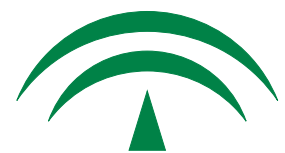


CONSEJERÍA DE ECONOMÍA Y HACIENDA

Economic Report  
on Andalusia  
**2003**

2003

# Economic Report on Andalusia



**JUNTA DE ANDALUCÍA**

**Consejería de Economía y Hacienda**  
Secretaría General de Economía

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Junta de Andalucía

Written by **Secretaría General de Economía**

Translated by Jayne Cotgreave and Pedro Satué

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# Table of Contents

1.	World Economy	9
2.	Spanish Economy	33
3.	Overview of the Andalusian Economy	47
4.	Population	69
5.	Productive Sectors	83
	Primary Sector	85
	Industrial Sector	97
	Construction Sector	111
	Service Sector	123
6.	Aggregate Demand	135
7.	Foreign Trade and Investment in Andalusia	147
8.	Structure of the Business Sector	171
9.	Labour Market	183
10.	Prices, Labour Costs and Income	205
11.	Banking System	223
12.	Andalusia in the Context of the Spanish Regions	239
13.	Convergence Between Andalusia and the European Union	259
14.	New Economy and Knowledge Society in Andalusia	271
	List of Tables	309
	List of Charts	315
	List of Boxes	323



# Presentation

*The Regional Ministry of Economy and Finance presents its sixteenth annual Economic Report on Andalusia for 2003.*

*The incipient world economic recovery of 2002 firmed in 2003, after a poor growth performance in 2001, the weakest since the early nineties. Spurred by highly expansive macroeconomic policies, economic growth rates were faster than the previous year, surpassing initial forecasts, and inflation remained relatively tame.*

*The economic recovery gained momentum in 2003 and was significant in its geographical extent, with most of the economic regions around the world benefiting from the upturn. Adding to the strong performance of the United States, which spearheaded economic growth in the industrialised countries, Japan remained on the path of recovery and Asia registered high growth rates, boosted by rapid expansion in China. The economic recovery experienced in Russia, Central and Eastern Europe and Latin America was modest, but very significant in that it heralded the end of the recession suffered in these areas in 2002.*

*The main exception to this global economic recovery was undoubtedly the European Union, particularly the euro area. Five years into economic and monetary union, these countries recorded the weakest growth in ten years in 2003, influenced by a sharp appreciation of the euro on currency markets and very sluggish domestic demand, which was not offset by favourable monetary conditions.*

*Against this backdrop, the Andalusian economy once again outperformed economies in its sphere in terms of growth, keeping the process of real convergence with them on track.*

*Real gross domestic product (GDP) at market prices grew by 2.6% in Andalusia, two tenths of a point faster than in Spain as a whole and 2.2 points faster than in the euro area. As a result of this differential economic growth, the Andalusian economy increased its percentage share in national GDP to 14.2% and in euro area GDP to 1.3%.*

*In terms of income per capita, Andalusia therefore continued to close the gap on the EU in 2003. GDP per capita measured in purchasing power parity terms was 69.4% of the average calculated for the fifteen-member European Union, almost one percentage point up on the previous year.*

*On the supply side, the non-agricultural sectors contributed to economic growth in Andalusia, expanding at a faster rate than in Spain or the euro area.*

*With regard to domestic demand, both consumption and investment were buoyant, with particularly good results for spending on consumer durables and investment in construction, in a context of falling interest rates that led to financing conditions that were more favourable than the previous year.*

*Andalusia's external demand also strengthened as world trade picked up after moderate growth the previous year, with a significant overall increase in trade with other countries and positive results for both inward and outward foreign investment.*

*Andalusia's strong economic performance in 2003 was also mirrored in the labour market and entrepreneurial activity.*

*The number of non-agricultural enterprises operating in Andalusia was 4.7% up on the previous year, a higher increase than registered nationally (3.8%). A breakdown by employment size reveals that the highest increase was in bigger enterprises. It is also significant that Andalusia had a lower closure rate than Spain as a whole, a trend observed throughout the current growth cycle.*

*The region's labour market picture was also good, with robust job growth (3.4%) that exceeded both the national average of 2.7% and the European Union average of 0.2%.*

*In absolute terms, 85,900 jobs were created in 2003, accounting for almost 20% of total job growth in Spain and almost half of employment gains in the euro area, well in excess of its share in total jobs in Spain as a whole (15.5%) and the euro area (2%).*

*The pattern of job growth in 2003 brought Andalusia closer into line with the most developed economies in terms of labour market structure. Job growth was stronger among wage earners, particularly those with open-ended contracts of work, women, part-time workers and people with university degrees. Job growth also outstripped labour force growth, resulting in a fall in jobless numbers in the region, in contrast with the increase in unemployment registered nationally.*

*In an international context characterised by a lack of inflationary pressures, indicators for Andalusia revealed that price growth slowed over 2003, and the year ended with the lowest inflation rate since 1999 and the narrowest differential vis-à-vis the euro area in four years. This favourable inflation trend resulted in an increase in the purchasing power of wages, which, in turn, spurred domestic demand.*

*The indicators used to monitor what has come to be known as the "new economy", the "information society" or the "knowledge society" reveal the continued development and rapid expansion of information and communication technologies in Andalusia, which registered high growth in this area, exceeding national averages.*

*With regard to Andalusia's position in Spain as a whole, partial economic indicators measuring production, demand, entrepreneurial activity and employment show that, in 2003, Andalusia achieved better results than those averaged by the Spanish regions.*

1.

## World Economy





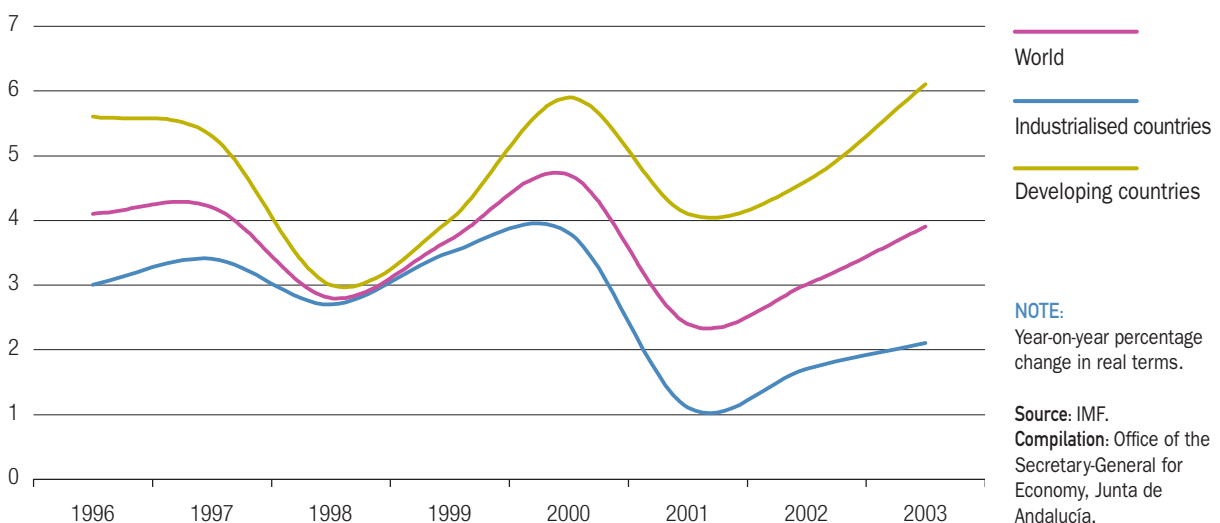
## World Economy

### Introduction

In 2003 the world economy enjoyed a period of recovery, after registering the weakest growth in eleven years in 2001. According to the International Monetary Fund (IMF), world GDP growth quickened from 3% in 2002 to 3.9%.

This improvement was observed in most of the economic regions, particularly the developing countries, which achieved the highest growth in 2003, continuing the trend of recent years. Within this group, the strongest growth performance was seen in Asia, and Latin America came out of the recession suffered in 2002.

Chart 1. **GROSS DOMESTIC PRODUCT**



The economic performance of the industrialised countries was also positive, although the recovery was not as strong as in the developing countries. The United States was one of the best-performing economies and Japan came out of the recession of the previous year. The fifteen-member European Union and the euro area, lagging behind in the economic cycle, showed no signs of recovery, while the ten new members of the European Union enjoyed a significant economic revival.

Other significant features of world economic performance in 2003 include well-contained inflation, the depreciation of the dollar against other major currencies and continuing low interest rates on the back of an expansionary monetary policy implemented with a view to stimulating economic recovery.

Buoyed by the overall improvement in the economy, the world trade in goods and services intensified, growing faster than world GDP once again.

This analysis of the world economy is supplemented by the information that the United Nations Development Programme (UNDP) publishes each year in its Human Development Report, which offers a more comprehensive picture of development,

beyond the traditional view of achievements in terms of conventional indicators.

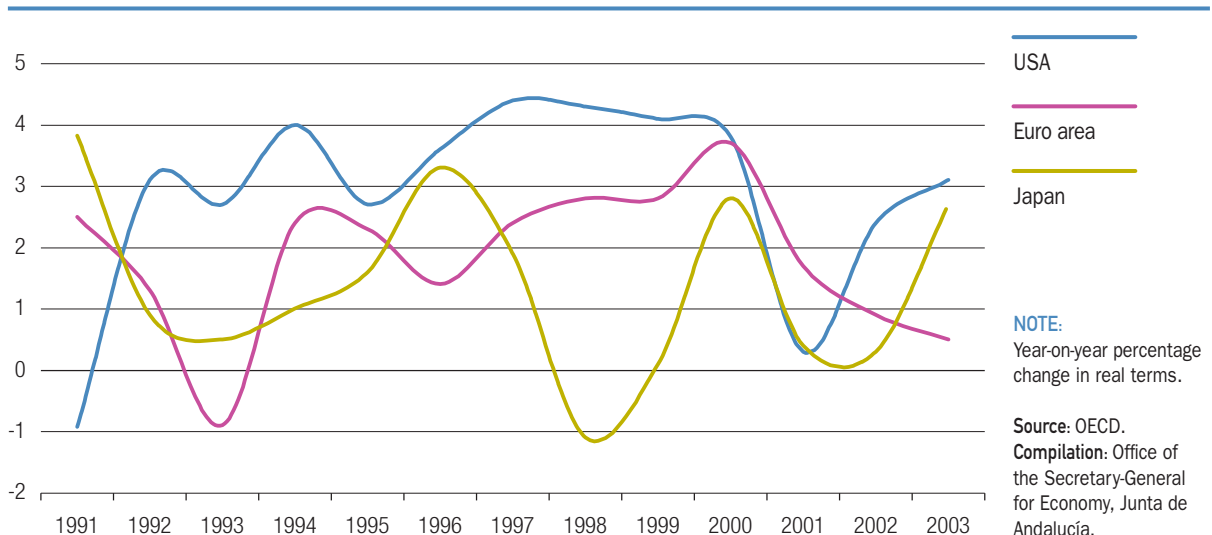
The 2003 report shows that although the majority of countries have achieved higher levels of development in the last twenty years, progress is very slow and some countries have even experienced development reversals.

In addition to the results of the human development index (HDI) and other indexes published each year, the 2003 report also includes an analysis of the millennium development goals adopted at the United Nations Millennium Summit held in September 2000. These goals, which set clear targets for reducing poverty and advancing human development, highlight the fact that many countries that implement social and economic measures have not yet achieved strong growth because geographic isolation, hostile environments and other handicaps mean that sustained external support at well above existing levels is critical to advance their development.

## Industrialised countries

In the industrialised countries the economic recovery that had begun the previous year continued to gain

Chart 2. **GROSS DOMESTIC PRODUCT**



momentum in 2003. The OECD estimates that GDP growth in these countries was 2.2% in 2003, five tenths of a point up on 2002.

The United States was one of the best-performing economies, and Japan's efforts to overcome the economic stagnation of recent years began to pay off, resulting in significant GDP growth in 2003. On the other hand, the eagerly awaited economic recovery failed to materialise in the European Union and the euro area, which registered the lowest growth since the 1993 recession.

This stronger economic expansion in the OECD did not, however, stoke inflation, with these countries averaging 1.9% price growth in 2003, measured according to the GDP deflator, six tenths of a point below the previous year's rate.

Against this backdrop, the labour market continued to show weak job growth in the industrialised countries, with a year-on-year increase in employment of 0.3%. The unemployment rate rose to 7.1% of the labour force, the highest on record since 1995.

A breakdown by country shows that Turkey was the fastest-growing OECD country in 2003, registering year-on-year GDP growth of 5.8%, followed by Greece

and Slovakia, both with 4.2%, and Iceland, with 4%. At the other end of the scale, the economies of four OECD countries, namely Portugal, the Netherlands, Switzerland and Germany, contracted.

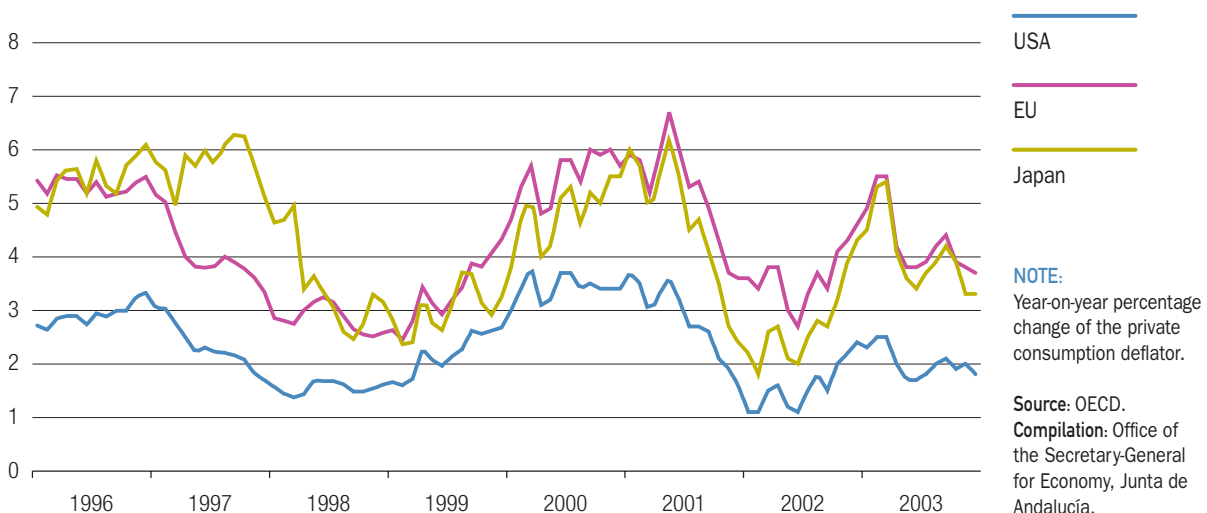
One of the best-performing industrialised countries was the United States, with 3.1% GDP growth, exceeding the OECD average.

The significant pickup in investment, following two years of decline, was a key factor in the revival of the US economy, with a 3.9% increase in gross fixed-capital formation. Positive trends were observed for both public and private consumption expenditure, fuelled by the 3.3% increase in domestic demand, up five tenths of a point on the previous year.

On the supply side, an incipient recovery was observed in industrial activity. Following two years of continued decline, the industrial production index (IPI) registered a moderate increase of 0.3%, albeit lower than the 1.2% increase averaged by the OECD countries.

In spite of the improvement in the US economy in 2003, it continued to be troubled by a gaping trade deficit. The overall performance of foreign trade in 2003 was influenced by the pick-up in exports, which rose 2%, bouncing back from the 2.4% fall of the

Chart 3. INFLATION RATE



previous year, and imports showed a bigger increase than the previous year (4% compared with 3.3% in 2002). As import growth was faster than export growth, there was an increase in the current-account deficit equivalent to 4.9% of GDP, three tenths of a point more than in 2003.

Inflation, measured by the private consumption deflator, was 1.8%, which while very similar to the average rate of inflation in the industrialised countries as a whole (1.9%), was four tenths of a point higher than the previous year, showing greater resistance to downward pressure.

The economic expansion enjoyed by the US was not noticeably mirrored in the labour market. Although employment is a variable that responds sluggishly to cyclical changes, job growth in 2003, estimated at 0.9% by the OECD, was slower than expected. This weak job growth was accompanied by a further increase in the unemployment rate to 6%, up two tenths of a point on the previous year.

According to OECD data, Japan has overcome the economic stagnation of the previous year, with estimated year-on-year GDP growth of 2.7%, the highest in three years.

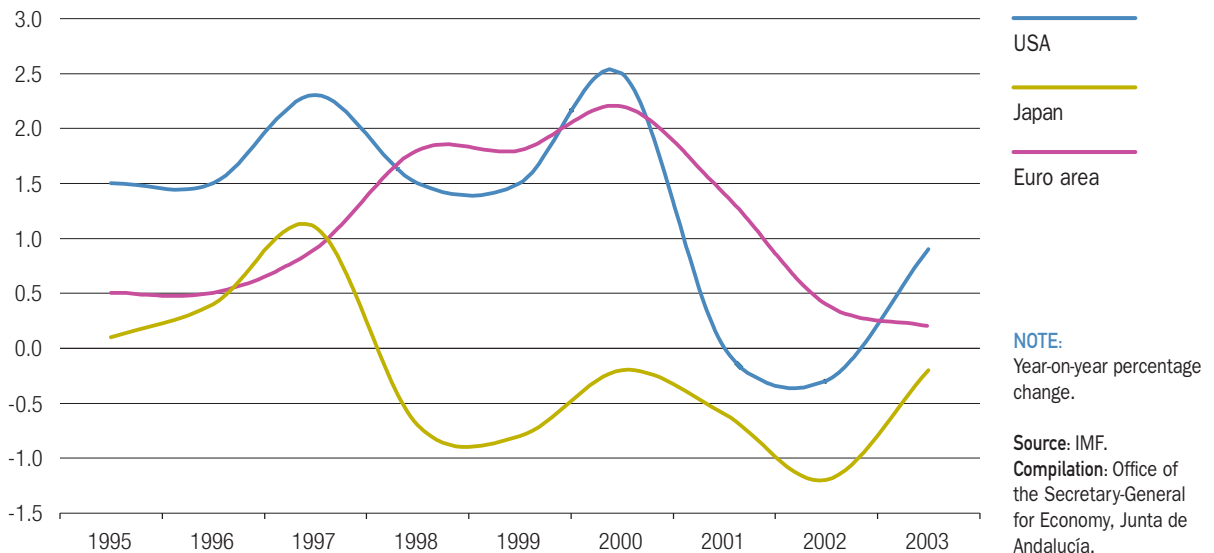
On the demand side, the acceleration of GDP growth can be largely attributed to the recovery of gross fixed-capital formation, which registered an increase of 3.3%, rebounding from two years of decline. Consumption expenditure growth, however, slowed, particularly public consumption growth, which decelerated from 2.4% year on year in 2002 to 1.2% in 2003.

On the supply side, industry picked up strongly, overcoming the recession of the previous two years, with a 3.3% increase in industrial production. This pick-up was influenced by export growth, a key factor in Japan's improving economic performance. Exports rose by 10%, compared with the 2.9% increase averaged by the OECD countries. The importance of exports to China increased considerably.

Import growth was lower at 4.9%, resulting in an increase in the current-account surplus, which was equivalent to 3.1% of GDP, compared with the 1.2% deficit averaged by the OECD countries.

The deflationary trend in evidence in Japan since 1998 continued unabated in 2003, with inflation, measured by the private consumption deflator, falling by 2.5%.

Chart 4. **EMPLOYMENT**



The improvement in Japan's economic performance has not yet influenced the country's labour market, and in 2003 job growth was once again negative. Employment fell by 0.2%, and the unemployment rate, although one tenth of a point down on the previous year, remained high for this country at 5.3% of the labour force.

## European Union

The European Union and euro area countries as a whole are lagging behind in the economic cycle and were showing only weak signs of recovery at the end of 2003.

The European Commission estimates that GDP grew by 0.8% in the European Union in 2003, three tenths of a point slower than in 2002. This deceleration is largely attributable to the sluggish performance of some of the major economies in the area, such as Germany, Italy and France, in contrast with the more buoyant economies of the United Kingdom and Spain.

A look at the different components of GDP reveals changes in their contribution to growth with regard

to 2002. In 2003 domestic demand made a positive contribution to growth, compared with a negligible contribution in 2002, while foreign trade, which made a positive contribution in 2002, detracted from GDP growth in 2003.

Specifically, domestic demand in the European Union countries as a whole grew by 1.3%, compared with 0.4% the previous year. The most vigorous component was public consumption (1.9%), although growth slowed in respect of the previous year, while private consumption evolved in the opposite direction, with growth quickening from 1.1% in 2002 to 1.4% in 2003. Gross fixed-capital formation experienced a recessionary trend for the second year in a row, with a fall of 0.5%, largely attributable to lower investment in capital goods, while investment in construction rose.

Foreign trade, affected by the appreciation of the euro, was characterised by a sharp loss of momentum in exports, which grew by just 0.5%, compared with 1.3% the previous year, and a pick-up in imports, which grew year on year by 2.4%. This resulted in a deterioration of the trade balance, although it continued to show a surplus.

Table 1. **AGGREGATE DEMAND AND OUTPUT IN THE EU AND THE EURO AREA. YEAR 2003**

	EU		Euro Area	
	% of GDP	02-03 growth %	% of GDP	02-03 growth %
Domestic demand	98.3	1.3	97.8	1.1
- Private consumption	58.2	1.4	57.2	1.1
- Public consumption	21.1	1.9	20.7	2.0
- Gross fixed-capital formation	19.1	-0.5	19.8	-1.0
Export of goods and services	33.9	0.5	35.2	0.6
Import of goods and services	32.2	2.4	33.0	2.6
GROSS DOMESTIC PRODUCT	100.0	0.8	100.0	0.4
	% of GVA	02-03 growth %	% of GVA	02-03 growth %
GROSS VALUE ADDED	100.0	0.6	100.0	0.4
- Primary sector	2.5	-3.0	2.6	-3.4
- Industry	23.5	-0.1	23.6	0.0
- Construction	5.3	0.2	5.3	-0.5
- Services	68.7	1.0	68.5	0.7

Source: Eurostat.  
Compilation:  
Office of the  
Secretary-  
General for  
Economy, Junta  
de Andalucía.

On the supply side, trends were very mixed. The best-performing and most dynamic sector in 2003 was the service sector, while construction registered moderate growth and the remaining sectors saw a fall in value added, with the sharpest drop in the primary sector, which recorded a year-on-year decline of 3%.

The labour market showed no improvement. The European Union experienced near-flat job growth in 2003 (0.1%), and the unemployment rate rose to 8%, three tenths of a point up on the previous year.

Against the backdrop of rising crude oil prices on world markets, in the early part of the year the harmonised index of consumer prices (HICP) registered an uptick, spiking at 2.3% in March, the highest year-on-year rate registered in 2003. Inflation became tamer as the year progressed, with an uptick in the summer months, and the year closed at 1.8%, four tenths of a point higher than the 2002 year-end rate.

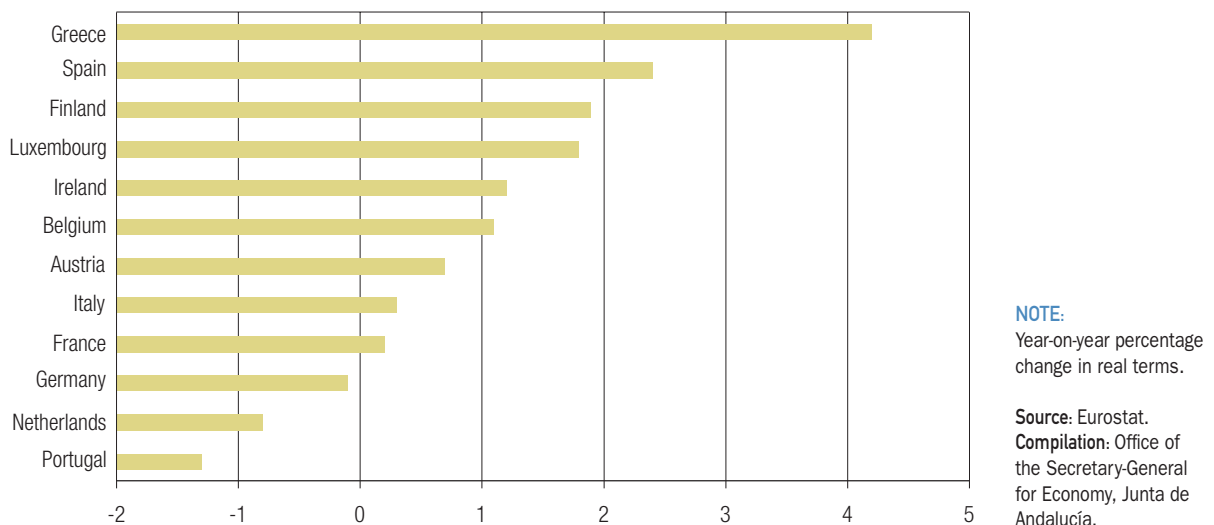
The economic performance of the **euro area** in 2003 was weaker still than that of the European Union. According to the European Commission, year-on-year GDP growth slowed for the third year in a row to 0.4%, four tenths of a point lower than that averaged by the European Union.

This result was strongly influenced by the performance of the German economy, which accounts for almost a third of the euro area's GDP. It experienced recessionary trends in 2003, registering a 0.1% fall in GDP. Weak GDP growth in France (0.2%) and Italy (0.3%) also contributed to the poor overall result, as together they account for almost 40% of the euro area's GDP. Recessionary trends were also observed in the Netherlands and Portugal, while at the other end of the scale, the strongest performance was seen in Greece, with 4.2% GDP growth, followed by Spain, with 2.4%.

On the other hand, domestic demand recovered slightly, registering a year-on-year increase of 1.1%, an improvement on the reduction recorded the previous year. This revival was observed in all the countries in the euro area, except Ireland, the Netherlands and Portugal, the latter two registering a drop in domestic demand in 2003.

The pick-up in domestic demand can be attributed to the recovery of private consumption, which grew year on year by 1.3% in 2003, compared with 0.5% the previous year. Although public consumption grew at a slower rate than in 2002, it was the most dynamic component, showing 2% growth. Gross fixed-capital formation continued to fall, although less sharply than in 2002, with a reduction of 1%.

Chart 5. **GROSS DOMESTIC PRODUCT. EURO AREA COUNTRIES. YEAR 2003**



The positive contribution of domestic demand to GDP growth was offset by foreign trade results, with export growth slowing to just 0.6%, compared with 1.5% the previous year, and import growth picking up from near flat growth in 2002 to 2.6% in 2003.

On the supply side, the service sector achieved positive results, registering a 0.7% increase in GVA. On the other hand, industry experienced near-flat growth and the other sectors contracted. The sharpest drop in GVA was observed in agriculture (-3.4%), and the smallest in construction (-0.5%).

The labour market, in keeping with the economic slowdown, was characterised by flat job growth and a high unemployment rate. Job destruction was observed in some countries, such as Germany (-1.1%), the Netherlands (-1%) and Portugal (-0.8%). The unemployment rate rose by four tenths of a point to 8.8%, eight tenths of a point higher than the average unemployment rate in the European Union. Countries that registered rates above this average were Spain, Greece, Germany, France and Finland, while the lowest rate was observed in Luxembourg (3.7%).

Inflation remained under control, once the effects of the rise in crude oil prices in the first quarter of the year were overcome. The harmonised index of consumer prices (HICP) stood at 2% in December 2003, three tenths of a point below the 2002 year-end rate.

The most inflationary component was alcoholic beverages and tobacco, with a year-on-year increase of 6.1% in December 2003, followed by education, with an increase of 3.7%. On the other hand, communications and recreation and culture showed a deflationary trend, with a 0.7% fall in prices in both cases.

The trend of contained inflation extended to all the countries in this area, except Belgium and France. The most inflationary country in the euro area was Greece, registering an inflation rate of 3.1% in December 2003, followed by Ireland (2.9%). At the other end of the scale, the least inflationary countries were Germany (1.1%) and Finland (1.2%). The overall

result of these trends was that the spread of inflation rates recorded in the euro area countries narrowed further in 2003, with the difference between the highest and lowest rates standing at 2 percentage points in 2003, compared to 3.5 points in 2002.

## Fifth enlargement of the European Union

In contrast to the economic slowdown experienced in the fifteen European Union countries, the ten new Member States that joined on 1 May 2004 (Cyprus, Slovakia, Slovenia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland and the Czech Republic) registered accelerating economic growth in 2003.

According to the European Commission, GDP growth in these countries averaged 3.6% in 2003, compared with 2.4% the previous year. This rate of growth is notably higher than the 0.8% registered in the European Union and the 0.4% registered in the euro area. GDP growth averaged by the 25 countries belonging to the European Union as from 1 May 2004 was 0.9% in 2003 (1.1% in 2002).

Lithuania was the fastest growing of these countries (8.9%), followed by Latvia (7.5%) and Estonia (4.8%), while Malta registered the lowest growth rate, equalling the euro area average (0.4%).

Domestic demand in the acceding countries grew by 3.3% in 2003 and therefore at a faster rate than in the fifteen-member EU, where it increased by 1.3%. The most dynamic component was private consumption, which grew by 4.4%, well in excess of the EU average. The biggest increase was registered in Hungary, where private consumption grew by 9%. Public consumption also showed good results, as did gross fixed-capital formation, which rebounded from a 0.6% reduction in 2002 to a 1.9% increase in 2003. The biggest increase was registered in Malta (13.4%), and only Cyprus, Slovakia and Poland experienced a decline.

With regard to foreign trade, export growth was strong in 2003 at 11.7%, outstripping import growth, which



### Box 1. FIFTH ENLARGEMENT OF THE EUROPEAN UNION

The fifth enlargement of the European Union, approved by the Luxembourg European Council of December 1997, became effective on 1 May 2004, resulting in the addition of ten new members: two Mediterranean States (Cyprus and Malta), three Baltic States (Estonia, Lithuania and Latvia) and five Central European States (Poland, Hungary, Czech Republic, Slovakia and Slovenia). This enlargement brought the total number of EU members up to 25 and was perhaps the most significant, not only because of the number of countries involved, but also because of the degree of disparity among them and differences in respect of the EU-15 in terms of real and nominal convergence, production structure and economic framework.

These ten countries have a surface area of 738,592 km<sup>2</sup>, which accounts for 23.1% of the EU-15 total. Poland is the largest country, accounting for 42.3% of the total, followed by Hungary, while Malta is the smallest (316 km<sup>2</sup>).

The enlargement has led to a 20% increase in the population of the EU, which is swelled by almost 75 million inhabitants. There are big differences between one country and another in demographic terms. Poland, the Czech Republic and Hungary have the biggest populations, together accounting for almost 80% of the total, while Malta and Cyprus have the lowest number of inhabitants. As a result, the enlarged EU has a lower population density than before (116.2 and 119 inhabitants per km<sup>2</sup> respectively in 2003).

Another common feature of these ten countries is their low level of income per capita; while the enlargement led to a 20% increase in population, European Union GDP increased by just 5%. Based on figures for 2003, the ten new members have a GDP per capita, in purchasing power standard, that is, 48.7% of the fifteen-member EU average. Cyprus has the highest level, with a GDP per capita that is 77.5% of the EU-15 average, while, at the other end of the scale, Latvia, with 37.1% has the lowest. The fifth enlargement has therefore resulted in a significant reduction in average GDP per capita to 91.7% of the EU-15 average. Furthermore, economic disparity among the different regions has widened.

There are significant differences in terms of production structure. In spite of the fact that the importance of agriculture has declined in the acceding countries, the primary sector still accounts for a larger share of the economy than it does in the EU-15 (3.8% and 2.1% respectively, based on figures for 2001). Industry accounts for a larger share of the total in these countries (28.4% of GVA) than in EU-15 (22.1%), as does construction (7.1% and 5.3% respectively), while the service sector, which has been increasing its weight in the production structure in recent years, accounts for 60.7% of GVA, a much lower proportion than in the pre-enlargement EU (70.5%).

The labour market of these ten countries, is characterised by a lower employment rate than in the EU-15. Since the early nineties, employment has fallen, although the rate of decline varies from one country to another. Poland and the Czech Republic are the countries that have seen a smaller decline in employment, while Hungary, Estonia and Latvia have registered the sharpest drops. According to figures for 2002, the employment rate of the ten new members, expressed as the number of employed people as a percentage of people aged between 15 and 64, is 8.1 percentage points lower than the EU-15 rate (56.1% and 64.2% respectively), and only Slovenia, Cyprus and the Czech Republic exceed the average. However, the effect of the decline in employment on the unemployment rate is not as strong as might be expected, owing to a number of factors, including emigration to other more developed countries and the adoption of measures resulting in underemployment situations, such as shared jobs and involuntary leave. The unemployment rate in the ten acceding countries in 2003 stood at 14.3%, compared with 8% in the EU-15.

A breakdown by sector shows that, following the fifth enlargement, the EU has also become more agricultural and rural in terms of employment. The percentage of people working in the primary sector in the 25 EU Member States is 5.5%, compared with 4.1% in the EU-15. The industrial sector accounts for 29.4% of employment, compared with 28.5% in EU-15, while the service sector accounts for 65% of the total in the new EU, compared with 66.7% in the EU-15, as the tertiary sector is less developed in the ten new Member States.

The ten countries have made considerable progress in controlling inflation in recent years, thanks to restrictive fiscal and monetary policies, and average price growth is similar to the EU-15 average. However, inflation varied greatly from one country to another in 2003, ranging from -1.1% in Lithuania to 7.7% in Slovakia.

The trade openness of these ten countries has also risen significantly in recent years, with an increase in trade exchanges, particularly with EU-15 countries. The countries with the best foreign trade results were Poland, the Czech Republic and Hungary, whose main trading partners are EU countries, including Germany, Italy, France, Austria and Finland.

#### EU FIFTH ENLARGEMENT COUNTRIES

	AREA (km 2)	POPULATION (2003) thousands	GDP per capita (PPS) (2003)		PRODUCTIVITY (2002) EU-15=100	EMPLOYMENT RATE (2003)	UNEMPLOYMENT RATE (2003)	INFLATION RATE
			EU-15=100	EU-25=100				
Cyprus	9,251	715	77.5	84.5	79.6	68.5	4.4	4.0
Czech Republic	78,886	10,211	63.8	69.6	54.7	65.6	7.8	0.1
Estonia	45,227	1,356	41.2	44.9	43.4	61.7	10.0	1.3
Hungary	93,030	10,118	55.1	60.1	64.2	56.5	5.8	4.7
Latvia	64,589	2,325	37.1	40.5	38.7	60.5	10.5	3.5
Lithuania	65,300	3,462	42.7	46.6	43.6	60.6	12.7	-1.1
Malta	316	398	64.2	70.0	90.1	55.2	8.2	1.3
Poland	312,685	38,204	42.7	46.6	50.3	51.7	19.8	0.7
Slovakia	49,035	5,379	48.3	52.7	57.6	56.5	17.1	7.7
Slovenia	20,273	1,996	71.3	77.8	69.5	74.3	6.5	5.4
Total newly entered countries	738,592	74,164	48.7	53.1	-	56.1	14.3	1.9
EU-15	3,191,120	382,468	100.0	109.1	100.0	64.2	8.0	1.8
EU-25	3,929,712	456,632	91.7	100.0	93.0	62.8	9.0	1.8

Source: European Commission.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

was 9.3%. In spite of this, these countries continued to show a trade deficit, estimated by the European Commission at 4.6% of GDP, compared with the 1% surplus registered by the fifteen-member EU. This deficit situation was widespread and particularly serious in Cyprus, which showed a gaping trade deficit equivalent to 26% of GDP in 2003.

The number of people employed fell by 0.4% in 2003. Slovenia and Malta were the countries that registered the worst labour market results, both experiencing a 1.4% fall in employment. Negative job growth was also observed in Poland (-1.1%) and the Czech Republic (-0.7%). The strongest job growth was achieved in Slovakia, where employment rose by 1.8% in 2003, followed by Lithuania, where it increased by 1.5%. The unemployment rate averaged

by the ten new members was almost double that of EU-15 (14.3% and 8% respectively), ranging between 4.4% in Cyprus and 19.8% in Poland.

Inflation, measured by the private consumption deflator, was 1.9% in 2003 in these countries, similar to the rate registered in the EU-15 (1.8%) and the euro area (1.9%).

The least inflationary countries were Lithuania, which experienced deflation (-1.1%), and the Czech Republic, with near-flat price growth (0.1%). Moderate inflation was registered in Poland (0.7%) and in Malta and Estonia (1.3% in both). In the remaining countries, inflation exceeded the EU average, with particularly high rates in Slovakia (7.7%) and Slovenia (5.4%).

Table 2. **ECONOMIC ESTIMATES AND FORECASTS FOR DEVELOPING COUNTRIES**

	2003	2004	2005
<b>GDP</b>			
Developing countries	6.1	6.0	5.9
Africa	4.1	4.2	5.4
Asia	7.8	7.4	7.0
China	9.1	8.5	8.0
India	7.4	6.8	6.0
Latin America	1.7	3.9	3.7
Argentina	8.7	5.5	4.0
Brazil	-0.2	3.5	3.5
Chile	3.3	4.6	5.5
Colombia	3.6	4.0	4.0
Costa Rica	5.6	4.0	3.5
Mexico	1.3	3.3	3.3
Central and Eastern Europe	4.5	4.5	4.4
<b>INFLATION</b>			
Developing countries	6.1	5.7	5.0
Africa	10.3	8.6	6.7
Asia	2.7	4.0	3.6
China	1.2	3.5	3.0
India	3.8	4.3	4.1
Latin American	1.6	6.2	5.6
Argentina	13.4	6.7	9.5
Brazil	14.8	5.9	4.7
Chile	2.8	1.3	2.9
Colombia	7.1	5.7	5.0
Costa Rica	9.4	9.4	9.0
Mexico	4.5	4.3	3.2
Central and Eastern Europe	9.2	6.9	5.5

NOTES:  
Year-on-year  
percentage change.  
GDP at constant  
prices.

Source: IMF.  
Compilation:  
Office of the  
Secretary-General  
for Economy, Junta  
de Andalucía.

## Developing countries

Following the general trend, in 2003 the developing countries continued to build on the economic recovery that got underway the previous year. According to the IMF, GDP growth in these countries was 6.1%, up one and a half percentage points on the previous year and higher, once again, than the growth rate averaged by the industrialised economies.

The revival was widespread among the various economic blocs, with the Asian countries registering the highest growth. The second-strongest growth performance was observed in Central and Eastern Europe, followed by the African countries. Although growth was more moderate in Latin America, it was significant in that it brought an end to the recession of the previous year.

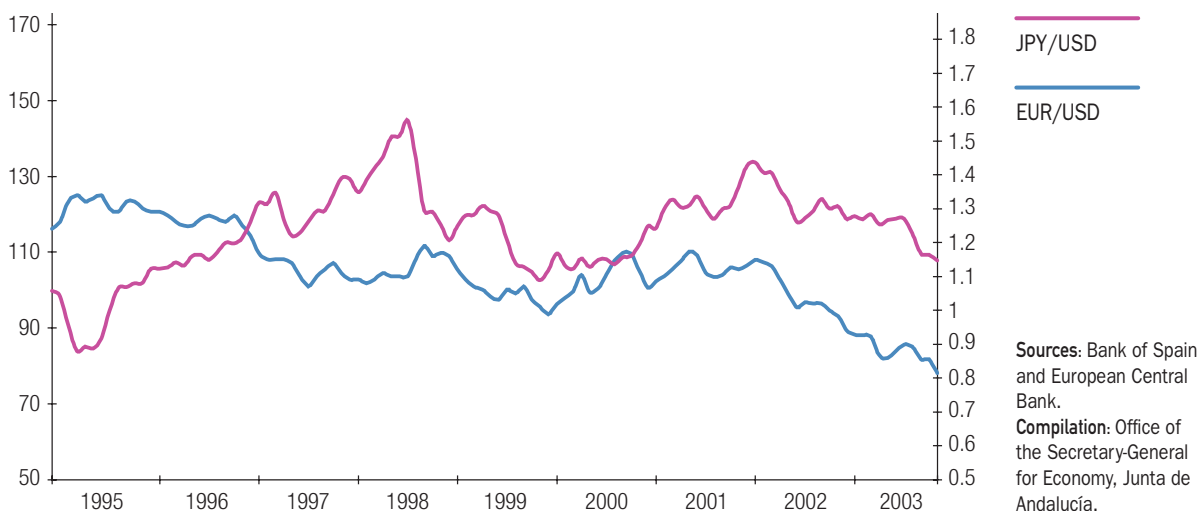
Specifically, GDP growth in the Asian countries was 7.8%, up from 6.4% in 2002. China's economic performance was particularly strong, with 7.5% GDP growth, in spite of the negative impact of the SARS crisis. The favourable economic results achieved by the Chinese economy extended to the entire Asian continent and were an important factor in the improvement observed in the Japanese economy. Strong growth was also registered in India (7.4%), Bhutan (7.3%), Thailand (6.7%), Maldives (6.2%) and Vietnam (6%).

In Central and Eastern Europe, where year-on-year GDP growth averaged 4.5% in 2003, the fastest-growing countries were Lithuania (9%) and Latvia (6.7%), which joined the European Union on 1 May 2004, and Albania (6%) and Turkey (5.8%). The remaining countries in this area registered positive economic growth in 2003, although at more moderate rates.

The African countries averaged 4.1% GDP growth, six tenths of a point up on the previous year. The highest growth was observed in Equatorial Guinea (15.6%), followed by Chad (10.9%). The economic revival did not extend to all the countries in the area, however. Angola experienced a dramatic slowdown, with GDP growth falling from 15.3% in 2002 to 4.5% in 2003, and recessionary trends were observed in other countries, including Burundi, Central African Republic, Côte d'Ivoire, Ethiopia, Guinea-Bissau, Seychelles and Zimbabwe.

Latin America came out of the recession of the previous year, registering 1.7% GDP growth according to the IMF, a significant improvement on the 0.1% fall in GDP recorded in 2002. This trend was widespread and stronger in those countries that suffered an economic crisis in 2002, such as Argentina, which was the fastest-growing country in the area, with 5.5% GDP growth. Another group of countries, comprising Costa Rica, Trinidad and Tobago, Peru, Panama,

Chart 6. **US DOLLAR EXCHANGE RATES**



Colombia, Chile and Honduras, achieved growth ranging between 3% and 4%. Growth was weaker in Mexico (1.3%), while Venezuela sank into a deep recession (-9.2%). Other countries, including Dominica, Dominican Republic, Guyana and Brazil, also suffered recession, although to a lesser extent.

After six consecutive years of receding inflation, in 2003 there was a 6.1% increase in consumer prices in the developing countries, one tenth of a point higher than the inflation rate recorded the previous year. Only in Central and Eastern Europe was the inflation rate lower, falling from 14.8% in 2002 to 9.2% in 2003.

The Latin American countries were the most inflationary (10.6%). A breakdown by country reveals that the highest inflation rates were recorded in Haiti (32.5%) and Venezuela (31.1%) and that Argentina succeeded in taming inflation, almost halving it from 25.9% in 2002 to 13.4% in 2003.

In Africa, where prices grew year on year by 10.3%, the inflation rate varied significantly from one country to another. For example, while Zimbabwe recorded three-digit inflation (431.7%), Madagascar experienced deflation (-1.1%).

Price growth was more subdued in Asia, although the inflation rate rose from 2% in 2002 to 2.7% in 2003. Deflation was observed only in the Maldives, where

prices fell by 1.5%, while China registered low inflation of 1.2%, in spite of strong economic growth.

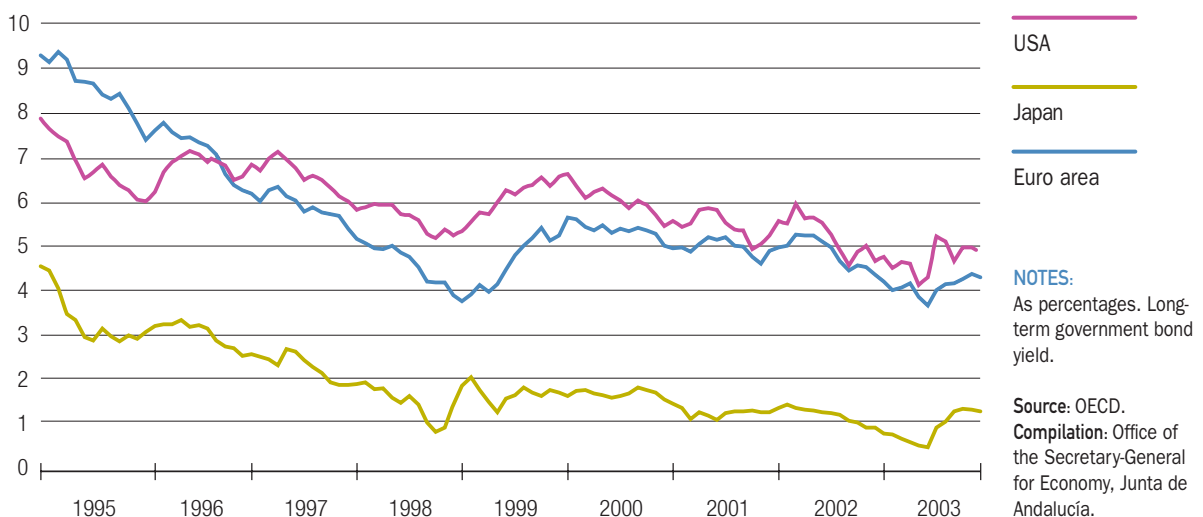
## Financial markets

International financial markets were marked by an expansionary monetary policy stance in 2003. In an attempt to speed up economic recovery, the main central banks cut interest rates to levels unprecedented in recent decades. The most significant exchange market development was the depreciation of the dollar against other major currencies.

Specifically, in the euro area, where the official interest rate stood at 2.75% at the end of 2002, the European Central Bank (ECB), in the face of the uncertainty surrounding the extent and sustainability of economic recovery and the appreciation of the euro, cut interest rates at the beginning of March by 25 basis points to 2.5%. Later in the year, in June, the easing of monetary policy continued, with a cut of 50 basis points, bringing the interest rate down to 2%, and it remained at this level through to the end of the year.

In the United States, the 2002 year-end interest rate of 1.25% was maintained during the early part of the year. Following the interest-rate cut implemented by the European Central Bank, the Federal Reserve also cut its rate to 1% in June, the lowest rate on record

Chart 7. LONG-TERM INTEREST RATES



since July 1958, which was maintained through to the end of the year.

The Bank of England cut the official interest rate in July by 25 basis points to 3.5%, the lowest rate in five decades, although in November it was raised again to 3.75%.

One of the main developments on the exchange market in 2003 was the depreciation of the dollar against other major currencies. The dollar began to fall against the euro at the start of the year, and the downward trend deepened from March onwards. The year-end rate was 1.23 US dollars to the euro, which meant that it had depreciated by 17.1%.

The dollar fell 11.6% against the yen, resulting in a year-end rate of 107.8 US dollars to the yen. The depreciation would probably have been sharper if not for the measures implemented by the Bank of Japan in an attempt to ensure that an excessive appreciation of the yen did not dampen the country's economic revival.

## World trade

The stronger world economic performance spurred world trade in 2003. According to the IMF, the volume

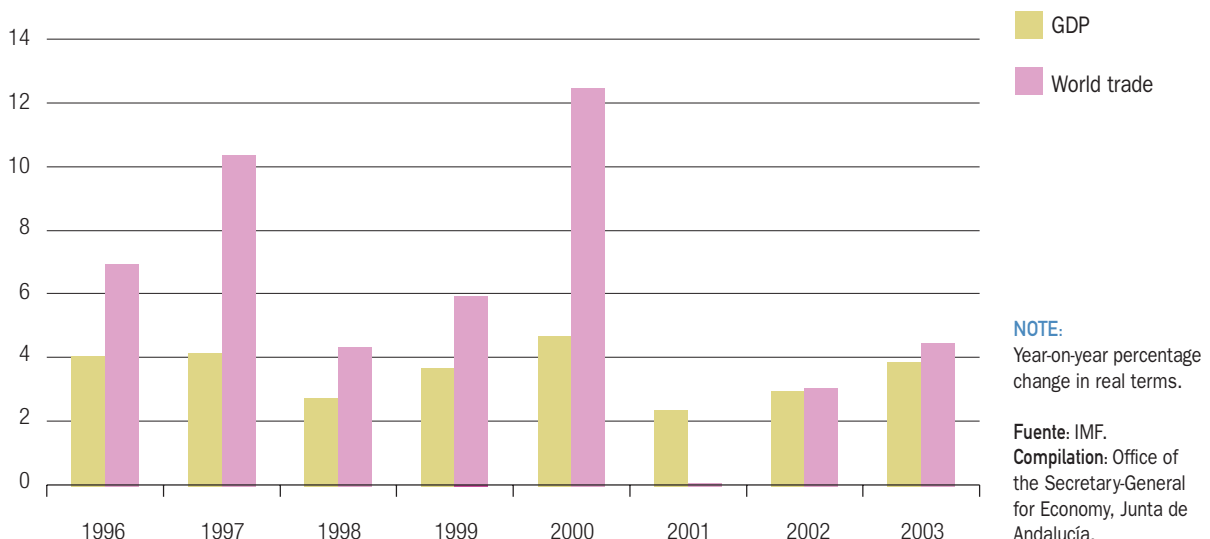
of goods and services exchanged in the course of world trade increased by an estimated 4.5% year on year, up from 3.1% the previous year. World trade growth therefore outpaced GDP growth in 2003, signalling a change in trend, as in 2002 they grew at practically the same rate and in 2001 GDP expanded faster than trade, which showed near-flat growth.

A breakdown of the figures reveals that world trade growth in 2003 can be largely attributed to strong export and import growth in the developing countries (both around 9%), while the industrialised countries registered more moderate trends, with a 2.7% increase in exports and a 3.5% increase in imports.

Both imports and exports of goods in the developing countries rose by 10.6% in 2003, with all the regions registering positive export and import growth. Asia and Central and Eastern Europe saw the biggest increases, while Latin America registered the weakest growth.

According to available information, in the industrialised countries the highest increases in exports and imports of goods and services were registered in Japan and Spain, while Italy recorded the sharpest reductions.

Chart 8. **GDP AND WORLD TRADE**



## Forecasts

The most recent economic forecasts, published by international organisations in the spring of 2004, suggest that the world economic recovery will continue to strengthen over the year.

The IMF estimates 4.6% world GDP growth for 2004, seven tenths of a point more than in 2003. The forecast for 2005, however, is slightly lower at 4.4%.

GDP growth in the developing countries will continue to outpace growth in the industrialised countries, although economic growth will accelerate more sharply in the latter in 2004. The IMF estimates

Table 3. **WORLD ECONOMY. ECONOMIC ESTIMATES AND FORECASTS. YEARS 2003-2005** <sup>(1)</sup>

	OECD			IMF		
	2003	2004	2005	2003	2004	2005
	GDP					
WORLD	-	-	-	3.9	4.6	4.4
DEVELOPING COUNTRIES	-	-	-	6.1	6.0	5.9
INDUSTRIALISED COUNTRIES	2.2	3.4	3.3	2.1	3.5	3.1
USA	3.1	4.7	3.7	3.1	4.6	3.9
Japan	2.7	3.0	2.8	2.7	3.4	1.9
EU	-	-	-	0.8	2.0	2.4
Euro area	0.5	1.6	2.4	0.4	1.7	2.3
Spain	2.4	2.9	3.3	2.4	2.8	3.3
	INFLATION <sup>(2)</sup>					
DEVELOPING COUNTRIES	-	-	-	6.1	5.7	5.0
INDUSTRIALISED COUNTRIES	1.9	1.7	1.5	1.8	1.7	1.7
USA	1.8	1.9	1.4	2.3	2.3	2.2
Japan	-1.4	-1.2	-0.7	-0.2	-0.4	-0.1
EU	-	-	-	2.0	1.7	1.7
Euro area	1.9	1.7	1.5	2.1	1.7	1.6
Spain	3.1	2.4	2.6	3.0	2.7	2.7
	UNEMPLOYMENT RATE <sup>(3)</sup>					
INDUSTRIALISED COUNTRIES	7.1	6.9	6.7	6.6	6.4	6.3
USA	6.0	5.5	5.2	6.0	5.5	5.4
Japan	5.3	5.0	4.6	5.3	4.9	4.9
EU	-	-	-	8.2	8.3	8.1
Euro area	8.8	8.8	8.5	8.8	9.1	8.9
Spain	11.3	10.9	10.2	11.3	10.8	10.1
	EMPLOYMENT					
INDUSTRIALISED COUNTRIES	0.3	0.8	1.3	0.6	1.0	1.2
USA	0.9	1.0	1.7	0.9	1.7	1.5
Japan	-0.2	0.0	0.3	-0.2	-0.1	0.4
EU	-	-	-	0.3	0.6	0.8
Euro area	0.1	0.4	1.1	0.2	0.5	0.9
Spain	2.7	2.8	2.8	2.7	2.7	2.6
WORLD TRADE	4.5	8.6	10.2	4.5	6.8	6.6

**NOTES:**

(1) Year-on-year percentage change unless otherwise stated.

(2) OECD estimates are referred to the private consumption deflator; IMF estimates are referred to consumer prices except for Spain, where the estimate is referred to the GDP deflator.

(3) As a percentage of labour force.

Sources: OECD and FMI.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

that economic growth will be 6% in the developing countries, a similar rate to that recorded in 2003, while the industrialised countries could see GDP growth rise from 2.1% in 2003 to 3.5% in 2004. In 2005, GDP growth is expected to slow in both groups of countries.

In 2004 economic expansion in the developing countries will continue to be led by Asia (7.4%), followed by Central and Eastern Europe, where the rate of growth is expected to remain stable at 4.5%. In Africa economic growth in 2004 is also expected to be much the same as in 2003 at 4.2%. On the other hand, Latin America is expected to enjoy a significant economic revival, with GDP growth quickening from 1.7% in 2003 to 3.9% in 2004, according to the IMF.

IMF inflation forecasts for the developing countries predict tamer inflation in 2004, estimating that the inflation rate in these countries will fall by four tenths of a point to 5.7%. This trend is expected to continue into 2005, when price growth could fall to 5%.

It is expected that this trend of receding inflation will be echoed in all the different groups of countries, except in Asia, where, in spite of slower GDP growth, the inflation rate could rise from 2.7% in 2003 to 4% in 2004. The following year, however, could see more moderate inflation.

The highest inflation rates are expected to be registered in the African countries, where forecasts predict 8.6% price growth, well in excess of the average of 5.7% expected in the developing countries. The Central and Eastern European countries, where prices are expected to rise by 6.9%, are in second place, and Latin America is in third place with an estimated inflation rate of 6.2%.

Economic expectations for the industrialised countries are also optimistic; both the IMF and the OECD forecast a further economic revival, estimating GDP growth at 3.5% and 3.4% respectively. The United States will remain the fastest-growing country, the European Union will join in the recovery process and the recovery in Japan will gain momentum.

It is also expected that inflation will fall over the next two years in the industrialised countries. The OECD forecasts 1.7% inflation in 2004, two tenths of a point down on the previous year and a further fall in price growth to 1.6% in 2005. The IMF forecasts the same inflation rate as the OECD for 2004, but predicts that it will be maintained the following year. The trend of contained inflation will be widespread in the industrialised countries, and in Japan the deflationary trend is expected to continue, although it will ease in 2005.

IMF labour market forecasts suggest stronger job growth in the industrialised countries over the next two years, with a rise in employment from 0.6% in 2003 to 1% in 2004 and 1.2% the following year. Spain is expected to see a particularly significant improvement, with estimates of 2.7% and 2.6% job growth for the next two years. At the other end of the scale, Germany is expected to see a further 0.4% fall in employment in 2004, although job growth is expected to pick up the following year. Following three years of increases, the unemployment rate could fall in 2004 to 6.4%, and this downward trend is expected to continue into 2005.

Forecasts for the European Union and the euro area are also fairly optimistic. The European Commission forecasts announced in the spring confirm that the eagerly awaited economic revival will materialise in 2004.

Specifically, GDP growth in the European Union, including the ten new members, is expected to rise from 0.9% in 2003 to 2.1% in 2004. A similar rate of growth is forecast for the fifteen-member EU (2%), while the forecast for the euro area is lower at 1.7%, but up from 0.4% in 2003. The economic revival is expected to be widespread, and it is predicted that Germany, the Netherlands and Portugal will come out of the recession experienced in 2003. The European Commission predicts that the economic recovery will continue to strengthen in 2005, with GDP growth continuing to accelerate to 2.5% in the European Union (2.4% in EU-15) and to 2.3% in the euro area.

Domestic demand is also expected to be buoyant, with the economic revival benefiting all the



Table 4. EUROPEAN UNION AND EURO AREA ECONOMIC FORECASTS

	2004			2005			
	Euro area	EU-15	EU-25	Euro area	EU -15	EU-25	
GDP <sup>(1)</sup>	1.7	2.0	2.1	2.3	2.4	2.5	<b>NOTES:</b> (1) Year-on-year percentage change. (2) As a percentage of GDP. (3) As a percentage of labour force.  <b>Source:</b> European Commission. <b>Compilation:</b> Office of the Secretary-General for Economy, Junta de Andalucía.
DOMESTIC DEMAND	1.7	2.0	2.1	2.4	2.5	2.6	
- Private consumption	1.6	1.9	1.9	2.3	2.3	2.3	
- Public consumption	1.2	1.3	1.3	1.3	1.5	1.5	
GROSS FIXED-CAPITAL FORMATION	2.4	2.9	3.1	3.6	3.9	4.1	
HICP <sup>(1)</sup>	1.8	1.8	1.8	1.6	1.7	1.8	
BUDGET DEFICIT <sup>(2)</sup>	0.7	0.5	-	0.8	0.7	-	
GOVERNMENT DEBT <sup>(2)</sup>	70.9	64.2	63.4	70.9	64.2	63.4	
EMPLOYMENT <sup>(1)</sup>	0.3	0.3	0.3	0.9	0.8	0.8	
UNEMPLOYMENT RATE <sup>(3)</sup>	8.8	8.1	9.0	8.6	7.9	8.8	

components, including gross fixed-capital formation, which has experienced a trend of decline in recent years.

Higher GDP growth is not expected to stoke inflation, and the European Commission predicts that the trend of receding inflation observed in recent years will continue. Specifically, it is forecast that inflation, measured by the private consumption deflator, in the European Union (both the fifteen-member and the twenty-five-member EU) will be 1.8% in 2004, the same as in the euro area. Inflation is expected to remain moderate in 2005, with rates ranging from 1.6% in the euro area to 1.8% in the enlarged European Union.

The improved economic performance is expected to be mirrored in a pick-up in job growth from near-flat growth in 2003 to 0.3% in 2004 both in the European Union and the euro area. A greater improvement is forecast for 2005, with the European Commission estimating a 0.9% rise in employment in the euro area and 0.8% in the European Union. The unemployment rate, however, is not expected to fall until 2005.

The continuing recovery of the world economy will spur world trade. Both the OECD and the IMF forecast an increase in the world trade in goods and services over the next two years. In specific terms,

the OECD predicts that the volume of goods and services exchanged in the course of world trade will increase by 8.6% in 2004 and by 10.2% in 2005, and the IMF forecasts increases of 6.8% and 6.6% respectively.

## Development indicators

This analysis of the world economy is supplemented by the information that the United Nations Development Programme (UNDP) publishes each year in its Human Development Report, which offers a more comprehensive picture of development, beyond the traditional view of achievements in terms of national income.

In the report, published each year since 1990, the UNDP provides the results of the human development index (HDI), a composite indicator that measures the achievements of each country in three basic dimensions of human development on a scale of zero to one, namely longevity, knowledge and a decent standard of living.

Other indexes, which measure other specific aspects of human development, have also been incorporated. They include the gender-related development index (GDI) and the gender empowerment measure (GEM), which were introduced in the 1995 report. The GDI

Table 5. **DEVELOPMENT INDICATORS**

	Yearly population growth (%)	Fertility rate <sup>(1)</sup>	Life expectancy at birth	Adult literacy rate (%) <sup>(2)</sup>	GDP per capita in USD (PPP)	GDP distribution by sector (%) <sup>(3)</sup>			Telephone lines (per 1000 people)	Computers with internet access per 1,000 people	Mobile phone subscribers (per 1000 people)	Internet users (per 1000 people)	Human development index (HDI) <sup>(4)</sup>	Gender-related development index (IDG) <sup>(5)</sup>
						Agriculture	Industry	Services						
						1998	1998	1998						
	2001-2015	2000-05	2001	2001	2001	1998	1998	1998	2001	2000	2001	2001	2001	1998
Developing countries	1.4	2.9	64.4	74.5	3,850	13.5	34.1	52.4	87	0.7	75	26.5	0.655	0.634
Industrialised countries	0.5	1.8	77	97.5	23,363	2.2	29.6	64.6	523	92.0	539	332.0	0.905	0.889
Spain	0.1	1.2	79.1	97.7	20,150	4.3	31.6	64.2	434	11.3	734	182.7	0.918	0.906
World total	1.1	2.7	66.7	79.2	7,376	4.8	30.6	62.1	169	17.8	193	79.6	0.722	0.706

**NOTES:**

- (1) Projections.
- (2) Over 14 years old. Figures for industrialised countries and world total refer to 1999.
- (3) INE estimate for Spain for 2001. Industry also includes construction.
- (4) A composite index measuring achievement in three basic aspects of human development: longevity, knowledge and standard of living. Values range between 0 and 1.
- (5) A composite index measuring achievement in the same aspects as HDI but taking into account gender inequality. Values range between 0 and 1. The figure for Spain refers to 2000.

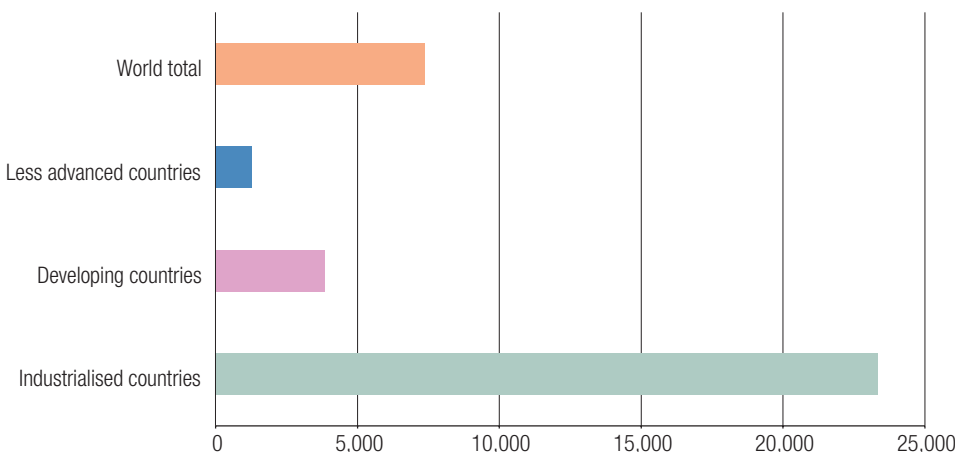
Source: Human Development Report 2003, United Nations Development Programa (UNDP).  
 Compilation: Office of the Secretary-General for Economy, Junt de Andalucía.

analyses human development adjusted for inequalities in the achievements of men and women, using the same indicators as the HDI, and the GEM measures the extent to which women play an active part in the economic and political life of a nation. The GEM differs from the GDI in that it focuses on gender inequality in key areas of economic and political participation, tracking the percentages of women

in parliament, among legislators, senior managers and officials and among professional and technical workers, gender disparity in earned income, etc.

The human poverty index (HPI), introduced in 1997, measures deprivations, so that while the HDI measures the progress of a country in the basic dimensions of human development, the HPI

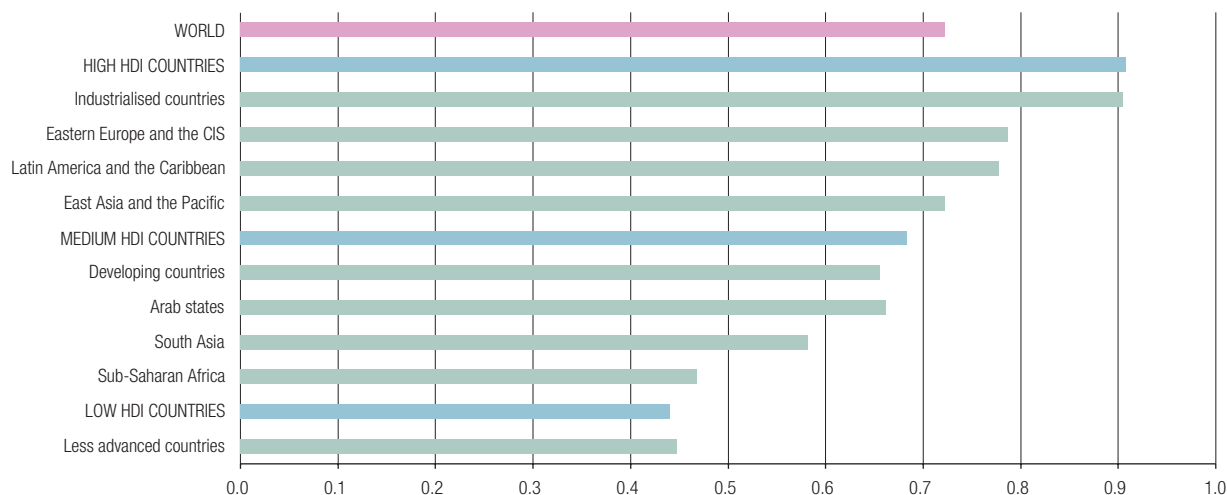
Chart 9. **GDP PER CAPITA. YEAR 2001**



**NOTE:**  
 Purchasing power parity (PPP) in US dollars.

Source: Human Development Report 2003, United Nations Development Program (UNDP).  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 10. HUMAN DEVELOPMENT INDEX 2001



**NOTE:**

A composite index measuring achievement in three basic aspects of human development: longevity, knowledge and standard of living. Values range between 0 and 1.

**Source:** Human Development Report 2003, United Nations Development Program (UNDP).

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

measures the percentage of the population that suffers deprivations in these same dimensions. There are separate indexes for developing countries (HPI-1) and selected OECD countries (HPI-2).

The statistical information provided in the *Human Development Report 2003* refers mainly to the year 2001, with HDI values for 175 countries. Of these, 55 are classed as having a high level of human development with a value of 0.8 or more (53 in 2000). A further 86 are ranked as having a medium level of human development, and the remaining 34 a low level, with a value of less than 0.5 on the HDI.

The available information shows that although human development is gradually improving in global terms, particularly when measured according to the HDI, progress is very slow and there have been cases of stagnation and decline, particularly in the nineties, when many countries suffered development reversals, while others advanced progressively in this respect. As a result, 54 countries are poorer now than they were in 1990, and in 21, a larger proportion of the population is going hungry. In 14

countries, more children are dying before age five, in 12, primary-school enrolments are shrinking and in 34, life expectancy has fallen.

The HDI shows that the majority of countries have made progress in human development over the past 20 years and that the East Asian and Pacific countries have achieved the most in this respect in the nineties. The Arab States also made significant achievements in human development, progressing at a more rapid pace than that averaged by the developing countries. On the other hand, in Sub-Saharan Africa human development has remained stagnated. Development reversals have affected two groups of countries: the Commonwealth of Independent States (CIS), which are in the process of making the transition to market economies, and poor African countries, where AIDS and other internal and external factors have hampered and even reversed progress.

A breakdown reveals that the HDI fell in 21 countries. Based on a sample of 113 countries with complete data, four countries saw a drop in the HDI between 1980 and 1990: Democratic Republic of Congo,

Guyana, Rwanda and Zambia. In the decade of the nineties, 15 countries experienced development reversals: Botswana, Burundi, Cameroon, Central African Republic, Congo, Democratic Republic of Congo, Côte d'Ivoire, Kenya, Lesotho, Moldova, Russian Federation, South Africa, Swaziland, Zambia and Zimbabwe.

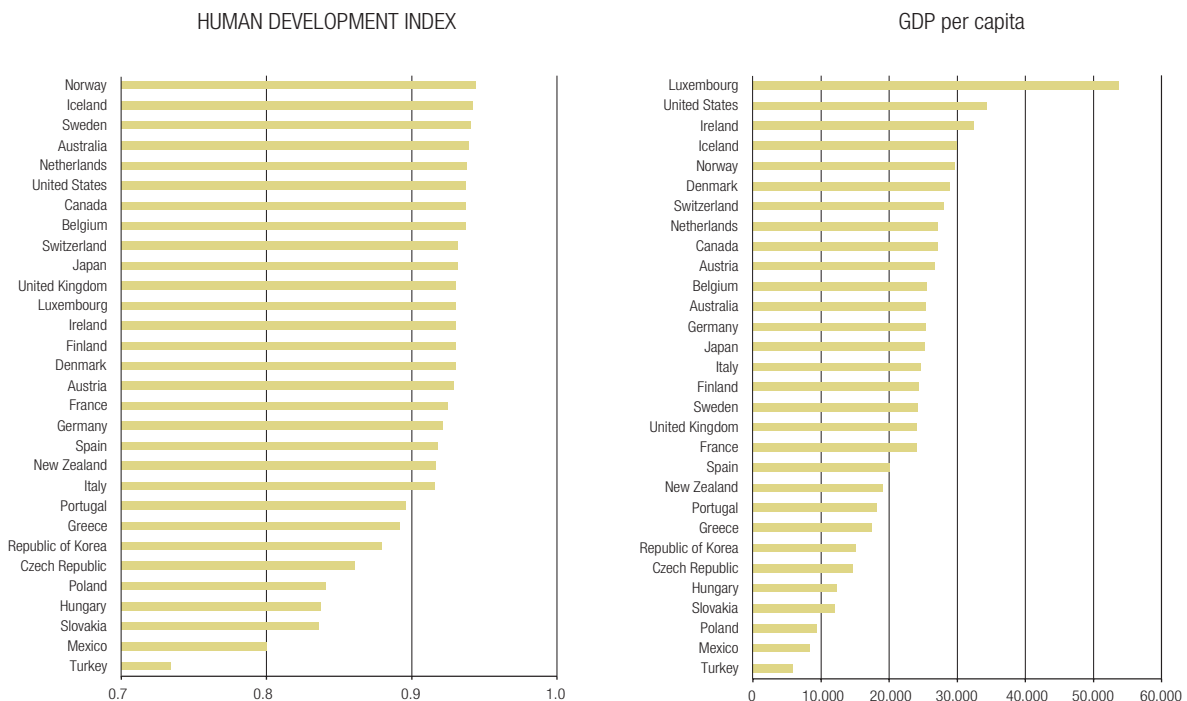
According to 2001 data, Sierra Leona had the lowest HDI value (0.275) and Norway the highest (0.944). Spain ranked nineteenth (twenty-first in 2000), with an HDI value of 0.918, which is higher than the OECD average of 0.905 and puts it ahead of three other EU countries, namely Italy, Portugal and Greece.

However, HDI and GDP per capita rankings did not coincide in any of the countries included in

the report except two (Burundi and Sierra Leona), highlighting the fact that, on the one hand, it is possible to achieve a high level of human development without necessarily having a high level of income and, on the other, that economic prosperity does not guarantee a high level of human development.

In 2001, 58.3% of the 175 countries covered by the report ranked higher on the HDI than in GDP per capita, which means that they have been very effective in converting economic prosperity into human development. Spain belongs to this group, coming nineteenth on the HDI and twenty-fourth in the GDP per capita ranking. This is also true for another eight European Union countries, namely Sweden, Netherlands, Belgium, United Kingdom, Finland, France, Portugal and Greece.

Chart 11. **INDUSTRIALISED COUNTRIES. YEAR 2001**



**NOTE:**

HDI: A composite index measuring achievement in three basic aspects of human development (longevity, knowledge and standard of living). Values range between 0 and 1.

GDP per capita measured in US dollars at purchasing power parity.

Source: Human Development Report 2003, United Nations Development Program (UNDP).

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

The opposite is true for 71 countries, that is, they ranked higher in GDP per capita than on the HDI. These are countries that have been less effective in converting economic prosperity into human development and include the United States and six EU countries: Denmark, Ireland, Luxembourg, Austria, Germany and Italy.

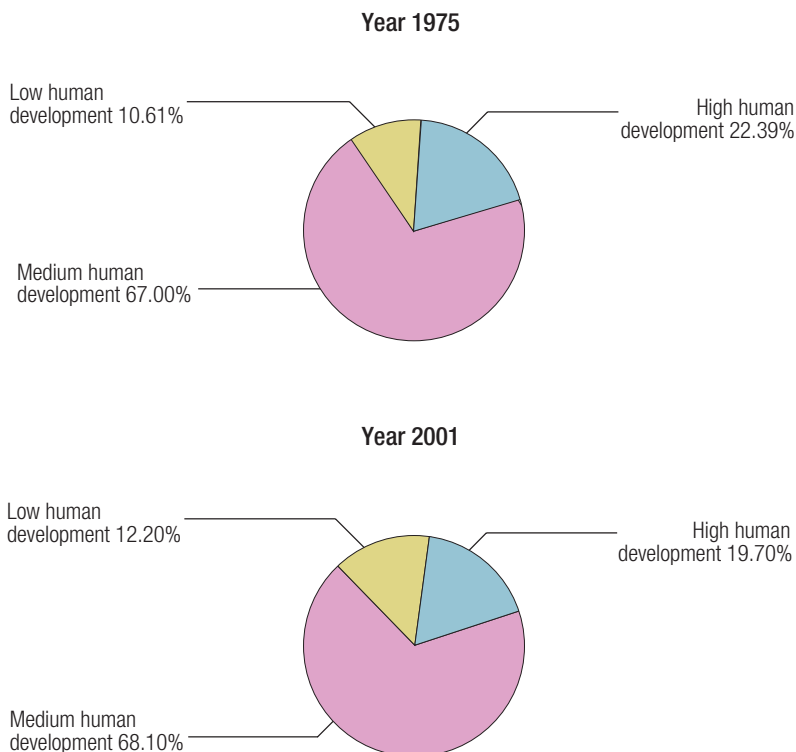
While the HDI measures the progress of a nation in human development, the human poverty index (HPI) indicates how this progress is distributed and measures the percentage of the population that suffers deprivations in the same dimensions of basic human development measured by the HDI. As these differ according to the socio-economic conditions of each country, there are separate indexes for developing countries and industrialised countries.

The HPI-1 measures poverty in developing countries, focusing on deprivation in three dimensions: longevity, as measured by the probability at birth of not

surviving to age 40; knowledge, as measured by the adult literacy rate; and overall economic provisioning, as measured by the percentage of people not using improved water sources, the percentage without sustainable access to an improved water source and the percentage of children under weight for age. This index was calculated for 94 developing countries using 2001 data, resulting in values ranging between 2.5% for Barbados and 61.8% for Niger, where the higher the percentage the greater the deprivation in a decent standard of living. In 43.6% of the countries covered, the HPI-1 value exceeds 33%, which means that poverty affects at least a third of the country's population. In the remaining countries, the situation had improved.

The HPI-2, calculated for 17 OECD countries, measures deprivations in the same dimensions as the HPI-1 and one additional one, namely social exclusion. The 2001 results for people suffering poverty range between 6.5% for Sweden and 15.8% for the United

Chart 12. **DISTRIBUTION OF WORLD POPULATION BY HUMAN DEVELOPMENT**



**NOTE:**  
As a percentage of total population.

**Source:** Human Development Report 2003, United Nations Development Program (UNDP).  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

States. Spain's HPI-2 value is 11%, putting it in ninth place.

The gender-related development index (GDI) measures achievements in the same dimensions and using the same indicators as the HDI, but captures inequality in achievement between women and men. It is simply the HDI adjusted downward for gender inequality. The UNDP Human Development Report 2003 provides the GDI results for 144 countries. All the countries for which it was calculated scored values that were lower than their HDI value, indicating the presence of gender inequality everywhere. A comparison of the HDI and GDI rankings for the 144 countries reveals that 34 of them ranked higher on the HDI than on the GDI, which means that their achievements in human development have not been evenly or fairly distributed between men and women. The opposite was true for 53 countries, suggesting a more even distribution of the development achieved, and the remaining 57 countries had the same rankings on both indexes. Spain ranks nineteenth on the HDI and twentieth on the GDI, reflecting a measure of gender inequality in human development.

The gender empowerment measure (GEM) also reflects gender differences in human development by evaluating gender inequality in key areas of economic and political participation and decision-making.

The 2003 Report publishes GEM results for 70 countries, which range between 0.127 for Yemen and 0.847 for Iceland, revealing great differences in gender disparity in the countries covered. At the top of the ranking after Iceland are Norway, Sweden, Denmark and Finland, all with values over 0.8. Spain, with a value of 0.709, ranks fourteenth, ahead of a number of European Union countries, namely Belgium, Ireland, United Kingdom, Italy, Portugal and Greece. At the other end of the scale, 23 countries had a GEM value of less than 0.5, with Egypt, Bangladesh and Yemen at the bottom of the list.

It is interesting to note that there are developing countries that have higher GEM values than some industrialised countries, demonstrating that economic development is not an indispensable requisite for creating economic and political opportunities for women. For example, the Bahamas, Trinidad and Tobago and Namibia ranked higher on the GEM than Italy, Greece and Japan.

In addition to the results of these indexes, the Human Development Report 2003 also looks at the development goals born of the Millennium Declaration adopted by 189 countries at the United Nations Millennium Summit held in September 2000.

There are eight goals with a target date of 2015, focusing on reducing poverty and furthering human development. They aim to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and develop a global partnership for development.

The Report observes that efforts to achieve these goals have so far fallen short and therefore sets out a Millennium Development Compact, building on the commitment that world leaders made at the 2002 Monterrey Conference of Financing for Development. The Compact is aimed squarely at implementing the Millennium Declaration and providing a framework to ensure that development strategies are better aligned and commensurate with the scale of the challenge of the goals.

A key conclusion of the Report is that while reallocating and mobilising more domestic resources towards targets related to the development goals, strengthening governance and institutions and adopting sound social and economic policies are all necessary to achieve the goals, they are far from sufficient, and in many countries sustained external support at well above existing levels is critical to advance their development.



2.

## Spanish Economy





# Spanish Economy

## Introduction

According to Spain's Quarterly National Accounts published by the *Instituto Nacional de Estadística* (INE - National Statistics Institute), real GDP grew by 2.4% in Spain in 2003, four tenths of a point faster than the previous year.

Although GDP growth fell short of the initial official forecast of 3%, it was two percentage points higher than the rate of growth registered in the euro area (0.4%).

Spain's improved growth performance in 2003 can be attributed to stronger domestic demand, as external demand detracted from growth to a greater extent than in 2002.

The pick-up in productive activity was mirrored in the labour market as stronger job growth, although a significant increase in the size of the labour force resulted in higher unemployment.

Inflation slowed more sharply in Spain than in the euro area in 2003, so that the inflation rate differential between the two narrowed by one percentage point.

Monetary policy in 2003 was influenced by the persistence of expectations of a fall in interest rates

on money markets, which prompted the European Central Bank (ECB) to cut the minimum bid rate on the main refinancing operations by three quarters of a point over the year to 2%.

The balancing item of the combined current and capital accounts showed an increase of 45% in the Spanish economy's borrowing requirement to 2.3% of GDP, as the result of a wider current-account deficit, with the capital account showing a larger surplus than the year before.

The public administration accounts closed the year with a surplus of 0.3% of GDP, following the deficit registered in 2002.

## Supply

On the supply side, the Andalusian economy showed balanced, broadly based growth in 2003, with all the productive sectors making a positive contribution, although trends were mixed. While industry grew at a faster rate than the previous year, growth slowed in agriculture, services and, to a greater extent, construction.

The **primary sector** registered an increase of 0.7% in real gross value added (GVA) at basic prices.

Table 6. **GROSS DOMESTIC PRODUCT AND AGGREGATE SUPPLY. SPAIN**

	Year 2003		Growth on previous year (%) (*)		
	€ million	Weight % (*)	2001	2002	2003
Agriculture and fishing	22,187	3.3	-3.3	1.0	0.7
Industry	130,595	19.5	2.3	0.6	1.3
Energy	21,081	3.2	4.3	0.3	1.4
Other	109,514	16.4	1.9	0.7	1.3
Construction	67,277	10.1	5.5	4.8	3.6
Service industries	448,732	67.1	3.7	2.2	2.1
Market services	349,584	52.3	3.3	2.1	1.8
Non-market services	99,148	14.8	3.0	2.3	3.3
GVA at basic prices	668,791	100.0	2.9	2.0	2.0
Net taxes on production	74,255		1.8	2.7	6.8
GDP at market prices	743,046		2.8	2.0	2.4

NOTE:  
(\*) Constant 1995 prices.

Source: INE Spanish Quarterly National Accounts. Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

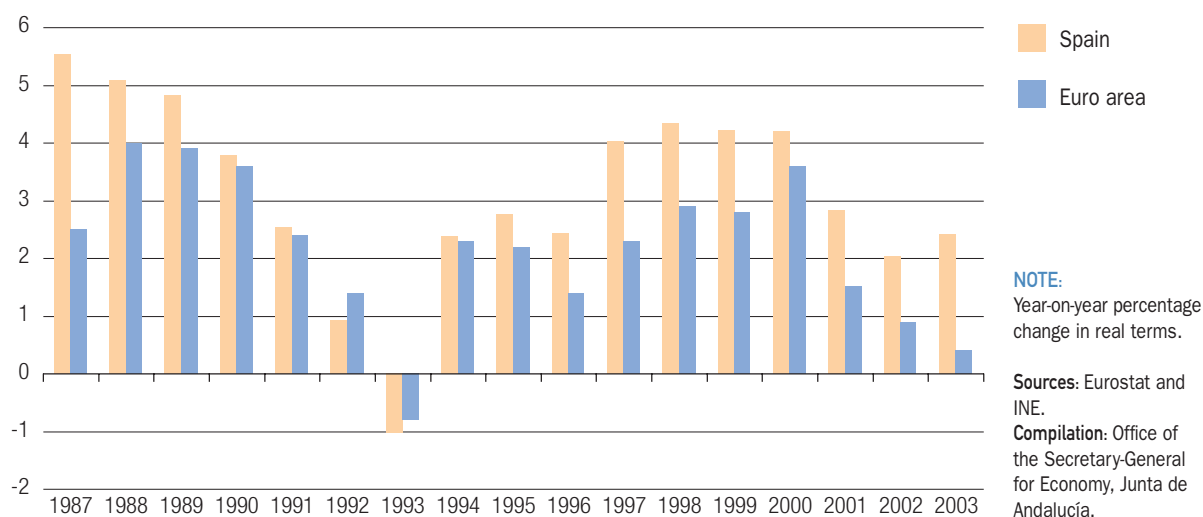
According to figures published by the Ministry of Agriculture, Fisheries and Food, final crop output increased year on year in current terms by 3.5%, largely owing to good results for wine and must and vegetables, which offset the decline in the output of other crops affected by unfavourable weather conditions. Final animal output also increased in 2003 by 4.2%.

The **industrial sector** grew at a faster rate in 2003 than it did in 2002, with a 1.3% increase in GVA

at basic prices, seven tenths of a point up on the previous year.

Industrial growth was strongest for intermediate goods, which increased by 2.1%, and capital goods made a significant recovery from the reduction in output registered the previous year, growing by 0.8%.

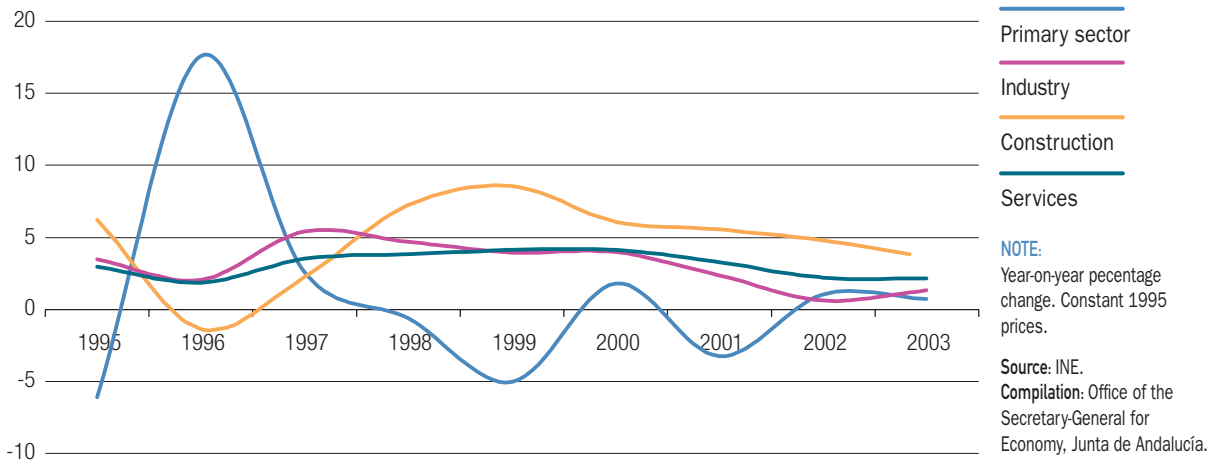
The increase in industrial production was accompanied by a rise in the capacity utilisation rate, up half a percentage point on the previous year to 79.1%.

Chart 13. **GROSS DOMESTIC PRODUCT**

NOTE:  
Year-on-year percentage change in real terms.

Sources: Eurostat and INE. Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 14. **GROSS VALUE ADDED BY SECTOR. SPAIN**



**Construction** was once again the most dynamic sector in Spain's economy in 2003, achieving 3.6% growth, although the trend of deceleration intensified, with growth over one percentage point below the 2002 rate.

The loss of momentum in construction activity was reflected in figures for construction industry inputs. The apparent consumption of cement grew by 4.8%. This and the previous year's figure are among the lowest increases recorded since 1996.

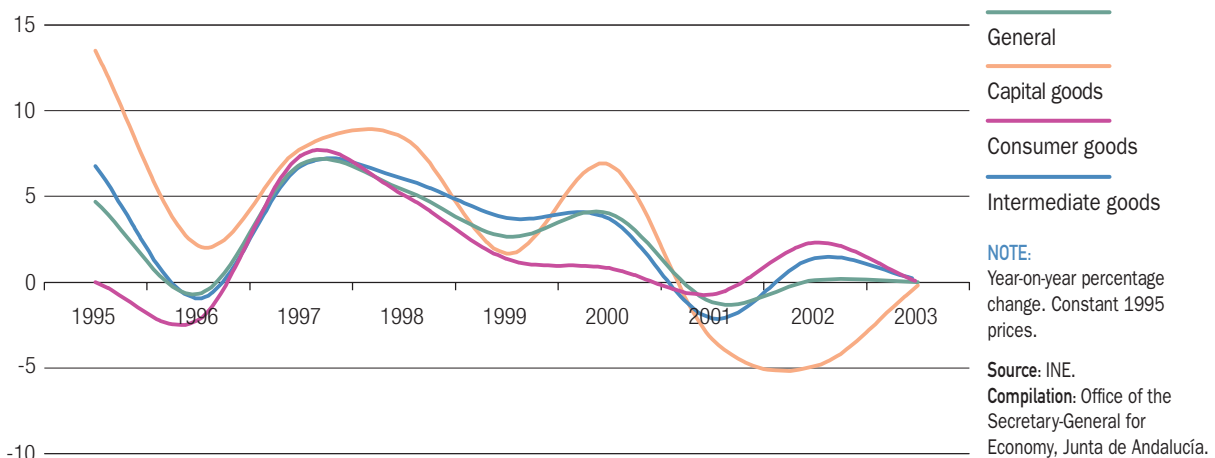
Likewise, leading indicators, such as residential building permits and government tenders for civil

engineering work, show that housing construction maintained an expansionary trend, while the civil engineering sector lost momentum.

The **service sector** grew by 2.1%, which was practically the same rate as in 2002.

GVA at basic prices generated by branches of the sector providing market services grew by 1.8%, three tenths of a point below the 2002 rate, while non-market services grew more rapidly at a rate of 3.3%, one percentage point faster than the previous year.

Chart 15. **INDUSTRIAL PRODUCTION INDEX. SPAIN**



Disaggregated data for the market service subsector reveals a significant pick-up in tourism, which, according to figures published by the INE in the Hotel Occupancy Survey, saw a 4.4% increase in the number of people staying in Spanish hotels and a 2.4% increase in overnight stays, a significant improvement on the negative results recorded the previous year.

## Demand

On the demand side, GDP growth in 2003 can be wholly attributed to the positive contribution made by domestic demand, which offset the worsening of the net balance of trade, the result of import growth outpacing export growth.

Stronger domestic demand growth in 2003 was due to the recovery of investment in capital goods after the decline registered in 2002.

The fastest-growing domestic demand component was final consumption expenditure, which increased by 3.3%, up three tenths of a point on the previous year. Stronger consumption growth can be attributed to an acceleration in household final consumption expenditure growth, which rose year on year by four tenths of a point to 3%, and to a similar trend in final

consumption expenditure by the public administration, which grew by 4.6%, making it the most dynamic expenditure component.

On the other hand, final consumption expenditure by non-profit institutions showed slower growth in 2003, with a 2.4% year-on-year increase, 1.8 percentage points below the previous year's rate.

The domestic demand aggregate that registered the sharpest acceleration in 2003 was gross fixed-capital formation, which grew year on year by 3%, two percentage points faster than the previous year, thanks to positive results for its two main constituent components.

Investment in capital goods picked up after the decline experienced the previous year, growing at a rate of 1.9%, while investment in construction grew by 3.7%, half a percentage point below the previous year's rate.

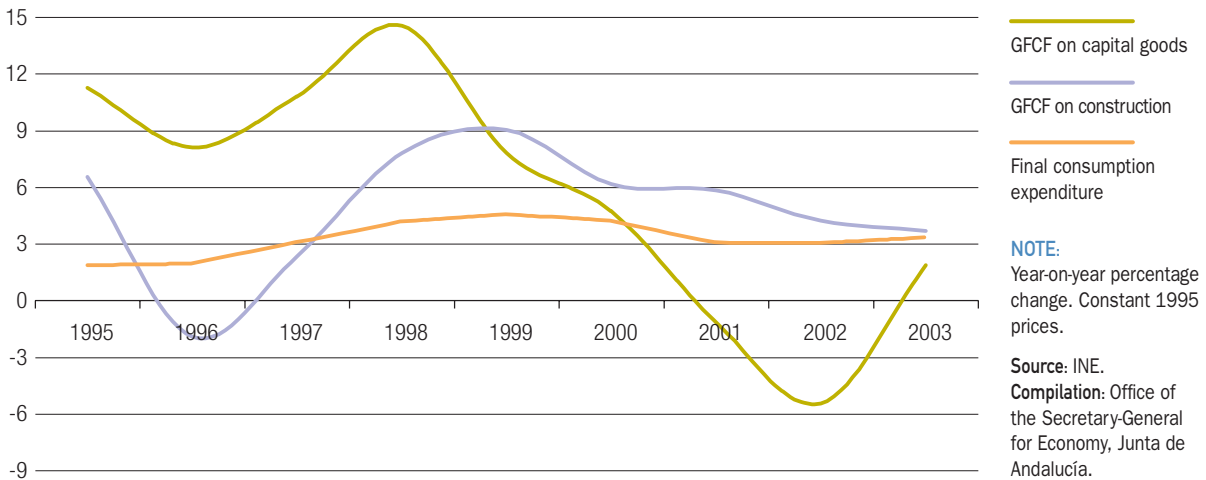
External demand detracted from GDP growth in 2003 to a greater extent (–1 percentage point) than in 2002, with import growth outpacing export growth.

According to the Quarterly National Accounts published by the INE, both exports and imports

Table 7. **GROSS DOMESTIC PRODUCT AND AGGREGATE DEMAND. SPAIN**

	Year 2003		Growth on previous year (%) (*)			
	€ million	Weight (%) (*)	2001	2002	2003	
Final consumption expenditure	563,678	75.9	3.0	3.0	3.3	NOTE: (*) Consant 1995 prices.  Source: INE Spanish Quarterly National Accounts. Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.
Household final consumption expenditure	425,223	57.2	2.9	2.6	3.0	
NPISH final consumption expenditure	5,175	0.7	1.6	4.2	2.4	
Government final consumption expenditure	133,280	17.9	3.6	4.4	4.6	
Gross fixed-capital formation	189,858	25.6	3.3	1.0	3.0	
Capital goods	45,410	6.1	–1.2	–5.4	1.9	
Construction	112,867	15.2	5.8	4.2	3.7	
Other products	31,581	4.3	3.6	2.6	2.8	
Domestic demand	756,402	101.8	3.1	2.6	3.4	
Export of goods and services	207,632	27.9	3.6	0.0	4.0	
Import of goods and services	220,988	29.7	4.0	1.8	6.7	
GDP at market prices	743,046	100.0	2.8	2.0	2.4	

Chart 16. CONSUMPTION AND INVESTMENT. SPAIN



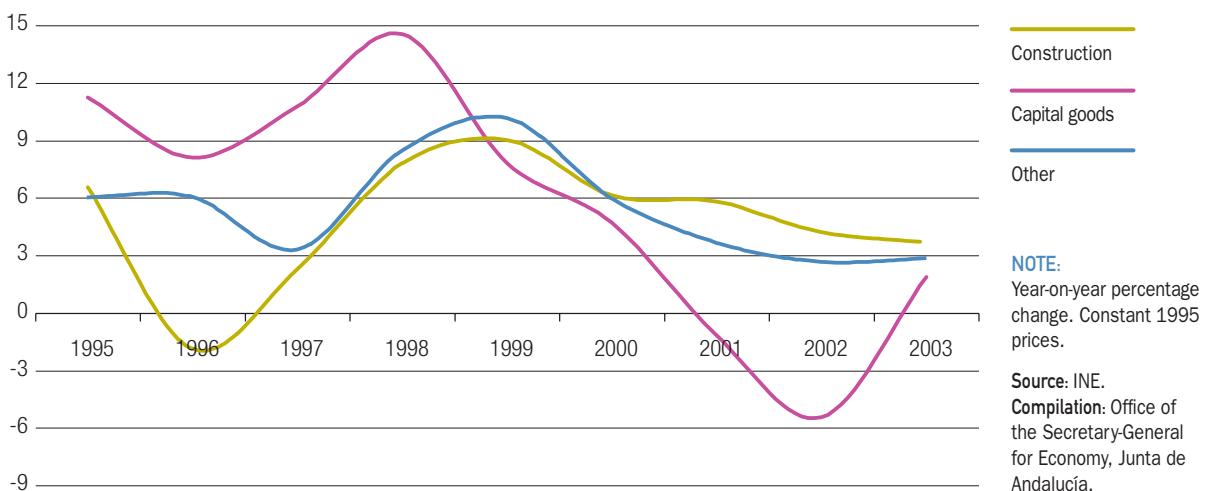
picked up. Exports of goods and services rose year on year by 4%, a significant improvement on the near-flat growth of the previous year. Imports grew at an even faster rate, with a 6.7% increase, almost five percentage points higher than the previous year's rate and well in excess of export growth.

According to foreign trade figures compiled by the Economy and Finance Ministry Customs and Excise Department, the trade deficit widened further to 46,284 million euro, and the export/import ratio stood at 74.9% in 2003.

The deficit was 6.2% of GDP, resulting from a nominal 5% increase in imports and a lower 3.4% increase in exports, both well in excess of the previous year's rates.

The 8% year-on-year increase in imports of consumer goods was wholly attributable to the rise in imports of non-food products, as food product imports fell. There was also a year-on-year increase in imports of capital goods (5.5%) and intermediate goods (3.5%), largely owing to the rise in imports of energy products.

Chart 17. GROSS FIXED-CAPITAL FORMATION. SPAIN



**Box 2. PRODUCTIVITY IN THE SPANISH ECONOMY**

Productivity is one of the pillars on which the competitiveness of an economy is based, because gains in productivity tend to curtail cost and price growth. The most conceptually accurate measure of productivity is one that clearly captures the idea of economic efficiency in production. It is measured in terms of the contribution to output of inputs of the factors of production. This is called total factor productivity and can be defined in two different ways depending on whether value added or total output is used in the calculation: one way is to divide value added by weighted inputs of capital and labour, and the other is to divide total output by a weighted combination of labour, capital and intermediate inputs.

The most commonly used measure of productivity is apparent labour productivity, as it is easy to calculate, while the use of total factor productivity is more limited for statistical reasons. Labour productivity is measured as the amount of output or value added per unit of labour input.

According to Eurostat, Spain's productivity per worker in 2003 was 95.8% of the fifteen-member European Union average, putting it in eleventh place ahead of Germany, Greece, the Netherlands and Portugal, whose productivity was just 63.9%. Luxembourg, Ireland, Belgium, France and Italy all recorded productivity levels above the EU average.

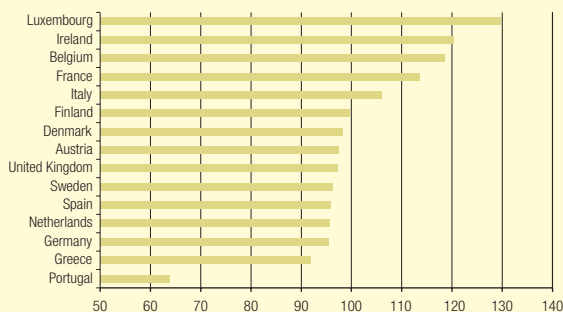
Spain has therefore fallen back in this respect over the current growth cycle that began in 1994, when Spain's productivity was 96.6% of the EU average. This is very significant, in so far as this last decade is the only time that productivity has grown at a slower pace in Spain than in Europe since the sixties.

In the sixties and seventies, productivity in the Spanish economy showed a cumulative annual growth rate of 5.4%, almost two points higher than the average EU rate of 3.5%.

Later, although productivity increased at a slower pace between 1981 and 1993, with a cumulative annual rate of 1.9%, it was still slightly higher than the EU average of 1.8%.

In the last decade (1994-2003), Spain saw a considerable slowdown in productivity growth compared with previous periods to 0.7%, slipping below the EU average of 0.9%.

**APPARENT LABOUR PRODUCTIVITY. YEAR 2003**



**NOTE:**  
EU-15=100.

**Source:** Eurostat.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

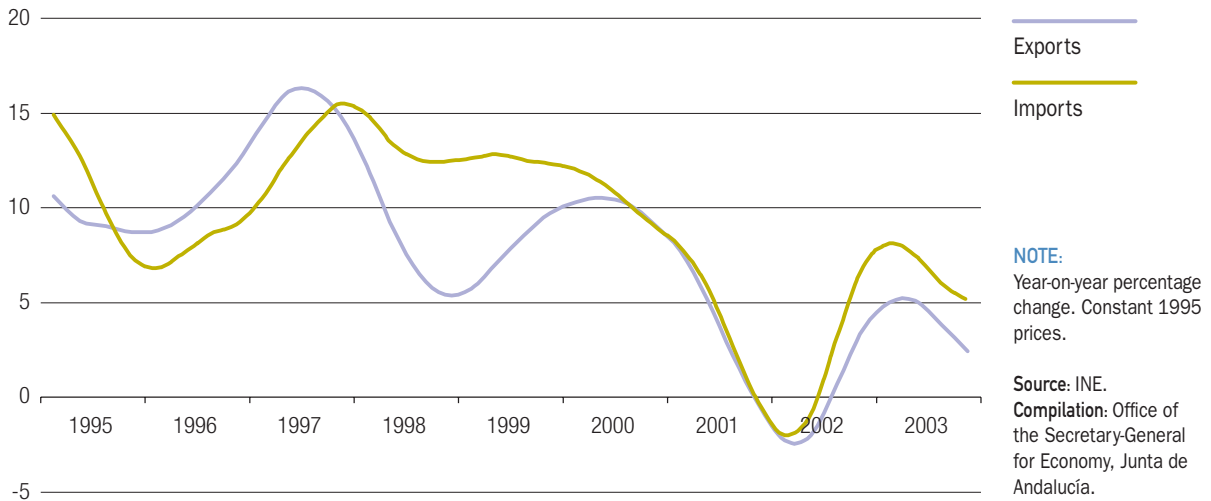
**APPARENT LABOUR PRODUCTIVITY**

Years	Spain	European Union
1961-1980	5.4	3.5
1981-1993	1.9	1.8
1994-2003	0.7	0.9

**NOTE:**  
Cumulative growth rates.  
**Source:** Eurostat.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 18. EXPORTS AND IMPORTS OF GOODS AND SERVICES. SPAIN



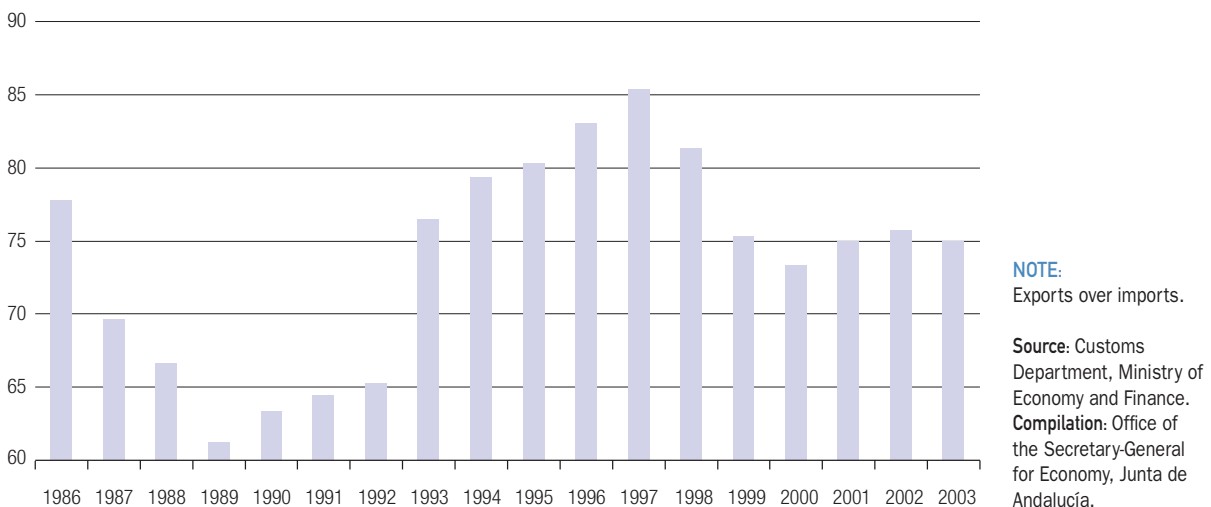
Export growth was highest for capital goods (5.1%), followed by consumer goods (3.3%) and intermediate goods (3.1%).

A breakdown by geographical area shows that exports to the European Union, which accounted for 71.8% of the total, grew by 6.2% in 2003, the most significant increases being in exports to the Benelux countries, Italy and Germany.

Outside the European Union, the biggest increase was in exports to Eastern Europe, which grew by 8.1%, while exports to the United States fell by 1.4%.

Imports from EU countries, accounting for 64% of the total, grew by 4.8%, largely owing to an increase in purchases from Portugal and Germany. There was a 1.6% increase in imports from the OPEC region, while imports from the United States fell by 5.4%.

Chart 19. EXPORT/IMPORT RATIO. SPAIN





## Labour market

In 2003 there was a moderate recovery in employment. According to the Quarterly National Accounts compiled by the INE, job growth, measured in terms of full-time equivalent jobs, was 1.8%, three tenths of a point up on the previous year.

The number of people in work registered in Social Security files rose by 3%, a similar increase to that registered in 2002.

The Labour Force Survey (LFS) indicates that job growth accelerated by more than half a percentage point to 2.7%.

However, an analysis of job growth by sector reveals mixed trends. According to the LFS, job destruction was observed in agriculture, although at a slower rate (-2%) than the previous year, and in industry, where job losses were higher than in 2002 (-1%). On the other hand, the service sector showed the biggest increase in jobs, with job growth climbing almost a whole percentage point to 4.1%. It therefore took over from construction, which has shown the strongest job growth in recent years and registered a 3.7% increase in 2003, as the most dynamic sector in terms of employment.

A breakdown of the figures by gender shows that employment increased among both men and women,

although at significantly different rates. Female job growth was up 1.6 percentage points on the previous year to 4.9%, while male job growth rose by just two tenths of a point to 1.4%.

The number of wage earners in employment increased by 3.5%, seven tenths of a point up on the previous year. The number of people employed under open-ended contracts of work rose by 4.1%, double the rate of increase for those with temporary employment. The rate of temporary employment therefore fell by four tenths of a point to 30.6%.

According to LFS data, in 2003, as in 2002, the labour force grew significantly (2.7%), outweighing the rise in employment, so that unemployment rose by 2.1%, resulting in an unemployment rate of 11.3%.

A breakdown of these figures by gender and age shows that the biggest increase in unemployment was once again among women and among the over-twenty-fives.

Continuing the trend of recent years, long-term unemployment continued to fall, although at a considerably slower rate, and the increase in jobless numbers can be wholly attributed to an increase in the number of people who have been out of work for less than two years.

Chart 20. **GROSS DOMESTIC PRODUCT AND EMPLOYMENT. SPAIN**

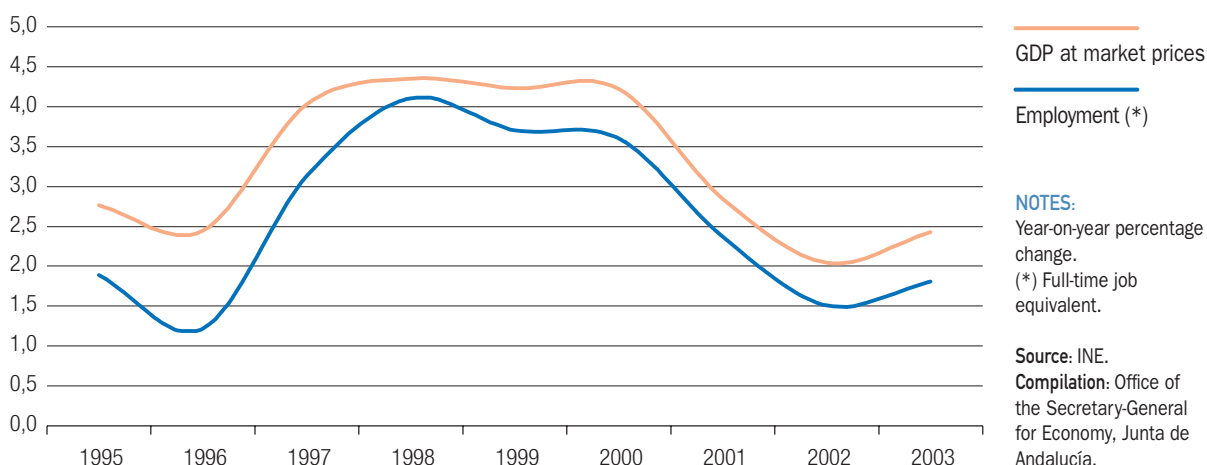
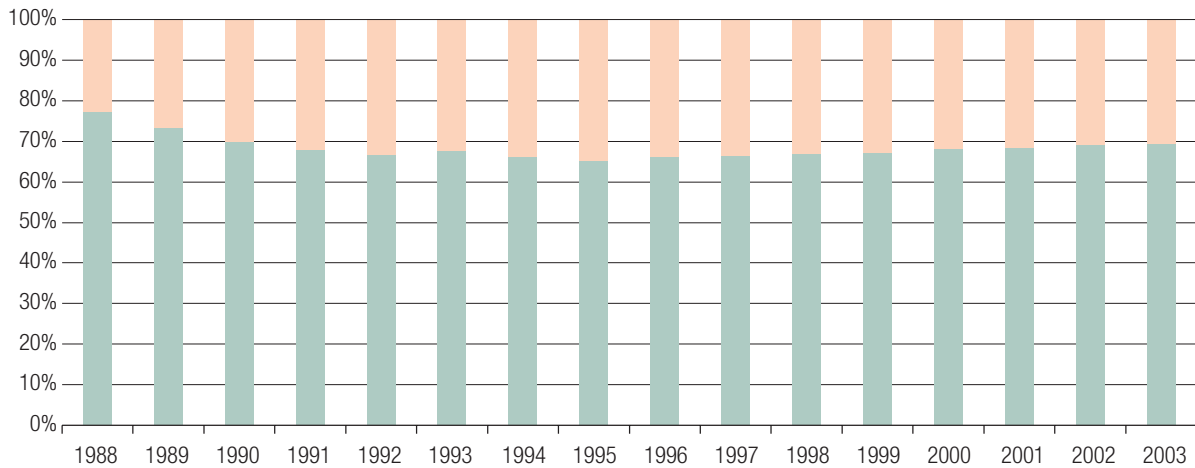


Chart 21. **WAGE-EARNING EMPLOYMENT BY LENGTH OF CONTRACT. SPAIN****NOTE:**

As a percentage of total wage-earning employment.

■ Open-ended contracts    ■ Temporary contracts

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Confirming LFS data, jobless figures recorded at National Employment Institute (INEM) offices showed a 1.4% increase in unemployment in December 2003.

## Prices and wages

On the supply side, the overall GDP deflator registered a year-end growth rate of 4.2%, two tenths of a point up on 2002.

A breakdown by sector reveals that construction registered the highest price growth, with the GDP deflator for this sector rising by 7.6%, followed by services (4.2%) and agriculture (4.1%), while industry was the least inflationary sector (1.9%). Trends for 2003 show that price growth was high in the primary sector after the fall in prices registered in 2002 and continued to accelerate in the construction sector, while in industry and services price growth was slower than the previous year.

On the demand side, the consumer price index (CPI) showed decelerating price growth over the year,

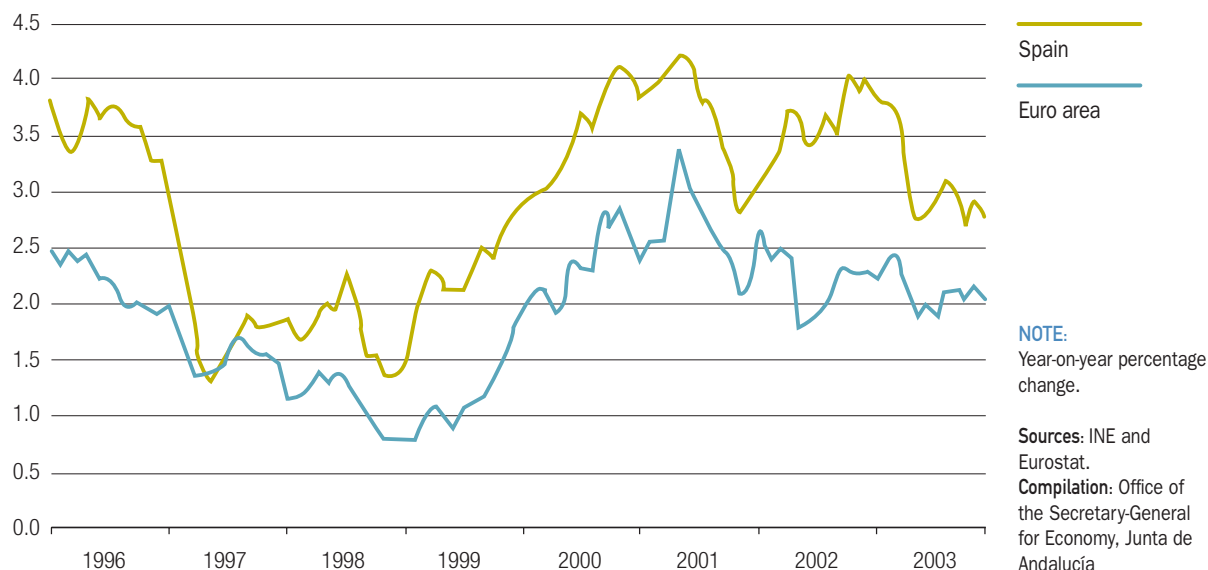
except in the summer months, ending the year at 2.6%, 1.5 percentage points below the 2002 year-end rate.

Underlying inflation, excluding the most volatile components, namely unprocessed food and energy, stood at 2.5% at the end of the year, nine tenths of a point below the 2002 year-end rate.

Price growth was slower in Spain than in the euro area, resulting in a narrowing of the inflation rate differential between the two. The harmonised index of consumer prices (HICP) showed that in 2003 Spain's year-end inflation rate was 0.7 percentage points above the euro area rate, narrowing the inflation rate differential by one percentage point. Even so, Spain was the fourth most inflationary EU country after Greece, Ireland and Portugal.

Pay rises negotiated in collective agreements in 2003, incorporating the impact of the safeguard clauses agreed the previous year, averaged 3.69%, which was higher than the inflation rate and therefore resulted in a gain in purchasing power.

Chart 22. HARMONISED INDEX OF CONSUMER PRICES



## Balance of payments

According to figures compiled by the Bank of Spain, the balancing item of the combined current and capital accounts, a measure of the economy's lending capacity or borrowing requirement, showed a negative balance of 13,258.8 million euro in 2003, equivalent to 2.3% of GDP. Spain's borrowing requirement was therefore 45% higher than in 2002, owing to an increase in the current-account deficit, as the capital account showed a bigger surplus than in 2002.

Specifically, the accumulated current-account deficit was 21,979.9 million euro in 2003, 32.2% higher than the previous year. This increase was largely due to a widening of the merchandise trade and investment income deficit and a reduction in the current transfers surplus. Only the services trade balance showed a surplus in 2003, thanks to a 3.6% increase in the tourism and travel surplus.

The capital account showed a surplus of 8,721.1 million euro in 2003, 16.3% up on the previous year. This increase was largely due to capital transfer inflows from the European Union.

The financial account, excluding transactions by the Bank of Spain, registered higher net inflows in 2003 than in 2002, which can be attributed to net inflows of foreign direct investment and other investment, as portfolio investment and financial derivatives registered net outflows.

## Monetary trends

Monetary policy in 2003 was influenced by the persistence of expectations of a fall in interest rates on money markets, which prompted the European Central Bank (ECB) to cut the minimum bid rate on the main refinancing operations by three quarters of a point over the year.

The first interest-rate cut came on 6 March, when the official price of money was reduced by a quarter of a point to 2.5%, until 6 June when it was trimmed again by half a point to 2%, remaining at this level for the rest of the year.

A look at the various measures of the money supply shows that M3 growth slowed to 7%, so that money supply growth in Spain was higher than the 4.5%

reference value set by the ECB for 2003, as a result of the preference shown by economic agents for more liquid positions.

Influenced by falling interest rates, the amount of credit granted in Spain grew at a faster rate in 2003 than it did in 2002. Figures published by the Bank of Spain reveal a 14.6% year-end, year-on-year increase in credit granted by financial institutions, 2.3 percentage points up on the previous year.

## Budget implementation

With regard to budget implementation, Spain closed the year with a surplus of 0.3% of GDP in terms of the National Accounts, up from the 0.07% deficit registered in 2002.

The Social Security showed a surplus equivalent to 1% of GDP, while central government showed a deficit of 0.4%.

The deficit shown by the territorial bodies, which include regional and local authorities, remained the same as in 2002 at 0.3% of GDP.

## Economic forecasts

National and international organisations coincide in forecasting that Spain's economy will perform better in 2004 than it did in 2003. The Spanish Ministry of Economy and Finance predicts 3% GDP growth, a slightly more optimistic forecast than those made by the IMF and the OECD (2.9%) and two tenths of a point higher than the European Commission forecast (2.8%).

The Ministry of Economy and Finance forecasts that the performance of the Spanish economy will improve as the result of stronger domestic demand, spurred by more buoyant private consumption expenditure. This trend is also expected to be mirrored in the labour market in the form of more robust job growth, estimated at 1.9% in terms of full-time equivalent jobs. The European Commission forecasts 2.1% job growth, three tenths of a point higher than the Ministry's forecast. The unemployment rate will continue to fall to 11% according to the Ministry, while the IMF estimates a lower unemployment rate of 10.8%, and the European Commission and the OECD expect it to be 10.9%.

Chart 23. **BUDGET DEFICIT. SPAIN**



**NOTE:**

As a percentage of GDP at constant prices.

**Source:** Ministry of Economy and Finance.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Table 8. **SPANISH ECONOMY. MACROECONOMIC FORECASTS**

	Ministry of Economy and Finance	European Commission		OECD		IMF	
	2004	2004	2005	2004	2005	2004	2005
GDP	3.0	2.8	3.3	2.9	3.3	2.9	3.5
Private consumption	3.1	3.0	3.3	3.3	3.6	2.9	3.6
Employment	1.9	2.1	2.3	–	–	2.7	2.6
Inflation <sup>(1)</sup>	2.7	2.4	2.3	3.5	3.2	2.7	2.7
Unemployment rate <sup>(2)</sup>	11.0	10.9	10.5	10.9	10.2	10.8	10.1

**NOTES:**

Year-on-year percentage change unless otherwise stated.

(1) Household final consumption expenditure deflator for Ministry of Economy and OECD figures, HICP for European Commission and consumer prices for IMF.

(2) As a percentage of labour force.

Sources: INE, Ministry of Economy and Finance, European Commission, OECD and IMF.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Inflation forecasts point to a continuation of the trend of price moderation. The Ministry forecasts an inflation rate of 2.7% and the European Commission, 2.4%.

The European Commission, the OECD and the IMF expect Spain's economic growth to continue gaining

momentum in 2005, with the IMF forecasting 3.5% GDP growth and the European Commission and the OECD, 3.3%. They also predict that the trend of price moderation will continue and that the unemployment rate will fall further.

# 3.

## Overview of the Andalusian Economy



## Overview of the Andalusian Economy

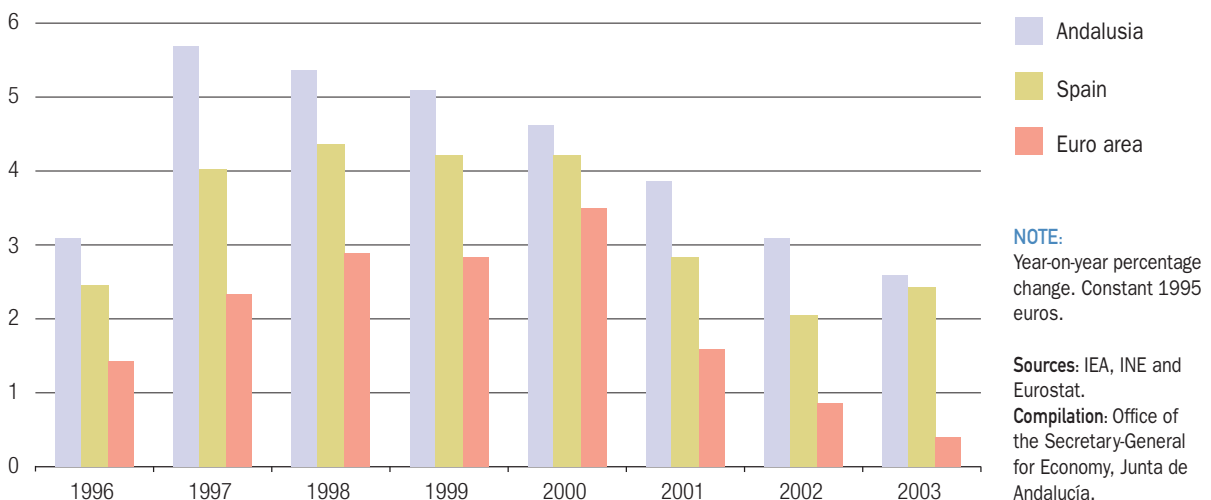
### Introduction

In a context in which expectations of a global economic revival strengthened as the year progressed, Andalusia's Quarterly Accounts produced by the *Instituto de Estadística de Andalucía* (IEA - Andalusian Statistics Institute) indicate that Andalusia's gross domestic product (GDP) grew by 2.6% in real terms in 2003. This was a faster rate of growth than registered nationally (2.4% according to the INE) or in the euro area (0.4% according to Eurostat).

As a result of this trend, which has continued unbroken since the current economic cycle began in 1994, the Andalusian economy continued to gain ground, slightly increasing its weight in the national economy in 2003 to 14.2% and in the euro area economy to 1.3%.

In nominal terms also, Andalusia's GDP, which amounted to 104,014.14 million euro, grew at a faster rate (6.9%) than Spain's (6.7%).

Chart 24. **GROSS DOMESTIC PRODUCT AT MARKET PRICES**





### 3. OVERVIEW OF THE ANDALUSIAN ECONOMY

This GDP growth was accompanied by a further increase in the region's population, which stood at 7,606,848 on 1 January 2003, up 1.7% on the previous year, according to the Municipal Population Census carried out by the INE. Although population growth in Andalusia was weaker than in Spain as a whole (2.1%), it was almost six times higher than in the euro area (0.3% according to Eurostat).

The fact that GDP growth outpaced population growth meant that Andalusia's GDP per capita rose by 5.1% to 13,673.75 euro in 2003, a sharper increase than registered nationally (4.5%). Andalusia therefore continued to close the gap on Spain, with the region's GDP per capita representing 78.6% of the national figure, 0.4 percentage points up on the previous year.

Similarly, in 2003 Andalusia continued to close the gap on the EU in terms of income per capita. GDP per capita, measured in purchasing power parity terms was 69.4% of the average calculated for the fifteen members of the European Union prior to enlargement, almost one percentage point up on the previous year.

On the supply side, the non-agricultural sectors contributed to economic growth, expanding at a faster rate than in Spain or the euro area.

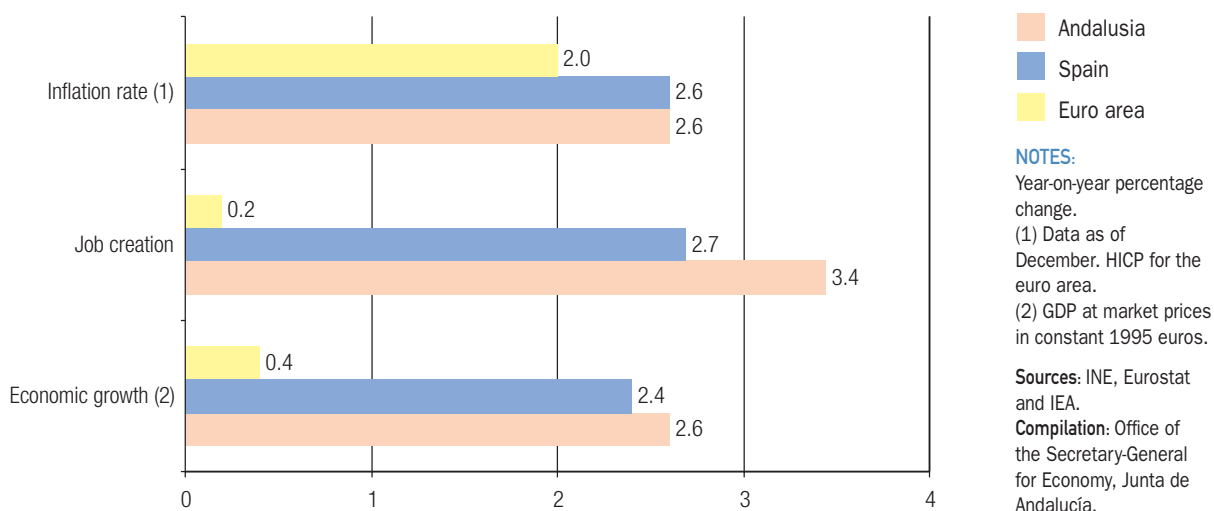
A look at domestic demand reveals that consumption and investment maintained a healthy rate of growth, with particularly good results for spending on consumer durables and investment in construction. With regard to external demand, the Andalusian economy saw a significant increase in trade with other countries, and both inward and outward foreign investment continued to show positive results.

Andalusia's strong economic performance in 2003 was also mirrored in labour market trends and entrepreneurial activity.

According to the *Directorio Central de Empresas* (DIRCE - Central Business Directory) compiled by the INE, a total of 417,006 enterprises (excluding primary sector enterprises) were operating in Andalusia as at 1 January 2003, 4.7% more than the previous year. Andalusia's business sector therefore grew at a faster rate than Spain's did (3.8%), with the region accounting for 14.7% of all Spanish enterprises, a significantly higher proportion than its share in national GDP.

The region's labour market picture was bright, with robust job growth that exceeded the national and euro area average rates. This resulted in a continuation of the trend of falling unemployment in the region, in contrast to the rise in jobless numbers recorded in Spain as a whole.

Chart 25. **ECONOMIC GROWTH, EMPLOYMENT AND INFLATION. YEAR 2003**



In an international context characterised by muted inflationary pressures, inflation indicators for Andalusia revealed sustained price moderation over 2003, and the year ended with the lowest inflation rate since 1999.

The indicators used to monitor what is now known as the “new economy”, the “information society” or the “knowledge society” reveal the continued development and rapid expansion of information and communication technologies in Andalusia, registering higher growth rates than in Spain as a whole.

## Supply

Economic growth in Andalusia in 2003 was based on positive contributions by the non-agricultural sectors, which expanded at a faster rate than they did in 2002, in contrast to the recessionary trend observed in the primary sector, after two years of rapid expansion.

Specifically, GVA at basic prices generated by the non-agricultural sectors grew by 3.2% in real terms in Andalusia in 2003, 1.1 percentage points faster than the national rate and 2.7 points faster than the euro area rate (0.5%). Andalusia outperformed Spain and the euro area in all the non-agricultural sectors, particularly the construction industry.

In the Andalusian **primary sector**, GVA at basic prices fell by 7.2%, following two years of rapid expansion. This downward trend was also observed in the euro area, where primary sector GVA fell by 3.4%, while the national primary sector saw weak GVA growth of 0.7%.

As a result, the Andalusian primary sector saw a fall in its share in the national primary sector and in the production structure of the Andalusian economy.

Specifically, the proportion of GVA generated by the Andalusian primary sector fell by two percentage points to 26.3% of the national total, and its weight in the Andalusian economy also shrank by eight tenths of a point to 7.6%.

The decline in Andalusian agriculture can be attributed to negative results in all the subsectors, except the farming of animals.

According to figures supplied by the Regional Ministry of Agriculture and Fisheries, final crop output was down 11.3% in current terms, owing to negative results for most crops, with the biggest reductions in edible oils and their cleavage products, industrial herbaceous crops, cereals, vegetables and non-citrus fruits. On the other hand, there were increases in the production of wine and byproducts, citrus fruits and cut flowers and ornamental plants, although they account for only 10% of this subsector’s total output.

Final animal output rose by 5.3% in nominal terms, so that the farming of animals subsector accounted for 16.4% of Andalusia’s final agricultural output in 2003, almost three percentage points more than in 2002, but less than half the national percentage (34.6%).

Final forestry output experienced a sharp 36.1% decline in 2003, which reduced its share in the sector to just over 1%.

According to data provided by the national port authority Puertos del Estado and by the regional government port authority *Empresa Pública de Puertos de Andalucía*, the fishing subsector recorded a further reduction in catches unloaded at Andalusian ports (–14.5%) in 2003.

This downward trend in output was not reflected in trade exchanges, as the primary sector registered 2% nominal export growth in 2003, pushing its export share up to 49.4%.

Conversely, in the labour market, the number of people in work fell year on year by 1.8%, similar to the reduction registered nationally. The downward trend affected all the agricultural subsectors.

The **industrial sector** showed 2.6% real GVA growth, doubling the national rate for this sector (1.3%) and in contrast with the stagnation observed in the euro area (0%).

Table 9. **BASIC INDICATORS OF THE ANDALUSIAN ECONOMY. YEAR 2003**

<b>GDP at market prices <sup>(1)</sup></b>	
Millions of current euros	104,014.14
Nominal growth in the year	6.9%
Real growth in the year	2.6%
GDP per capita <sup>(1)</sup>	13,673.75
GDP per capita, Spain=100 <sup>(1)</sup>	78.6%
Andalusian GDP/Spain GDP <sup>(2)</sup>	14.2%
<b>GDP distribution <sup>(3)</sup></b>	
Compensation of employees	43.4%
Gross operating surplus <sup>(4)</sup>	46.2%
Net taxes on production	10.4%
<b>Employed</b>	
Thousand people	2,585.1
Annual growth	3.4%
Employment in Andalusia/employment in Spain	15.5%
<b>Productivity <sup>(5)</sup></b>	
Spain=100	91.9%
<b>Price growth</b>	
GDP deflator	4.2%
CPI <sup>(6)</sup>	2.6%
<b>Labour costs <sup>(7)</sup></b>	
Euro	1,832.0
Annual growth	4.4%
Spain=100	92.0%
<b>Enterprises <sup>(8)</sup></b>	
Number	417,006
Annual growth	4.7%
Enterprises in Andalusia/Enterprises in Spain	14.8%
<b>Foreign trade</b>	
Exports	
€ million	11,306.06
Annual growth	8.7%
Imports	
€ million	12,056.15
Annual growth	9.3%
Trade balance	
€ million	-750.10
% of GDP	-0.7%
Openness to trade <sup>(9)</sup>	22.5%
Export share <sup>(10)</sup>	59.8%

**NOTES:**

- (\*) Advance figures.  
(1) GDP at market prices in current euros.  
(2) GDP at market prices in constant 1995 euros.  
(3) Data from 2001.  
(4) Includes mixed income.  
(5) GDP at market prices in constant 1995 euros per person in employment.  
(6) Year-on-year rate as of December.  
(7) Labour costs per worker per month.  
(8) Non-agricultural sectors only.  
(9) Sum of exports and imports as a percentage of GDP at market prices in current euros.  
(10) Primary and industrial sector exports as a percentage of GVA at basic prices in current euros.

Sources: IEA and INE.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

This upward growth trend had a favourable influence on the labour market, with a 2.3% increase in employment in the sector, contrasting sharply with the job destruction experienced in industry nationally, where employment fell by 1%.

As output growth outpaced job growth, apparent productivity per worker in Andalusian industry rose, making it the Andalusian sector with the highest productivity, on a par with that of Spanish industry as a whole.

The Andalusian Industrial Production Index (AIPI) showed similar results, rising year on year by 3.3%, doubling the national average (1.6%) and well in excess of the euro area average (0.4%).

For the second consecutive year, the increase in the AIPI was broadly based across all categories of goods classified according to economic destination and the four divisions of activity. The most significant increases were observed in the production of capital goods, which was up 4.9% on the previous year, and the manufacture of basic metals and fabricated metal products and precision mechanics, which rose by 6.3%, twice the previous year's rate.

A look at foreign trade figures for the sector reveals robust industrial export growth (9.8%) and even

stronger import growth (12%), up sharply from the decline experienced in 2002.

The increase in industrial sales abroad, which can be wholly attributed to manufacturing industry exports, particularly the manufacture of basic metals and fabricated metal products, resulted in a 2.6-point increase in the sector's export share to 61%.

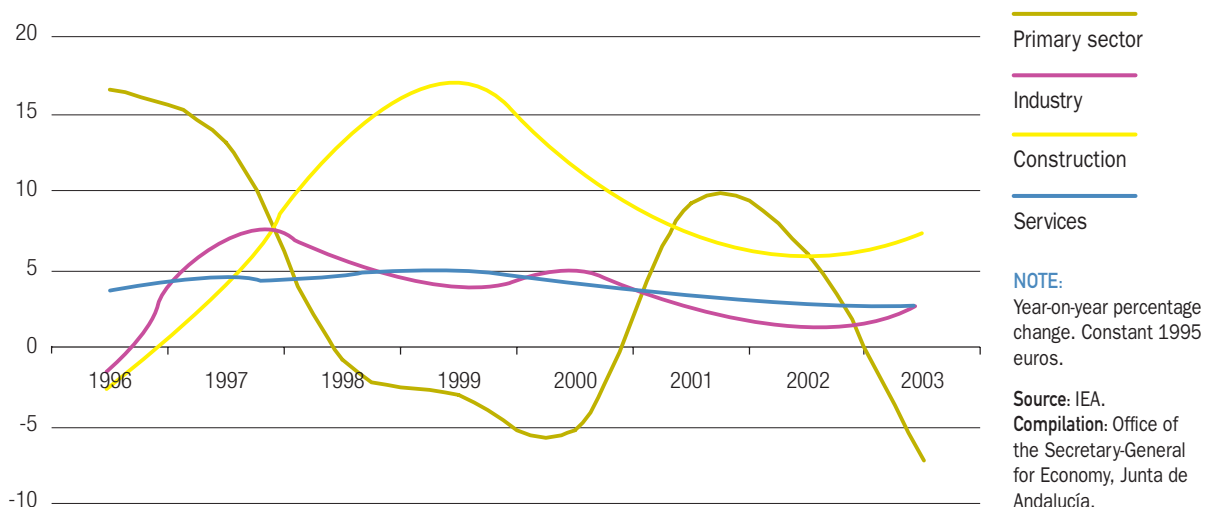
As with industry, the **construction sector** in Andalusia grew at twice the rate it did in Spain as a whole (7.5% in the region compared with 3.6% nationally), while construction in the euro area contracted (-0.5%).

Strong growth in the construction industry, tripling the rate averaged by the Andalusian sectors as a whole, meant that it increased its share in the Andalusian production structure to 12.3%, up six tenths of a point on the previous year and significantly higher than the proportion it accounts for nationally (8.8%) and in the euro area (5.4%).

A breakdown of production indicators reveals that the dynamic performance of the construction sector was driven mainly by housing construction.

A total of 159,837 housing starts were registered in Andalusia in 2003, up 26.9% on the previous year,

Chart 26. **GROSS VALUE ADDED BY SECTOR. ANDALUSIA**



### 3. OVERVIEW OF THE ANDALUSIAN ECONOMY

almost doubling the national increase (14.6%) and the highest figure on record since this information has been available (1979). As a result, Andalusian housing starts accounted for over a quarter of all those recorded nationally in 2003, a significantly higher percentage than Andalusia's share in the total number of dwellings in Spain (16.9% according to the 2001 census).

There was also an increase in housing completions, which were 4.6% up on the previous year to 129,689.

However, in spite of the significant increase in the supply of new dwellings coming onto the market in Andalusia, dwellings became less affordable, as house prices rose at a notably faster rate than wages.

According to Ministry of Development figures, the average increase in house prices per square metre in Andalusia rose by 17.2% in 2003, similar to the rate recorded nationally. This increase and a slight reduction in the average size of new dwellings in the region meant that the average price of a new dwelling in Andalusia was 15.5% higher than in 2002.

Wage growth, however, was significantly lower at 3.2% according to the Labour Cost Index compiled by the INE, so that the financial effort required to buy a home, measured as the ratio of the average price of a dwelling to average earnings, increased by almost 12% in Andalusia in 2003 (10.9% in Spain). Therefore, while in 2002, the amount required to

purchase a home in Andalusia was 6.6 times the average annual wage, in 2003 this ratio rose to 7.4, which was, however, lower than the national average of 9.3.

In spite of housing becoming less affordable, the total amount of mortgages granted in Andalusia in 2003, spurred by low interest rates, continued to grow at a very brisk pace, although not as rapidly as in 2002. Specifically, mortgages rose by 13.4% in nominal terms, according to the INE, a higher increase than the 9.6% recorded nationally. The amount granted as mortgages in the region totalled 13,556 million euro, equivalent to 13.1% of Andalusian GDP, which is higher than the national average (11.5% of GDP).

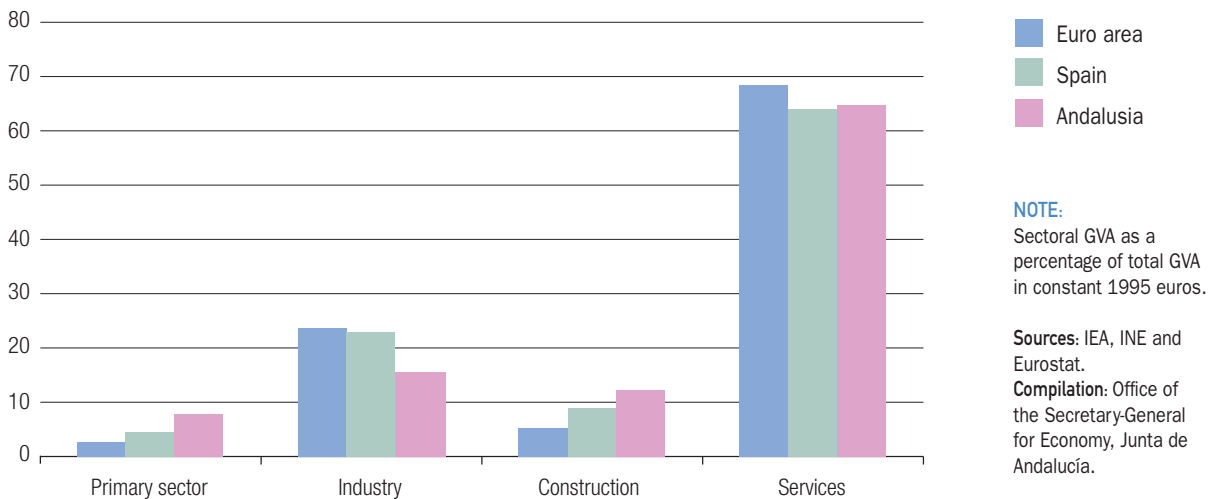
The brisk momentum of construction activity in Andalusia in 2003 led to robust job growth in the sector for the ninth consecutive year. Employment in the Andalusian construction industry was 8% higher than the previous year, a significantly sharper increase than that averaged nationally (3.7%), so that Andalusia accounted for 37.8% of job growth registered in the construction sector in Spain as a whole.

GVA at basic prices generated by the region's **service sector** showed 2.6% real growth, half a percentage point higher than the national average and almost two points higher than the euro area average (0.7%).

The service sector grew faster than the rate averaged by the Andalusian sectors as a whole, increasing its share in the Andalusian production structure to 64.7%

Table 10. **GROWTH OF GDP AND GDP COMPONENTS. YEAR 2003**

	ANDALUSIA		SPAIN		
	Nominal	Real	Nominal	Real	
Agriculture and fishing	-4.2	-7.2	4.8	0.7	NOTE: As a percentage change on 2002.  Sources: IEA and INE. Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.
Industry	5.2	2.6	3.3	1.3	
Construction	13.8	7.5	11.4	3.6	
Service industries	6.7	2.6	6.5	2.1	
GVA at basic prices	6.6	2.4	6.3	2.0	
Net taxes on production	9.6	4.7	11.2	6.8	
GDP at market prices	6.9	2.6	6.7	2.4	

Chart 27. **PRODUCTION STRUCTURE. YEAR 2003**

in 2003, a slightly higher proportion than registered nationally (64.3%), but lower than in the euro area (68.5%).

A breakdown of the figures shows that all the subsectors achieved positive results in 2003.

Indicators for 2003 show that demand grew at a faster pace in the tourist industry. According to the Tourist Situation Survey conducted by the IEA, a total of 21,451,100 tourists visited Andalusia in 2003, up 2.1%, twice the increase registered in 2002.

This upward trend was wholly due to the increase in national tourism, which was up 7.3% on the previous year, with a particularly big increase in the number of tourists from within the region itself (16.8%). On the other hand, the number of tourists from abroad who visited the region fell by 4.1%. There was a particularly sharp drop in the number of tourists from the European Union, largely owing to the area's weak economic situation.

With regard to supply, the number of beds available in tourist accommodation increased to 374,015 in 2003 in Andalusia, 3.8% up on the previous year. All types of tourist accommodation saw an increase in beds, except camp sites, with the biggest rise in

country cottages (18.5%), highlighting the boom in inland tourism.

Employment figures show that all the other service industries also achieved positive results in Andalusia in 2003. The strongest job growth was seen in business services, with a 6.4% increase in employment, followed by social service activities (4.5%), particularly the branches of public sanitation and education.

Job growth in distribution services was also higher than the previous year, with employment gains in both the wholesale and retail trade and transport activities, the latter showing the biggest increase, with particularly good results for sea transport.

## Domestic demand

According to key domestic demand indicators for Andalusia, 2003 saw consumption expenditure growth similar to the previous year and a slight acceleration in investment growth, with investment in construction remaining the fastest-growing component.

Buoyant domestic demand and low interest rates influenced credit applications by businesses

and households to implement consumption and investment decisions, with the amount of credit granted to the private sector rising year on year by 18.1% in Andalusia, the highest increase in three years and higher than the increase averaged in Spain as a whole (15%).

Most of the indicators for consumption expenditure, which accounts for around three-quarters of domestic demand in Andalusia, revealed rates of growth similar to those observed in 2002, and a slightly upward trend in spending on consumer durables.

The findings of the INE's Household Budget Survey show that average spending per person in Andalusia increased by 3.3% in nominal terms, very similar to the increase recorded the previous year and not far behind the one observed nationally (3.9%).

Indicators for the availability of consumer goods showed an improvement on the previous year, with output growth for this type of goods quickening to 2.5%, according to the AIPI, while imports rose by 13.4%.

**Investment** figures reveal an increase in investment in construction and capital goods.

Investment in construction, maintaining the sustained dynamic momentum that has characterised it in recent years, in step with activity in this sector, achieved 7.5% real growth in 2003, 1.6 percentage points more than the previous year and a higher increase than recorded in Spain as a whole.

With regard to capital goods investment, domestic production followed a rising trajectory, registering 4.9% growth, according to the AIPI, notably higher than the national average (0.8%).

The volume of investment channelled through regional economic incentive schemes in Andalusia in 2003 amounted to 1,271 million euro, up 41% on the previous year. The average amount invested per project rose by 32.7%.

## Foreign trade and investment

Andalusia's international economic activity in 2003 was characterised by an appreciable increase in trade with other countries, further advancing the integration of the Andalusian economy in world markets, and a positive balance of foreign investment flows.

**Foreign trade** figures for imports and exports show an overall 9% nominal increase in trade flows between Andalusia and other countries in 2003, following two years of decline.

As foreign trade growth outpaced GDP growth (6.9% in nominal terms) in Andalusia, the region's trade openness, that is imports plus exports as a percentage of GDP, rose in 2003 to 22.5%, half a percentage point up on the previous year.

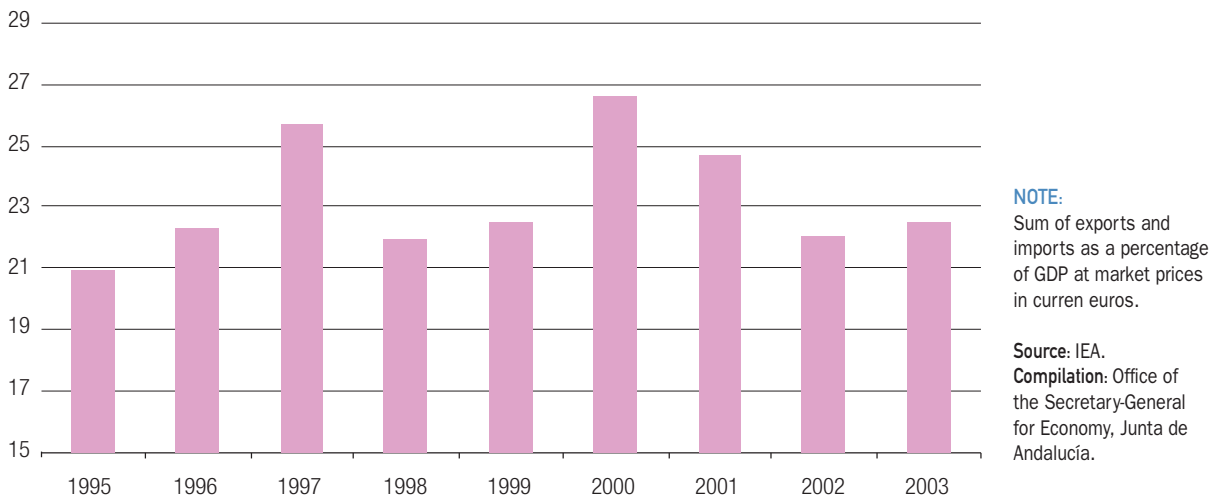
The export share, that is total exports of goods as a percentage of exportable goods (agricultural and industrial goods), stood at 59.8%, 3.6 percentage points higher than the previous year.

After two years of very weak growth, Andalusian exports bounced back in 2003, rising by 8.7%, in spite of the economic slowdown experienced in the EU, which is the destination of 68% of Andalusian sales abroad.

Imports grew by 9.3%, and therefore at a faster rate than exports, in a context in which world crude oil prices rose, Andalusia grew at a faster rate than other economies in its economic sphere and the euro rose against the dollar.

As import growth outpaced export growth, Andalusia's trade balance continued to show a deficit, albeit a small one. Specifically, the region's trade deficit in 2003 stood at 750.1 million euro, equivalent to 0.7% of GDP, a much lower percentage than the national trade deficit, which was 6.2% of GDP.

However, the unit value indexes compiled by the IEA for Andalusia's foreign trade show that in real terms exports grew at a faster rate than imports in 2003.

Chart 28. **OPENNESS TO TRADE. ANDALUSIA**

Therefore, taking into account that export prices were down 0.7% on 2002, the real increase in export volume was 9.5%, exceeding the 6.2% increase registered nationally.

The unit value index for Andalusian imports reveals a 4.3% increase in import prices in 2002, so that the real increase in import volume was 5%, a smaller rise than registered nationally (7%).

A breakdown of 2003 trade flow figures for Andalusia by economic bloc reveals that the nominal increase in Andalusian imports was partly due to the sharp increase in imports from the OPEC area (21.2%), which accounted for just over 28% of total Andalusian imports. This increase in the value of OPEC imports can be attributed to the fact that crude oil prices on world markets rose more sharply than in 2002, increasing by 15.7% to 28.8 US dollars a barrel, after remaining at around 24 US dollars a barrel for the previous two years.

There was also an increase of 11.8% in imports from the OECD, particularly from European countries. It is worth noting that imports from the ten countries that became members of the EU on 1 May 2004 were 24.5% higher than in 2002.

Exports to the OECD —the destination of over 82% of the region's total exports— were 6.6%

up on the previous year, in spite of a loss in the price competitiveness of the Andalusian economy vis-à-vis these countries, largely attributable to the appreciation of the euro and higher price growth in the region.

Within the OECD area, there was a significant 4.1% nominal increase in exports to the European Union, in spite of very weak economic growth in the area.

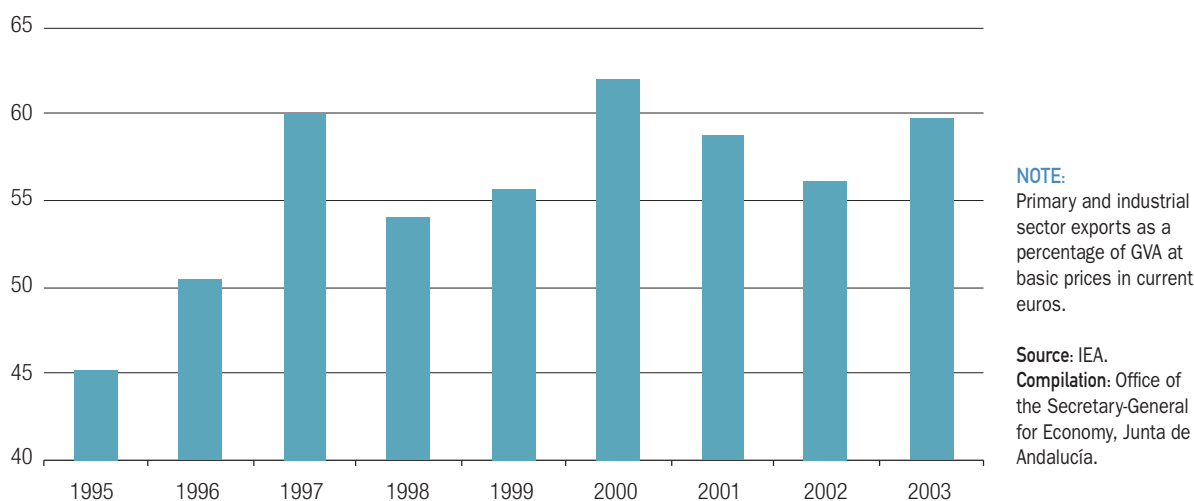
Andalusia's trade balance with the European Union continued to show a surplus of almost 3,070.3 million euro in 2003, equivalent to 3% of Andalusian GDP.

A breakdown of foreign trade figures according to tariff sections reveals that the rise in imports in 2003 was largely due to sharp increases in purchases of mineral products, the section that includes crude oil, and of chemicals, basic metals and electrical machinery and apparatus. In contrast, there were reductions in other important sections, such as vegetable products and transport equipment.

The best export results were achieved by electrical machinery and apparatus, which accounted for 8% of the region's total export figure and rose year on year by 58.9%. Basic metals, transport equipment, mineral products and chemicals also recorded good export figures.



Chart 29. EXPORT SHARE. ANDALUSIA



An analysis of the trade balance by tariff section reveals that the fats and oils section had the biggest surplus, with exports almost ten times higher than imports, followed by vegetable products.

With regard to **foreign investment flows** between Andalusia and other countries, continuing the trend in evidence since this information has been available (1993), real gross investment inflows and outflows showed a positive balance in 2003, amounting to 169 million euro. In contrast, in Spain as a whole, capital outflows exceeded inflows by 7,699.8 million euro, continuing the trend observed since 1997.

Real gross foreign investment in Andalusia fell by 25.4% to 231.6 million euro in 2003, a much smaller reduction than registered nationally (-46.9%).

As a result, Andalusia's share in total inward investment in Spain rose slightly in 2003 to 1.39% of the total, putting the region in seventh place in the national ranking after Madrid, Aragón, Catalonia, Murcia, Castilla-La Mancha and the Balearic Islands. It is important to note that these figures do not reflect the actual amounts invested in each region. The so-called "headquarters effect" distorts the results in favour of Madrid, because foreign investors report the investment in the region where the headquarters

of the enterprise is located rather than the region in which the operating facilities in question are located.

Real gross investment by Andalusia abroad fell by 56.4% to 62.5 million euro in 2003, following the national trend (-41.6%).

## Business sector

According to the DIRCE (Central Business Directory) compiled by the INE, a total of 417,006 enterprises (excluding primary sector enterprises) were operating in Andalusia as at 1 January 2003, accounting for 14.7% of the national total and making Andalusia the region with the largest business sector after Catalonia.

The Andalusian business sector grew by 4.7%, almost one percentage point faster than nationally, so that in 2003 there were 18,704 more enterprises operating in the region than there were in 2002.

A breakdown of the figures according to employment size reveals that there was a 2.9% increase in enterprises without employees and a bigger 6.8% increase in those with employees, with the highest rise recorded for bigger enterprises.

All the sectors contributed to the increase in Andalusia's business sector, with the highest rise in the construction sector, where the number of enterprises rose by 10.8%, followed by the service sector and industry.

Since the DIRCE does not provide figures on the number of enterprises formed and dissolved over the year, this information is drawn from the Statistics on Commercial Companies published by the INE, taking into account that they do not cover sole proprietorships, which account for 64.3% of the Andalusian business sector.

According to this source, 20,509 commercial companies were formed in Andalusia in 2003 and 1,118 were dissolved, giving a closure rate of 5.5%, over two points lower than the national rate (7.7%), highlighting the fact that Andalusian companies had a lower propensity to close in 2003, a continuation of the recurrent trend in evidence since 1995.

## Labour market

The region's labour market picture was good in 2003, with robust job growth that exceeded the national average. This resulted in a continuation of the trend

of falling unemployment, in contrast to the rise in jobless numbers observed in Spain as a whole.

According to the Labour Force Survey (LFS), employment rose year on year by 3.4% in Andalusia, bringing the total number of people in work in the region up to an all-time high of 2,585,100. Job growth was therefore higher in Andalusia than in Spain as a whole (2.7%) and the euro area (0.2% according to Eurostat).

In absolute terms, 85,900 new jobs were created over the year, so that Andalusia accounted for almost 20% of all job growth in Spain and 44.9% in the euro area, easily exceeding its share in total jobs in Spain as a whole (15.5%) and in the euro area (2%).

Job growth in Andalusia in 2003 was stronger among wage earners, particularly those with open-ended contracts of work (6.5%), women (6.4%), part-time workers (8%) and people with university degrees (10.8%). The pattern of job growth in 2003 brought the Andalusian labour market structure closer into line with those of the most developed economies.

Strong job growth was accompanied by an increase in the labour force in Andalusia (2.1% year on year), with 64,100 job seekers joining the region's labour market in 2003, bringing the total labour force up to

Table 11. **ECONOMIC GROWTH AND EMPLOYMENT. ANDALUSIA**

	GDP at market prices				EMPLOYMENT			
	Year 2003		Growth on previous year (%)		Year 2003		Growth on previous year (%)	
	€ million	Weight (%) (*)	2002	2003	Thousands	Weight %	2002	2003
Primary sector	5,514.98	7.6	6.0	-7.2	256.4	9.9	-4.0	-1.8
Industry	13,405.45	15.4	1.1	2.6	299.1	11.6	-1.3	2.3
Construction	12,455.17	12.3	5.9	7.5	366.3	14.2	8.8	8.0
Services	62,041.27	64.7	2.7	2.6	1,663.3	64.3	4.7	3.6
<b>GVA at basic prices</b>	93,416.87	100.0	3.1	2.4	—	—	—	—
Net taxes on production	10,597.27	—	3.4	4.7	—	—	—	—
<b>TOTAL</b>	104,014.14	—	3.1	2.6	2,585.1	100.0	3.5	3.4

### NOTE:

(\*) Constant 1995 euros.

Sources: IEA and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

3,174,450 and pushing the participation rate up to 52.9%, both all-time highs.

However, job growth outstripped labour force growth, resulting in a 3.6% fall in jobless numbers in the region, in contrast with the 2.1% increase in unemployment figures registered nationally. This resulted in a fall in the Andalusian unemployment rate to 1.1 percentage points below the 2002 rate, narrowing the unfavourable unemployment rate differential with Spain as a whole.

It is also significant that the fall in unemployment in Andalusia benefited the long-term unemployed, defined as people who have been seeking employment for two years or more, with unemployment among this group falling by 8.8%, a sharper drop than registered nationally (-1.7%). Structural unemployment therefore accounted for 20.9% of the regional jobless figure, 1.2 percentage points less than the previous year and four tenths of a point below the national average.

The main trends in the area of labour relations included a sharp reduction in the number of labour disputes, a decline in collective bargaining compared with the previous year and fewer filings for short-time working or layoffs.

In 2003 there were very few working days lost as a result of strikes in Andalusia, down 97.9% on the previous year, a sharper drop than registered nationally (-84%).

Provisional collective bargaining figures published by the Ministry of Labour and Social Affairs reveal that 750 collective agreements were signed in Andalusia in 2003, 22 fewer than the previous year, including agreements signed in 2003 and the annual revisions of contracts signed previously for two years or more. These collective agreements covered a total of 1,274,055 workers, 4% down on the 2002 figure, but a smaller reduction than recorded in Spain as a whole (-6.3%).

In spite of the sharp 21% drop in the number of filings for short-time working or layoffs in Andalusia, the number of workers affected increased slightly (1.2%), although this was a smaller rise than registered nationally.

### Prices, labour costs and income

In keeping with **price growth** trends observed in the industrialised countries in general, indicators revealed a downward trend over the year, in contrast with the upward trend of the previous year.

Chart 30. **EMPLOYMENT**

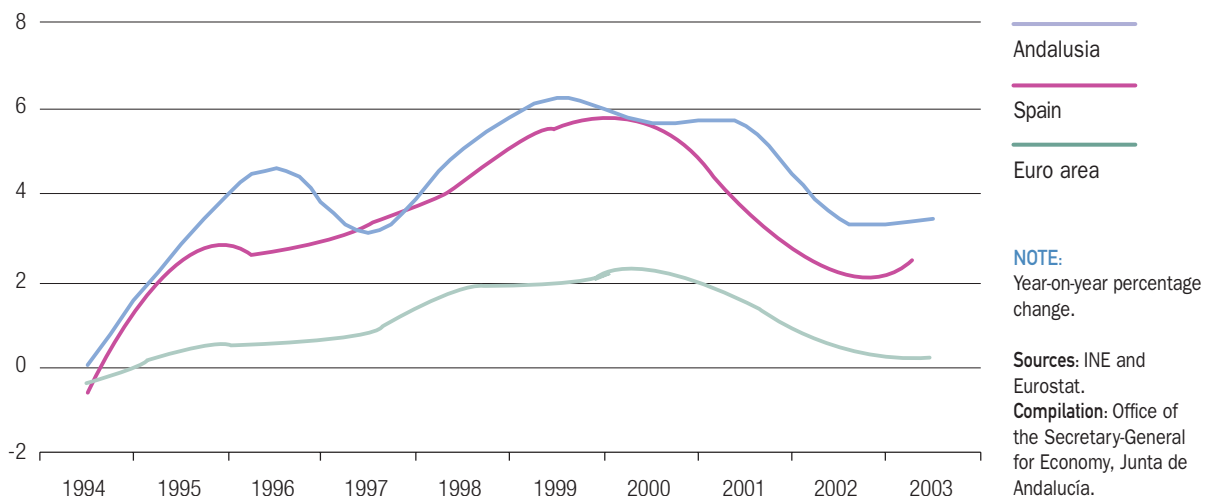
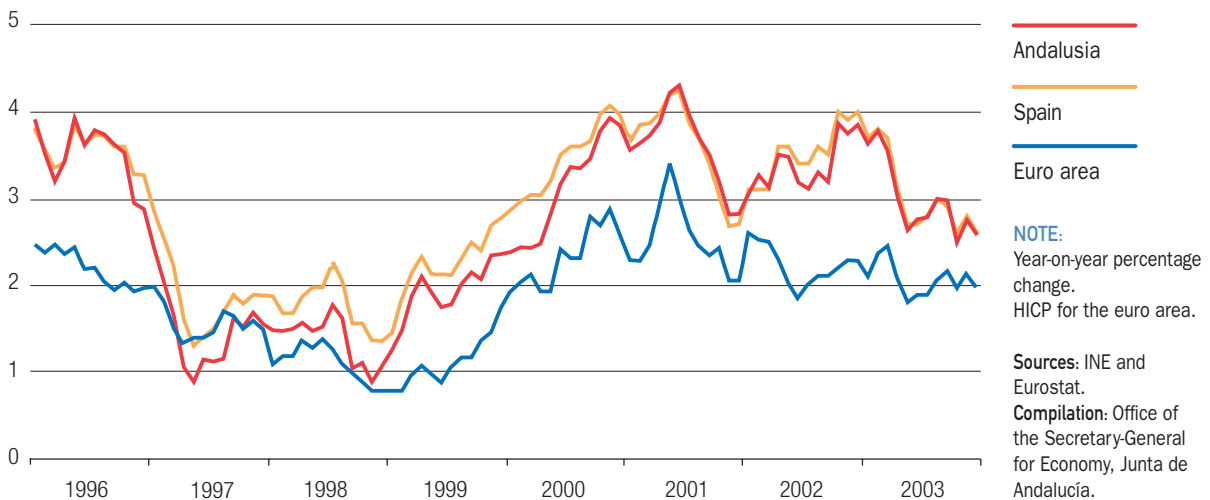


Chart 31. CONSUMER PRICE INDEX



On the production side, the GDP deflator, a measure of variations in the prices of goods and services produced by the economy, showed an annual increase of 4.2% in Andalusia in 2003, the same as the national rate and only slightly higher than the previous year's rate (4.1%).

A sectoral breakdown reveals that the lowest price growth was seen in industry, and the highest in construction.

A comparison of price and GDP trends reveals that in 2003, as in 2002, GDP deflator growth in Andalusia outpaced real GDP growth, although to a lesser extent than nationally. For each percentage point of real GDP growth, producer prices rose by 1.6 percentage points in Andalusia and by 1.8 points in Spain as a whole.

On the demand side, the consumer price index (CPI) for Andalusia closed the year with a year-on-year increase of 2.6%, matching the national increase and resulting in the lowest inflation rate since 1999. The rate of inflation was therefore 1.3 points lower than the previous year, a sharper drop than registered in the euro area, resulting in the narrowest inflation rate differential between the two in four years (0.6 percentage points).

Underlying inflation, a measure of the structural evolution of prices, excluding the most volatile

components from the all-item CPI, namely unprocessed food and energy prices, was even more moderate, ending the year at 2.3% in Andalusia, two tenths of a point below the national rate.

The slowdown of price growth in Andalusia was accompanied by more moderate **labour cost** growth.

According to the Labour Cost Index (LCI) produced by the INE, average labour costs per worker per month for the non-agricultural sectors as a whole amounted to 1,832 euro in Andalusia. Labour cost growth was 4.4% in 2003 and therefore slower than in 2002.

This increase was higher than in Spain as a whole (4.2%), resulting in a narrowing of the gap between average labour costs in the region and Spain, so that Andalusia's average labour costs per worker per month accounted for 91.8% of the national average in 2003.

An analysis of the different components reveals that labour costs grew more rapidly in Andalusia than in Spain as a whole, because of a higher increase in non-wage costs, which include Social Security contributions and non-wage items such as payments for temporary disability, unemployment, etc. Specifically, non-wage costs rose year on year by 7.9% in Andalusia and by 5.4% nationally.

Wage costs grew at a more moderate rate of 3.2% in Andalusia and 3.8% in Spain as a whole.

The Ministry of Labour and Social Affairs also provides information on wage trends, based on pay rises negotiated in collective agreements signed over the year, covering all the productive sectors.

Pay rises negotiated in collective agreements in 2003, incorporating the impact of the safeguard clauses agreed the previous year, averaged 3.8%, which was a slightly smaller rise than recorded in 2002 (3.95%).

The increase in wages negotiated in collective agreements in Andalusia was slightly higher than recorded nationally (3.67%) and 1.2 percentage points above the inflation rate. This resulted in a gain in purchasing power for wage earners, which was slightly higher in Andalusia than nationally.

## Banking system

The performance of the Andalusian banking system in 2003 was determined to a large extent by the

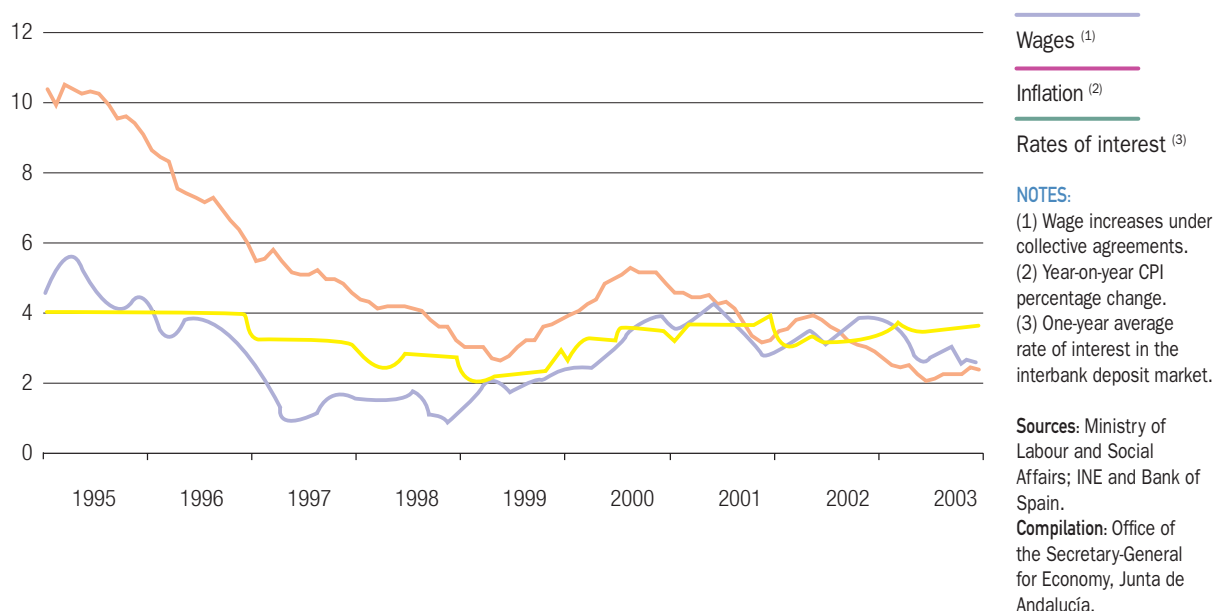
financial decisions taken by the Governing Council of the European Central Bank (ECB), as has been the case since Spain became part of the euro area. The measures taken by the ECB included trimming the Eurosystem minimum bid rate on the main refinancing operations in March by a quarter of a point and in June by half a point, resulting in a year-end rate of 2%, the lowest since the ECB was created and an all-time low in Spain.

Spanish banks in general and Andalusian ones in particular passed these interest cuts on to their operations, so that the weighted average lending rate applied by banks in Spain as a whole fell to 4.09%, which meant that the real interest rate fell below 1.5%. The weighted average deposit rate stood at 1.15% at the end of 2003, resulting in negative real interest rates.

These low interest rates strongly influenced the borrowing and saving decisions taken by economic agents in 2003.

Consequently, in 2003 the amount of credit granted in Andalusia rose year on year by 17.6% to 102,842 million euro, the biggest increase in three years

Chart 32. **INFLATION, WAGES AND RATES OF INTEREST. ANDALUSIA**



and higher than national credit growth, which was 14.6%.

In spite of negative real interest rates, the amount of deposits also continued to grow at a brisk pace (9.9%), although this was two tenths of a point slower than in 2002. In Spain as a whole, the deceleration of deposit growth was sharper, falling by 2.2 points to 6.7%.

The fact that credit grew at a faster rate than deposits meant that the loans to deposits ratio, which can be used as a measure of financial savings, fell to 70.1% in Andalusia in 2003, almost five percentage points below the previous year's ratio. This indicates that the volume of deposits held by Andalusia's banks covers only 70% of the demand for credit. This ratio also fell year on year in Spain as a whole, although it remained higher than in Andalusia at 84.9%.

These lending and deposit trends in Andalusia in 2003 were accompanied by an increase in the size of the Andalusian banking system.

In 2003 the Andalusian banking network had 5,799 commercial bank, savings bank and credit cooperative branches open in the region, 187 more than the previous year, bringing the total number of branches up to a record high.

This was a bigger increase than recorded nationally, so that the region increased its share of branches in the national total to 14.7%, two tenths of a point up on the previous year.

A breakdown of these figures according to type of institution shows that, following the pattern of recent years, the biggest increase was in the number of savings bank branches (125 more than in 2002), followed by credit cooperative branches (40 more) and commercial bank branches (22 more).

This difference in rates of growth was mirrored in lending to the private sector, as savings banks strengthened their market share of credit in Andalusia for the fourth consecutive year, increasing it by 18.1% to 47.6%.

Disaggregated data for savings banks based in Andalusia and those based outside Andalusia, but with branches in the region, reveals that lending to the private sector by Andalusia-based savings banks rose by 15.3% in 2003, a smaller increase than recorded for savings banks based outside Andalusia (26.5%). As a result, the Andalusia-based savings banks have a 34.8% market share of private credit, while those based outside Andalusia control 12.8%.

Savings banks once again also held the largest market share of deposits in 2003, as they have since 1994, accounting for 58.7% of the total, 2.1 percentage points more than the previous year.

Andalusia-based savings banks registered a 13.3% increase in private sector deposits, while savings banks based outside the region saw a higher increase of 19.6%. Savings banks based outside Andalusia therefore continued to achieve deposit market share gains in Andalusia, up seven tenths of a point to 9.4%, although it is not as high as its percentage share of lending.

## Knowledge society

The social and economic changes wrought by the introduction and development of information and communication technologies (ICT) have had a considerable influence on life in Andalusia.

The indicators used to monitor what is now known as the "new economy", the "information society" or the "knowledge society" reveal the continued development and rapid expansion of information and communication technologies in Andalusia, registering higher growth rates than in Spain as a whole.

According to the DIRCE (Central Business Directory), on 1 January 2003 there were a total of 8,433 enterprises operating in Andalusia in high-technology sectors, as defined by the INE in accordance with the OECD technological intensity classification. There were therefore 482 more enterprises operating in these sectors in Andalusia in 2003 than there were in 2002. This 6.1% increase was higher than that

#### Box 3. 1994-2003: ANDALUSIA'S LONG GROWTH CYCLE

The Andalusian economy has been enjoying an unbroken cycle of economic growth since 1994, outperforming other economies in its economic environment, which has enabled it to make further advances in the process of real convergence with them.

Between 1994 and 2003 gross domestic product (GDP) at market prices grew by 45.5% in real terms in Andalusia, almost nine points faster than in Spain (36.6% according to the INE) and much faster than in the European Union (24% according to Eurostat. Over these ten years, Andalusia has therefore grown at a cumulative annual rate of 3.8%, over half a percentage point faster than Spain (3.2%) and 1.6 points faster than the EU. These figures show that in this economic cycle the Andalusian economy is exceeding its growth potential, calculated as the annual rate of growth recorded since official estimates have been available (1980) at 3.2%.

Andalusia's superior performance over this period in terms of growth has also been mirrored in the labour market. There has been a steady, unbroken upward trend in job creation since 1994, with Andalusia registering stronger job growth than Spain as a whole or the EU.

According to the Labour Force Survey (LFS), employment rose by 48% in this ten-year period in Andalusia, bringing the total number of people in work in the region up to an all-time high of 2,585,100. Job growth was therefore higher in Andalusia than in Spain as a whole (35.8%) and well in excess of the European Union average (10.8%). In absolute terms, 837,900 new jobs were created over these ten years, so that Andalusia accounted for almost 20% of all job growth in Spain and 5.3% in the European Union. These percentages are significantly higher than the region's share in total jobs in 2003 in Spain (15.5%) and the European Union (1.6%), which means that Andalusia has made a more than proportional contribution to job growth in the current growth cycle.

These trends have enabled Andalusia to make significant advances in the process of real convergence with other economies in its economic environment, as is clearly evidenced by a comparison of GDP per capita figures.

GDP per capita (PPS) in Andalusia, adjusted for purchasing power parity, which allows a consistent comparison to be made of purchasing power in different geographic areas, by taking into account differences in price levels, rose by just over five percentage points in this period, increasing from 74.9% of the national average in 1994 to 80% in 2003.

#### GDP, EMPLOYMENT AND INFLATION. 1994-2003

	Andalusia	Spain	EU
GDP	45.5	36.6	24.0
Employment	48.0	35.8	10.8
Inflation <sup>(1)</sup>	-2.4	-2.4	-1.4

#### NOTES:

As a percentage of accumulated growth in the period unless otherwise stated.

(1) Inflation rate reduction, in percentage points.

Sources: IEA, INE, European Commission and Eurostat.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

A comparison with the European Union reveals an even faster rate of convergence in terms of income per capita. In spite of more rapid population growth in the region, Andalusia's GDP per capita (PPS) rose by more than ten percentage points from 58.9% of the EU average in 1994 to 69.4% in 2003.

Andalusia has not only made progress in closing the gap on these economies in terms of real convergence, but has also advanced significantly in terms of nominal convergence. Over the past ten years, Andalusia's inflation rate has fallen by 2.4 percentage points from 5% at the start of 1994 to 2.6% at the end of 2003. This is a sharper reduction than registered in the EU, resulting in a narrowing of the inflation rate differential between the two areas from 1.8 percentage points in 1994 to 0.8 points in 2003.

averaged nationally (4.5%) and than the average increase in the number of enterprises in the Andalusian business sector as a whole.

Over a third (33.9%) of these high-technology enterprises operating in Andalusia belong to ICT sectors, that is, branches of activity relating to information technology, electronic components, software, telecommunications, etc. The number of such enterprises registered a sharp 37.4% increase in 2003.

A characteristic feature of these high-technology sectors is a high level of foreign trade activity. Overall trade flows, that is, imports plus exports, in the high-technology sectors stood at 5,301.7 million euro, accounting for 22.7% of Andalusia's total volume of foreign trade in 2003, a hugely higher proportion than these sectors' 2% share in the total number of enterprises operating in the region.

It is therefore evident that foreign trade plays an important role in these sectors. More specifically, they have a high export propensity, as evidenced by the fact that the high-technology sectors export 12.2 times more than the regional average.

The value of exports by these enterprises amounted to just over 2,700 million euro in 2003, 22.5% up on the previous year and accounting for almost a quarter of all Andalusian sales to other countries.

As a result of this robust export growth, which outpaced import growth, the trade balance for

these sectors showed a surplus of 229.16 million euro in 2003, in contrast to Andalusia's overall trade deficit.

ICT enterprises, which accounted for 17.1% of Andalusia's foreign trade by high-technology sectors in 2003, also showed positive, dynamic foreign trade trends in 2003, with export growth (11%) exceeding import growth (5.5%) and resulting in a trade balance surplus.

The rapid development and spread of information and communication technologies in recent years has led to significant economic and social transformations, as their expansion and use in businesses, public administration and the home becomes more and more widespread.

According to the Survey on household ICT usage and equipment conducted by the INE, there have been considerable advances in the use of ICT in Andalusian homes in 2003.

The survey reveals that practically all homes are equipped with basic ICT equipment, such as television, telephone, radio, etc. and that the use of mobile phones has also risen dramatically, with the number of Andalusian homes with a mobile phone up almost ten percentage points on the previous year to 73.3% in 2003.

Results for 2003 also show an upward trend in computer equipment and the use of and access to



certain services, such as internet and e-commerce. The proportion of Andalusian households with a computer of some kind rose by 22.2%, a higher increase than recorded nationally (19.9%), and the proportion of homes with access to internet services rose dramatically year on year by 61.2%, also a higher increase than registered nationally (44.8%).

The i@landalus Barometer for ICT penetration, produced by the *Instituto de Estudios Sociales de Andalucía* (IESA - Andalusian Institute for Social Studies), confirms that Andalusia has achieved significant advances compared with the previous year in terms of the implementation and use of new technologies relating to the knowledge society.

The study reveals that 50.1% of Andalusian residents aged 14 and over used a computer in 2003, ten percentage points up on the previous year, and there was an even bigger increase in the proportion of Andalusian residents aged 14 and over with internet access, rising from 22.8% in 2002 to 32.6% in 2003.

## Economic forecasts

The results reported for the Andalusian economy in the early part of 2004, showing an acceleration in real GDP growth to 3.5% in the first quarter, confirm expectations of a differentially better performance by the Andalusian economy in 2004.

In a context in which the main international organisations predict a world economic revival, the Regional Ministry of Economy and Finance forecasts 3.4% real GDP growth in Andalusia in 2004, up eight tenths of a point on the previous year.

Andalusia, in its eleventh year of sustained growth in the current economic cycle, is therefore likely to outperform Spain and the euro area once again, so that the process of real convergence with these economies will remain on track.

According to the macroeconomic scenario established by the Ministry of Economy and Finance, the Spanish economy will expand by 3% in 2004, 0.4 percentage points slower than the Andalusian economy.

The growth differential between Andalusia and the euro area will be even wider, as the European Commission forecasts 1.7% growth in its spring report, which means that Andalusia's GDP growth will be double that of the euro area.

On the supply side, the Andalusian economy is expected to show more balanced, broadly based growth in 2004, with all the productive sectors making a positive contribution.

The primary sector is expected to recover from the negative results recorded in 2003 to make a positive contribution to GDP growth in 2004, buoyed by good olive yields predicted for the crop year. Against the backdrop of a global economic recovery, a slight pick-up in growth is also expected in the other sectors, spurred by foreign demand.

On the demand side, the domestic components are expected to be stronger, with faster growth in investment, buoyed by low interest rates, and in consumption expenditure, fuelled by the upward trend in job growth unbroken since 1994.

Table 12. **ECONOMIC ESTIMATES AND FORECASTS. ANDALUSIA**

	2002 (a)	2003(a)	2004 (for)	NOTES:
GDP at market prices				(a) Advance figures. (for) Forecast.
% nominal growth	7.3	6.9	7.5	Sources: INE, IEA and Office of the Secretary-General for Economy, Junta de Andalucía.
% real growth	3.1	2.6	3.4	
Employment				Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.
% growth	3.5	3.4	3.0	

External demand is also expected to see stronger growth in 2004, particularly exports, on the basis of international forecasts predicting the recovery of world trade and stronger growth in the major industrialised countries, including those of the European Union, the destination of 70% of all Andalusian exports.

These supply and demand trends are expected to be mirrored in the labour market, with continued job growth for the eleventh year in a row.

The Regional Ministry of Economy and Finance forecasts 3% job growth in Andalusia for 2004, well in excess of that forecast by the European Commission for the euro area (0.3%). In absolute terms, there will be 75,000 more people in work in Andalusia in 2004, bringing the total up to an all-time high of 2.6 million.

Job growth is therefore expected to be weaker than real GDP growth, which will result in an increase in apparent labour productivity, in keeping with the mature stage of the cycle that the Andalusian economy is now in.

A survey based on the business expectations of entrepreneurs, conducted by Eurochambres, the Association of European Chambers of Commerce and Industry, confirms that in 2004 the Andalusian economy is expected to perform better than the economies in its economic environment.

The survey covers a total of 119 regions in Europe, 80 in the EU-15, 32 in countries that joined the EU in May 2004 and the rest in Bulgaria and Romania.

The regional classification used is largely based on the NUTS 1 level, except in the case of Poland, Spain and Sweden, for which the NUTS 2 level is used (Autonomous Communities in Spain), and Finland, for which a special aggregation of NUTS 3 regions is employed.

According to the findings of the survey, Andalusia was in eighth position on the ranking of the 80 EU-15 regions covered in terms of turnover expectations for 2004, an improvement on the 2003 result.

Specifically, the results of the survey showed that 66% of the Andalusian entrepreneurs surveyed expected total sales to increase in 2004, coinciding with the national percentage and well in excess of the EU average of 50%. On the other hand, only 2% of Andalusian entrepreneurs expected sales to fall, which was half the national percentage and considerably lower than the much more pessimistic 20% registered in the EU.

As a result, the difference between those who expect higher sales and those who expect lower sales was 64% in Andalusia, slightly higher than the national average (62%) and more than double the EU average (30%). This is a notable improvement on the previous year's results, when the difference between those who expected an increase and those who expected a fall was 56%.

This more optimistic outlook can be attributed to the fact that Andalusian enterprises expect better export results in 2004, with over half of the enterprises surveyed reporting that they expected to see exports rise, while only 4% predicted that they would fall. These expectations were more optimistic than those reported by EU entrepreneurs.

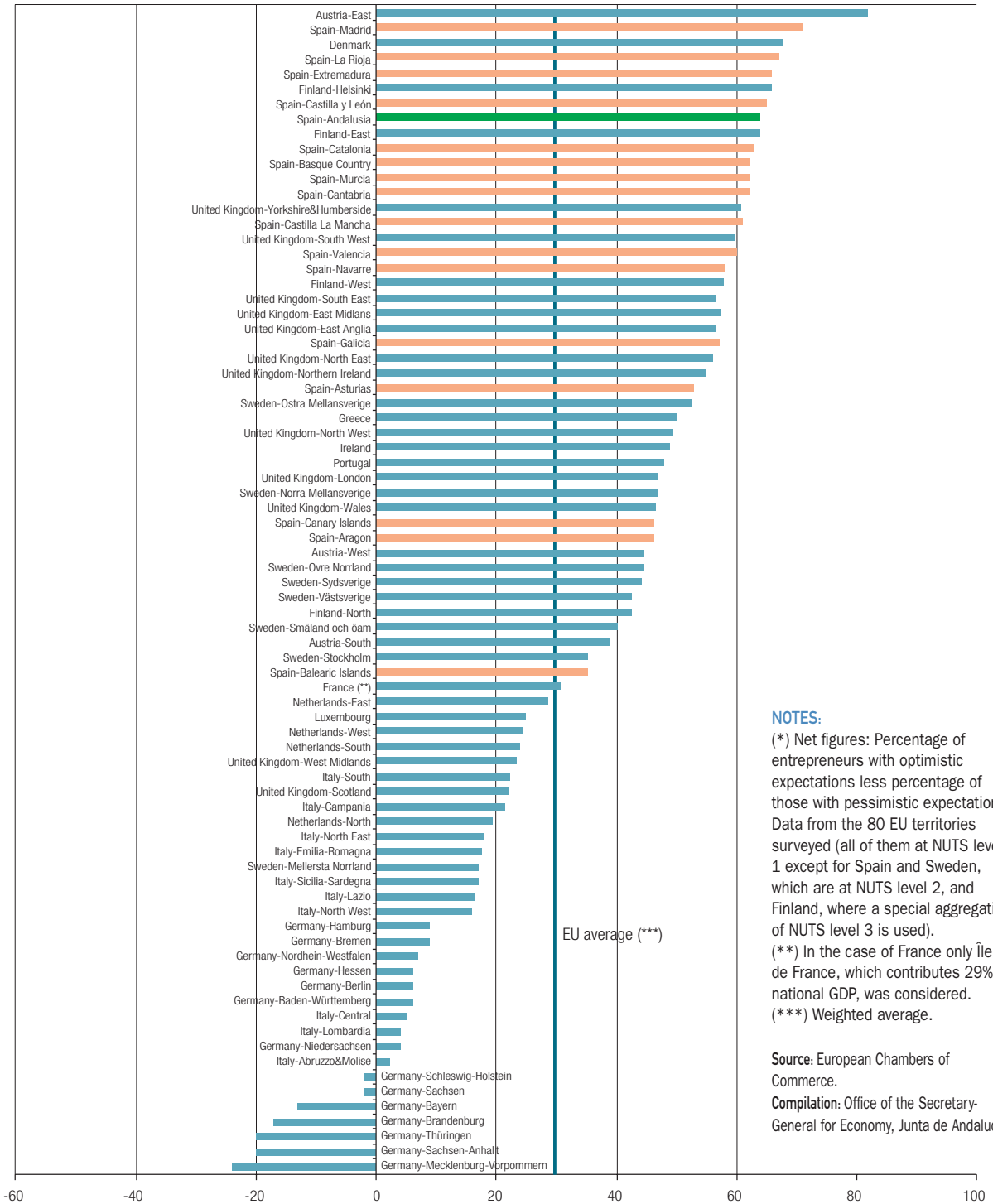
A breakdown by sector, based solely on information for Spanish Autonomous Communities, shows that, in terms of total sales, the service sector is expected to perform better than industry and construction in Andalusia, in keeping with national forecasts.

Other indicators monitored in the survey, such as domestic sales, investment and job creation, also suggested more favourable expectations in Andalusia than in the EU economy.

Specifically, almost 40% of the entrepreneurs surveyed in Andalusia expected employment to rise in 2004, almost the same proportion as registered nationally and well in excess of that registered in the EU, which was barely 20%. Furthermore, the proportion of EU entrepreneurs that predicted an increase in employment coincided with the proportion that expected it to fall, so that the difference was nil, compared with 24% in Andalusia.

### 3. OVERVIEW OF THE ANDALUSIAN ECONOMY

Chart 33. **EU TURNOVER FORECASTS (\*)**, YEAR 2004



**NOTES:**  
 (\*) Net figures: Percentage of entrepreneurs with optimistic expectations less percentage of those with pessimistic expectations. Data from the 80 EU territories surveyed (all of them at NUTS level 1 except for Spain and Sweden, which are at NUTS level 2, and Finland, where a special aggregation of NUTS level 3 is used).  
 (\*\*) In the case of France only Île de France, which contributes 29% of national GDP, was considered.  
 (\*\*\*) Weighted average.

**Source:** European Chambers of Commerce.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

# 13.

## Convergence between Andalusia and the European Union



# Convergence between Andalusia and the European Union

## Introduction

This section of the report analyses the process of convergence between Andalusia and the European Union. The analysis is based on official statistics and assesses the situation of Andalusia in 2003 and the progress made in the region since Spain's accession to the EU.

Two observations must first be made, one in relation to the context and the other to methodology.

With regard to context, it is important to note that the European Union was enlarged in 2004, with the addition of ten new member countries. Specifically, on 1 May 2004, Cyprus, Slovakia, Slovenia, Estonia, Hungary, Lithuania, Latvia, Malta, Poland and the Czech Republic joined the European Union. It is therefore useful to assess the process of convergence in relation to two geographical areas: the European Union as it was in 2003, with fifteen members (EU-15), and the acceding countries.

With regard to methodology, it should be noted that measuring convergence is very complex and requires the combination of three factors:

- Firstly, the convergence process must be assessed on the basis of a set of indicators used to measure regional development. These indicators involve not only the economic results of growth, but also the economic and social development factors that make growth possible in the medium term, such as: human capital (population, employment, participation, skills, life expectancy); physical capital (private or public, residential or productive, social or economic); technical organisation capital (business sector, internationalisation); and natural capital (sustainable development).
- Secondly, a time framework must be established because convergence necessarily implies moving towards certain targets and so requires an analysis of progress over time.
- Thirdly, it is necessary to compare the performance of the economy in question with that of a reference environment, which in this case is Spain, UE-15 and the acceding countries.

However, it is important to note that it is not possible to make a full analysis of the process of real convergence between Andalusia and the EU as

explained above, because updated official data series are not available for 2003 for some key variables relating to development factors.

In view of these statistical limitations, the approach used in this report to analyse convergence is based on the quantification of the results of the development process in terms of income and employment. This is achieved by examining a set of key economic indicators: economic growth, employment and productivity. A distinction is also made between nominal and real convergence. In the analysis of real convergence, differences in price levels are taken into account and monetary indicators are adjusted for purchasing power parity (PPP). Nominal convergence is measured on the basis of the evolution of purchasing power parities, which take into account differences in price levels between different areas and the EU-15 average and the average for the acceding countries.

With regard to the timeframe, this analysis assesses the progress made by Andalusia since Spain joined the EU in 1986 and focuses specifically on the current situation, detailing the region's performance in 2003.

The analysis is based on information provided by the relevant official statistics offices, namely the Andalusian Statistics Institute (IEA), the National Statistics Institute (INE) and Eurostat. GDP figures are the official estimates published by the statistics offices for each area.

Purchasing power parity between Spain and the EU is based on official estimates published by Eurostat. The evolution of Andalusia's purchasing power parity vis-à-vis the EU has therefore been calculated taking into account these Eurostat estimates and GDP deflator trends.

Population and employment figures for Andalusia and Spain are INE estimates. The reference population

Table 80. **BASIC MACROECONOMIC CONVERGENCE INDICATORS FOR ANDALUSIA AND SPAIN VIS-À-VIS THE EU-15 AND THE EU ENLARGEMENT COUNTRIES IN REAL TERMS. YEAR 2003.**

	ANDALUSIA	SPAIN	ENLARGEMENT COUNTRIES	EU-15
POPULATION (thousand people) <sup>(1)</sup>	7,412	41,153	74,164	382,468
Nominal GDP in billions of euros (PPP) <sup>(2)</sup>	124.9	866.6	878.0	9,295.0
GDP in billions of euros (1995 PPP) <sup>(2)</sup>	102.6	711.5	746.1	7,777.2
GDP PER CAPITA in euros (PPP) <sup>(3)</sup>	16,855	21,058	11,839	24,303
GDP PER CAPITA in euros (1995 PPP) (1995) <sup>(3)</sup>	13,839	17,289	10,061	20,334
EMPLOYED (thousand people) <sup>(4)</sup>	2,585	16,695	28,801	163,354
APPARENT PRODUCTIVITY <sup>(5)</sup> In euros (1995 PPP)	39,679	42,619	25,907	47,625
EMPLOYMENT RATE % <sup>(6)</sup>	34.9	40.6	38.8	42.7

#### NOTES:

(1) POPULATION: Figures for Spain and Andalusia result from the 1995-based Spanish Regional Accounts for 2002, corrected for the projected population growth as calculated by INE based on the 2001 Census. EU data were obtained from the European Commission (*European Economy*).

(2) GDP: Data from Andalusian Quarterly Accounts, INE and Eurostat respectively. PPP: The purchasing power parity (PPP) figures result from converting national currencies into euros in terms of purchasing power parity. These data were obtained from the series published by Eurostat for the EU member countries. The discrepancies that may exist for Spanish and Andalusian data are due to the correction made to adjust nominal GDP for purchasing power parity, taking into account differences in price levels measured by the GDP deflator.

(3) GDP PER CAPITA adjusted for purchasing power parity was obtained by dividing GDP (PPP) by the registered population.

(4) EMPLOYMENT: The figures for population in employment in Andalusia and Spain were obtained from the Labour Force Survey. EU figures come from Eurostat and show the information from the European Labour Force Survey 2002. Figures for 2003 were calculated from the employment growth figures published in *European Economy* by the European Commission.

(5) Apparent productivity results from dividing GDP in euros (1995 PPP) by the number of people in work.

(6) The employment rate shows people in employment as a percentage of total population.

Source: IEA, INE, Eurostat and Office of the Secretary-General for Economy, Junta de Andalucía.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

is based on figures provided in the Spanish Regional Accounts, updated to 2003 with population projections made by the INE on the basis of the findings of the 2001 Census. In the case of the EU, population figures are those published by the European Commission in European Economy.

Employment figures for Andalusia and Spain are taken from the Labour Force Survey (LFS) conducted by the INE and those for the European Union are taken from the European Union Labour Force Survey for the period for which information is available, which is 1995 to 2002, linking the series to the job growth figures provided in the above-mentioned publication for the rest.

## Convergence in 2003

According to Andalusia's Quarterly Accounts compiled by the IEA, Andalusia recorded a real increase in GDP

at market prices of 2.6% in 2003, outperforming Spain as a whole, which saw 2.4% GDP growth, and the European Union, where GDP growth was 0.7%. However, the region's real GDP growth was slower than in the acceding countries, which averaged 3.6%. GDP growth was therefore two tenths of a point higher in Andalusia than in Spain, according to INE figures, and 1.9 percentage points higher than in the European Union, according to Eurostat figures, so that the region advanced further in the process of real convergence in terms of production. The growth cycle in progress in Andalusia since 1994, which has permitted real convergence between Andalusia and the EU, continued into its tenth year.

Andalusia fares even better in terms of employment. Indicators highlight the continuation of the trend of job creation, which started in the mid-nineties, and that the process has been more intense in Andalusia than in Spain and the EU.

Table 81. **MACROECONOMIC CONVERGENCE INDICATORS FOR ANDALUSIA AND SPAIN VIS-À-VIS THE EU-15 AND THE EU ENLARGEMENT COUNTRIES IN REAL TERMS. YEAR 2003**

	ANDALUSIA	SPAIN	ENLARGEMENT COUNTRIES
<b>GDP PER CAPITA in euros (PPP) <sup>(1)</sup></b>			
EU-15 = 100	69.4	86.6	48.7
ENLARGEMENT COUNTRIES = 100	142.4	177.9	–
<b>APPARENT PRODUCTIVITY <sup>(2)</sup></b>			
EU-15 = 100	83.3	89.5	54.4
ENLARGEMENT COUNTRIES = 100	153.2	164.5	–
<b>EMPLOYMENT RATE <sup>(3)</sup></b>			
EU-15 = 100	81.7	95.0	91.0
ENLARGEMENT COUNTRIES = 100	89.8	104.5	–
<b>PURCHASING POWER PARITY <sup>(4)</sup></b>			
EU-15 = 100	83.3	85.7	49.8
ENLARGEMENT COUNTRIES = 100	167.0	172.0	–

### NOTES:

(1) GDP PER CAPITA adjusted for purchasing power parity was obtained by dividing GDP (PPP) by the registered population.

(2) Apparent productivity results from dividing GDP in euros (1995 PPP) by the number of people in work

(3) The employment rate shows people in employment as a percentage of total population.

(4) PPP: The purchasing power parity (PPP) figures result from converging national currencies into euros in terms of purchasing power parity.

These data were obtained from the series published by Eurostat for the EU member countries. The discrepancies that may exist for Spanish and Andalusian data are due to the correction made to adjust nominal GDP for purchasing power parity, taking into account differences in price levels measured by the GDP deflator.

**Sources:** IEA, INE, Eurostat and Office of the Secretary-General for Economy, Junta de Andalucía.

**Compilation:** Office of the Secretary General for Economy, Junta de Andalucía.



### Box 15. GDP PER CAPITA, EMPLOYMENT AND PRODUCTIVITY

One of the main objectives of Andalusian economic policy is to progress towards economic convergence with the European Union. Economic convergence is commonly measured in terms of GDP per capita. This variable can be broken down into two components: the employment rate (the number of people in work as a percentage of the total population) and productivity (output per worker).

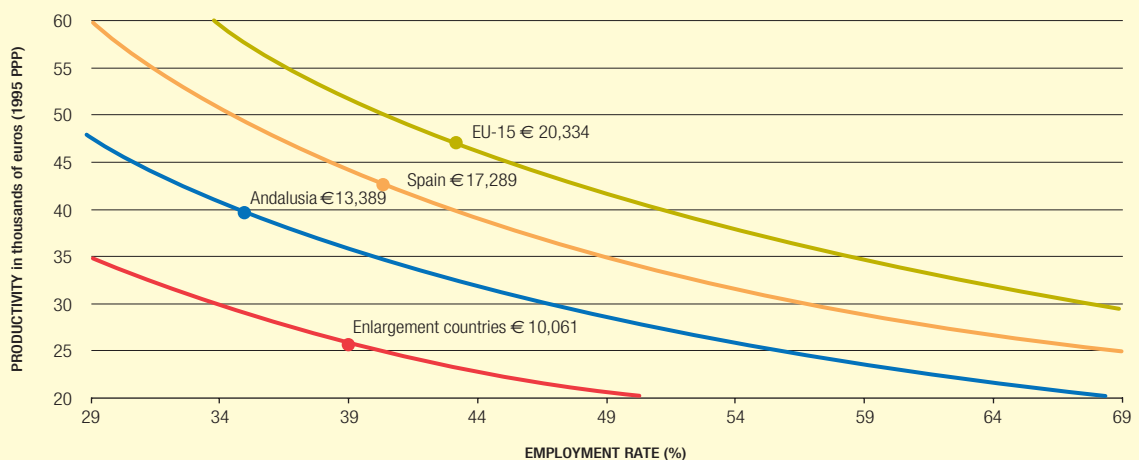
$$\frac{\text{GDP}}{\text{Population}} = \frac{\text{Employment}}{\text{Population}} \times \frac{\text{GDP}}{\text{Employment}}$$

GDP per capita can therefore grow in three different ways: when the number of people in work increases at a faster rate than the population, when worker productivity increases, or when the two coincide. In the first two cases, GDP per capita increases if the other variable does not fall.

One way of representing the status of convergence and making comparisons in terms of time and space is to draw level curves that represent different alternative combinations of employment rates and productivity for a certain level of GDP per capita. In principle, there is an infinite number of combinations allowing an economy to achieve the standard GDP per capita associated with each curve. The further away the curves are from the point of origin, the higher the level of GDP per capita that combination of variables generates in the economy. As there is an infinite number of GDP per capita levels possible, there is also an infinite number of level curves that represent them. Rising to a higher GDP per capita level, that is, a level curve further from the point of origin, depends on the increase in the employment rate and productivity.

Graph 1 shows level curves for 2003 for Andalusia, Spain, EU-15 and the ten acceding countries, and the dot shows the combination of productivity and employment rate for each one. Productivity is plotted on the y-axis in thousands of euros (1995 PPP), and the employment rate is shown as a percentage on the x-axis.

Chart 1. **PRODUCTIVITY AND EMPLOYMENT RATE COMPONENTS OF GDP PER CAPITA FOR ANDALUSIA, SPAIN, EU-15 AND EU ENLARGEMENT COUNTRIES. YEAR 2003**



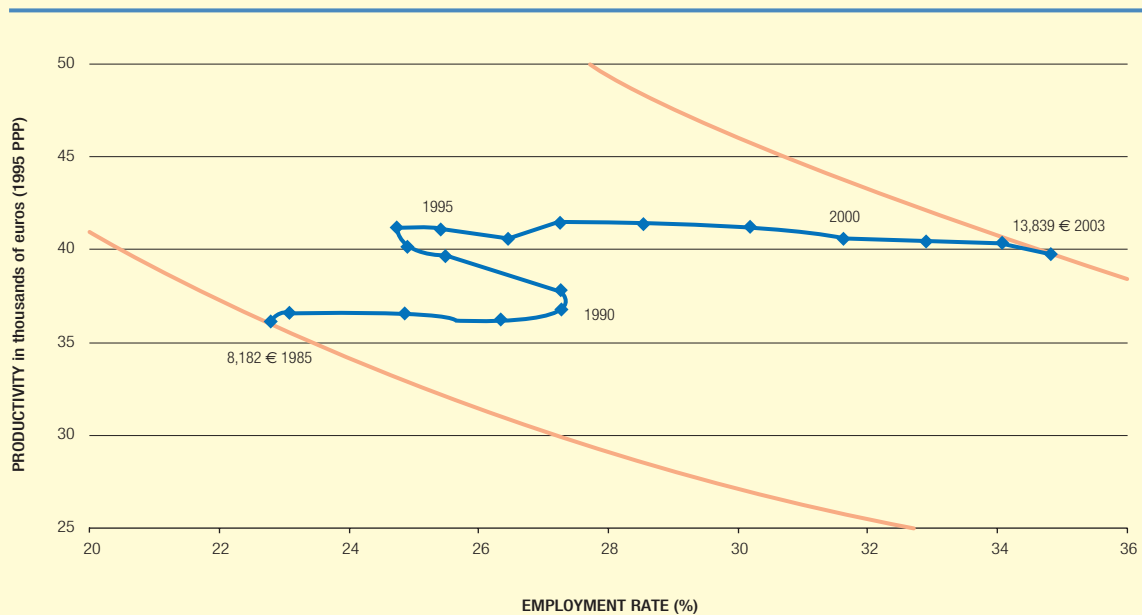
Sources: Eurostat, European Commission, INE, IEA and Office of the Secretary General for Economy, Junta de Andalucía.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

In the case of Andalusia, GDP per capita is 13,839 euro (1995 PPP), which is achieved with productivity at 39,679 euro and an employment rate of 34.9%. This same level of GDP per capita could also be achieved with a lower employment rate, 32% for example, if productivity were to rise to 43,247 euro; then again, it could be achieved with a higher employment level, say 39.5%, and lower productivity (35,000 euro).

A comparison with the ten new members of the European Union reveals that Andalusia has higher productivity, but a lower employment rate than they do. While these countries have an employment rate that is almost four percentage points higher than the Andalusian rate, their GDP per capita is 10,061 euro. If they were to catch up with Andalusia in terms of GDP per capita, maintaining the current employment rate and assuming that Andalusia advanced no further in this respect, they would have to increase productivity by 37.7% to 35,668 euro. With an employment rate similar to that of these countries and maintaining its current level of productivity, Andalusia, would have a GDP per capita of 15,395 euro.

In order for Andalusia to reach a higher GDP per capita level, for example, the EU-15 level of 20,334 euro, it would have to make gains on both the extensive margin (employment rate) and the intensive margin (productivity), thereby moving upwards to a higher level curve. The ways and means of achieving a simultaneous increase in both these variables are far from easy, and the margins of action are limited in the short and medium term owing to the inertia of underlying processes. For example, in the case of Andalusia (see Graph 2), it can be seen that since 1985 the Andalusian economy has rarely experienced periods in which both productivity and the employment rate have risen at the same time. Usually, one of the variables increases, while the other remains the same or declines.

Chart 2. **PRODUCTIVITY AND EMPLOYMENT RATE COMPONENTS OF GDP PER CAPITA. ANDALUSIA YEARS 1985-2003**



Sources: Eurostat, European Commission, INE, IEA and Office of the Secretary-General for Economy, Junta de Andalucía.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

According to the Labour Force Survey (LFS) published by the INE, the number of people in work in Andalusia rose by 3.4% in 2003, with the creation of 85,900 new jobs, bringing the total up to 2,585,100. Andalusia therefore made an important contribution to job growth in Spain and the EU. Andalusia experienced robust job growth in 2003, which was 0.7 percentage points higher than in Spain (2.7% according to the INE) and 3.2 and 3.8 percentage points higher than in the fifteen-member European Union and the acceding countries respectively (0.2% and 0.4% respectively according to European Economy). As a result, both the number of people in work and the employment rate rose to all-time highs in Andalusia.

These developments in Andalusia are particularly significant, taking into account that the main EU countries are experiencing an economic slowdown or recession. In similar situations in the past, GDP growth and job growth slowed more sharply in Andalusia than in Spain and the EU. In 2003, however, the 2.6% increase in GDP and the 3.4% increase in employment recorded in the region led to a widening of GDP and job growth differentials vis-à-vis Spain and the EU.

On the other hand, both Andalusia and Spain registered a slight fall in GDP per worker, while in the European Union it rose slightly (0.5%), and in the acceding countries it increased by a robust 4%.

This process of real convergence is enabling Andalusia to gradually close the gap on the EU in terms of employment and income per capita. The macroeconomic indicators for real convergence between Andalusia and the EU showed the following picture in 2003:

- Andalusia's GDP per capita (PPS) was 69.4% of the UE-15 figure and 142.4% of the figure for the acceding countries.
- Andalusia's employment rate was 81.7% of the UE-15 rate and 89.8% of the rate for the acceding countries.
- Andalusia's apparent productivity was 83.3% of the UE-15 figure and 153.2% of the figure for the acceding countries.

- With regard to price levels, Andalusia's purchasing power parity was 83.3% of the UE-15 figure and 167% of the figure for the acceding countries.

#### Convergence since accession to the EU (1986-2003)

The results achieved by the Andalusian economy in 2003 indicate the continuation of the trend of convergence that Andalusia and Spain have been following at a similar pace since Spain joined the EU in 1986. Since that time, they have made significant progress in achieving real and nominal convergence with the EU, with population growth, GDP growth and job growth exceeding the EU averages.

Specifically, in the period from 1986 to 2003, using the latest statistics available:

- Andalusia's population grew by 11%, 4.4 points more than the EU-15 average (6.6%) and 3.8 points more than the Spanish average (7.2%).
- Cumulative real growth recorded by the Andalusian economy was 87.7%, 38.3 percentage points more than the EU-15 average (49.4%) and 13.4 percentage points more than the Spanish average (74.3%).
- Real GDP per capita (PPS) rose by 69.1% in Andalusia, 28.9 percentage points more than the EU-15 average (40.2%) and 6.5 percentage points more than the Spanish average (62.6%).
- Employment rose by 70.2% in Andalusia, 53.2 percentage points more than the EU-15 average (17%) and 18.5 percentage points more than the Spanish average (51.7%).
- Output per worker rose by 10.3% in Andalusia, compared with 14.9% in Spain and 27.7% in the EU-15.

These figures show that the Andalusian economy continues to progress towards average EU-15 income per capita levels. The cumulative annual rate of convergence, measured by the GDP per capita (PPS) growth differential, was 1.1%, and real convergence, measured by GDP per capita (PPS) vis-à-vis the EU-15, increased by 12.8 percentage points.

Table 82. **CONVERGENCE INDICATORS FOR ANDALUSIA, SPAIN AND THE EU ENLARGEMENT COUNTRIES VIS-À-VIS THE EU-15. YEARS 2002-2003**

	ANDALUSIA	SPAIN	ENLARGEMENT COUNTRIES	EU-15
RESIDENT POPULATION GROWTH <sup>(1)</sup>	1.1	1.6	-0.1	0.3
REAL GDP GROWTH <sup>(2)</sup>	2.6	2.4	3.6	0.7
NOMINAL GDP PER CAPITA (PPS) GROWTH (%) <sup>(3)</sup>	2.2	1.6	4.1	1.0
REAL GDP PER CAPITA (PPS) GROWTH <sup>(3)</sup>	1.5	0.8	3.7	0.4
EMPLOYED POPULATION GROWTH <sup>(4)</sup>	3.4	2.7	-0.4	0.2
APPARENT PRODUCTIVITY GROWTH <sup>(5)</sup>	-0.8	-0.3	4.0	0.5
GENERAL PRICE LEVEL GROWTH <sup>(7)</sup>	4.2	4.2	2.4	2.3
GROWTH GDP PER CAPITA (PPS) (in p.p.) <sup>(3)</sup>				
VS. EU-15	0.8	0.5	1.5	-
GROWTH OF EMPLOYMENT RATE (in p.p.) <sup>(4)</sup>				
VS. EU-15	0.8	0.4	-0.2	-
GROWTH OF PURCHASING POWER PARITY (in p.p.) <sup>(6)</sup>				
VS. EU-15	2.8	2.8	-2.8	-
CUMULATIVE ANNUAL RATE OF CONVERGENCE <sup>(8)</sup>				
WITH THE EU-15	1.2	0.6	3.1	-

**CONVERGENCE INDICATORS FOR ANDALUSIA AND SPAIN VIS-À-VIS THE EU-15. YEARS 1986-2003**

	ANDALUSIA	SPAIN	EU-15
RESIDENT POPULATION GROWTH <sup>(1)</sup>	11.0	7.2	6.6
REAL GDP GROWTH <sup>(2)</sup>	87.7	74.3	49.4
NOMINAL GDP PER CAPITA (PPS) GROWTH (%) <sup>(3)</sup>	182.8	171.9	130.7
REAL GDP PER CAPITA (PPS) GROWTH (%) <sup>(3)</sup>	69.1	62.6	40.2
EMPLOYED POPULATION GROWTH <sup>(4)</sup>	70.2	51.7	17.0
APPARENT PRODUCTIVITY GROWTH <sup>(5)</sup>	10.3	14.9	27.7
PRICE GROWTH <sup>(7)</sup>	133.6	142.7	64.6
GROWTH OF GDP PER CAPITA (PPS) (EU-15 = 100 p.p.) <sup>(3)</sup>	12.8	13.1	-
GROWTH OF EMPLOYMENT RATE (EU-15 = 100 p.p.) <sup>(4)</sup>	23.2	21.3	-
GROWTH OF PURCHASING POWER PARITY (EU-15 = 100 p.p.) <sup>(6)</sup>	23.7	26.7	-
CUMULATIVE ANNUAL RATE OF CONVERGENCE WITH THE EU <sup>(8)</sup>	1.1	0.9	-

**NOTES:**

(1) POPULATION: Figures for Spain and Andalusia were obtained from the INE Spanish Regional Accounts 1995-based linked series for 1980-1985 and 1986-based series for 1986-1994. Figures for Spain and Andalusia in 2003 were derived from the growth in INE's projected population figures based on the 2001 Census. EU data were obtained from the Eurostat linked series including the new German territories after the reunification in 1991.

(2) GDP: Figures for Andalusia were obtained from the INE Spanish Regional Accounts, base year 1986 until 1995 and then linked to the IEA 1995-based series. Figures for Spain were obtained from the INE 1995-based homogeneous series. EU data were obtained from the Eurostat linked series including the new German territories after the reunification in 1991.

(3) GDP PER CAPITA adjusted for purchasing power parity was obtained by dividing GDP (PPP) by the registered population.

(4) EMPLOYMENT: The figures for population in employment in Andalusia and Spain were obtained from the newest Labour Force Survey. EU figures come from Eurostat and show the information from the European Labour Force Survey from 1995 to 2002. Data prior to 1995 and for 2003 were calculated on the basis of the employment growth figures published in

*European Economy* by the European Commission. The employment rate shows people in employment as a percentage of total population.

(5) Apparent productivity results from dividing GDP in euros (1995 PPP) by the number of people in work.

(6) PPP: The purchasing power parity (PPP) figures result from converting national currencies into euros in terms of purchasing power parity. These data were obtained from the series published by Eurostat for the EU member countries. The discrepancies that may exist for Spanish and Andalusian data are due to the correction made to adjust nominal GDP for purchasing power parity, taking into account differences in price levels measured by the GDP deflator.

(7) PRICES: General price level growth is measured through the GDP deflator.

(8) The annual rate of convergence is equal to the nominal GDP per capita (PPS) average cumulative annual growth differential vis-à-vis the EU in the period reviewed.

**Sources:** IEA, INE, Eurostat and Office of the Secretary-General for Economy, Junta de Andalucía.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

However, economic convergence should not only be measured in terms of GDP or GDP per capita growth, it should also be taken into account how it occurred. It is only when an economy nears full employment that GDP growth and GDP per capita growth are reliable indicators of an improvement in the standard of living of the inhabitants of a region or country. Productivity should also be taken into account, as it is a measure of the capacity of an economy to continue maintaining a certain standard of living in the medium term. This section therefore also includes an analysis of GDP per capita trends in relation to job growth and productivity.

With a view to making such an analysis, economic growth, measured by GDP per capita, is broken down into its two component parts: productivity and the employment rate. The employment rate is the number of people in work as a percentage of the total resident population. In Andalusia, this indicator grew by 53.4% in the period from 1986 to 2003. Productivity, measured as GDP in euros (1995 PPP) per worker, has risen by 10.3% since Spain joined the European Union. In this way it is possible to analyse the pillars on which income per capita growth has been based since Andalusia became part of the European Union. In this time, the 69.1% increase in GDP per capita (PPS) has been based to a greater extent on an increase in the employment rate, accounting for 84% of this growth, than on productivity growth, which accounted for just 16% of the increase.

These figures also show that economic growth in Andalusia was more employment-intensive than it was in Spain and the EU over this period. In specific terms, for every percentage point of economic growth, employment rose by 0.8 points in Andalusia, compared with 0.34 in the EU-15 as a whole. In other words, over this period, 80% of economic growth was converted into jobs in Andalusia, compared with just 34% in the EU-15.

The model of economic development observed in Andalusia over this period therefore shows that the increase in wealth in Andalusia, measured in terms of GDP or GDP per capita growth, was accompanied by the conversion of economic growth into higher

employment and, to a lesser extent, by productivity growth. This was not the case in other periods of expansion prior to EU membership, when economic growth in Andalusia was mainly based on increasing productivity and the conversion of economic growth into jobs was insufficient, triggering a process of emigration from the region. In the period under analysis, job growth (70.2%) was more than six times higher than population growth (11%).

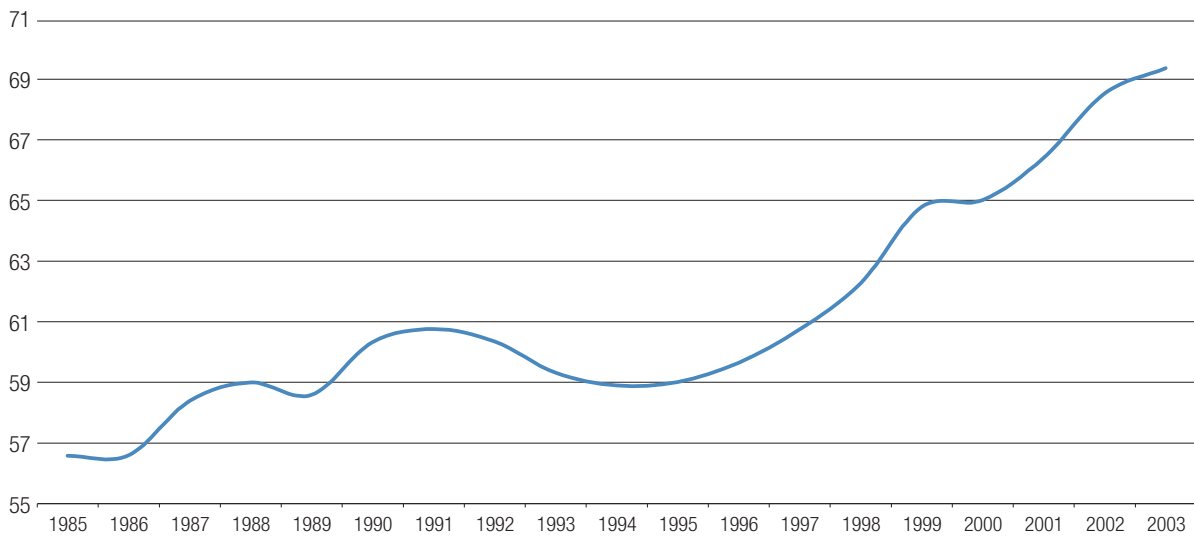
Changes in prices is another factor to be taken into account when analysing convergence. As economic and monetary union is based on a single currency and one exchange rate, price differences determine the competitiveness of the economy. Purchasing power parity is used to measure price differences between Andalusia or Spain and the EU-15. It is a composite indicator that measures the convergence of price levels between the two areas.

In 1985, the year before Spain joined the EU, there was a 40-point difference between price levels in Andalusia and Spain and the EU, measured in terms of real purchasing power parity, that is, prices were 60% of the EU-15 average. Since that time price convergence has advanced at a remarkable pace. The Andalusian and Spanish economies have closed the gap in terms of purchasing power and therefore in terms of prices, bringing them nearer to EU-15 averages. In 2002 Spain's purchasing power parity was 85.7% of the EU-15 average, and Andalusia's was 83.3%, exceeding the 1985 percentages by 26.6 and 23.7 points respectively.

Purchasing power parity is influenced by two factors: inflation and the exchange rate. Since the introduction of the single currency, the evolution of Andalusia's purchasing power parity vis-à-vis the EU has been largely influenced by inflation trends. Inflation has therefore become a key factor in economic policy, as it partly determines the competitiveness of the economy.

Between 1985 and 2003 price growth was higher in Andalusia than it was in the European Union. The GDP deflator is a more accurate measure of inflation than the consumer price index, because it reflects

Chart 141. TRENDS IN GDP PER CAPITA (PPS) OF ANDALUSIA VIS-À-VIS THE EU-15. YEARS 1985-2003

**NOTE:**

Estimates for Andalusian GDP per capita (PPS) by the Office of the Secretary-General for Economy, and estimates for EU-15 GDP per capita (PPS) by Eurostat.

Sources: IEA, INE, Eurostat and Office of the Secretary-General for Economy, Junta de Andalucía.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

the behaviour of prices for all the supply and demand components. According to this indicator, between 1986 and 2003 prices in Andalusia rose by 133.6%, 9.1 points less than in Spain (142.7%), but 69 points more than in the EU-15 (64.6%). It can therefore be seen that inflation trends in the region have been strongly influenced by national trends.

It is very significant that price convergence (85.7%) is keeping pace with GDP per capita convergence (86.6%) in the Spanish economy, which, within the economic and monetary union framework, depends solely on inflation. If economic growth is higher in Spain than in the EU, which it must be if the process of real convergence is to continue, it is only natural that price growth should also be higher. However, if the inflation differential between Spain and the EU were to increase at a faster rate than the GDP per capita growth differential, Spain would suffer a loss of competitiveness, making real convergence in terms of GDP and employment more difficult, particularly

if accompanied by a decline in productivity. This is what has been happening in the Spanish economy since 2000. For example, the GDP per capita growth differential between Spain and the EU-15 in 2003 was 0.6 percentage points, while purchasing power parity increased by 2.8 points and productivity was 0.8 percentage points lower (-0.3% in Spain compared with 0.5% in EU-15).

In conclusion, it can be said that the process of convergence between Andalusia and the European Union in progress since 1986 has advanced at a considerable pace. Progress was based on stronger economic growth than averaged by the fifteen members of the European Union, particularly on the employment side, which has enabled the region to close the gap on the EU-15 by almost thirteen points. It will be possible to maintain this positive trend if job growth in Andalusia remains stronger than in the EU-15 and if competitiveness improves, as a result of lower inflation and higher productivity.



4.

## Population





# Population

## Andalusia's population in 2003

According to the most recent official figures published by the Spanish National Statistics Institute (INE), based on the revision of the Municipal Population Census of 1 January 2003, the resident population of Andalusia is 7,606,848, accounting for 17.8% of the national population and approximately 2% of the European Union population.

The Andalusian population increased year on year by 128,416 people in 2003, making it the region with

the biggest increase in inhabitants in absolute terms after Madrid, Catalonia and Valencia.

Although this 1.7% increase in the population was slightly lower than population growth in Spain as a whole (2.1%), it was much higher than in the euro area (0.3% according to Eurostat).

The increase in population recorded in 2003 in Andalusia and in Spain as a whole can be attributed to a large extent to significant inflows of foreign people. Immigration accounted for over half (55%)

Table 13. **RESIDENT POPULATION OF ANDALUSIA. BREAKDOWN BY PROVINCE. YEAR 2003**

	Population	% of total population	CHANGE ON 2002	
			Absolute	Relative (%)
Almeria	565,310	7.4	18,812	3.4
Cadiz	1,155,724	15.2	14,931	1.3
Cordova	775,944	10.2	4,813	0.6
Granada	828,107	10.9	9,148	1.1
Huelva	472,446	6.2	7,512	1.6
Jaen	651,565	8.6	4,178	0.7
Malaga	1,374,890	18.1	44,880	3.4
Seville	1,782,862	23.4	24,142	1.4
<b>Andalusia</b>	<b>7,606,848</b>	<b>100.0</b>	<b>128,416</b>	<b>1.7</b>

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## 4. POPULATION

of population growth in Andalusia and for over three quarters (78%) of the national increase.

Population density, calculated as the total number of persons divided by land area, was 87 inhabitants per square kilometre in Andalusia in 2003, which was higher than the national average (85 inhabitants/square kilometre), but significantly lower than the European Union average of 119 inhabitants per square kilometre.

### Population structure by gender and age

A breakdown according to gender reveals that in 2003 the size of the male population saw a slightly higher increase than the female population (1.9%

and 1.5% respectively), a trend mirrored nationally. (2.3% and 1.9% respectively). Nevertheless, the female population continued to account for just over half of the total Andalusian population, specifically 50.6%, practically the same as nationally (50.8%).

A breakdown by age group shows a continuation of the trend of population ageing, reflected as a narrowing of the base of the population pyramid and a widening of the apex.

On the basis of data split into five-year age bands, it can be seen that the highest population growth was observed among the 80 to 84 age group (6.2%), followed by the 70 to 74 group (3.7%), well in excess of the region's average rate of growth.

Chart 34. **POPULATION PYRAMIDS. ANDALUSIA-SPAIN. YEAR 2003**

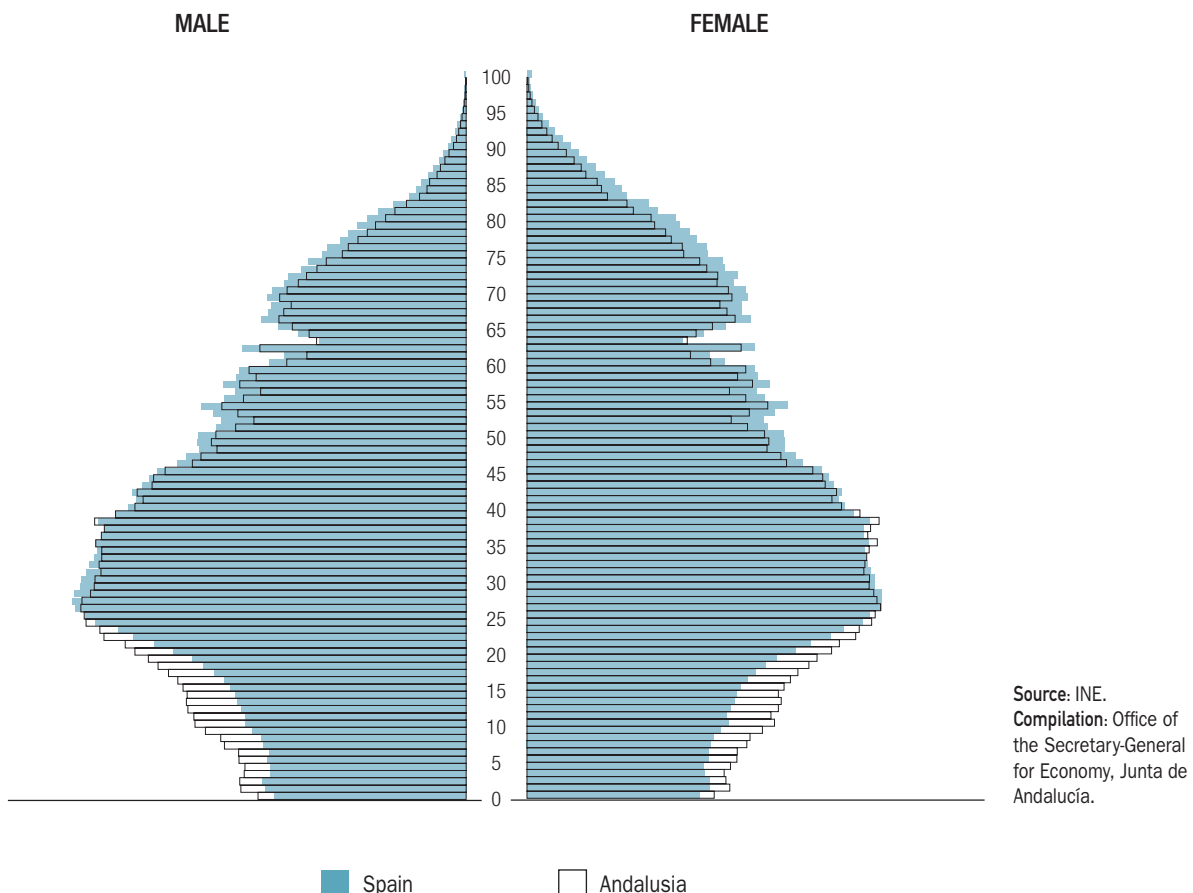


Table 14. **POPULATION BREAKDOWN BY AGE GROUP. YEAR 2003**

	Andalusia	SPAIN	EU (*)
< 15 years old	16.6	14.1	16.8
15-64 years old	68.5	68.8	66.9
65+ years old	14.8	17.0	16.3
Demographic dependency ratio (**)	45.9	45.3	49.5

**NOTES:**

As a percentage of total population.

(\*) Data from 2000.

(\*\*) Population under 15 or over 65 as a percentage of population aged 15-64.

Sources: Eurostat and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

At the other end of the scale, very weak growth was observed among the younger age bands, and there was even a fall of 1.6% in the population aged 5 to 9.

However, it is very significant that the under-four age band recorded a sharp increase in 2003 (6.2%), coinciding with the national results and confirming the upward trend observed the previous year, a reflection of the upturn in the total fertility rate in recent years.

The Andalusian population remained younger than the Spanish population as a whole. Data for 2000 shows that the population under 15 accounted for 16.6% of the total, which is similar to the European Union average of 16.8%, while in Spain the proportion was lower, specifically 14.1%.

The older population (over 65), however, accounts for a smaller proportion of the population in Andalusia (14.8%) than it does in the EU (16.3%) and in Spain as a whole (17%).

The dependency ratio is calculated as these two age groups, the under-fifteens and the over sixty-fives, which form the base and apex of the population pyramid, taken together as a percentage of the population aged between 15 and 64. This provides a measure of the proportion of the population that is economically inactive and that must be supported by the economically active population.

In 2003 the population dependency ratio in Andalusia was 45.9%, just over half a percentage point above the national ratio of 45.3%, owing to the fact that Andalusia has a younger population structure than Spain as a whole. This ratio was significantly higher in the European Union, specifically 49.5% in 2000, as both younger and elderly cohorts accounted for a larger proportion of the population structure.

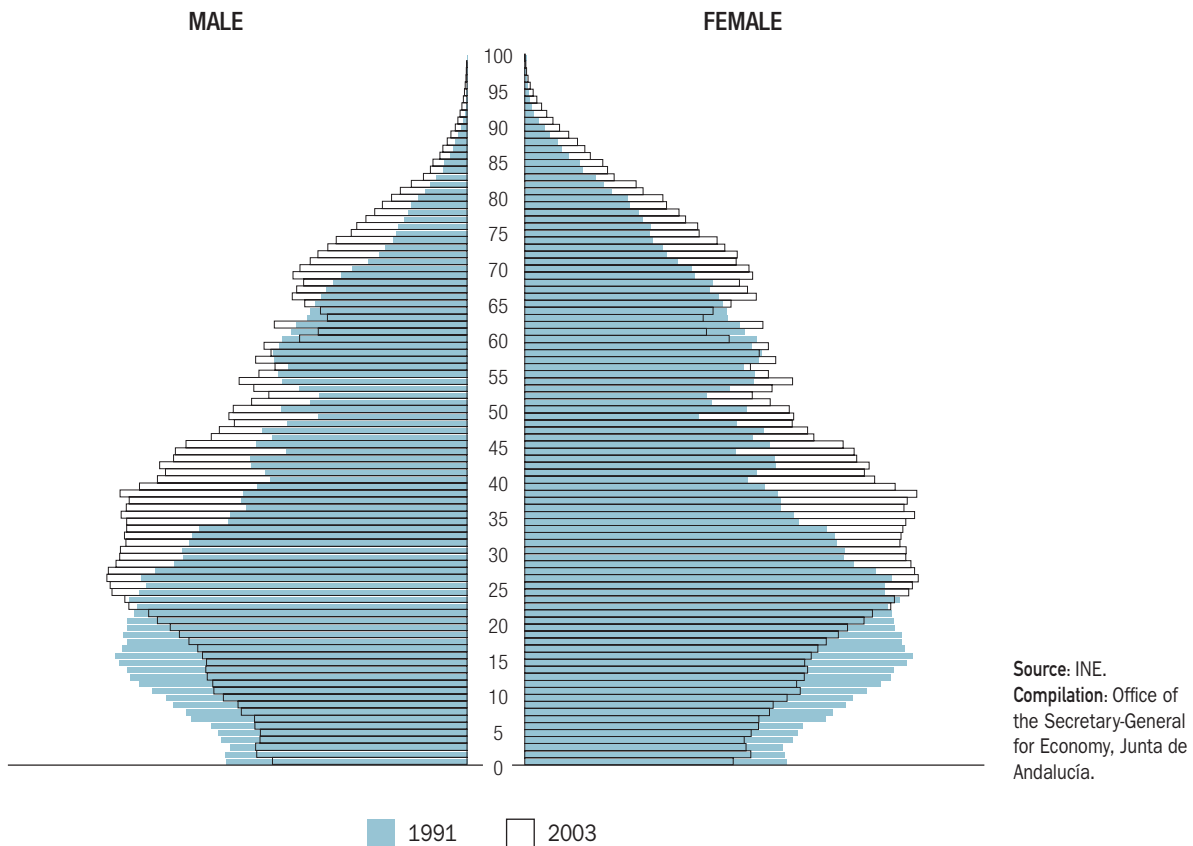
### Geographical distribution

All the Andalusian provinces experienced population growth in 2003, although the rate of increase varied appreciably from one province to another. The highest increases were recorded in the provinces of Almería and Málaga (3.4% in both cases, doubling the average rate of growth for the region and accounting between them for almost half (49.6%) of all population growth in Andalusia.

At the other end of the scale, Córdoba and Jaén registered the weakest population growth, with increases of 0.6% and 0.7% respectively, followed by Granada (1.1%), Cádiz (1.3%) and Seville (1.4%), all with growth below the regional average. Huelva recorded population growth of 1.6%, very similar to the Andalusian average.

Seville remained the most populous province, accounting for almost a quarter of the region's

Chart 35. **POPULATION PYRAMIDS. ANDALUSIA. 1991-2003**



population (23.4%), followed by Malaga, with 18.1% of the total, and Cadiz, with 15.2%. These three provinces together accounted for over half (56.7%) of the population in Andalusia in 2003.

Huelva, on the other hand, remained the province with the smallest number of inhabitants, accounting for 6.2% of the regional total.

A comparison of these figures with the land area of each of the provinces reveals considerable differences in population density. Huelva and Jaén have the lowest levels, specifically 47 and 48 inhabitants per square kilometre respectively, almost half the regional average. At the other end of the scale, the province with the highest population density is Malaga, with 188 inhabitants per square kilometre, double the regional average, followed by Cadiz, with

155, and Seville, with 125. The population density in these three provinces exceeds the European Union average.

It can also be observed that the propensity of the population to concentrate in municipalities that are provincial capitals is lower in Andalusia than it is in Spain as a whole.

In 2003 less than a third of the Andalusian population lived in provincial capitals (31.4%), compared with a national average of 33.7%. This percentage was slightly lower than the previous year, as population growth in the provincial capitals was weaker than in the other municipalities.

In Andalusia's eight provinces, the population living in provincial capitals grew year on year by 1.2%, just

over half the growth rate registered for the other municipalities (2%). On the other hand, in Spain as a whole, there was more balanced population growth in provincial capitals (2%) and other municipalities (2.2%).

However, trends varied considerably from one province to another. There were reductions in the number of inhabitants in the provincial capitals of Granada (-1.2%) and Cadiz (-0.9%), so that population growth in these provinces in 2003 was wholly attributable to the increase in municipalities other than the capitals.

In provinces such as Malaga and Almería, population growth in the provincial capitals was just half that averaged in the other municipalities.

At the other end of the scale, Huelva and Jaén registered increases of 2.8% and 2.4% respectively in the number of people living in their capitals, well in excess of the population growth rates in the rest of the municipalities of these provinces.

Cadiz remained the province with the smallest proportion of the population living in the capital,

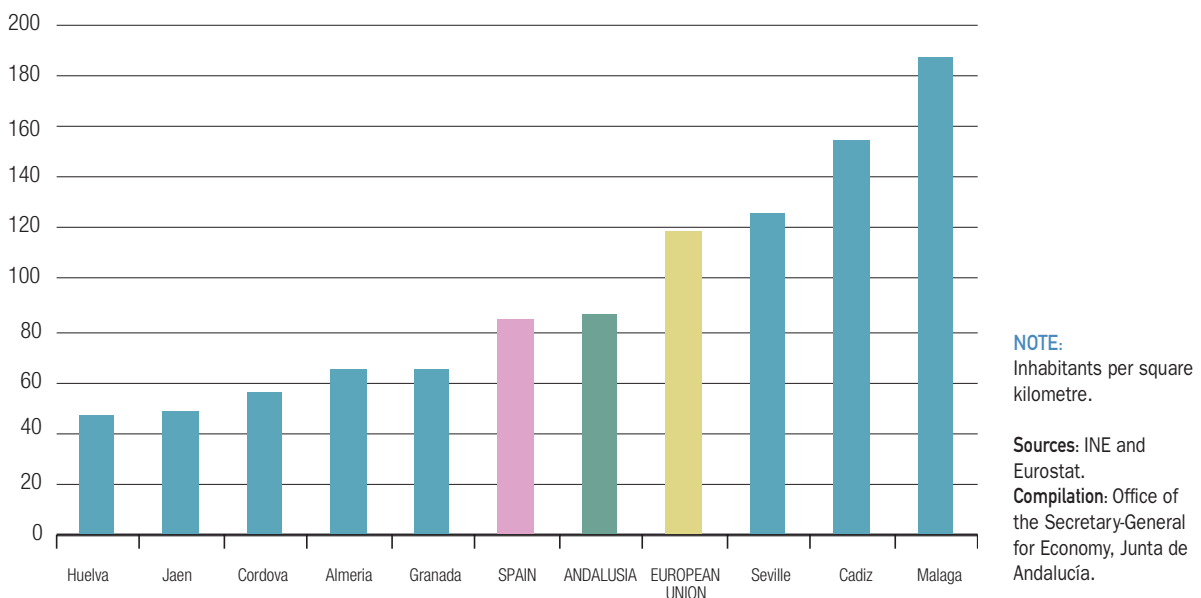
accounting for just 11.7% of the total, almost three times less than the regional average. On the other hand, in provinces such as Seville, Malaga and Cordova, the proportion of the population living in their capitals was around 40%, exceeding the national average.

### Population distribution by municipality size

Andalusia's resident population divided by the number of municipalities in the region (770 according to the Municipal Population Census) gives average municipality size, which was 9,879 inhabitants in 2003, almost double the Spanish average, which was 5,269 inhabitants per municipality.

An analysis of the distribution of municipalities by size also reveals the fact that Andalusia's municipalities are relatively larger. Specifically, 181 of Andalusia's 770 municipalities have a population of between 5,000 and 20,000 inhabitants, that is 23% of the total and more than double the figure for Spain as a whole, where only 10% of municipalities fall into this category.

Chart 36. **POPULATION DENSITY. YEAR 2003**



## 4. POPULATION

Table 15. **DISTRIBUTION OF POPULATION WITHIN PROVINCES. ANDALUSIA. YEAR 2003**

	Year 2003								
	Population			% of total population		% change on 2002			
	Provincial Capital	Rest of province	Total	Provincial Capital	Rest of province	Provincial capital	Rest of province	Total	
Almeria	176,727	388,583	565,310	31.3	68.7	2.0	4.1	3.4	
Cadiz	134,989	1,020,735	1,155,724	11.7	88.3	-0.9	1.6	1.3	
Cordova	318,628	457,316	775,944	41.1	58.9	1.2	0.2	0.6	
Granada	237,663	590,444	828,107	28.7	71.3	-1.2	2.1	1.1	
Huelva	144,831	327,615	472,446	30.7	69.3	2.8	1.1	1.6	
Jaen	115,638	535,927	651,565	17.7	82.3	2.4	0.3	0.7	
Malaga	547,105	827,785	1,374,890	39.8	60.2	2.1	4.2	3.4	
Seville	709,975	1,072,887	1,782,862	39.8	60.2	0.8	1.7	1.4	
Andalusia	2,385,556	5,221,292	7,606,848	31.4	68.6	1.2	2.0	1.7	
TOTAL FOR SPAIN	14,405,636	28,311,428	42,717,064	33.7	66.3	2.0	2.2	2.1	

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Likewise, there are more municipalities with more than 20,000 inhabitants in Andalusia, where they account for 8.3% of the total, than in Spain as a whole, where they account for just 4.1%.

On the other hand, there are fewer small municipalities in the region. In Spain, 85% of municipalities have a population of under 5,000, while in Andalusia they account for 68% of the total.

There is an even bigger difference when it comes to municipalities of less than 2,000 inhabitants. In Spain 72% of the total fall into this category, while in Andalusia they account for only 41%.

Andalusian municipalities are proportionately larger, owing mainly to the tendency of the Andalusian population to concentrate in towns with a population of between 5,000 and 20,000 inhabitants.

According to the figures provided in the Municipal Population Census, 23.6% of the total population of Andalusia lived in such municipalities in 2003, compared with 19.7% nationally.

On the other hand, 12.4% of the Andalusian population lives in rural municipalities with less than

5,000 inhabitants, while in Spain, the proportion is 14.2%. There is an even greater difference between national and regional figures for municipalities with less than 2,000 inhabitants. In Spain as a whole, 7% of the population lives in such municipalities, while in Andalusia, the proportion is just over half that (3.8%).

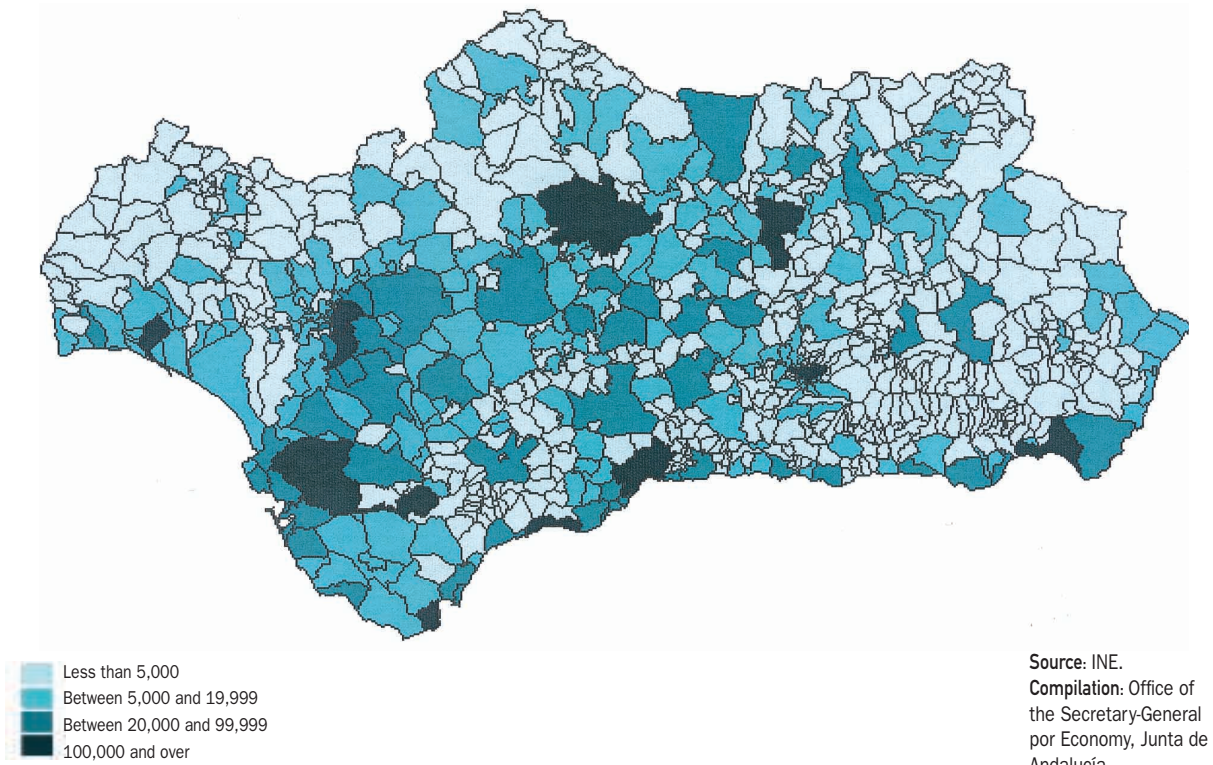
A look at medium-sized municipalities (between 20,000 and 100,000 inhabitants) shows that the regional and national percentages are similar, with around a quarter of the population living in such towns in both cases.

The proportion of the population that lives in cities or big towns (over 100,000 inhabitants) is greater in Spain as a whole (40.5% of the total) than in Andalusia (38.2%).

### Population trends

The standards for producing the Municipal Population Census were amended in 1996, when a computerised management system providing continuously updated information was established under the coordination of the National Statistics Institute (INE).

Chart 37. MAP OF ANDALUSIAN MUNICIPALITIES BY POPULATION SIZE BAND. YEAR 2003



Under this new system, the INE has published official population figures for 1 January of each year since 1998, while previously, official figures were only published when the general population census was carried out every ten years or when the municipal census was revised every five years.

The availability of an official series of population figures from 1998 to 2003, when the most recent data was published, allows the evolution of the Andalusian population over the past five years and some of its most distinctive features to be analysed.

Between 1998 and 2003 the Andalusian population grew at a slower rate than the Spanish population as a whole, in contrast with the trends revealed by previous analyses of figures based on population censuses for the last two decades.

In the five-year period between 1998 and 2003, Andalusia's population registered 5.1% cumulative

growth, just over two points lower than the Spanish average rate of growth (7.2%).

### Foreign population

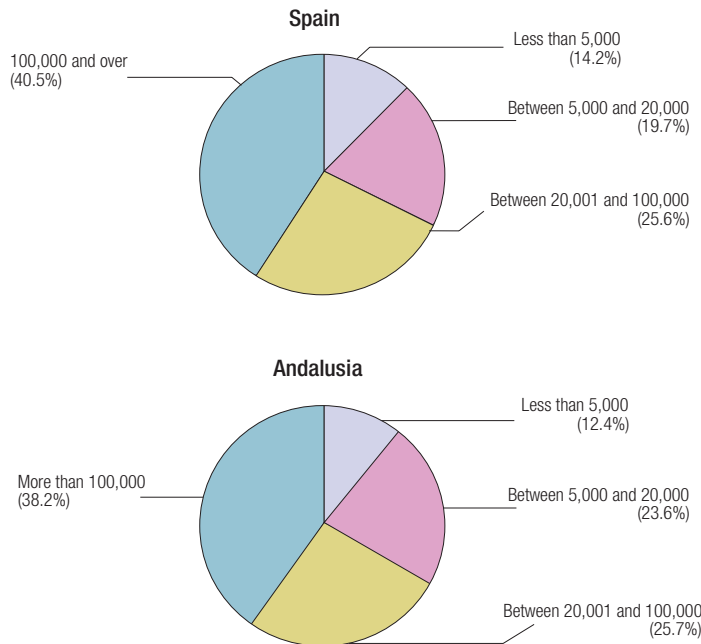
Faster population growth in Spain as a whole can be largely attributed to the fact that the foreign-born population has increased more rapidly in Spain than it has in Andalusia in the last five years, as the Spain-born population grew at a similar pace nationally and regionally.

According to the Population Census, the foreign-born population residing in Spain increased four-fold between 1998 and 2003 from 637,085 to 2,664,168.

In absolute terms, the Spanish population grew by 2,864,413 from 1998 to 2003, so that 70.8% of population growth was due to an increase in



Chart 38. **POPULATION BREAKDOWN BY MUNICIPALITY SIZE. ANDALUSIA-SPAIN. YEAR 2003**



**NOTE:**

As a percentage of total population in the country or region.

**Source:** INE.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

the number of foreign-born inhabitants, while the remaining 29.2% was due to an increase in the number of Spain-born inhabitants.

There was also a considerable increase, albeit smaller than the one recorded nationally, in the foreign-born population in Andalusia, which numbered 282,901 in 2003, 2.8 times more than in 1998.

In absolute terms, Andalusia's foreign-born population has increased by 183,120 in the last five years, accounting for almost half (49.4%) of overall population growth, while the increase in the number of Spain-born inhabitants accounted for the other half.

The foreign-born population in Andalusia therefore increased its share in the regional total to 3.7% in 2003, a smaller percentage than registered nationally (6.2%).

A provincial breakdown shows that the largest increases in the foreign-born population in absolute terms were recorded in Malaga and Almería, which were also the provinces with the strongest overall

population growth in this five-year period (10.8% and 11.8% respectively).

In Malaga there were 70,532 more foreign-born inhabitants in 2003 than there were in 1998, accounting for 38.5% of the total increase in the region and increasing the share of the foreign-born population in the province to 9.5%, double the figure recorded five years earlier.

The biggest increase in relative terms was in Almería, where the foreign-born population increased four-fold in this five-year period, with a rise in its share in the total population from 2.6% in 1998 to 10% in 2003.

There were also increases in the foreign-born population in all the other provinces, with the smallest increases registered in Cordova and Jaén, where it accounted for just 1.1% of the total population.

A breakdown by nationality shows that the main country of origin of the region's foreign-born

#### Box 4. SPATIAL POPULATION DYNAMICS IN ANDALUSIA

According to the most recent information available from the INE's Population Census, in 2001 the Andalusian population was 6% larger than it was ten years before, growing almost one percentage point faster than nationally (5.1%).

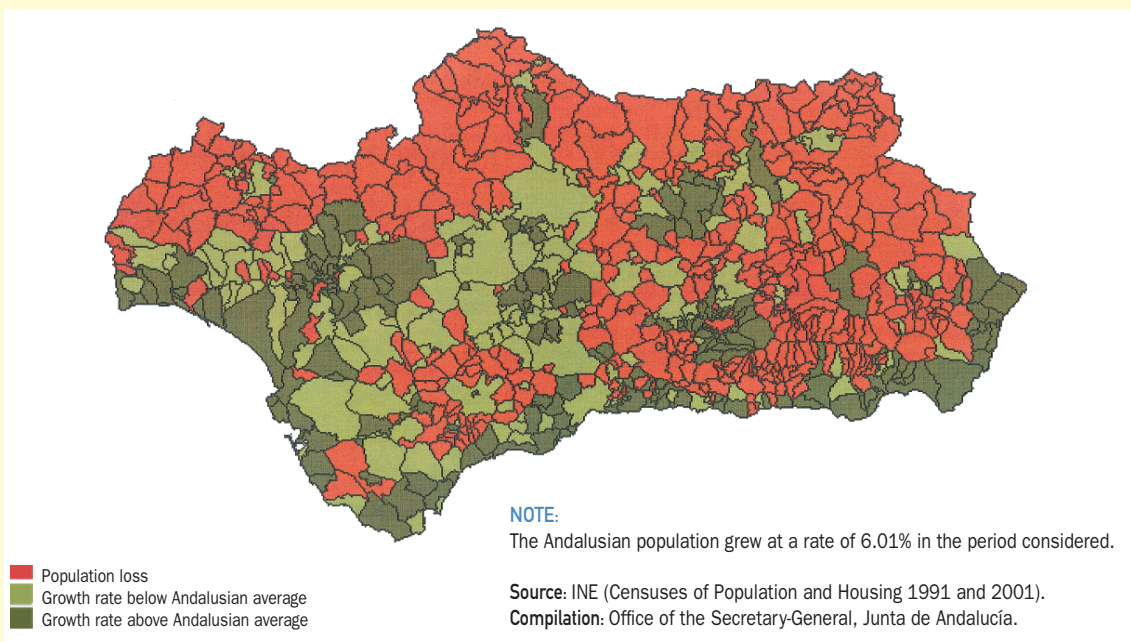
This dynamic population growth is not limited to the past decade, but is the continuation of a trend already observed in the eighties, when the Andalusian population grew at an even faster rate of 7.8%, more than double the average national rate of 3.2%.

A breakdown of Andalusian population growth figures by municipality reveals that in over half (418) of the 770 municipalities in the region of Andalusia, the population fell between 1991 and 2001, although this reduction was offset by the increases registered in the remaining 352 municipalities.

The 418 municipalities that registered negative population growth have a land area of 46,774 square kilometres, which means that the population fell in over half of the total area of Andalusia (53.4%). However, although these municipalities account for a large proportion of the region in terms of land area, they have a relatively low population density, accounting for less than a quarter of Andalusia's total population (22.8% in 2001).

The majority of the municipalities with shrinking populations are located in mountain areas, particularly Sierra Morena, Sierras Subbéticas and Sierras Penibéticas, while those with growing populations are coastal municipalities and urban centres, defined as towns and cities with more than 100,000 inhabitants and municipalities in their area of influence.

#### POPULATION GROWTH IN ANDALUSIA. YEARS 1991-2001



#### 4. POPULATION

In the coastal area, defined as coastal municipalities and other neighbouring municipalities, the population grew by 10.6% between 1991 and 2001. In urban agglomerations, not including those located in the coastal area, population growth was 7.3%, higher than the regional average, and mainly concentrated in the municipalities in the area of influence of big cities.

A breakdown by municipality size reveals that population growth in Andalusia in the last decade has been stronger in medium-sized municipalities, which are those with between 20,000 and 100,000 inhabitants. The population living in such municipalities grew by 15.2% in the last decade, accounting for almost a quarter (24.3%) of the total population of Andalusia in 2001.

The next highest population growth was in towns with between 5,000 and 20,000 inhabitants, where the population increased by 8.9% in the last decade.

Population growth in big towns and cities (over 100,000 inhabitants) was lower than the regional average, registering an increase of 1.5%. The number of such towns or cities in Andalusia increased from 10 in 1991 to 12 in 2001.

It is the smaller rural municipalities, with fewer than 5,000 inhabitants, mostly located in the eastern and north-western part of Andalusia, that have seen a fall in population over the ten years (-0.8%).

Table 16. **RESIDENT POPULATION BY NATIONALITY. YEARS 1998-2003**

	Year 2003			CHANGE ON 1998					
	Total	Foreigners	Spaniards	Absolute			Relative (%)		
				Total	Foreigners	Spaniards	Total	Foreigners	Spaniards
Almeria	565,310	56,276	509,034	59,862	43,016	16,846	11.8	324.4	3.4
Cadiz	1,155,724	19,904	1,135,820	48,240	12,523	35,717	4.4	169.7	3.2
Cordova	775,944	8,445	767,499	8,769	6,780	1,989	1.1	407.2	0.3
Granada	828,107	23,113	804,994	26,930	16,637	10,293	3.4	256.9	1.3
Huelva	472,446	12,128	460,318	18,488	9,182	9,306	4.1	311.7	2.1
Jaen	651,565	7,149	644,416	5,773	5,723	50	0.9	401.3	0.0
Malaga	1,374,890	130,146	1,244,744	134,310	70,532	63,778	10.8	118.3	5.4
Seville	1,782,862	25,740	1,757,122	68,017	18,726	49,291	4.0	267.0	2.9
Andalusia	7,606,848	282,901	7,323,947	370,389	183,120	187,269	5.1	183.5	2.6
Spain	42,717,064	2,664,168	40,052,896	2,864,413	2,027,083	837,330	7.2	318.2	2.1

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 39. FOREIGN POPULATION

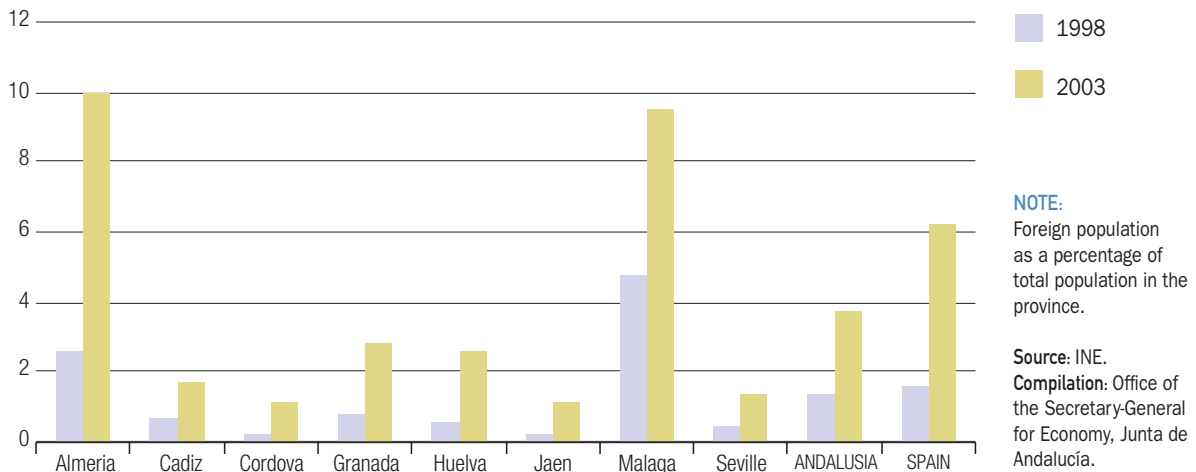


Table 17. FOREIGN POPULATION IN ANDALUSIA BY COUNTRY OF ORIGIN

	Year 2003		Change on 1998	
	Number	% of total	Absolute	Relative (%)
Morocco	51,774	18.3	34,159	193.9
United Kingdom	45,497	16.1	22,897	101.3
Ecuador	17,365	6.1	n.a.	n.a.
Colombia	16,370	5.8	n.a.	n.a.
Argentina	16,262	5.7	13,346	457.7
Germany	15,992	5.7	6,775	73.5
France	8,503	3.0	4,656	121.0
Rumania	7,779	2.7	7,633	5,228.1
Italy	7,463	2.6	5,532	286.5
Netherlands	5,288	1.9	2,544	92.7
Belgium	4,805	1.7	2,222	86.0
USA	4,692	1.7	2,319	97.7
Denmark	4,458	1.6	1,642	58.3
Ucrania	4,395	1.6	n.a.	n.a.
Rest of countries	72,258	25.5	n.a.	n.a.
<b>TOTAL</b>	<b>282,901</b>	<b>100.0</b>	<b>183,120</b>	<b>183.5</b>

**NOTE:** n.a.: Not available

**Source:** INE.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

population is Morocco, accounting for 18.3% of the Andalusian total in 2003. The number of Moroccans living in Andalusia has tripled in this five-year period, with the biggest increases in the provinces of Almería, which is home to 35% of all Moroccans living in the region, and Malaga (25.8%).

The second-most important country of origin is the United Kingdom. Although the UK-born population living in the region is steadily increasing and has doubled since 1998, it is growing at a slower rate than the foreign-born population as a whole. The UK-born population accounted for 16.1% of the total foreign-born population in Andalusia in 2003 and is concentrated in the province of Malaga, which is

home to almost three-quarters of UK-born inhabitants living in Andalusia.

Next on the list, quite some way behind, are immigrants from South American countries, such as Ecuador, Colombia and Argentina, although they are fewer in number, accounting for around 6% of the foreign-born population in Andalusia.

Over the five-year period, there has been a notable influx of people from Eastern European countries, such as Romania, Bulgaria and Russia, with sharp increases in the numbers of such immigrants, although they account for only a small proportion of the total foreign-born population.

# 5.

## Productive Sectors



## Primary Sector

### Overview

Figures for the primary sector indicate a fall in output, after two years as the best-performing sector in the Andalusian economy. Gross value added (GVA) measured at basic prices amounted to 5,515 million euro in Andalusia in 2003, 7.2% down on the previous year in real terms.

This poor performance contrasts with the slightly positive growth observed in the primary sector nationally (0.7%). As a result, its weight in the Spanish primary sector as a whole, in terms of constant price GVA at basic prices, shrank by more than two percentage points to 26.3%.

The fact that the Andalusian primary sector contracted, while the region's other productive sectors expanded meant that the weight of the primary sector in Andalusia's production structure also fell to 7.6%, eight tenths of a point less than in 2002.

The sector's decline was mirrored in the labour market, where employment fell, albeit at a slower rate of 1.8%, resulting in a drop in productivity compared with the previous year. Therefore, the productivity differential between Andalusia's primary sector and the region's economy as a whole widened,

and primary sector productivity was 3.2% lower in Andalusia than it was nationally.

In this context of declining output, the Andalusian primary sector was more inflationary, with a 3.2% increase in prices, as measured by the GVA deflator, although price growth remained lower than pay increases negotiated through collective bargaining in the sector.

With regard to primary sector foreign trade, the decline in production did not stunt nominal export growth completely (2%). As a result, the sector's export share, that is, total exports as a percentage of GVA, rose to 49.4%.

A broader picture of developments in the region in 2003 can be obtained from the structural information provided by the Annual Regional Accounts for Andalusia, compiled by the Andalusian Statistics Institute (IEA).

These accounts, which provide figures up to 2001, reveal that the primary sector in Andalusia has a higher value added to output ratio than the regional average. An analysis of the subsectors shows that this is echoed in the growing of crops, farming of animals and hunting subsectors and in fishing and the operation of fish hatcheries and fish farms, while



## 5. PRIMARY SECTOR

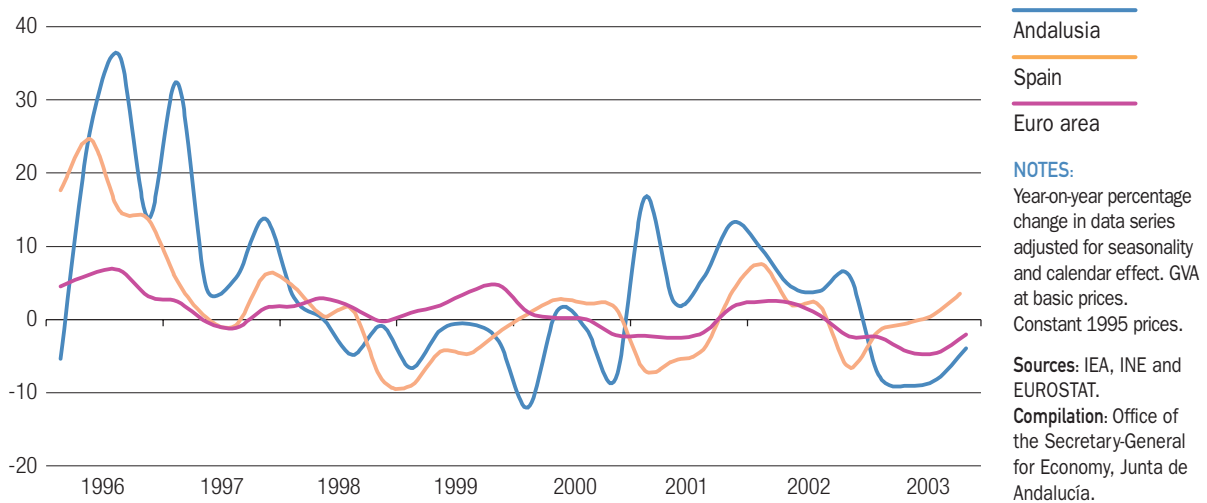
Table 18. **BASIC INDICATORS OF THE PRIMARY SECTOR. ANDALUSIA. YEAR 2003**

GVA at basic prices <sup>(1)</sup>	
Millions of current euros	5,515
Nominal growth in the year	-4.2%
Real growth in the year	-7.2%
Primary sector GVA/Total Andalusian GVA <sup>(1)</sup>	7.6%
Primary sector GVA/Spanish primary sector GVA <sup>(1)</sup>	26.3%
Primary sector GVA/Primary sector output <sup>(2)</sup>	63.8%
GVA distribution <sup>(2)</sup>	
Compensation of employees	44.0%
Gross operating surplus <sup>(3)</sup>	57.6%
Net taxes on production	-1.6%
Employment	
Thousand people	256.4
Annual growth	-1.8%
Primary sector jobs/Total jobs in Andalusia	9.9%
Primary sector jobs/Primary sector jobs in Spain	27.2%
Productivity <sup>(4)</sup>	
All sectors=100	76.5
Spain's primary sector=100	96.8
GVA deflator <sup>(1)</sup>	
Annual growth	3.2%
Wages	
Wage increases under collective agreements	3.75%
Foreign trade	
Exports	
- € million	2,724.0
- Annual growth	2.0%
Imports	
- € million	645.8
- Annual growth	-15.7%
Trade balance	
- € million	2,078.2
Export share <sup>(5)</sup>	49.4

### NOTES:

- (\*) Advance figures.  
(1) GVA at basic prices (constant 1995 prices).  
(2) Data from 2001.  
(3) Includes mixed income.  
(4) GVA per person in employment at basic prices (constant 1995 prices).  
(5) Exports as a percentage of GVA at current basic prices.
- Sources: IEA, INE and Ministry of Labour and Social Affairs.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 40. PRIMARY SECTOR GVA



forestry is the only subsector with a lower ratio. In specific terms, GVA at basic prices generated by agricultural and fishing activities accounted for 63.8% of output, a higher proportion than the 51.9% averaged by the Andalusian economy as a whole.

The Annual Regional Accounts for Andalusia also provide an insight into the distribution of value added between earned income and capital income. In the Andalusian primary sector, as nationally, capital income accounts for a larger proportion of GVA than earned income. Gross operating surplus, including mixed income of unincorporated enterprises and therefore incorporating a remuneration component and an operating surplus component, account for 57.6% of GVA at basic prices and earned income for 44%. The proportion of GVA corresponding to net taxes on production is negative (-1.6%), which means that the Andalusian primary sector is a net recipient of subsidies. In Spain as a whole, the sector is also a net recipient of subsidies, with net taxes on production accounting for a higher proportion than in Andalusia (-6.9% of GVA), according to figures provided by the National Statistics Institute (INE).

A breakdown of these figures shows that in the growing of crops and fishing subsectors the proportion of value added corresponding to gross operating surplus is greater than that corresponding

to remuneration paid by enterprises to employees in return for work, while in the forestry subsector the opposite is true. The growing of crops and forestry subsectors are net recipients of subsidies, but the fishing subsector is not, with net taxes corresponding to these activities accounting for 4.8% of GVA.

## Production

The decline in GVA in the Andalusian primary sector can be attributed to negative results in the growing of crops, forestry and fishing. The farming of animals was the only subsector that made a positive contribution to primary sector growth in the region.

Rainfall in the 2002/2003 crop year was higher than average, increasing the availability of water. According to figures supplied by the Environment Ministry for the Seville and Malaga Local Weather Centres, total rainfall accumulated over the crop year was 6.7% higher than normal on the basis of average rainfall figures for the period 1961-90.

The high level of rainfall swelled the volume of water in Andalusia's reservoirs, so that on 30 August 2003, at the close of the crop year, water levels in the Guadalquivir Hydrographic Confederation reservoirs were 9% higher than at the same time the year

Table 19. **FINAL AGRICULTURAL OUTPUT**

	2002		2003		02-03 growth %
	€ million	% of total	€ million	% of total	
<b>FINAL AGRICULTURAL OUTPUT</b>	<b>9,356</b>	<b>100.0</b>	<b>8,474</b>	<b>100.0</b>	<b>-9.4</b>
<b>FINAL CROP OUTPUT</b>	<b>7,635</b>	<b>81.6</b>	<b>6,775</b>	<b>80.0</b>	<b>-11.3</b>
Cereal crops	360	3.8	339	4.0	-5.7
Pulses	24	0.3	20	0.2	-17.7
Straw	13	0.1	8	0.1	-37.8
Tuber crops	110	1.2	105	1.2	-4.9
Industrial herbaceous crops	546	5.8	507	6.0	-7.1
Forage crops	9	0.1	11	0.1	26.2
Market vegetables	2,765	29.6	2,623	31.0	-5.1
Citrus fruits	355	3.8	366	4.3	3.0
Non-citrus fruits	372	4.0	353	4.2	-5.0
Wine and by-products	133	1.4	162	1.9	21.3
Anim. or veget. fats and oils and their cleavage prod.	2,374	25.4	1,618	19.1	-31.8
Other industrial crops	135	1.4	206	2.4	52.6
Cut flowers and ornamental plants	279	3.0	297	3.5	6.7
Seeds	160	1.7	160	1.9	0.0
<b>FINAL ANIMAL OUTPUT</b>	<b>1,323</b>	<b>14.1</b>	<b>1,393</b>	<b>16.4</b>	<b>5.3</b>
<b>FINAL FORESTRY OUTPUT</b>	<b>160</b>	<b>1.7</b>	<b>102</b>	<b>1.2</b>	<b>-36.1</b>
<b>OTHER CONTRIBUTIONS</b>	<b>239</b>	<b>2.6</b>	<b>203</b>	<b>2.4</b>	<b>-14.9</b>

**NOTE:**

Current prices.

Source: Andalusian Ministry of Agriculture and Fisheries.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

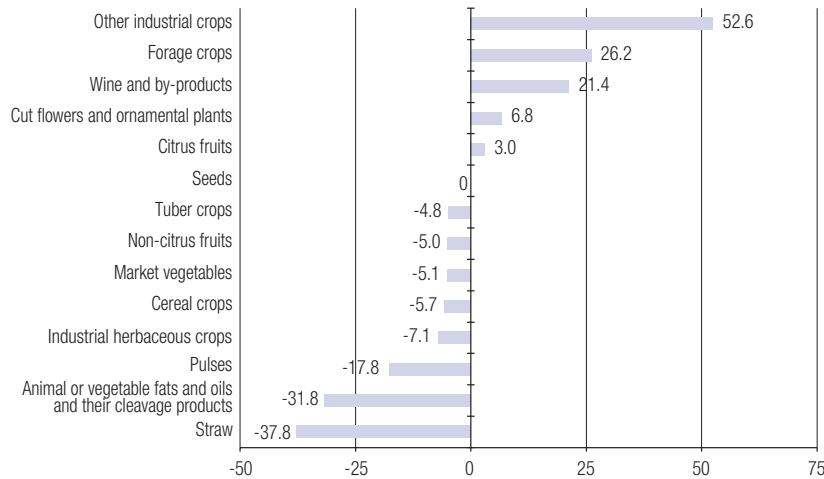
before, at 63% capacity. Water levels in the Southern Hydrographic Confederation reservoirs were up 11% on the previous year to 40% capacity, and the Guadiana Hydrographic Confederation reservoirs contained 7% more water than in 2002 and were therefore at 83% capacity.

The 2002/2003 crop year began with the arrival of various rainy weather fronts sweeping across the country, bringing heavy showers, particularly in the western part of Andalusia, and cooler temperatures than normal for September. October also saw unevenly distributed scattered showers. This weather, in general, created favourable conditions, preparing the land for sowing. The beginning of November was characterised by an almost total

lack of rainfall and temperatures that were higher than normal for the time of year, with highs of up to 30°C. This was followed by successive fronts, bringing cloudy weather, which continued into December, accompanied by a considerable drop in temperatures, which fell further in January and February as chilly northerly winds swept across the region, causing frosts in many inland areas.

March began with widespread rain that saturated the land, alternating with warmer, dry weather that helped to aerate the soil. In April periods of dry weather alternated with cloudy weather until the second half of May, when temperatures soared. June saw the arrival of easterly Levante winds, which pushed the temperatures above 40°C, and this hot weather

Chart 41. FINAL CROP OUTPUT. ANDALUSIA. YEAR 2003



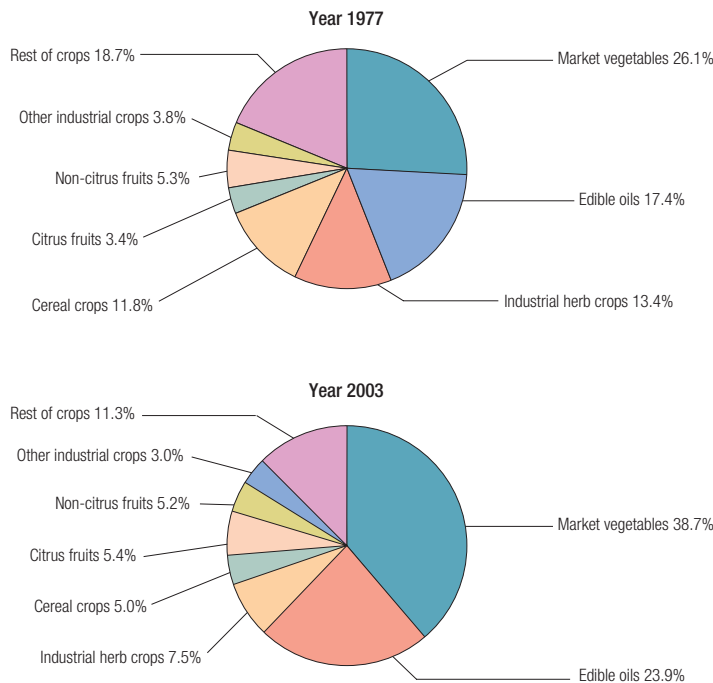
**NOTES:**

Year-on-year percentage change. Current prices.

Source: Andalusian Ministry of Agriculture and Fisheries.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 42. ANDALUSIAN CROP OUTPUTS



**NOTE:**

Andalusian crop outputs as a percentage of Andalusian final crop output at current prices.

Source: Andalusian Ministry of Agriculture and Fisheries.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

### Box 5. FARMING STRUCTURE IN ANDALUSIA

The farming structure in Andalusia can be analysed using the information provided in the Agricultural Census, first conducted by the INE in 1962 and repeated in 1972, 1982, 1989 and, most recently, in 1999. The agricultural holding is the basic unit for which information on the organisation and structure of the agricultural sector is provided.

According to the 1999 Agricultural Census, the total agricultural land area in Andalusia was 7,789,011 hectares (ha), accounting for 18.5% of all agricultural land in Spain. However, the utilised agricultural area (UAA) was 4,974,175 ha, which means that around 36% of the land was not in use, although this was a smaller proportion than recorded nationally (37.6%).

The UAA had increased by 6.4% since the previous Agricultural Census in 1989, while the number of agricultural holdings had fallen by 13.5% to 369,768 in 1999. This trend was echoed in Spain as a whole and in all the Andalusian provinces except Seville, where the number of agricultural holdings rose by 1.2%. The biggest reductions were recorded in the provinces of Almería, Granada and Huelva, where they fell by 30%. Jaén, Granada and Cordova are the provinces with the largest numbers of agricultural holdings.

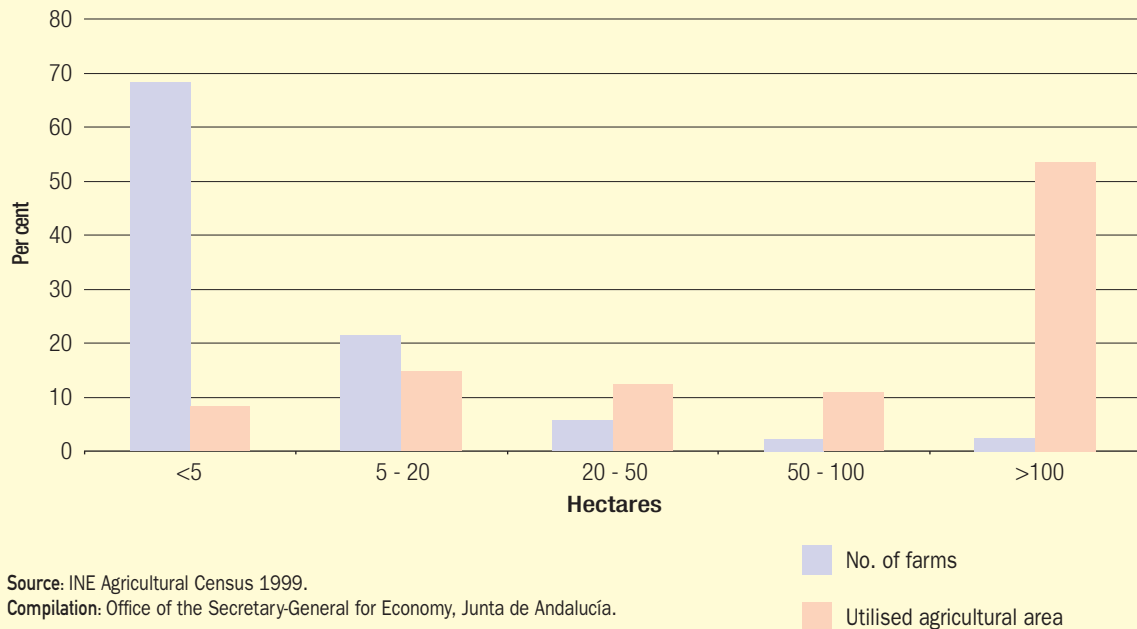
As a result of the increase in the UAA and the reduction in the number of agricultural holdings, the UAA per holding rose in Andalusia from 10.6 ha in 1989 to 13.5 ha in 1999 and in Spain as a whole from 10.8 ha to 14.7 ha.

A breakdown by farming type shows that 45.5% of utilised agricultural land was used for crop growing, 18.3% for pasture and the rest for hunting and forestry. This differs considerably from the distribution of farm land nationally, where 40.1% is used for growing crops and 22.3% for pasture. This pattern of agricultural land use is repeated in all the Andalusian provinces, except Huelva, where the farming of animals and forestry account for larger proportions, while Seville and Jaén are the provinces where the land is used most intensively for the growing of crops.

The most common form of agricultural land tenure in Andalusia is owner occupancy, which accounts for 75.4% of total UAA, followed by fixed rent tenancy, accounting for 19.7%, share tenancy, an arrangement whereby a landowner leases land to a tenant in exchange for a percentage of the production of the land in cash or kind (22%), and other forms of tenure (2.7%), including lease without consideration, trusteeship, contested ownership, etc. Owner-occupied agricultural holdings account for a smaller proportion in Spain (67%) than they do in Andalusia, while fixed rent tenancy accounts for a larger percentage nationally (26.9%) than in the region. Although the share of lease holdings in the land tenure system is smaller in Andalusia, it has increased considerably at the expense of owner-occupied farms since the 1989 Agricultural Census, when they accounted for just 15% of the UAA. Almería and Jaén are the provinces that have the highest proportion of owner-occupied agricultural holdings, at around 83% of the UAA, while in Cadiz, Cordova and Huelva, other forms of land tenure are more common.

A breakdown by farm size reveals structural dualism, a phenomenon also observed nationally, although to a lesser extent. There are a large number of small farms existing alongside a few large agricultural holdings, while medium-sized farms are relatively rare. According to the most recent Agricultural Census data, in Andalusia 68.3% of agricultural holdings have an area of less than 5 ha and account for just 8.3% of the UAA. On the other hand, holdings with an area of over 100 ha, which account for just 2.4% of all holdings in the region, occupy 53.6% of the UAA.

### SIZE DISTRIBUTION OF ANDALUSIAN FARMS



continued into July and August to the end of the crop year.

According to estimates published by the Andalusian Agriculture and Fisheries Ministry, final crop output fell by 11.3% at current prices compared with the previous year. This decline was due to negative results for most crops, with the biggest reductions in edible oils and their cleavage products, industrial herbaceous crops, cereals, vegetables and non-citrus fruits. On the other hand, there were increases in the production of wine and byproducts, citrus fruits and cut flowers and ornamental plants, although they account for only 10% of this subsector's total output.

The production of edible oils and their cleavage products, accounting for 24% of Andalusia's final crop output and 83.5% of these commodities produced nationally, rose by 31.8% in nominal terms in 2003. Olive picking was disrupted by heavy rainfall, which interrupted and delayed the work and caused the olives to fall to the ground, impairing the quality of the oil produced.

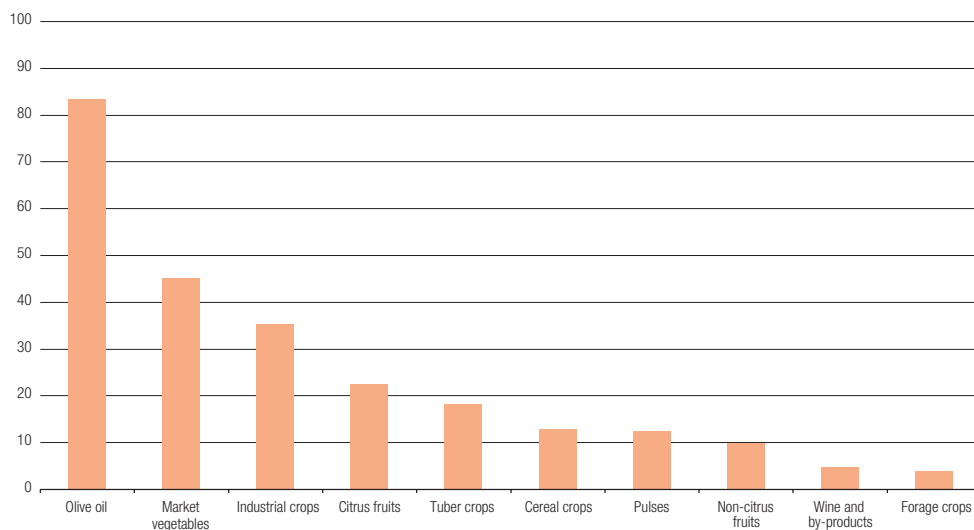
The output of industrial herbaceous crops fell by 7.1% in nominal terms as a result of the heat wave that swept the whole of Spain and Andalusia in particular in the summer months. The hot weather affected sunflower yields, drying the seeds too quickly, and beet and cotton crops were damaged by pests.

The output of cereals, the sixth most important crop category in Andalusia, fell by 5.7%, also affected by the long period of hot weather, which parched the grain, resulting in weight loss and lower yields.

Vegetables, Andalusia's most important type of crop, accounting for 38.7% of final crop output, fell by 5.1%, as a result of the very hot weather in the summer months, which affected tomatoes and strawberries, among others.

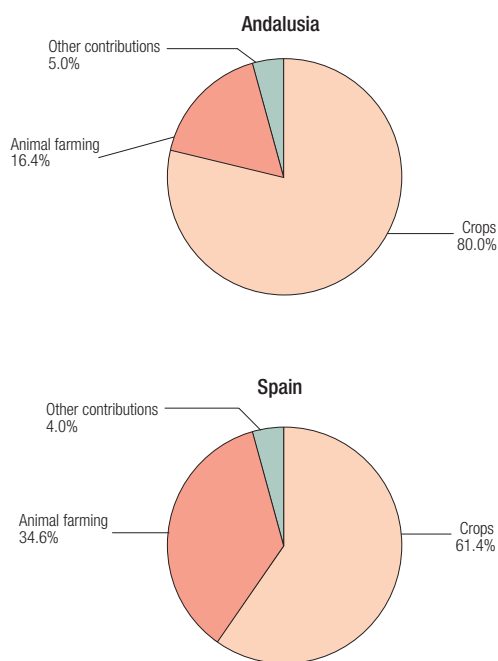
The output of non-citrus fruits fell by 5%, with a particularly sharp reduction in the production of almonds. Tuber crops saw a 4.9% drop in production, with the early potato showing the sharpest reduction.

Chart 43. **ANDALUSIAN CONTRIBUTION TO SPANISH CROP OUTPUTS. YEAR 2003**



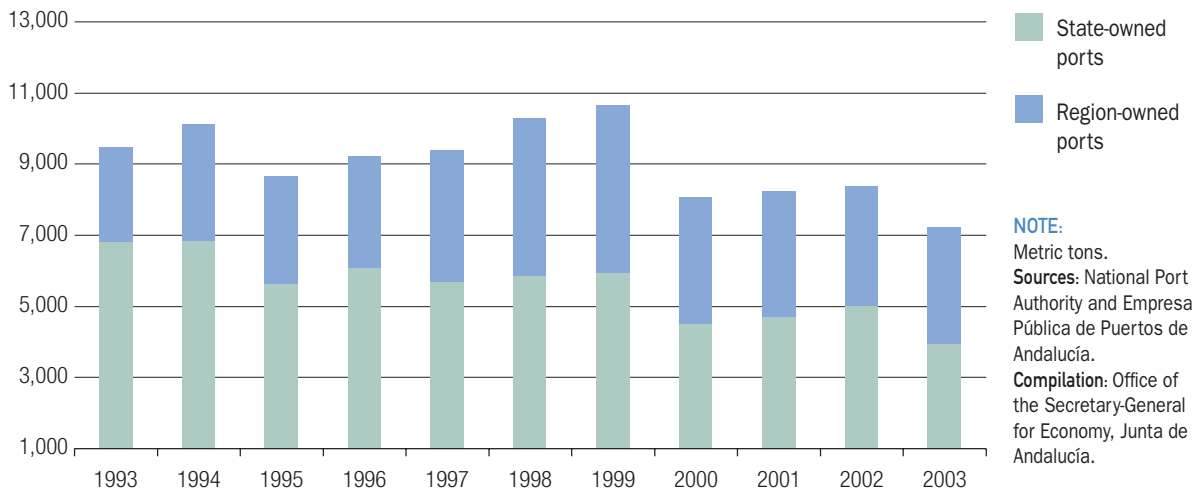
**NOTE:**  
Andalusian crop outputs as a percentage of total Spanish figures, measured in metric tons.  
**Sources:** Ministry of Agriculture, Fisheries and Food, and Andalusian Ministry of Agriculture and Fisheries.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 44. **FINAL AGRICULTURAL OUTPUT. YEAR 2003**



**NOTE:**  
As a percentage of final agricultural output at current prices.  
**Sources:** Andalusian Ministry of Agriculture and Fisheries and Ministry of Agriculture, Fisheries and Food.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 45. FRESH CATCHES UNLOADED AT ANDALUSIAN PORTS



On the other hand, there was a nominal increase of 21.4% in the production of wine and byproducts. Although the grapes had to be picked earlier than usual, the harvest went well.

Cut flowers and ornamental plants, mostly grown in the province of Cadiz, saw a 6.8% rise in output, and citrus fruit output increased by 3%, as newly planted orchards in Seville and Huelva began to bear fruit, offsetting the losses caused by fruit falling before harvest as a result of the hot summer.

Final animal output rose by 5.3% in nominal terms, so that the share of the farming of animals subsector in Andalusia's final agricultural output in 2003 rose to 16.4%, although this remained a much lower percentage than registered nationally (34.6%).

Final forestry output fell sharply by 36.1%, so that its share in total agricultural output dropped to just over 1%.

According to data provided by the national port authority *Puertos del Estado* and by the regional government port authority *Empresa Pública de Puertos de Andalucía*, the fishing subsector recorded a further 14.5% reduction in catches.

The overall reduction was the result of a fall in catches unloaded at both Andalusian ports owned

by the regional government and those owned by the State, with the sharpest drop being registered in the latter, where catches fell by 21.6%.

## Foreign Trade

Foreign trade figures for the Andalusian primary sector showed nominal export growth of 2% in 2003. This export growth, coupled with the contraction of the sector's GVA, resulted in a 49.4% increase in its export share, that is, total exports as a percentage of GVA.

Export growth was observed in all the primary subsectors. The biggest increase was registered in forestry and logging exports, which rose by 13.9%, although they accounted for just 1% of total primary sector exports, followed by exports of live animals and animal products, which, accounting for 2% of the total, rose by 11.4%.

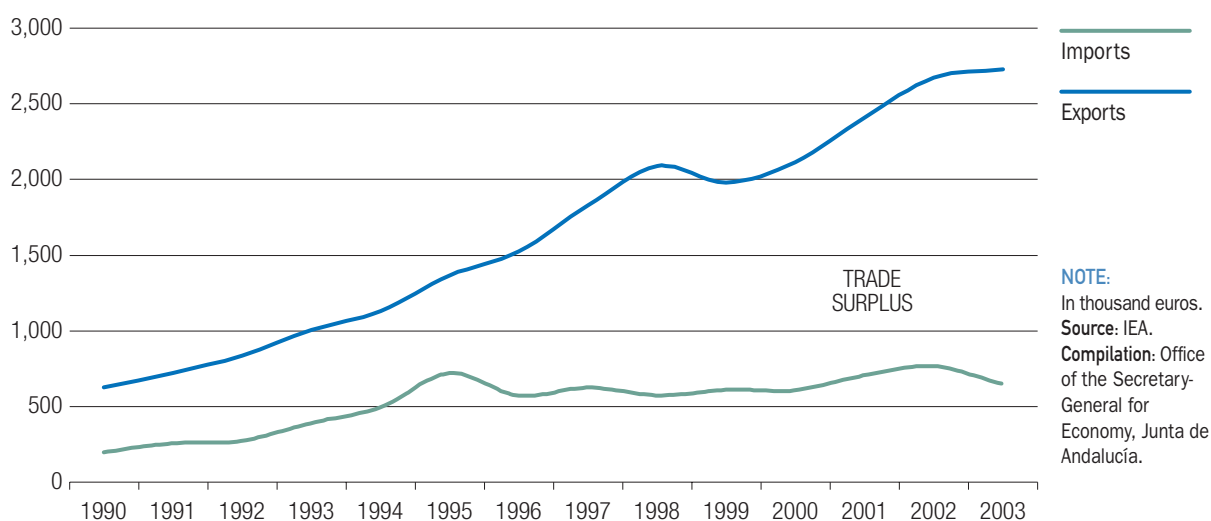
Fish, fish-hatchery and fish-farm exports rose by 2.2%. The smallest increase was in crop exports, which, accounting for 94.7% of the total, saw a 1.8% rise, wholly attributable to the increase in vegetable and nursery product exports.

Primary sector imports were 15.7% down on the previous year, owing mainly to a 20.2% fall in crop



## 5. PRIMARY SECTOR

Chart 46. **FOREIGN TRADE IN THE PRIMARY SECTOR**



imports, accounting for 71% of the total. Forestry and logging imports also fell, while purchases of animals and animal products from other countries grew by 10.8%, and fish, fish-hatchery and fish-farm imports by 7.1%.

The fact that exports grew while imports fell meant that the primary sector trade surplus increased in 2003. The crop subsector, with a sharp increase

in vegetable exports and a fall in imports of these products, contributed to widening the surplus, as did the animal subsector, although to a lesser degree, with an increase in bovine, ovine, caprine, equine, porcine and poultry exports, while imports of these products saw a smaller rise. On the other hand, forestry and logging and fishing and the operation of fish hatcheries and fish farms showed a deficit.

Table 20. **FOREIGN TRADE IN THE PRIMARY SECTOR. ANDALUSIA. YEAR 2003**

	Imports			Exports			Trade balance
	€ thousand	% of total	02-03 growth %	€ thousand	% of total	02-03 growth %	€ thousand
<b>Crop output</b>	458,453.0	71.0	-20.2	2,578,604.1	94.7	1.8	2,120,151.1
Cereal crops and other	291,330.6	45.1	-27.5	218,994.3	8.0	-8.8	-72,336.3
Market vegetables and nursery prod.	94,241.9	14.6	-14.5	1,669,160.9	61.4	5.3	1,574,919.1
Fruit, nuts and dried fruit	72,880.5	11.3	16.0	690,448.9	25.3	-2.4	617,568.4
<b>Animal farming output</b>	29,362.8	4.5	10.8	53,311.6	2.0	11.4	23,948.8
Bovine, ovine, caprine, equine and porcine output	18,213.5	2.8	1.1	44,288.3	1.6	6.7	26,074.8
Poultry output	4,347.6	0.7	30.2	6,757.2	0.2	48.2	2,409.6
Other	6,801.7	1.1	32.2	2,266.1	0.1	27.0	-4,535.5
Forestry and logging	49,427.4	7.7	-21.9	17,853.7	0.7	13.9	-31,573.6
Fishing, fish hatcheries and fish farms	108,567.7	16.8	7.1	74,268.3	2.7	2.2	-34,299.5
<b>TOTAL</b>	<b>645,810.9</b>	<b>100.0</b>	<b>-15.7</b>	<b>2,724,037.7</b>	<b>100.0</b>	<b>2.0</b>	<b>2,078,226.9</b>

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## Labour market

In keeping with the sector's poor performance in terms of production, 2003 saw a reduction in primary sector employment. According to the Labour Force Survey, the number of people employed in the Andalusian primary sector fell by 1.8% to 256,425, similar to the reduction recorded in the sector nationally.

This downward trend in primary sector employment contrasted with the 3.5% job growth averaged by the Andalusian economy as a whole, which meant that the share of agricultural and fishing jobs in the Andalusian total fell to an all-time low of 9.9%.

An analysis of employment by subsector reveals similar trends in all of them, with falling employment in crop growing, animal farming and hunting (-1.1%), forestry and logging (27.7%) and fishing, the operation of fish hatcheries and fish farms and related services (-5%).

An analysis of employment according to gender reveals that the number of men working in the primary sector fell by 4.9%, while female employment, accounting for just over a quarter of the total, rose year on year by 6.8%.

Distinguishing between part-time and full-time jobs, the year 2003 saw a 4.1% year-on-year reduction in the number of people working full time in the primary sector, who accounted for 93.2% of the total, while the number of people working part time was up on the previous year.

Job losses in the sector, coupled with a 2.1% reduction in the size of the labour force, resulted in a 2.8% fall in jobless numbers, bringing the number of unemployed people down to 120,900. Jobless figures recorded at National Employment Institute (INEM) offices showed a sharper drop, with the number of people out of work falling to 14,529.

The discrepancy between INE and INEM figures can be explained, at least in part, by the fact that the concept of unemployment used by the INEM to compile its data is more restrictive than that used in the Labour Force Survey conducted by the INE, since not all unemployed people register with the INEM and certain categories are not included in its statistics, such as seasonal farm labourers claiming unemployment benefit.

The latter is a relatively important category of workers in Andalusia, including as many as 174,600 people in 2003 and accounting for 68.1% of all primary sector

Table 21. **PRIMARY SECTOR LABOUR MARKET**

	2003			CHANGE ON 2002			
	Andalusia	Spain	And/ Sp %	Absolute		Relative (%)	
				Andalusia	Spain	Andalusia	Spain
Labour force	377.3	1,115.1	33.2	-8.2	-19.7	-2.1	-1.7
Employed	256.4	942.1	26.7	-4.8	-19.2	-1.8	-2.0
Crop and animal farming, hunting and forestry	248.9	892.6	27.5	-4.4	-13.0	-1.7	-1.4
Fishing	7.5	49.4	13.5	-0.4	-6.3	-5.1	-11.3
Unemployed	120.9	173	69.7	-3.4	-0.5	-2.8	-0.3
Unemployed rate	32.0	15.5	-	-0.2	0.2	-	-
Wage-earner to overall employment ratio	66.8	43.6	-	0.7	0.5	-	-

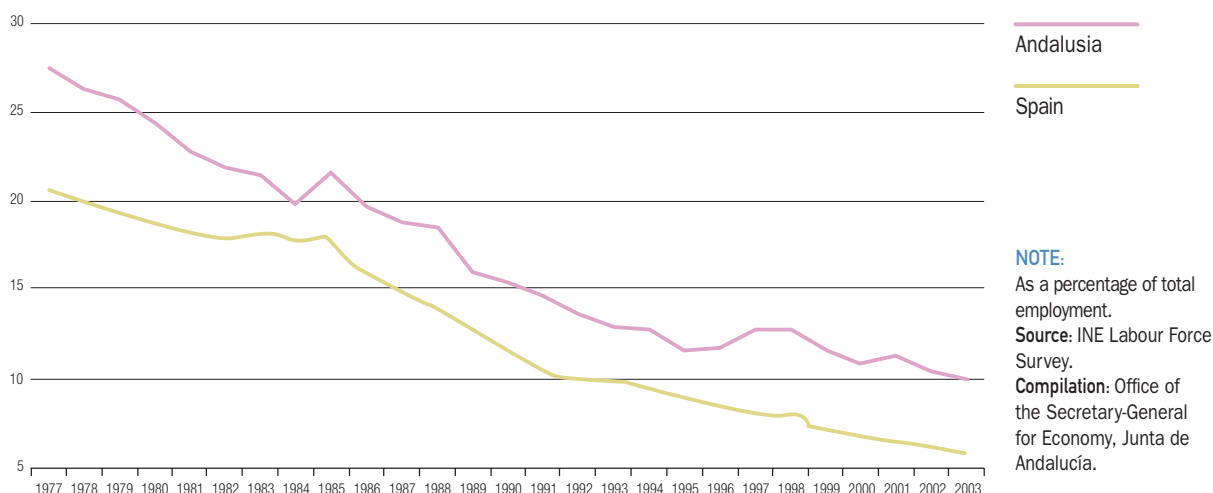
### NOTE:

Thousand people unless otherwise stated.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 47. EMPLOYMENT IN THE PRIMARY SECTOR



workers and almost half of its labour force (46.3%). The number of seasonal agricultural workers was 5.3% down on the 2002 figure.

The number of workers registered with the Social Security's Special Agricultural Workers' Scheme showed a slight 0.8% reduction at year end, in contrast with the increase registered the previous year. This reduction can be wholly attributed to the fall in the number of such people working for employers, who accounted for 93.4% of the total, as the number of self-employed registered with the scheme rose by 1.4%.

These trends contrast with those observed nationally, which reveal an increase in the number of people registered with the Special Agricultural Workers' Scheme, wholly attributable to an increase in the number of people working for employers, accounting

for 74.5% of the total, a much smaller proportion than in Andalusia.

This situation is corroborated by the Labour Force Survey, which indicates that the number of wage-earners as a percentage of the total number of people employed in the Andalusian primary sector in 2003 was 66.1%, a considerably higher proportion than in the national primary sector (44.5%).

Collective bargaining figures for the sector published by the Ministry of Labour and Social Affairs reveal that the increase in pay negotiated in collective agreements in the primary sector was lower in 2003 than the year before, falling from 4.05% in 2002 to 3.75%, including the safeguard clauses, but higher than recorded nationally (3.59%). Wage settlements in Andalusia as a whole followed a similar trend, establishing lower pay rises than the previous year.

## Industrial Sector

### Overview

In 2003 the Andalusian industrial sector registered the highest growth in three years, doubling the national rate.

Andalusian industry generated gross value added (GVA) measured at basic prices amounting to 13,405.5 million euro in 2003, a real year-on-year increase of 2.6%. It therefore grew at a faster rate than the previous year (1.1%) and than industry nationally (1.3%).

This strong performance, contrasting with near-flat growth in the euro area industrial sector, meant that Andalusian industry accounted for 15.4% of the region's GVA and increased its share in national industrial GVA to 9.6% of GVA, two tenths of a point more than in 2002.

This upward production trend had a favourable influence on the labour market, with a 2.3% increase in employment in the sector, contrasting sharply with the job destruction experienced in industry nationally, where employment fell by 1%.

Chart 48. **INDUSTRIAL SECTOR GVA**

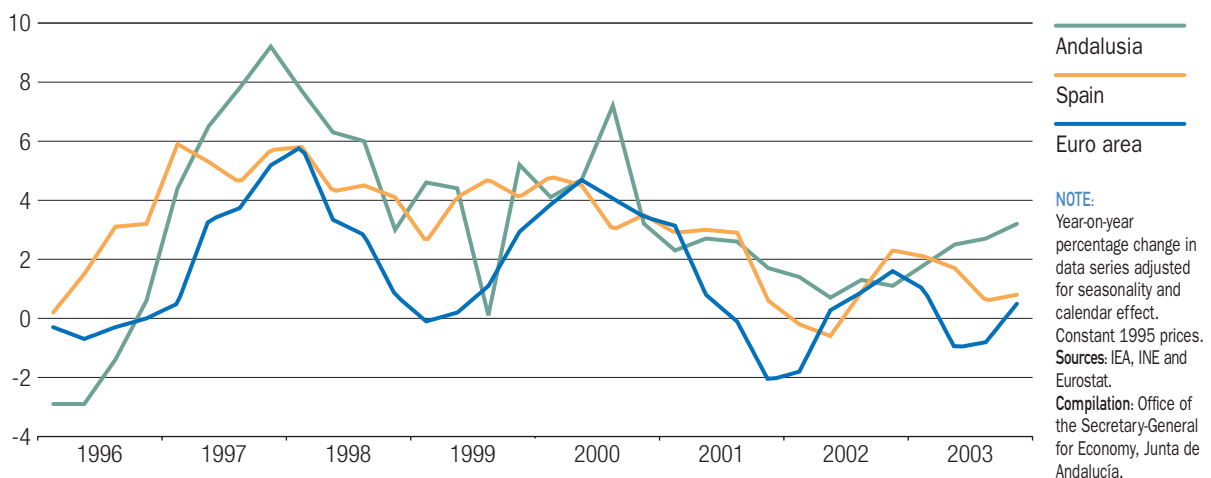


Table 22. **BASIC INDICATORS OF THE INDUSTRIAL SECTOR. ANDALUSIA. YEAR 2003**

<b>GVA at basic prices <sup>(1)</sup></b>	
Millions of current euros	13,405.5
Nominal growth in the year	5.2%
Real growth in the year	2.6%
Industry GVA/Total Andalusian GVA <sup>(1)</sup>	15.4%
Industry GVA/Spanish industry <sup>(1)</sup>	9.6%
Gross value added from industrial activities <sup>(2)</sup>	28.9%
<b>GVA distribution <sup>(2)</sup></b>	
Compensation of employees	41.4%
Gross operating surplus <sup>(3)</sup>	57.5%
Net taxes on production	1.1%
<b>Employed</b>	
Thousand people	299.1
Annual growth	2.3%
Industry jobs/Total jobs in Andalusia	11.6%
Industry jobs/Industry jobs in Spain	9.6%
<b>Productivity <sup>(4)</sup></b>	
All sectors in Andalusia=100	132.8
Spain's industrial sector=100	99.8
<b>Industry GVA deflator <sup>(1)</sup></b>	
Annual growth	2.6%
<b>Labour costs <sup>(5)</sup></b>	
Euro	2,060.1
Annual growth	5.8%
All sectors in Andalusia=100	112.5
Spain's industrial sector=100	90.8
<b>Enterprises</b>	
Number	32,175
Annual growth	1.9%
Industrial enterprises / Industrial enterprises in Spain	13.0%
<b>Foreign trade</b>	
Exports	
- € million	8,179.2
- Annual growth	9.8%
Imports	
- € million	11,174.2
- Annual growth	12.0%
Trade balance	
- € million	-2,995.0
- Export share <sup>(6)</sup>	61.0%

**NOTES:**

- (\*) Advance figures.  
(1) GVA at basic prices (constant 1995 prices).  
(2) Data from 2001.  
(3) Includes mixed income.  
(4) GVA per person in employment at basic prices (constant 1995 prices).  
(5) Labour costs per worker per month.  
(6) Exports as a percentage of GVA at current basic prices.
- Sources: IEA and INE.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

As industrial output growth outpaced job growth, apparent productivity per worker in the sector increased in 2003. Andalusian industry was therefore once again the Andalusian sector with the highest productivity level, on a par with the national average for industry.

The business sector also showed favourable results, with 606 more industrial enterprises operating in Andalusia in 2003 than there were in 2002, bringing the total up to a 32,175. This 1.9% year-on-year increase, coupled with the virtual stagnation of the business sector nationally (0.1%), meant that 13% of all enterprises operating in the Spanish industrial sector were based in Andalusia in 2003, three tenths of a point more than in 2002.

In 2003 industry was the only sector that contributed to holding price growth down in Andalusia. Industrial prices, measured by the GVA deflator, rose by 2.6% over the year, a smaller increase than in 2002 (3.4%) and well below the implicit GDP deflator for the Andalusian economy as a whole (4.2%).

Labour costs per worker in the Andalusian industrial sector, which were 12.5% higher than the average for the Andalusian economy as a whole, rose by 5.8% in 2003, a sharper rise than the previous year (2.7%)

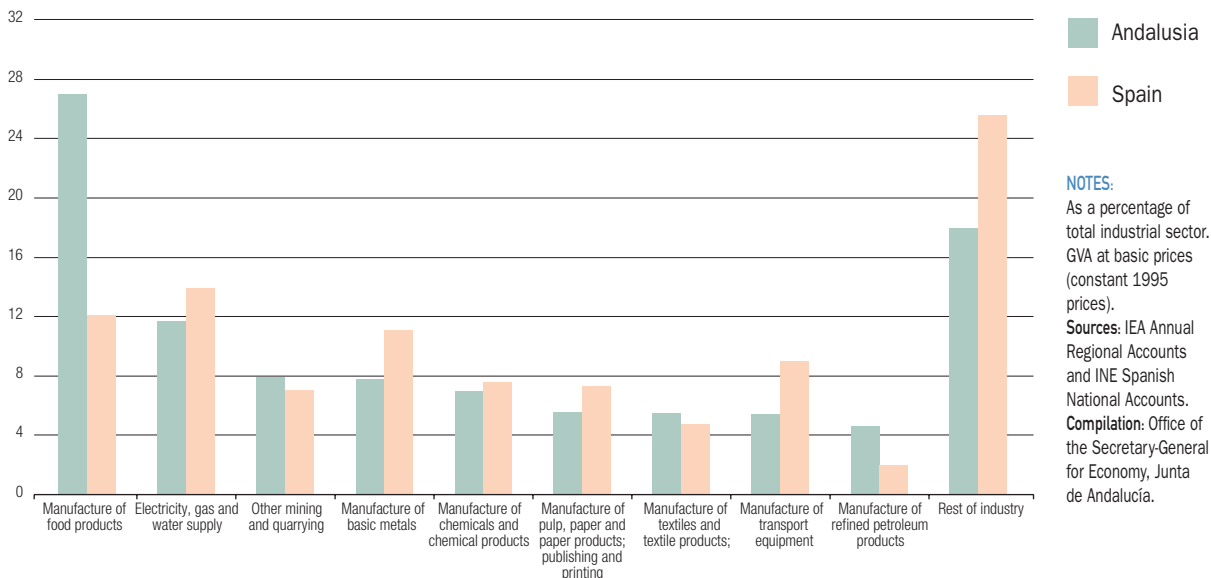
and than labour cost growth in the Spanish industrial sector as a whole (4.7%).

The sector's trade relations with other countries were characterised by robust export growth, which quickened by 2.6 percentage points to 9.8%, driving industry's export share up to 61%.

Andalusia's Annual Regional Accounts, compiled by the IEA, provide a more structural view of industrial trends. The latest available figures, which are for 2001, reveal that the value added to output ratio for the Andalusian industrial sector is lower (28.9%) than the ratio for the Andalusian productive sectors as a whole (51.9%). A look at the different branches of industry shows that the extractive industries had the highest value added to output ratio, specifically 45.3%.

The distribution of GVA between earned income and capital income in the industrial sector in Andalusia differed significantly from that observed in the industrial sector in Spain as whole. Gross operating surplus, including mixed income generated by unincorporated enterprises, which contains a remuneration component, accounted for 57.5% of GVA generated by Andalusian industry, while compensation of employees accounted for 41.4%.

Chart 49. **INDUSTRIAL SECTOR. YEAR 2001**



In industry nationally, according to INE figures, these proportions were significantly different, with earned income accounting for 61.7% and capital income for 38.7%. However, while the proportion corresponding to net taxes on production was 1.1% in Andalusia, in Spain as a whole it was -0.4%, which means that, according to these figures, at the national level, industry was a net recipient of subsidies.

A look at the different branches of industry shows that the picture of GVA distribution in the Andalusian extractive industries and the manufacturing industries is very similar to that of the national industrial sector, with earned income accounting for 43.7% and 43.1% respectively, and capital income for 55.7% and 56.1% respectively.

## Production

The global economic recovery experienced in 2003 led to an upturn in industrial production trends in the developed countries.

The OECD industrial production index rose year on year by 1.2% in 2003, following near-flat growth the previous year. This can be largely attributed to increases in industrial output registered in Japan (3.3%), the United States (0.3%) and the European

Union (0.4%), a bounce-back from the downward trends of the previous year.

Industrial production in the euro area rose by 0.4%, picking up after the decline in output observed the previous year. Spain saw a 1.6% increase in the IPI, the highest rise registered by a euro area country.

Industrial production growth was even higher in Andalusia, at 3.3% year on year in 2003, improving on the previous year's rate of 1.5%.

For the second consecutive year, the increase in industrial production in Andalusia was broadly based across all four divisions of activity and all the categories of goods classified according to economic destination.

It should be noted that a comparison of Spain and Andalusia in terms of production figures for all the different industrial branches is not possible, because, starting in 2003, the national figures are based on the 1993 Spanish classification of economic activities (CNAE), while Andalusian data is based on the 1974 classification. In Andalusia, the highest increase in production was registered in the manufacture of basic metals and fabricated metal products (6.3% year on year in 2003), particularly the manufacture of machinery and equipment and the manufacture of electronic equipment (except computers).

Chart 50. **INDUSTRIAL PRODUCTION INDEX. YEAR 2003**

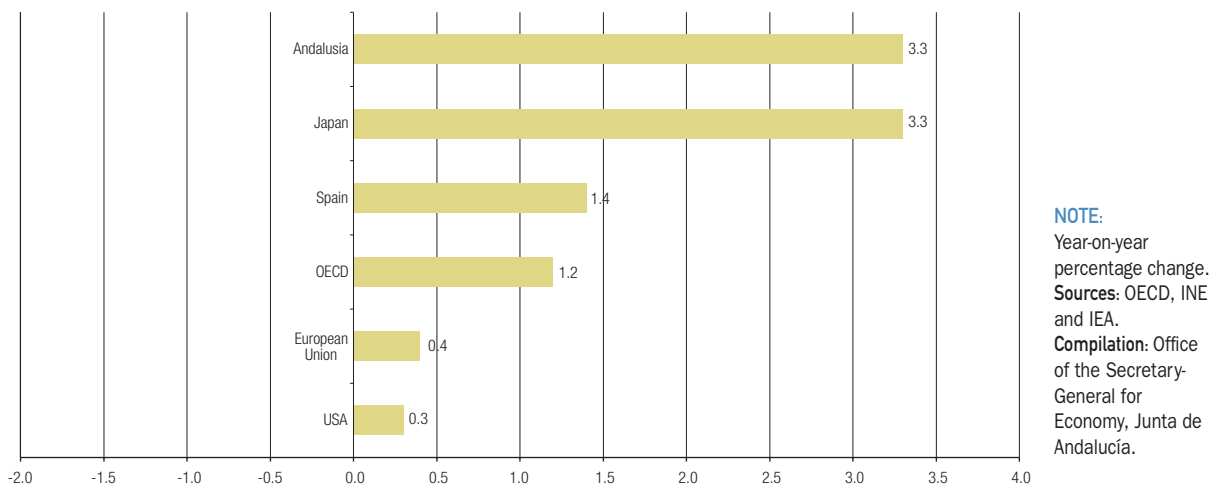
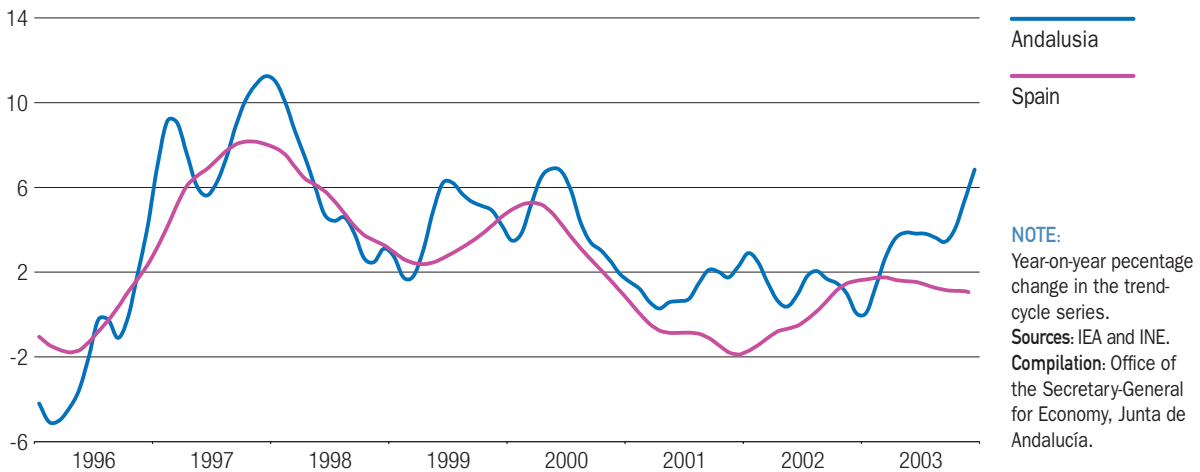


Chart 51. **INDUSTRIAL PRODUCTION INDEX**



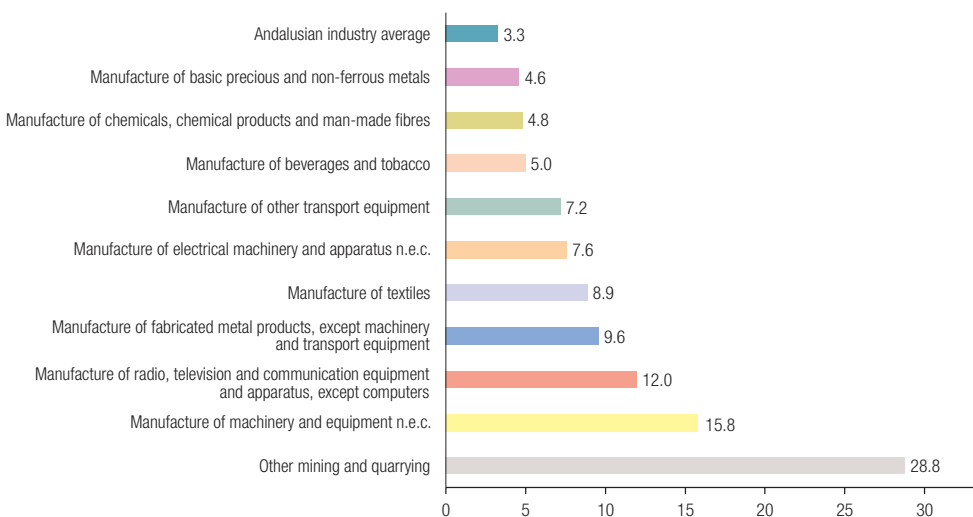
The second highest increase in output was recorded in the non-energy producing minerals and chemical industries, with 4.1% production growth, a vigorous rebound from the near-flat growth of the previous year. This upward trend was observed in all the branches except in the mining, quarrying and processing of metal ores.

Production growth also quickened in the manufacturing industries in 2003 to 1.7%. This increase, which is particularly significant because manufacturing is the most important division of the Andalusian industrial

sector, can be attributed to good output results in the textile industry (8.9%) and in the food industry (3.6%). There were also increases in footwear and clothing and the manufacture of rubber and plastic products, while all the other branches registered reductions in output.

The food industry, the most important branch of Andalusian industry, saw an increase in output, contrasting with the decline in production registered nationally, attributable to a 2.3% increase in the production of food and a 5% increase in the production of sugar, beverages and tobacco.

Chart 52. **INDUSTRIAL ACTIVITIES WITH FASTEST OUTPUT GROWTH. ANDALUSIA. YEAR 2003**



**NOTE:** Year-on-year percentage change.  
**Source:** Andalusian Industrial Production Index (IEA).  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.



## 5. INDUSTRIAL SECTOR

Table 23. **INDUSTRIAL PRODUCTION INDEX. ECONOMIC BRANCHES. ANDALUSIA**

	2001	2002	2003
<b>GENERAL INDEX</b>	1.3	1.5	3.3
<b>ENERGY</b>	7.1	1.3	1.3
Mining and quarrying of energy prod. materials; manuf. of coke oven prod.	6.0	1.3	-8.4
Manufacture of refined petroleum products	-3.9	3.6	3.6
Production of electricity; manufacture of gas	11.2	0.5	0.8
<b>MINING AND QUARRYING, EXCEPT OF ENERGY PROD. MATERIALS; MANUF. OF CHEMICALS AND CHEMICAL PROD.</b>	-0.4	0.2	4.1
Mining of metal ores	-11.6	-55.7	-87.2
Manufacture of basic precious and non-ferrous metals	0.9	0.3	4.6
Other mining and quarrying	3.9	-12.0	28.8
Manufacture of other non-metallic mineral products	-0.4	1.8	4.2
Manufact. of chemicals, chemical prod. and man-made fibres	-0.9	3.0	4.8
<b>MANUF. OF BASIC METALS AND FABRICATED METAL PROD.</b>	-3.6	2.7	6.3
Manufact. of fabricated metal prod. (except machinery and transport equipment)	0.7	2.3	9.6
Manufacture of machinery and equipment n.e.c.	-12.3	9.2	15.8
Manufacture of office machinery and computers	1.6	-15.5	-23.4
Manufacture of electrical machinery and apparatus n.e.c.	3.3	-0.6	7.6
Manufact. of radio, television and communication equipment and apparatus, except computers	-6.7	-4.4	12.0
Manufacture of motor vehicles	-18.7	-3.6	1.7
Building and repairing of ships and boats	-12.1	10.7	-4.2
Manufacture of other transport equipment n.e.c.	10.2	13.8	7.2
<b>MANUFACTURING N.E.C.</b>	3.7	1.5	1.7
Manufacture of food products, beverages and tobacco	6.9	3.6	3.6
Manufacture of textiles	7.1	13.5	8.9
Manufacture of leather and leather products	2.1	-1.5	-7.4
Manufacture of footwear, apparel and made-up textile articles	-13.0	-9.9	2.2
Manufacture of wood and wood products	-1.1	-1.3	-6.9
Manufact. of pulp, paper and paper products; publishing and printing	0.2	-3.5	-3.9
Manufacture of rubber and plastic products	0.8	-5.1	0.7
Manufacturing n.e.c.	4.0	2.7	-3.1

**NOTE:**

Year-on-year percentage change.

Sources: INE and IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Good output results in the food industry were not mirrored in the labour market, as the number of people employed in this activity fell by 1.5% in 2003, or in foreign trade, where exports fell by 2.5%.

Energy industry output rose by 1.3% in 2003, owing to good results for electricity and the manufacture of gas and, particularly, the manufacture of refined petroleum products.

Andalusia's industrial production can also be analysed on the basis of a breakdown of output figures according to the economic destination of goods. The biggest increase was in the production of capital goods, thanks to the machinery and equipment industry, which registered year-on-year output growth of 5.1% in 2003, more than double the previous year's rate and well in excess of the national rate of 0.8%.

The second-biggest increase was in the production of intermediate goods, which rose year on year by 3% in 2003, with strong output growth in the construction materials industry. The smallest increase was in the production of consumer goods, which rose by 2.5%, wholly attributable to an increase in the output of food products, beverages and tobacco. The intermediate goods and consumer goods industries both performed better in Andalusia than in Spain as a whole (2.1% and 0.5% year on year respectively).

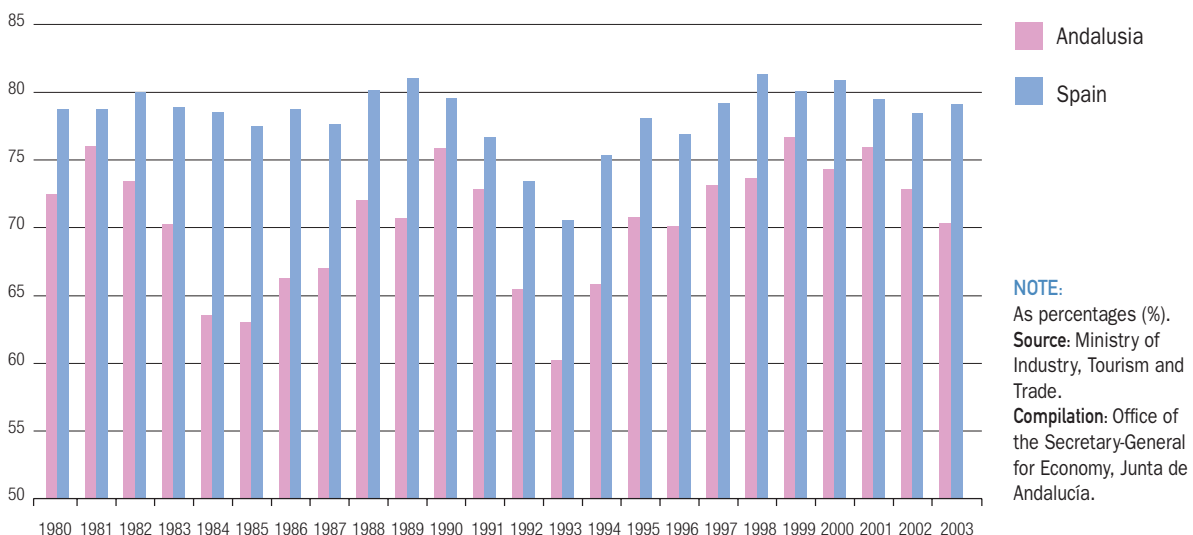
## Business sentiment

A fuller picture of the industrial sector can be gained by analysing the information provided in the Industry Situation Survey conducted by the Ministry of Industry, Tourism and Trade, which indicates that entrepreneurs were more optimistic about the performance of the industrial sector in 2003 than they were the previous year. The industrial climate index, which is based on average business sentiment indicators, including order-book backlogs, production trends and inventories of finished products, recorded better results than in 2002, although it continued to show a negative annual balance.

This improvement in the index can be largely attributed to the more optimistic production expectations of entrepreneurs, influenced by the upturn in the world economic situation, as order book backlogs showed only a slight recovery, with domestic orders and orders for capital goods picking up, while the level of inventories rose.

In addition to this qualitative information, the survey also provides figures on the capacity utilisation rate in Andalusian industry, which in 2003 stood at 70.3%, below the 2002 rate of 72.8% and the rate of 79.1% registered by industry in Spain as a whole.

Chart 53. **CAPACITY UTILISATION IN INDUSTRY**



A breakdown according to types of goods shows that the highest capacity utilisation rate was registered in the intermediate goods industry (72%), followed by the consumer goods industry (71.1%), while the rate for the capital goods industry dipped to 64.1%, the lowest level in ten years.

### Labour market

Employment indicators for industry were more favourable in Andalusia than in Spain as a whole. Social Security files showed a 1.6% year-on-year increase in the number of registered workers at year end in Andalusian industry, contrasting with the decline registered nationally (-0.8%) and bringing the regional total up to 250,407.

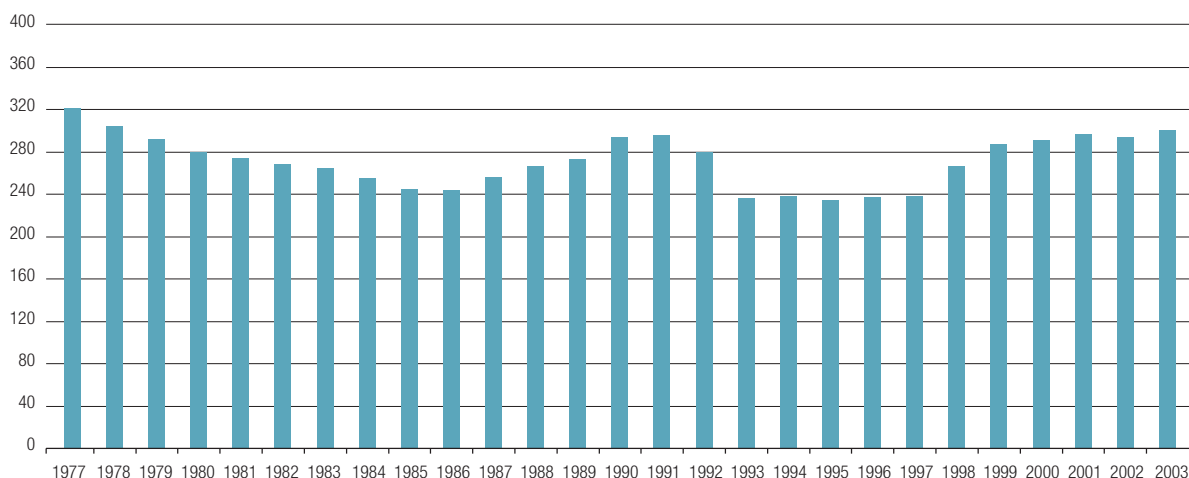
The Labour Force Survey reveals a sharper 2.3% year-on-year increase in employment in Andalusia's industrial sector, once again contrasting with the drop registered nationally. According to the survey, the number of people working in the Andalusian industrial sector rose to 299,100, the highest figure on record since 1978, and accounting for

almost 10% of all industrial jobs in Spain as a whole.

A breakdown according to productive branches of activity reveals that the sharpest increase in employment was observed in the extractive industry, which registered 15.4% job growth. This was a considerable improvement on the sharp fall in employment recorded the previous year, thanks to the significant recovery observed in the mining and quarrying of energy producing materials, and contrasted with the near-flat job growth registered nationally.

Employment also rose in the manufacturing industry, the most important in Andalusia as it accounts for 93.3% of all industrial jobs, with 2.4% job growth, a vigorous bounce-back from the fall in employment observed in 2002 and higher than the national rate. The strongest job growth in the manufacturing industry was shown by footwear and leather goods, paper, publishing and printing and the manufacture of machinery and equipment. At the other end of the scale, the sharpest reductions in employment were recorded in textiles and clothing and the manufacture

Chart 54. **EMPLOYMENT IN INDUSTRY. ANDALUSIA**



**NOTE:**

Thousand people.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

of furniture. Employment also fell in the manufacture of food products, beverages and tobacco, an industry that employs 20.5% of people working in the industrial sector in Andalusia.

Finally, the number of people working in the electricity, gas and water industries fell by 2.8% in 2003, contrasting with 8.9% job growth in these industries nationally.

A breakdown of employment figures by gender shows that the vast majority of industrial sector jobs

in Andalusia, specifically 80.7% in 2003, were held by men (75.6% in Spain), sixth tenths of a point more than in 2002, as the result of a year-on-year 3.2% increase in male employment and a 1.5% reduction in female employment in this sector.

Distinguishing between part-time and full-time jobs, full-time employment in Andalusian industry rose year on year at a faster rate than part-time employment in 2003 (2.3% and 0.8% respectively), with full-time jobs accounting for a vast majority (95.5%) of employment in industry.

Table 24. **INDUSTRY LABOUR MARKET**

	2003			Change on 2002			
				Absolute		Relative (%)	
	Andalusia	Spain	And/Sp %	Andalusia	Spain	Andalusia	Spain
LABOUR FORCE	334.8	3,371.3	9.9	7.6	-16.8	2.3	-0.5
EMPLOYED	299.1	3,123.5	9.6	6.6	-30.3	2.3	-1.0
Mining and quarrying	5.8	63.3	9.2	0.8	0.2	15.4	0.2
Manufacturing n.e.c.	279.2	2,960.5	9.4	6.5	-38.7	2.4	-1.3
Foods products, beverages and tobacco	61.2	438.0	14.0	-0.9	0.3	-1.5	0.1
Manufacture of textiles and textile products	17.6	226.5	7.8	-3.2	-29.4	-15.2	-11.5
Manufacture of leather and leather products	3.6	94.5	3.8	1.3	-2.0	55.3	-2.1
Manufacture of wood and wood products	10.6	114.5	9.3	0.3	-10.6	3.1	-8.5
Manufact. of pulp, paper and paper prod.; publishing and printing	17.5	219.7	8.0	4.6	-11.1	35.4	-4.8
Manufacture of refined petroleum products	5.0	12.6	39.8	1.0	-0.1	24.2	-0.6
Manufact. of chemicals, chemical prod. and man-made fibres	11.6	168.2	6.9	-1.0	-6.2	-8.1	-3.6
Manufacture of rubber and plastic products	8.8	120.2	7.3	0.1	9.5	0.6	8.6
Other non-metallic mineral products	25.0	200.3	12.5	0.7	-0.9	2.7	-0.4
Manufact. of basic metals and fabricated metal prod.	39.7	432.0	9.2	1.3	0.7	3.4	0.2
Manufacture of machinery and equipment n.e.c.	12.4	216.8	5.7	3.0	-5.5	32.1	-2.5
Electrical, electronic and optical equipment	13.7	161.8	8.5	2.9	-3.8	26.9	-2.3
Manufacture of transport equipment	21.1	308.3	6.8	-0.3	2.5	-1.3	0.8
Manufacture of furniture	28.5	229.0	12.4	-3.3	15.4	-10.3	7.2
Manufacturing n.e.c.	2.9	18.1	16.0	0.1	2.5	2.8	15.8
Electricity, gas and water supply	14.4	99.7	14.5	-0.4	8.2	-2.8	8.9
UNEMPLOYED	35.7	247.9	14.4	1.0	13.6	2.9	5.8
UNEMPLOYMENT RATE	10.6	7.4	-	0.1	0.4	-	-

**NOTE:**

Thousand people unless otherwise stated.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

The rise in employment in the Andalusian industrial sector was matched by a similar increase in the size of the labour force in 2003 (2.3%), resulting in a 2.9% increase in jobless figures in the sector, albeit appreciably lower than the national average increase of 5.8%. The unemployment rate for Andalusian industry stood at 10.7%, the lowest rate registered by an Andalusian productive sector. As a result, the unemployment rate differential between Andalusian industry and Spanish industry as a whole narrowed to 3.3 percentage points.

Jobless figures recorded at National Employment Institute (INEM) offices showed better results than the Labour Force Survey, estimating a 5% year-on-year fall in unemployment at year end in Andalusian industry, a sharper drop than registered nationally (-2%).

## Foreign trade

Foreign trade figures for Andalusian industrial products reveal robust nominal increases in both imports and exports in 2003, with import growth outpacing export growth.

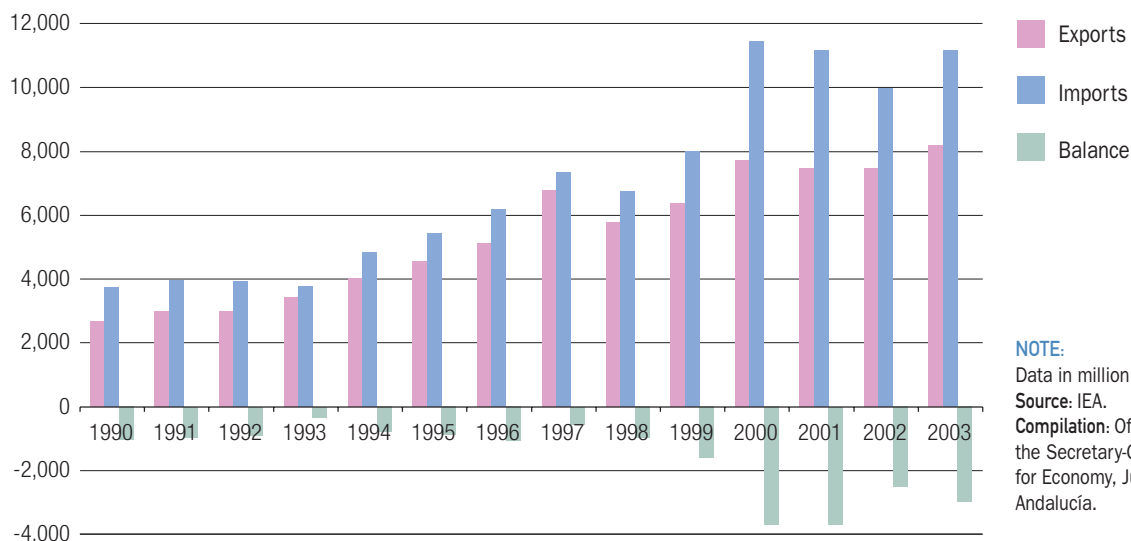
Sales of industrial goods abroad rose by 9.8% over the year, rebounding vigorously from the decline of the previous year. This was largely as a result of the

10.2% rise in manufacturing industry exports, as extractive industry and energy industry exports fell. The manufacturing industries that showed the strongest export growth were basic metals and fabricated metal products, refined petroleum products and chemicals, which accounted for 38.5% of industrial sector exports. These increases, along with increases in exports in manufacturing industries of lesser importance, offset the 2.5% decline in food industry exports, which account for the largest proportion of the total.

The fact that the sector's export growth outpaced GVA growth meant that its export share, that is, exports as a percentage of GVA, rose to 61%, 2.6 percentage points above the 2002 figure.

Andalusia registered a 12% increase in industrial imports in 2003, contrasting with the reduction observed the previous year. This robust import growth can be largely attributed to the 19.3% rise in manufacturing industry imports, accounting for 61.1% of total industrial imports in Andalusia. The biggest increases were in imports of basic metals and fabricated metal products (65.2%) and refined petroleum products (62.6%). Positive results were also recorded in other quantitatively important branches, such as the chemical industry, with a 19.4% increase in imports, and the food industry,

Chart 55. FOREIGN TRADE IN THE INDUSTRIAL SECTOR. ANDALUSIA



**Box 6. THE FOOD INDUSTRY IN ANDALUSIA**

The Andalusian food industry accounts for a very important part of the region's industrial sector and of the national food industry.

The food industry developed into the region's most important industrial activity, thanks to the agricultural specialisation that has historically characterised Andalusia. According to the latest data available from the Annual Regional Accounts for Andalusia, in 2001 the food industry accounted for 27.1% of GVA generated by the Andalusian industrial sector, compared with 12.5% nationally, highlighting the Andalusian economy's degree of specialisation in this economic activity .

Employment and entrepreneurial activity figures tell the same story, with the food industry accounting for 20.5% of all industrial jobs and 9.6% of all industrial enterprises in Andalusia.

The food industry is also significant in the Andalusian economy as a whole, as it accounted for 4% of total GVA at basic prices generated by the region in 2001 and for 2.4% of all Andalusian jobs and 1.5% of all Andalusian enterprises in 2003.

The Andalusian food industry is not only an important part of the region's industrial sector and economy as a whole, it is also an important part of the national food industry. The Andalusian food industry accounted for 21.4% of GVA at basic prices generated by this activity nationally in 2001 and for 14% of food-industry jobs and 18.5% of food-industry enterprises nationally in 2003.

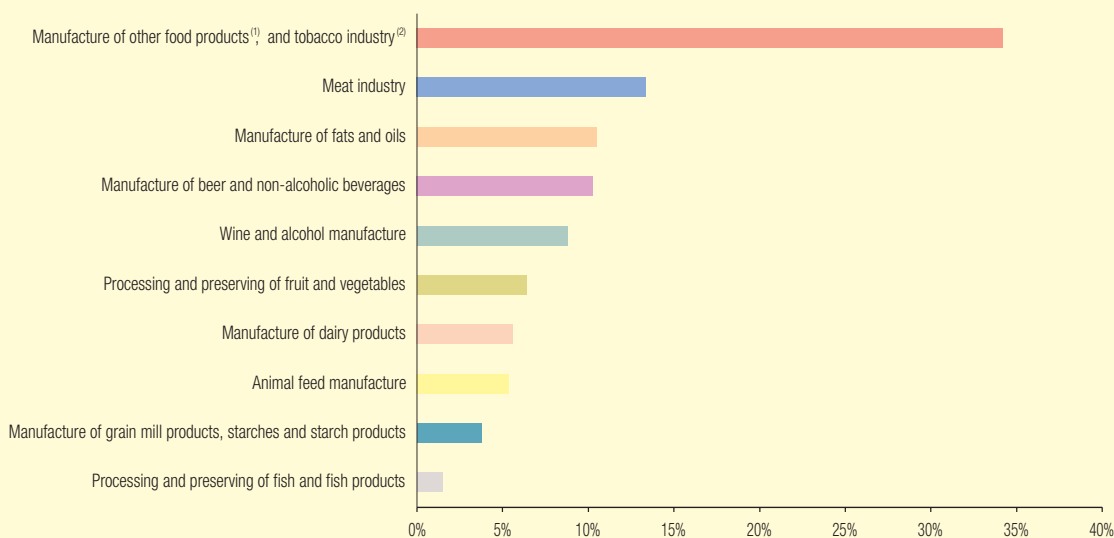
The Andalusian food industry is made up of a large number of activities, the most important of which, in terms of GVA, are the ones grouped under "manufacture of other food products; tobacco industry", which includes the industries that produce bread, pastry goods, cakes, sugar, cocoa, chocolate, pasta, coffee, tea, infusions, seasonings, sauces, condiments and diet food, and the manufacture of tobacco products, which in 1995, according to the Input-Output Framework, accounted for 2.7% of GVA generated by the food industry. This branch accounted for over a third of food-industry GVA in 2001, followed by the meat industry (13.4%), the manufacture of oils and fats (10.5%) and the manufacture of beer and non-alcoholic beverages (10.3%). Smaller branches include the manufacture of wines and alcoholic beverages, the processing and preserving of fruit and vegetables, the manufacture of dairy products and the manufacture of animal feeds, each accounting for between 5% and 10%. The least important in quantitative terms are the manufacture of grain mill products, starches and starch products and the manufacture of fish and fish products.

The distribution of GVA between earned income and capital income in the food industry in Andalusia differs significantly from that observed in the food industry in Spain as a whole, as it does in the industrial sector in general. Gross operating surplus, including mixed income, accounted for 58.5% of GVA generated by the food industry in the region in 2001, and compensation of employees for 40.8%, while net taxes on production represented 0.7%. In the food industry nationally, according to INE figures, these proportions are different, with earned income accounting for 58.9% and capital income for 43.1%. The proportion corresponding to net taxes on production was -2%, which means that, according to these figures, at the national level, the food industry was a net recipient of subsidies, while in Andalusia it was not.

The food industry also has a high level of productivity. In 2001 it was 32.8% higher than the productivity level averaged by the Andalusian industrial sector and 69.1% higher than that averaged by the Andalusian economy as a whole.

The Andalusian food industry is also important in terms of foreign trade. In 2003 it accounted for 26.1% of the region's industrial exports and almost 10% of imports. This branch of industry also has a high export propensity, as food-industry exports double imports, making a positive contribution to Andalusia's overall trade balance, with a surplus of 1,049.6 million euro, equivalent to 1% of GDP.

**BREAKDOWN OF ANDALUSIAN FOOD INDUSTRY**



**NOTES:**

As a percentage of total food industry.  
GVA at current basic prices. Year 2001.

(1) This corresponds to CNAE-93 and NACE code 15.8, which comprises: bread, pastry goods and cakes, sugar, cocoa, macaroni, noodles, couscous and similar farinaceous products, tea and coffee, condiments and seasonings, homogenized food preparations and dietetic food.

(2) According to the Input-Output Framework for 1995, the tobacco industry accounted for 2.7% of the food industry GVA.

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

with a 6.7% increase. There was also a significant 2.2% increase in extractive industry imports, which accounted for almost 40% of all Andalusian industrial imports in 2003, following the sharp drop registered in 2002. The only branch of industry that saw a fall in imports was the production and distribution of electricity, gas and water.

The fact that industrial imports rose more sharply than exports resulted in a significant widening of the

sector's trade deficit in 2003 to 2,995 million euro. This result can be wholly attributed to the deficit of 4,298.5 million euro shown by the extractive industries, owing to high crude oil imports. The manufacturing industries, on the other hand, continued to show a sizeable surplus of almost 1,302.5 million euro, largely thanks to the food industry, the manufacture of transport equipment and refined petroleum products.

Table 25. FOREIGN TRADE IN THE INDUSTRIAL SECTOR. ANDALUSIA. YEAR 2003

	Import			Export			Trade balance
	€ thousand	% of total	02-03 growth %	€ thousand	% of total	02-03 growth %	
<b>MINING AND QUARRYING</b>	4,351,220.8	38.9	2.2	52,725.7	0.6	-6.0	-4,298,495.1
Mining and quarrying of energy prod. materials	3,626,789.3	32.5	2.2	2,347.6	0.0	132.3	-3,624,441.7
Mining and quarrying of non-energy prod. materials	724,431.5	6.4	2.4	50,378.1	0.6	-8.6	-674,053.4
<b>MANUFACTURING INDUSTRIES</b>	6,822,860.6	61.1	19.3	8,125,381.7	99.4	10.2	1,302,521.1
Food products, beverages and tobacco	1,083,360.5	9.7	6.7	2,132,949.0	26.1	-2.5	1,049,588.5
Manufacture of textiles and textile products	299,755.9	2.7	6.8	200,312.4	2.4	-1.4	-99,443.5
Manufacture of leather and leather products	88,940.3	0.8	47.2	76,300.5	0.9	-8.2	-12,639.8
Manufacture of wood and wood products	143,786.8	1.3	36.7	63,144.6	0.8	21.6	-80,642.2
Manufact. of pulp, paper and paper prod.; publishing and printing	149,300.9	1.3	-0.3	174,091.2	2.1	-8.5	24,790.3
Manufact. of refined petroleum products	710,932.6	6.4	62.6	987,131.8	12.1	10.7	276,199.2
Manufact. of chemicals, chemical prod. and man-made fibres	925,198.5	8.3	19.4	841,787.6	10.3	8.7	-83,410.9
Manufacture of rubber and plastic products	145,798.5	1.3	2.1	123,306.3	1.5	14.2	-22,492.2
Other mining and quarrying	206,848.3	1.9	7.7	126,033.3	1.5	-1.8	-80,815.0
Manufact. of basic metals and fabricated metal prod.	1,327,872.6	11.9	65.2	1,316,585.8	16.1	18.7	-11,286.8
Manufact. of machinery and equipment n.e.c.	534,742.7	4.8	12.2	310,455.5	3.8	106.0	-224,287.2
Manufact. of electrical and optical equipment	647,983.0	5.8	6.6	716,411.2	8.8	24.4	68,428.2
Manufacture of transport equipment	428,132.6	3.8	-22.0	896,716.7	11.0	18.6	468,584.1
Manufacturing n.e.c.	130,207.4	1.2	5.0	160,155.8	2.0	0.2	29,948.4
<b>PRODUCTION AND DISTRIBUTION OF</b>							
<b>ELECTRICITY, GAS AND WATER</b>	122.3	0.0	-40.8	1,127.2	0.0	-94.3	1,004.9
<b>TOTAL</b>	11,174,203.7	100.0	12.0	8,179,234.6	100.0	9.8	-2,994,969.1

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.





## Construction Sector

### Overview

The construction industry was the most dynamic productive sector in Andalusia in 2003. GVA at basic prices generated by construction in the region grew by 7.5% in real terms to 12,455 million euro. This was double the national increase (3.6%) and in sharp contrast to the 0.5% fall in GVA registered in the euro area construction sector

The construction industry tripled the growth rate averaged by the Andalusian productive sectors and therefore increased its share in Andalusian GVA to 12.3%, six tenths of a point more than the previous year. This expansion also spurred job growth in the sector, which quickened for the ninth consecutive year to 8%, significantly higher than the rate recorded nationally (3.7%). The Andalusian construction industry therefore accounted for 37.8% of job growth registered nationally in the industry.

Productivity per worker fell slightly in 2003, as job growth was moderately higher than GVA growth. In spite of this, the productivity level of Andalusian construction was 8.2% higher than the national average for the sector.

The number of enterprises operating in the Andalusian construction sector rose by 10.8% to 41,263. This

increase was higher than the rate averaged by the sector in Spain as a whole (7.1%).

Labour costs per worker in the region's construction industry rose more sharply (7.3%) than in Andalusia's non-agricultural sectors (4.4%) and than in the construction industry nationally (6.3%). As a result, labour costs per worker in Andalusian construction were slightly higher than the Andalusian average, but still almost 3 percentage points lower than in the construction sector nationally.

Producer prices also rose more rapidly in the construction sector than in any of the other Andalusian sectors. The GVA deflator for construction rose by 5.8%, compared with 4.2% for the Andalusian economy as a whole.

The latest available figures, taken from the Annual Regional Accounts for Andalusia, compiled by the IEA, reveal that in 2001 the value added to output ratio for the Andalusian construction sector was lower (44.7%) than the ratio for the Andalusian sectors as a whole (51.9%).

The distribution of value added between earned income and capital income in the construction sector in Andalusia was significantly different from that of the other sectors, in that compensation of employees

Table 26. **BASIC INDICATORS OF THE CONSTRUCTION INDUSTRY. ANDALUSIA. YEAR 2003**

<b>GVA at basic prices <sup>(1)</sup></b>	
Millions of current euros	12,455
Nominal growth in the year	13.8%
Real growth in the year	7.5%
Construction GVA/Total Andalusian GVA <sup>(1)</sup>	12.3%
Construction GVA/Spanish construction GVA <sup>(1)</sup>	20.0%
Construction GVA/Cosntruction output <sup>(2)</sup>	44.7%
<b>GVA distribution <sup>(2)</sup></b>	
Compensation of employees	62.7%
Gross operating surplus <sup>(3)</sup>	35.0%
Net taxes on production	2.3%
<b>Employed</b>	
Thousand people	366.3
Annual growth	8.0%
Construction jobs/Total jobs in Andalusia	14.2%
Construction jobs/Construction jobs in Spain	18.5%
<b>Productivity <sup>(4)</sup></b>	
All sectors in Andalusia=100	86.9
Spain's construction sector=100	108.2
<b>Construction GVA deflator</b>	
Annual growth	5.8%
<b>Labour costs <sup>(5)</sup></b>	
Euro	1,848.7
Annual growth	7.3%
All sectors in Andalusia=100	100.9
Spain's construction sector=100	97.2
<b>Enterprises</b>	
Number	41,263
Annual growth	10.8%
Construction enterprises/Construction enterprises in Spain	11.5%

**NOTES:**

(\*) Advance figures.

(1) GVA at basic prices in constant 1995 euros.

(2) Data from 2001.

(3) Includes mixed income.

(4) GVA per person in employment at basic prices in constant 1995 euros.

(5) Labour costs per worker per month.

Sources: IEA and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

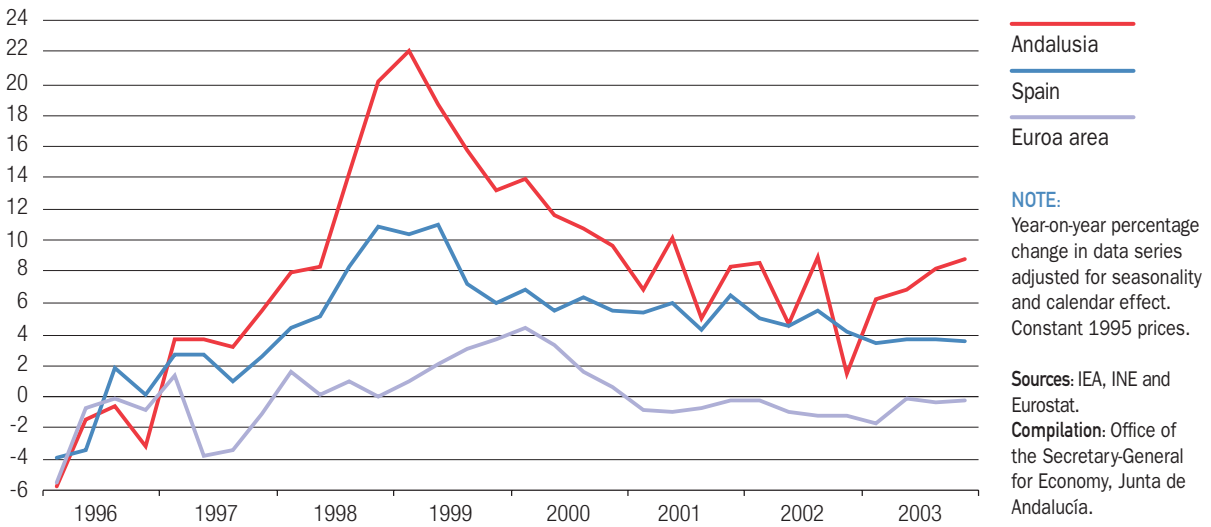
accounted for a higher proportion of GVA (62.7%) than in the other sectors, where it was no higher than 50%. Gross operating surplus including mixed income accounted for 35%, and the remaining percentage was net taxes on production. This distribution of value added observed in Andalusian construction is similar to that of the national construction sector, where, according to the INE, compensation of employees accounted for 63.2% and gross operating surplus, including mixed income, for 35.5%.

## Production

A breakdown of production indicators reveals that the dynamic performance of the construction sector was mainly driven by housing construction.

A total of 159,837 housing starts were registered in Andalusia in 2003, the highest figure on record since this information has been available (1979). This was an increase of 26.9%, significantly higher than the

Chart 56. CONSTRUCTION INDUSTRY GVA



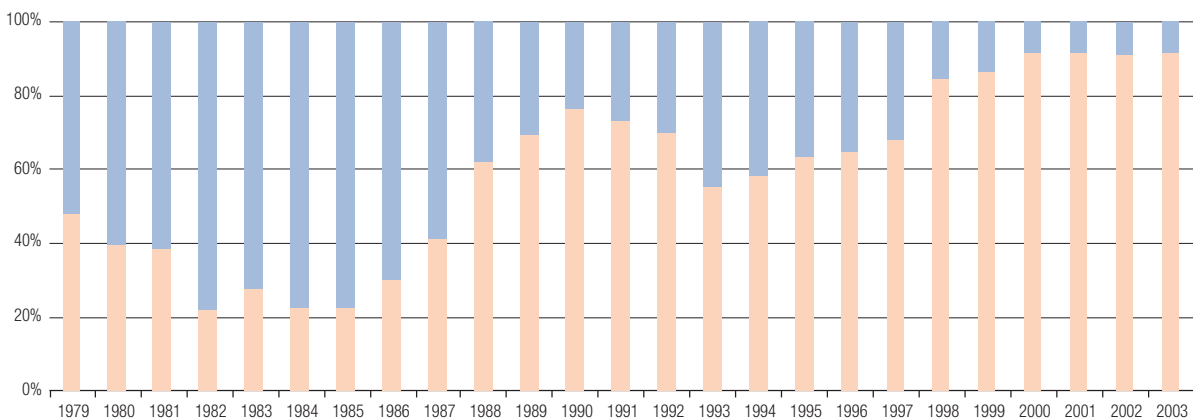
national average of 14.6%. As a result, Andalusian housing starts accounted for over a quarter of all those recorded nationally in 2003, a significantly higher percentage than Andalusia's share in the total number of dwellings in Spain, which is 16.9%, according to the 2001 census.

The vast majority were open-market housings starts (91.7%), which increased by 27.6%. Government-

sponsored housing starts also registered a sharp 20.5% rise in 2003, the biggest in four years.

The total number of dwellings rose by 129,689, as the result of a 4.6% increase in housing completions. Completions of government-sponsored housing rose more sharply (12%), following three years of decline, than those of open-market housing, which rose by 4%. As a result, government-sponsored housing

Chart 57. HOUSINGS STARTS BY TYPE OF HOUSING. ANDALUSIA



**NOTE:**

As a percentage of total housing starts.

**Source:** Ministry of Housing.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Open-market

Government-sponsored

Table 27. HOUSING SUBSECTOR. YEARS 2002-2003

	ANDALUSIA						SPAIN	
	Government-sponsored		Open-market		TOTAL		TOTAL	
	2003	02-03 growth %	2003	02-03 growth %	2003	02-03 growth %	2003	02-03 growth %
Housing starts	13,256	20.5	146,581	27.6	159,837	26.9	622,185	14.6
Housing completions	10,616	12.0	119,073	4.0	129,689	4.6	506,349	-2.6
Projects endorsed by architects' assoc.	11,612	30.1	172,261	30.6	183,873	30.5	686,278	10.2

Source: Directorate General of Housing, Architecture and City-Planning, Ministry of Housing.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

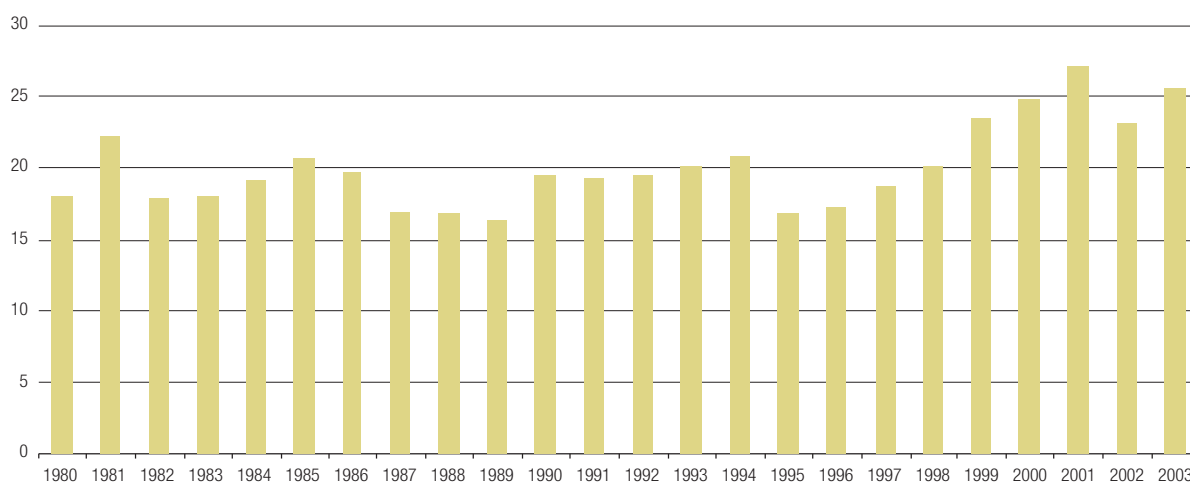
increased its share in the total number of dwellings completed in Andalusia in 2003 to 8.2%.

While the supply of new dwellings coming onto the market increased, they became less affordable, as the selling price of new homes rose at a notably faster rate than wages.

House price growth in Andalusia slowed by 1.5 percentage points to 17.2% in 2003, so that the average price per square metre was 1,072 euro. This increase was practically the same as the

one registered nationally (17%), so that the price per square metre of new homes in Andalusia was equivalent to 75.1% of the national average, two tenths of a point more than the previous year. The average area of a dwelling, according to project design approvals for new buildings in Andalusia, fell by 1.7 m<sup>2</sup> to 111.6 m<sup>2</sup>. The increase in house prices and the reduction in the average size of new dwellings in the region resulted in a 15.5% increase in the average price of a new dwelling in Andalusia, 1.8 percentage points less than in 2002.

Chart 58. HOUSING STARTS IN ANDALUSIA VIS-À-VIS SPAIN

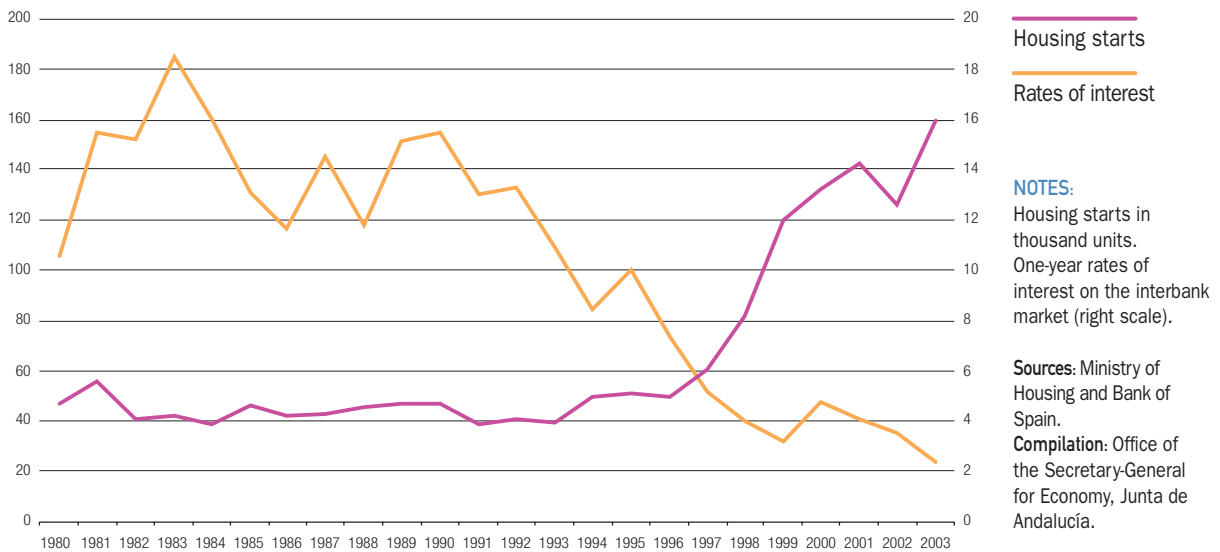
**NOTE:**

Housing starts in Andalusia as a percentage of total housing starts in Spain.

Source: Ministry of Housing.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 59. HOUSING STARTS AND RATES OF INTEREST. ANDALUSIA



The average price of a dwelling therefore increased much more sharply than wages in 2003, which, according to the Labour Cost Index rose by 3.2%. The fact that house price growth was faster than wage growth made housing less affordable in 2003. The unaffordability of housing, measured as the ratio between the average price of homes and wages, increased by 11.9% in Andalusia, compared with

10.9% in Spain. The earnings of 7.4 years were therefore needed to buy a home in Andalusia in 2003, compared with 6.6 years in 2002 and 9.3 in Spain as a whole.

The total amount of mortgages granted in Andalusia in 2003 continued to grow at a very rapid pace, spurred by low interest rates, although not as fast

Chart 60. PRICE OF HOUSING AND WAGES IN ANDALUSIA

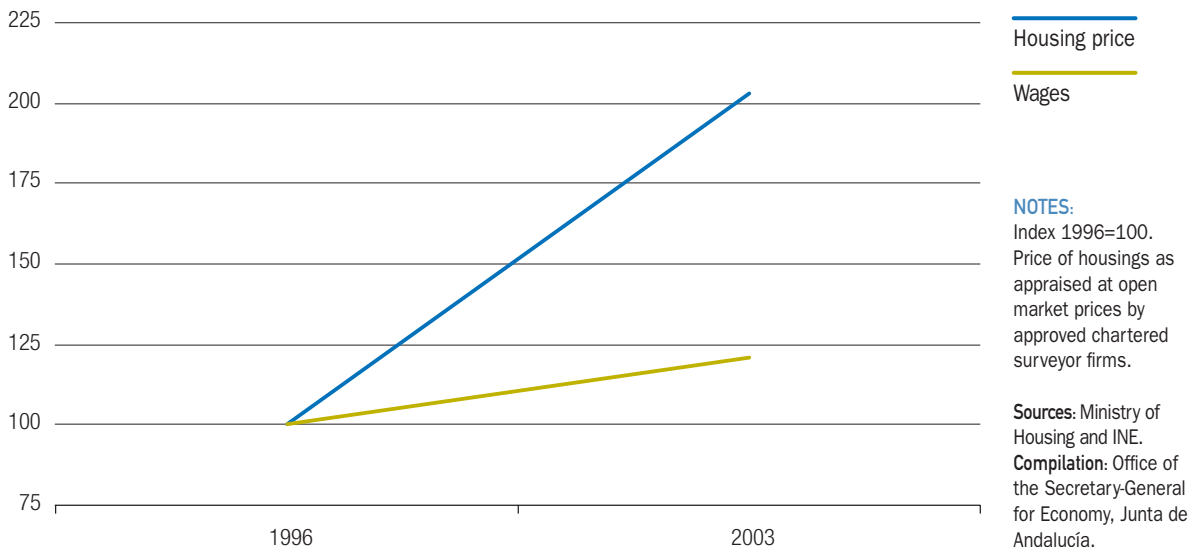
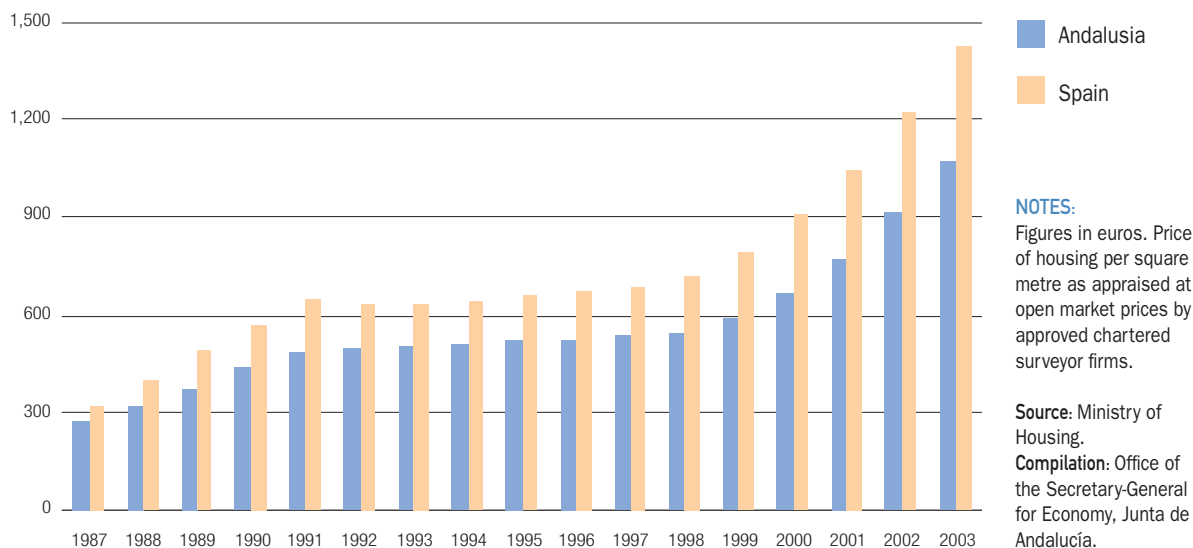


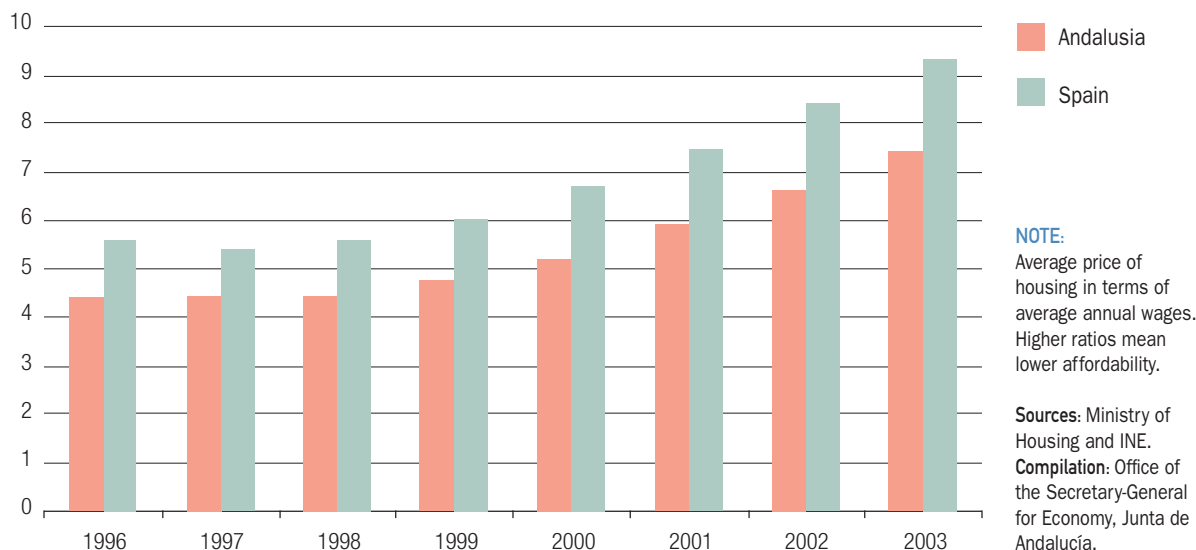
Chart 61. **AVERAGE PRICE OF HOUSING PER SQUARE METRE**



as the previous year. According to the INE, loans approved for house purchase rose by 13.4% in nominal terms, significantly higher than the 9.6% increase recorded nationally. The amount granted as mortgages on urban real estate in the region totalled 13,556 million euro, equivalent to 13.1% of Andalusian GDP, compared with 11.5% nationally. On

the other hand, the number of mortgage operations carried out for urban real estate fell by 4.2% in Andalusia. This, coupled with the increase in the total amount granted as mortgages, meant that the average amount per operation rose by 18.4% to 93,738 euro, equivalent to 87.5% of the national average.

Chart 62. **AFFORDABILITY OF HOMES**



## Labour market

There was an 8% increase in employment in the Andalusian construction industry, making 2003 the ninth consecutive year of job growth in the sector. Although this was a slightly slower rate of growth than observed in 2002, it was double the national rate (3.7%), bringing the total number of people in work in Andalusian construction up to 366,275, the highest figure on record since this information has been available. As a result, the percentage share of Andalusian construction jobs in the national total rose to 18.5%. Social Security figures also showed robust job growth of 7.7%, a higher rate than registered in the other sectors.

The vast majority of people working in the construction industry are men, with women accounting for only a very small proportion of the total. However, female employment in the construction industry rose much more rapidly in 2003 (18.7%) than male employment (7.6%), increasing the proportion of women working in the sector to 3.5%.

The vast majority of construction jobs are full-time, increasing by 8.1% to represent 98.7% of the total

in 2003, while the number of people employed part-time fell by 4%.

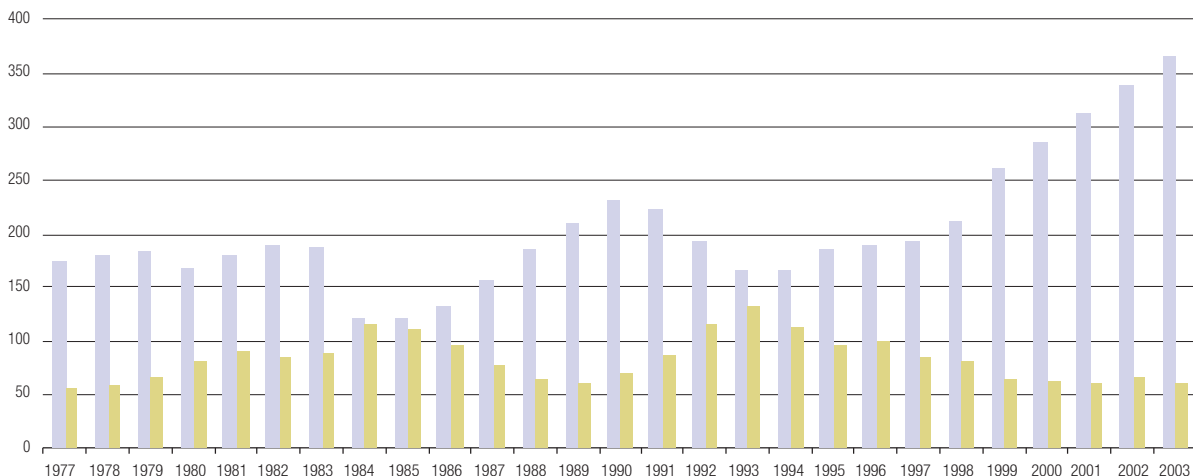
Labour force growth was also higher in the construction industry than in the other productive sectors in 2003 (5.7%). However, job growth in the sector was strong enough to absorb all the job seekers entering the labour force, so that jobless numbers fell by 6%, a bigger reduction than recorded in Spain as a whole (2%). In spite of this, the construction industry unemployment rate remained higher in Andalusia (14.4%) than in Spain as a whole (9%).

This trend of falling unemployment was confirmed by unemployment office (INEM) figures, although they showed a smaller year-end reduction of 1%.

## Outlook

An analysis of leading indicators reveals that the construction sector is likely to continue expanding in 2004, with faster growth in the construction of buildings than in civil engineering works.

Chart 63. **LABOUR FORCE IN THE CONSTRUCTION INDUSTRY. ANDALUSIA**



### NOTE:

Thousand people.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

■ Employed  
■ Unemployed



### Box 7. REAL ESTATE MARKET AND MORTGAGE LENDING IN ANDALUSIA

The growth cycle enjoyed by the Spanish economy in general, and the Andalusian economy in particular, since the mid-nineties, is characterised, among other things, by high and rising household debt.

Factors influencing this trend include robust job growth, the stability gained by joining economic and monetary union, which has resulted in good financing conditions with record low interest rates, and the appreciation of assets, particularly real estate. One of the main reasons for the increase in household debt has been the dynamic house buying trend accompanied by a continuing house price boom.

The structural information provided in the Population and Housing Census reveals the growing proportion of homes with outstanding mortgages. In 2001, the proportion of owner-occupied homes in Andalusia with outstanding mortgages was 22.2%, over five points higher than the percentage recorded in the previous census, conducted in 1991.

An analysis of the most recent real estate boom, which began in 1997, reveals an expansionary trend in mortgage approvals, according to the mortgage lending statistics published by the INE.

The number of mortgages approved over the period 1998-2003 rose by 56.2% in Andalusia, compared with 30.9% in Spain. There was also a significant increase in the amount of mortgage lending for the purchase of urban real estate during this period. Specifically, in Andalusia it tripled in five years, rising from 4,382 million euro in 1998 to 13,556 million euro in 2003, while in Spain it was 2.3 times higher.

As the amount of mortgage lending rose much more sharply than the number of mortgages approved, the average mortgage increased significantly over this period. In Andalusia, it doubled, rising from 47 thousand to 94 thousand euro. In Spain as a whole, the increase was not quite as sharp (74.5%), with the average amount per mortgage rising from 61 thousand euro in 1998 to 107 thousand euro five years later. The average amount granted per mortgage in Andalusia was therefore 12.5% less than it was nationally.

A provincial breakdown shows that the average amount granted per mortgage varied considerably from one province to another, ranging from 30.3% above the Andalusian average in Malaga to just over 20% below the average in Jaén.

This significant increase in the average amount granted per mortgage is not, however, due to an increase in the size of the homes purchased, as the average area of a dwelling, according to project design approvals for new buildings, fell slightly over this five-year period (-3.3%). The key factor in the increase is the phenomenal rise in the average price of property per square metre, which doubled in Andalusia in this period, rising from 542 euro in 1998 to 1,072 five years later. The trend was echoed in Spain as a whole, where house prices also doubled.

Mortgage lending grew at a faster rate than GDP. Nominal GDP growth in Andalusia between 1998 and 2003 was 45.7%, compared with the 209.3% increase in mortgage lending. Therefore, mortgage lending in Andalusia rose from 6.2% of GDP in 1998 to 13.1% five years later, exceeding the national percentage of 11.5%.

**MORTGAGES ON URBAN REAL ESTATE****NOTE:**

Average amount per mortgage. In thousand euro.

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Andalusia

Spain

Government tender figures and project design approvals registered in 2003 suggest a favourable outlook for the construction of buildings subsector.

A total of 183,873 house-building project designs were approved in 2003, the highest figure on record

since this information has been available. This was a year-on-year increase of 30.5%, significantly higher than the national average increase of 10.2%. It is significant that approvals for government-sponsored housing increased at a similar rate to that of approvals for open-market housing.

Table 28. **CONSTRUCTION INDUSTRY LABOUR MARKET. YEARS 2002-2003**

	2003			Change on 2001			
	Andalusia	Spain	And/Sp %	Absolute		Relative (%)	
				Andalusia	Spain	Andalusia	Spain
Labour force	428.1	2,180.4	19.6	23.0	67.4	5.7	3.2
Employed	366.3	1,984.6	18.5	27.0	71.4	8.0	3.7
Unemployed	61.8	195.9	31.6	-4.0	-4.0	-6.0	-2.0
Unemployment rate	14.4	9.0	-	-1.8	-0.5	-	-

**NOTE:**

Thousand people unless otherwise stated.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## 5. CONSTRUCTION SECTOR

Government tender figures suggest a similarly optimistic outlook for the construction of buildings, with an increase of 32.3%, almost double the previous year's rate.

Government tenders for civil engineering works, accounting for just over two-thirds of total tenders in Andalusia in 2003, recovered from the decline of the previous year, rising by 8.7%, with particularly high increases in works for railways and ports, while tenders for roads fell.

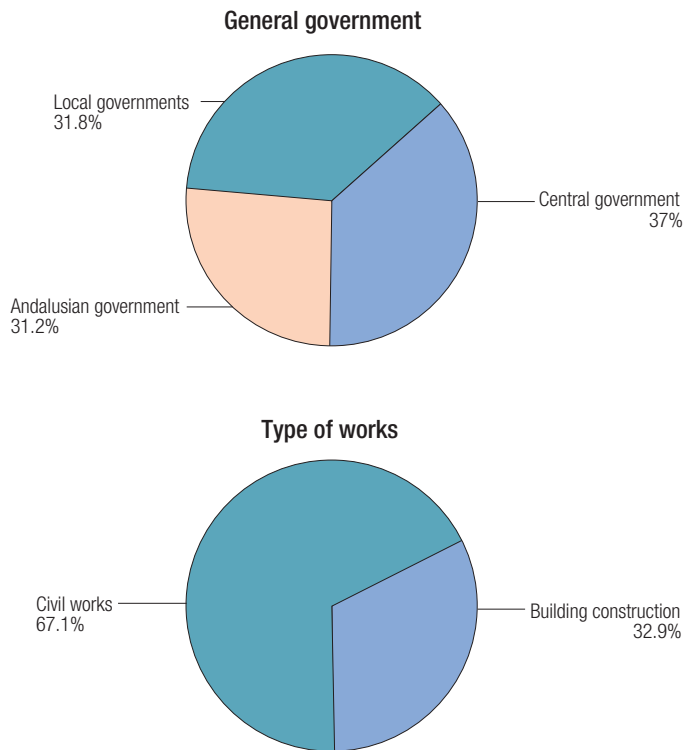
The overall result of these trends in the construction of buildings and civil engineering works was a 15.5% increase in government tenders to 3,251 million euro, a higher increase than registered nationally (2.2%). Total government tenders for construction works in Andalusia therefore accounted for 12.1% of

the national total and represented 68% of the national average in per capita terms.

A breakdown of these figures according to the government tiers that issued calls for tenders reveals that the most significant increase was in those issued by the local authorities (54.2%), followed by the Junta de Andalucía, Andalusia's regional government (32.3%), while central government tenders fell by 12.7%.

A province-by-province analysis reveals that the biggest increase was in Jaen, where the total value of tenders rose by 73%, followed by Cadiz and Almeria, while Granada, Cordova and Huelva registered reductions. The provinces with the highest proportion of total government tenders were Cadiz (23.7% of the total) and Malaga (17.8%), while Huelva accounted for the smallest proportion (6.6%).

Chart 64. **PUBLIC TENDERING. ANDALUSIA. YEAR 2003**



**NOTE:**

Breakdown of government tenders by type of works and government tier.

**Source:** SEOPAN.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Table 29. **GOVERNMENT TENDERS BY TYPE OF WORKS AND GOVERNMENT TIER. ANDALUSIA. YEARS 2002-2003**

	2002	2003	02-03 growth %	
			Current prices	Constant prices (1)
Building construction	808	1,069	32.3	27.5
Civil works	2,008	2,182	8.7	4.7
<b>TOTAL</b>	<b>2,815</b>	<b>3,251</b>	<b>15.5</b>	<b>11.3</b>
Central government	1,378	1,202	-12.7	-15.9
Andalusian government	767	1,015	32.3	27.5
Local governments	670	1,033	54.2	48.5
<b>TOTAL</b>	<b>2,815</b>	<b>3,251</b>	<b>15.5</b>	<b>11.3</b>

**NOTE:**

Data in million euro unless otherwise stated.

(1) Constant 1990 prices.

Source: SEOPAN.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



## Service Sector

### Overview

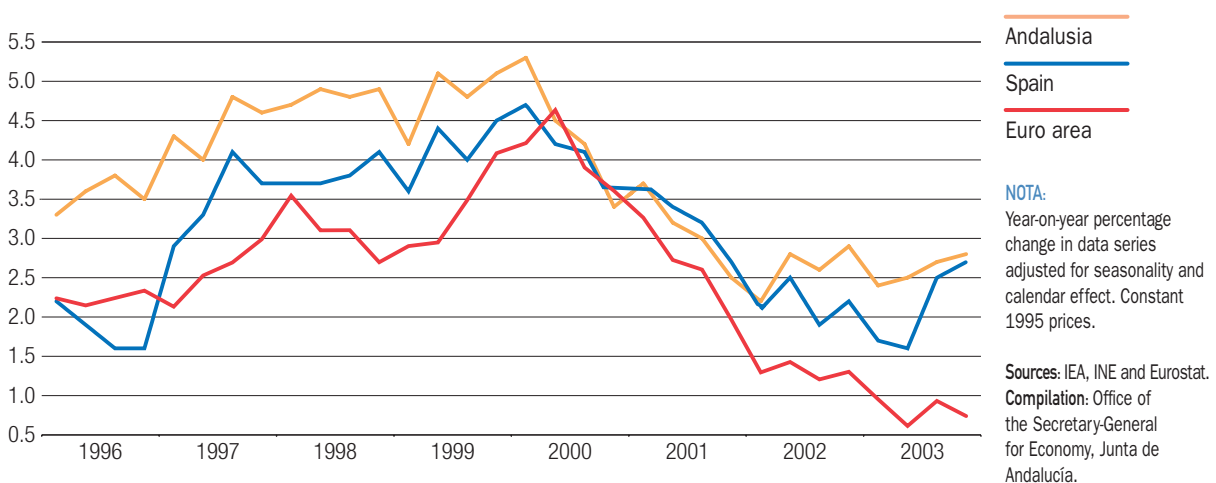
The trend of gradually decelerating growth in evidence in the Andalusian service sector since 2000 came to an end in 2003. It grew at the same rate as the previous year, showing upward momentum as the year progressed and exceeding the national average.

Service sector gross value added (GVA) measured at basic prices amounted to 62,041.3 million euro in Andalusia, a real increase of 2.6%, the same as in

2002 and higher than in Spain (2.1%) and the euro area (0.7%). The Andalusian service sector therefore accounted for 14.2% of gross value added generated by the service industries nationally.

It grew at a faster rate than the Andalusian economy as a whole (2.4%), and, as a result, increased its percentage share in the Andalusian production structure by one tenth of a point to 64.7% of GVA in 2003, slightly higher than the proportion it represents nationally (64.3%).

Chart 65. **SERVICE INDUSTRIES GVA**



## 5. SERVICE SECTOR

Table 30. **BASIC INDICATORS OF THE SERVICE INDUSTRIES. ANDALUSIA. YEAR 2003**

GVA at basic prices <sup>(*)</sup>	
Millions of current euros	62,041.3
Nominal growth in the year	6.7%
Real growth in the year	2.6%
Services GVA/Total Andalusian GVA <sup>(1)</sup>	64.7%
Services GVA/Spanish services GVA <sup>(1)</sup>	14.2%
Gross value added from industrial activities <sup>(2)</sup>	63.8%
GVA distribution <sup>(2)</sup>	
Compensation of employees	47.3%
Gross operating surplus <sup>(3)</sup>	52.1%
Net taxes on production	0.6%
Employed	
Thousand people	1,663.3
Annual growth	3.6%
Service sector jobs/Total jobs in Andalusia	64.3%
Service sector jobs/Service sector jobs in Spain	15.6%
Productivity <sup>(4)</sup>	
All sectors in Andalusia=100	100.6
Spain's service sector=100	91.1
GVA deflator <sup>(*)</sup>	
Annual growth	3.9%
Labour costs <sup>(5)</sup>	
Euro	1,777.3
Annual growth	3.4%
All sectors in Andalusia=100	97.0
Spain's service sector=100	92.7
Enterprises	
Number	343,568
Annual growth	4.3%
Service sector enterprises/Service sector enterprises in Spain	15.6%

### NOTES:

(\*) Advance figures.

(1) GVA at basic prices in constant 1995 euros.

(2) Data from 2001.

(3) Includes mixed income.

(4) GVA per person in employment at basic prices in constant 1995 euros.

(5) Labour costs per worker per month.

Sources: IEA and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Job growth in the sector was stronger, with a 3.6% increase in employment, although job growth registered in tertiary activities nationally was higher at 4.1%, resulting in a slight reduction in Andalusia's percentage share in service sector jobs nationally to 15.6%.

The fact that employment grew more rapidly than GVA meant that productivity per worker fell year on year in 2003, although at a slower rate than in the Andalusian economy as a whole, so that service sector productivity was 0.6% higher than the Andalusian average.

As regards service sector prices, the GVA deflator rose at the same rate as the previous year (3.9%), putting it three tenths of a point below the GDP deflator for the region as a whole.

Labour costs per worker in the Andalusian service industry increased at a slower rate (3.4%) in 2003 than the other productive sectors and were lower

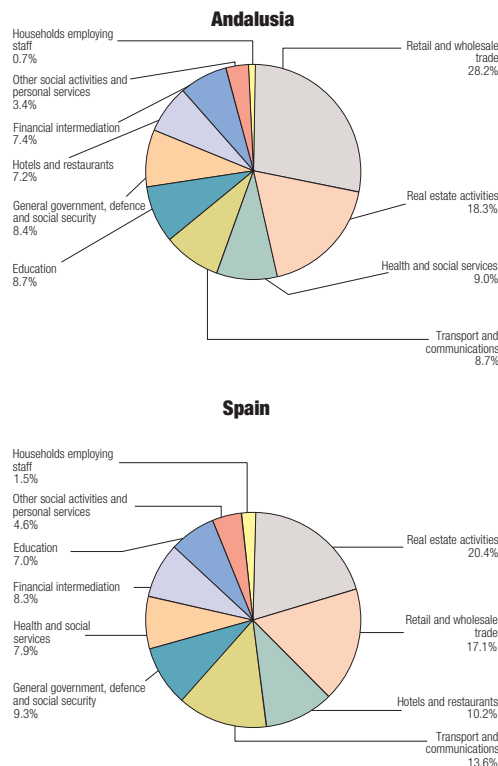
than the Andalusian average and the national service sector average.

The business sector showed more favourable results, with 14,082 more service enterprises operating in Andalusia than in 2002, bringing the total up to a 343,568. This was a 4.3% increase, higher than recorded in the service sector nationally (3.7%), so that Andalusia increased its percentage share in the national total to 15.6%.

A broader picture of developments in the region can be obtained from the structural information provided by the Regional Accounts for Andalusia, compiled by the IEA.

The latest figures, which are for 2001, reveal that GVA at basic prices generated by the Andalusian service industries accounted for 63.8% of the sector's production, which means that they had a higher value added to output ratio than the other

Chart 66. **STRUCTURE OF THE SERVICE INDUSTRIES. YEAR 2001**



**NOTES:**  
As a percentage of total service industries. GVA at basic prices. Constan 1995 prices.

**Sources:** IEA Annual Regional Accounts and INE Spanish National Accounts.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.



Andalusian productive sectors. A breakdown by branch of activity shows that the service industries with the highest proportions of value added were education and real-estate and renting activities (88.7% and 81.9% of production respectively), while hotels and restaurants and transport showed the smallest proportions (50.6% and 51.7% respectively).

With regard to the distribution of GVA, capital income in the Andalusian service sector accounted for a larger proportion of GVA than earned income, while the reverse was true of the national service sector. Gross operating surplus, including mixed income, accounted for 52.1%, and compensation of employees for 47.3%, while net taxes on production represented 0.6%. The pattern of distribution was echoed in most of the branches of activity, except in education, where earned income accounted for a very high proportion of GVA (91.4%), in health and social services (75.8%) and in public administration, defence and compulsory Social Security (70.4%).

## Tourist industry

Both the Andalusian Tourist Industry Situation Survey published by the IEA and the Hotel Occupancy Survey published by the INE revealed that in 2003 the number of tourists visiting Andalusia rose at a faster rate than in 2002.

Results were also good on the supply side. There were increases in both the number of tourist

establishments and the number of beds in all categories of tourist accommodation in 2003, with the highest registered in five-star hotels and country cottages.

## Tourist demand

According to the Andalusian Tourist Industry Situation Survey, a total of 21,451,100 tourists visited Andalusia in 2003, 40,000 more than the previous year. This was a year-on-year increase of 2.1%, higher than the 1.2% rise registered in 2002.

This overall upward trend in 2003 was wholly due to the 7.3% year-on-year increase in national tourism, a higher rate of growth than recorded the previous year (2.2%). There was a particularly big increase in the number of tourists from within the region itself (16.8%), accompanied by a smaller increase in tourists from other parts of Spain.

On the contrary, the number of foreign tourists fell in 2003, mainly owing to the drop in tourists from the European Union, who accounted for 80.7% of all foreign tourists visiting Andalusia, a trend strongly influenced by the area's tepid economic performance.

As a result, over half of all tourists visiting the region were Spanish—23% from Andalusia itself and 34.4% from other parts of Spain—and the remaining 42.6% were from other countries.

Table 31. **TOURIST VISITING ANDALUSIA**

	2002	2003	02-03 growth %
No. of tourists (thousand people)	21,012.7	21,451.1	2.1
From Andalusia	4,226.1	4,937.2	16.8
From rest of Spain	7,251.7	7,373.5	1.7
From EU countries	7,733.1	7,378.3	-4.6
From rest of world	1,801.8	1,762.2	-2.2
Average daily spending (euro)	45.3	47.6	5.1
Average length of stay (days)	11.2	10.1	-1.1 <sup>(2)</sup>
Composite perception index <sup>(1)</sup>	7.7	7.7	0.0 <sup>(2)</sup>

### NOTES:

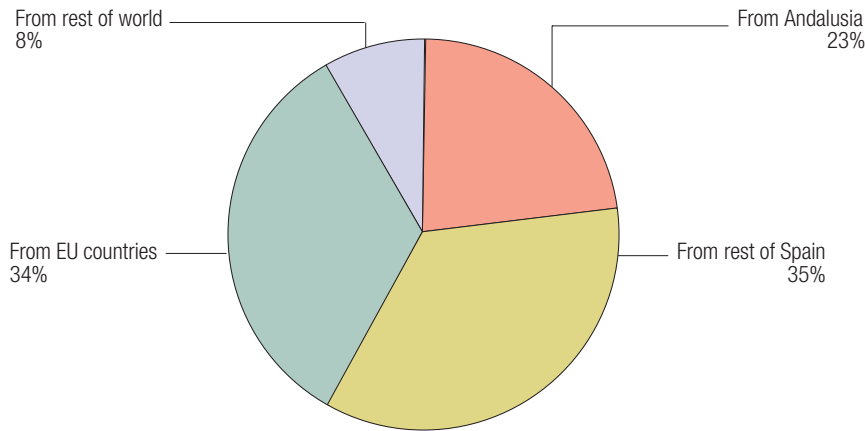
(1) Rated 1 to 10.

(2) Growth on previous year.

Source: IEA Andalusian Tourist Situation Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 67. **TOURIST BY PLACE OF ORIGIN. ANDALUSIA. YEAR 2003**



**NOTE:**  
As a percentage of total.

**Source:** IEA Andalusian Tourist Situation Survey.  
**Compilation:** Office of the Secretary-general for Economy, Junta de Andalucía.

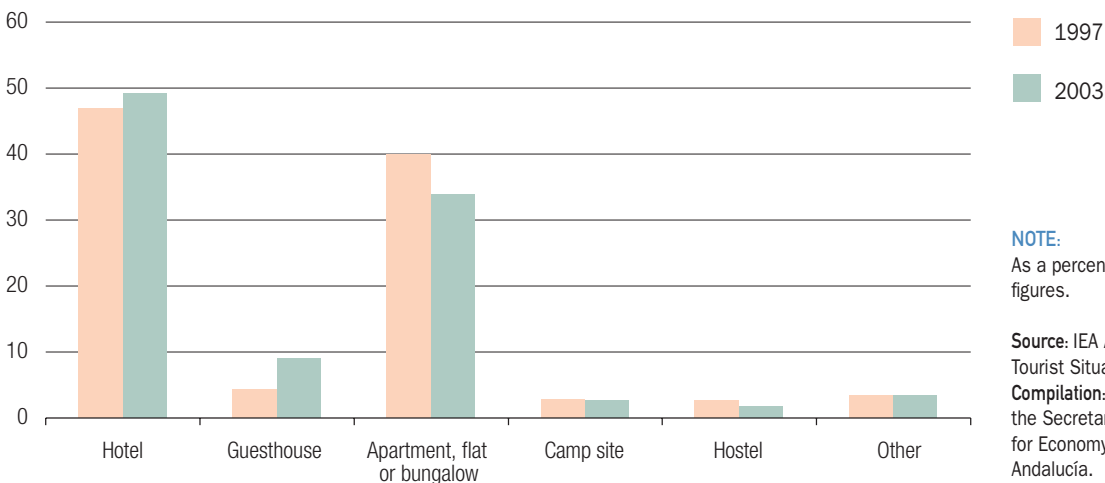
The increase in the number of tourists visiting Andalusia was accompanied by a rise in average daily spending by visitors to 47.6 euro in 2003, 5.1% up on the 2002 figure. The biggest spenders were foreign tourists, who spent an average of 53.1 euro a day, while Spanish tourists spent 47 euro.

In spite of the increase in average daily spending, total spending by tourists fell year on year by 3.4% in 2003, as the average length of stays fell by 1.1 days to 10.1.

Distinguishing between different types of tourist accommodation, the Andalusian Tourist Industry Situation Survey reveals that hotels continued to be the most popular, with 49.2% of all tourists visiting the region choosing this type of accommodation, increasing their share in the total by 2.6 percentage points.

The second most popular type of tourist accommodation was holiday homes of friends or relatives, which increased their share to 13.7% of the

Chart 68. **TYPES OF ACCOMMODATION PREFERRED BY TOURISTS. ANDALUSIA**



**NOTE:**  
As a percentage of total figures.

**Source:** IEA Andalusian Tourist Situation Survey.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

## 5. SERVICE SECTOR

total, followed by rented accommodation, accounting for 10.1%.

The survey also provides qualitative information on how tourists assessed their stay in Andalusia. In 2003 the average score, on a scale of 1 to 10, remained the same as the previous year at 7.7. The highest-scoring features were nature parks, scenery and service and hospitality, followed by accommodation and restaurants, which scored higher than the previous year, while the lowest-scoring features were health care and buses and taxis as means of public transport.

A further source of information is the Hotel Occupancy Survey published by the INE, which provides a partial analysis of the tourist industry on the basis of hotel stays.

The survey shows that the number of people staying in hotels in Andalusia rose by 4.4% in 2003 and overnight stays increased by 4.1%, both exceeding the previous year's rates. The increase in the number of overnight stays in Andalusian hotels, a vigorous

bounce-back from the decline observed in 2002, was higher than the national increase of 2.4%. The number of people staying in hotels in Andalusia therefore rose to almost 12 million, accounting for 19% of the national total, while overnight stays increased to over 36.6 million.

A breakdown according to country of origin confirms the findings of the Andalusian Tourist Industry Situation Survey, showing that the increase in the number of tourists staying in Andalusian hotels was wholly attributable to national tourism, with the number of Spanish hotel guests rising year on year by 8.6%, a much bigger increase than the 1.5% recorded the previous year and the national average of 5.9%. On the other hand, the number of foreign tourists staying at Andalusian hotels fell by 0.9%, largely as a result of the reduction in tourists from outside the European Union.

There was a 1.3% increase in tourists from the European Union visiting Andalusian hotels, increasing their percentage share in foreign tourism to 73.4%. Just over half (51.8%) of EU tourists were from

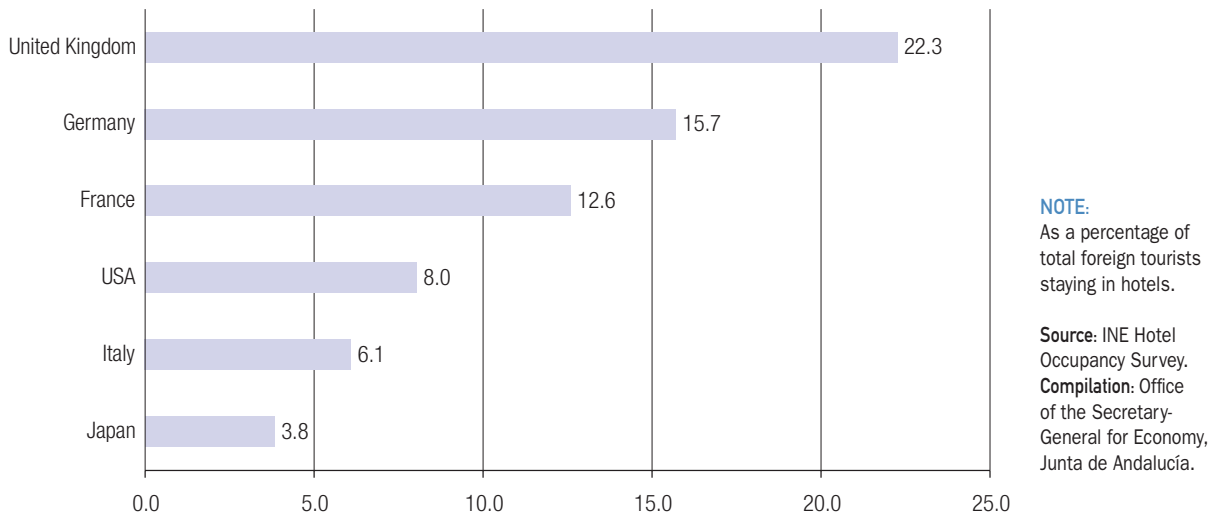
Table 32. **TRAVELLERS STAYING AT HOTELS. ANDALUSIA**

	2002	2003	02-03 growth %
<b>TRAVELLERS (thousand people)</b>	11,404.7	11,902.5	4.4
Domestic	6,331.2	6,873.5	8.6
Foreign	5,073.5	5,029.0	-0.9
Eu countries	3,643.3	3,690.6	1.3
Germany	857.6	790.6	-7.8
United Kingdom	1,010.9	1,120.0	10.8
France	584.0	633.9	8.5
Italy	359.2	307.2	-14.5
Rest of EU	831.6	839.0	0.9
United States	417.0	404.5	-3.0
Japan	237.0	193.3	-18.4
Other	776.2	740.6	-4.6
<b>OVERNIGHT STAYS (thousands)</b>	35,219.3	36,666.5	4.1
Domestic	16,460.0	17,844.9	8.4
Foreign	18,759.0	18,821.6	0.3
<b>HOTEL OCCUPANCY RATE</b>	53.1	52.2	-0,9 (*)

**NOTE:**  
(\*) Growth on previous year.

Source: INE Hotel Occupancy Survey.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 69. MAIN COUNTRIES ORIGINATING TOURISM FLOWS TO ANDALUSIA. YEAR 2003



the United Kingdom and Germany. However, while UK tourists showed a robust 10.8% year-on-year increase, the number of German tourists fell, owing largely to the adverse economic situation affecting their country in 2003. Within the group of tourists from outside the EU, Americans and the Japanese were the most frequent visitors to Andalusia's hotels, together accounting for 11.9% of all foreign hotel guests in the region, although there was a fall in the number of tourists from both these countries, particularly Japan (-18.4%).

Hotel occupancy in the region fell in 2003 by almost one percentage point to 52.2%. A provincial breakdown shows that Malaga and Almería recorded the highest levels of occupancy and were the only provinces that exceeded the average rate of hotel occupancy in Andalusia, while Almería and Huelva were the only provinces to show a higher level of occupancy than the previous year.

According to the survey, the most popular tourist destinations in Andalusia in 2003 were in the province of Malaga, accounting for 30.6% of the total number of visitors to Andalusian hotels, followed by Seville and Granada, accounting for 16.1% and 15.6% respectively, while Jaén was the least popular (4.2%). One of the most significant trends of recent

years is that inland tourism is gaining in popularity at the expense of the more conventional "sun, sea and sand" tourist destinations, which accounted for the bulk of all tourism in the early nineties. As a result, Cordova, Granada, Jaén and Seville have almost doubled their share of visitors staying in Andalusian hotels from 22.7% in 1990 to 42.5% in 2003.

### Tourist supply

The Andalusian tourist industry also achieved good results in 2003 on the supply side, as the number of beds in tourist accommodation in Andalusia rose by 3.8%, bringing the total up to 374,015. This upward trend was echoed in all the region's provinces, except Huelva, where the number of beds fell by 2.9%. The biggest increases were registered in Cadiz (8.5%), Seville (5.9%) and Granada (5.6%). Almería and Cordova also showed increases that were above the regional average.

A breakdown by type of accommodation shows that the biggest increase was once again in country cottages, with a year-on-year increase of 18.5%, in keeping with the increasing popularity of inland tourism in Andalusia. The biggest increases were recorded in Seville and Almería.

### Box 8. WHOLESALE AND RETAIL TRADE IN ANDALUSIA

The wholesale and retail trade is of great importance in any economy, not only in terms of its quantitative contribution to production and employment, but also because it provides the interface between producers and consumers.

The wholesale and retail trade in Andalusia is particularly important, as it accounts for a larger proportion of the production structure than it does nationally and supplies the third biggest regional market in the European Union.

According to the latest data available from the Annual Regional Accounts for Andalusia, in 2001 this activity accounted for 27% of GVA generated by the Andalusian service sector, compared with 16.2% nationally, highlighting the degree of specialisation of the Andalusian economy in this sector.

This can also be observed in terms of employment, with the wholesale and retail trade accounting for 26% of all service industry jobs in Andalusia, and in terms of the business sector, as 40.4% of service sector enterprises are engaged in the wholesale or retail trade.

The wholesale and retail trade is also significant in the Andalusian economy as a whole, as it accounted for 19.1% of total GVA at basic prices generated by the region in 2001 and for 16.8% of all Andalusian jobs and 33.3% of all Andalusian enterprises in 2003.

The wholesale and retail trade comprises three activities, the most important of which, in terms of GVA, is the retail trade and the repair of personal and household goods, which accounted for almost half (49.3%) of the total in 2001. The next in importance is wholesale trade and commission trade, accounting for 39.4%. The least important, in quantitative terms, are the sale, maintenance and repair of motor vehicles and motorcycles and the retail sale of automotive fuel, which accounted for 11.3%.

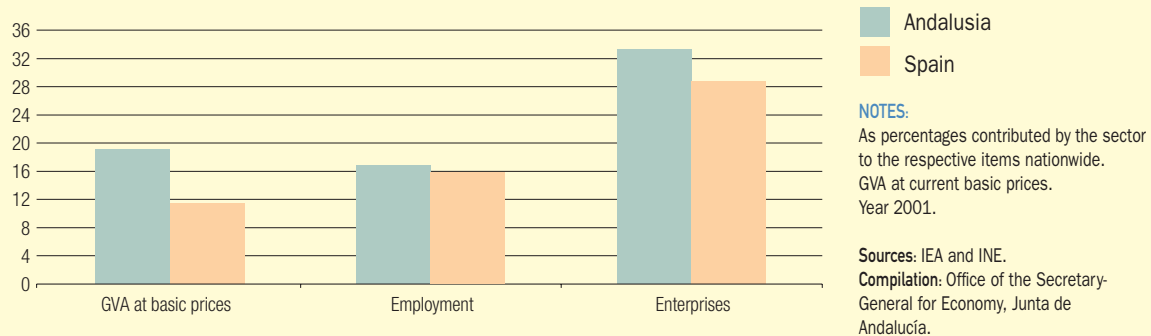
The wholesale and retail trade, like the other service industries, is an activity that has a high value added to output ratio. Specifically, GVA generated by the wholesale and retail trade in Andalusia accounted for 68.1% of output, a similar percentage to that of the service sector as a whole (67.9%), but significantly higher than the 51.9% averaged by Andalusia's productive sectors.

A look at the distribution of value added between earned income and capital income shows that in Andalusia's wholesale and retail trade earned income accounts for a smaller proportion of GVA than it does in the service sector or in the Andalusian economy as a whole. In 2001, earned income accounted for 37.2% of GVA in Andalusia's wholesale and retail trade, compared with 47.3% in the service sector and 54% in the region's productive sectors as a whole.

The proportion of gross operating surplus, including mixed income of unincorporated enterprises and incorporating a remuneration component and an operating surplus component, was therefore higher, a situation that is probably related to the fact that there is a large number of self-employed people working in this sector. In specific terms, mixed income accounted for 20.8% of GVA generated by the Andalusian wholesale and retail trade, almost double the percentage observed in the service sector or in the Andalusian economy as a whole.

Finally, the wholesale and retail trade has a higher productivity level than other service industries or the Andalusian economy as a whole. In 2001 productivity was 3.9% higher than that averaged by the Andalusian service sector and 12.6% higher than that averaged by the Andalusian economy.

## RELATIVE SIZE OF WHOLESALE AND RETAIL TRADE. YEAR 2003



There were also increases in the number of beds in hotels, apartments and hostels, with camp sites being the only type of accommodation in 2003 to see a fall in supply.

The number of hotels, the most popular type of tourist accommodation, rose by 73 to 1,322 in Andalusia in 2003, bringing the total number of hotel beds up to 187,389. This was up 6.7% on the previous year, and all the provinces saw an increase except Cordova (-2.5%) The biggest increases were registered in Cadiz (16.3%) and Seville (7.9%), while in absolute terms, Malaga, Cadiz and Almería were

the provinces with the highest proportions of hotel beds, together accounting for almost two thirds of the regional total.

A breakdown of these figures according to hotel category reveals that four-star and three-star hotels accounted for 80.8% of total hotel beds in Andalusia, while five-star hotels accounted for 4.4%. However, the supply of hotel beds grew more rapidly in the higher categories, with five-star hotels registering a 13.8% year-on-year increase in the number of beds, and four-star hotels, a 12.3% increase.

Table 33. TOURIST ACCOMMODATION IN ANDALUSIA

	2002		2003		02-03 growth %	
	No. of establis.	No. of beds	No. of establis.	No. of beds	No. of establis.	No. of beds
<b>HOTELS</b>	1,249	175,670	1,322	187,389	5.8	6.7
5-star	24	7,270	28	8,275	16.7	13.8
4-star	255	80,905	284	90,841	11.4	12.3
3-star	374	59,691	398	60,532	6.4	1.4
2-star	377	19,500	390	19,445	3.4	-0.3
1-star	219	8,304	222	8,296	1.4	-0.1
<b>COUNTRY COTTAGES</b>	499	3,436	579	4,070	16.0	18.5
<b>HOSTELS</b>	1,461	33,825	1,489	34,996	1.9	3.5
<b>APARTMENTS</b>	517	52,525	552	55,019	6.8	4.7
<b>CAMP SITES</b>	178	94,836	179	92,541	0.6	-2.4
<b>TOTAL</b>	3,904	360,292	4,121	374,015	5.6	3.8

Source: Andalusian Ministry of Tourism, Trade and Sports.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 34. **TRANSPORT SUBSECTOR INDICATORS. ANDALUSIA**

	2002	2003	02-03 growth %
<b>Maritime transport</b>			
Passengers (thousand people)	5,990.8	6,236.6	4.1
Freight (thousand tons)	88,112.2	94,204.3	6.9
<b>Air transport</b>			
Passengers (thousand people)	14,306.6	15,791.3	10.4
Freight (tons)	13,954.6	11,421.3	-18.2
<b>Rail transport</b>			
Local line passengers (thousand people)	17,029.0	18,782.0	10.3
Regional line passengers (thousand people)	4,093.0	4,117.0	0.6
Goods vehicle registrations	44,111.0	50,204.0	13.8

Sources: National Port Authority, Directorate General of Traffic, Directorate General of Civil Air Transport and RENFE.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## Other subsectors

For lack of other information, the performance of the remaining service industries is assessed on the basis of employment figures and, in some cases, partial activity indicators.

According to the Labour Force Survey, job growth was broadly based across all the service subsectors. The highest employment gains were observed in business services, where growth quickened to 6.4% year on year. They were followed by social service activities (4.5%), with the highest increases in public sanitation and education.

Distribution services also registered job growth (3.7%), both in the wholesale and retail trade (3.2%), in line with the 4.7% increase in retail sales in 2003, and transport activities (5.4%). Employment rose in all types of transport, with the biggest increase in sea transport, in keeping with the rise in passenger and goods traffic figures.

Jobs also increased, although to a lesser extent, in recreational and personal service activities (1.2%), particularly recreational, cultural and sporting activities, while employment fell in hotels and restaurants.

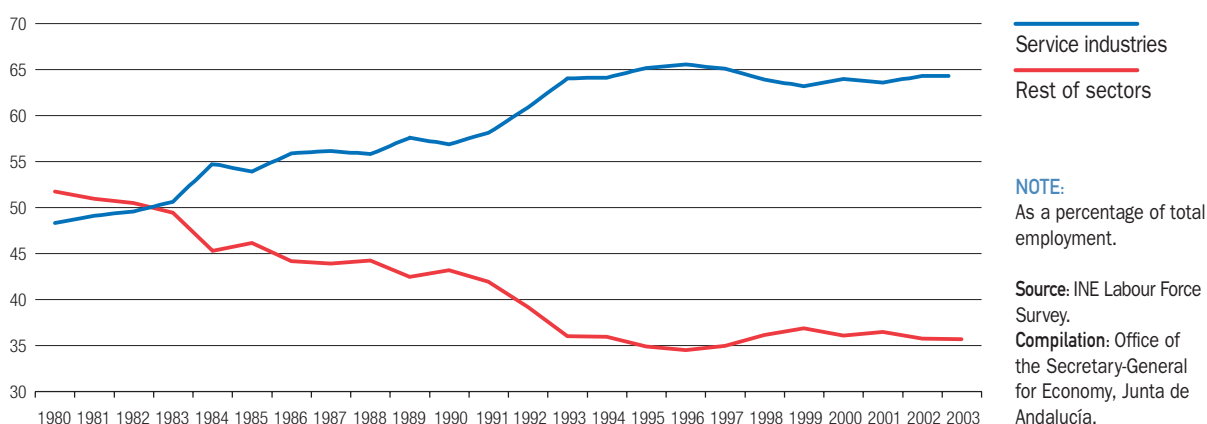
Chart 70. **TERTIARISATION OF EMPLOYMENT. ANDALUSIA**

Table 35. **SERVICE INDUSTRIES LABOUR MARKET**

	2003			Absolute		Change on 2002	
	Andalusia	Spain	And/Sp %	Andalusia	Spain	Relative (%)	
						Andalusia	Spain
Labour force	1,878.4	11,543.5	16.3	53.9	456.2	3.0	4.1
Employed	1,663.3	10,644.5	15.6	57.1	415.1	3.6	4.1
Wholesale and retail trade	433.2	2,639.0	16.4	13.3	86.6	3.2	3.3
Hotels and restaurants	164.8	1,042.3	15.8	-1.0	23.4	-0.6	2.2
Transport	131.7	1,026.9	12.8	6.8	33.2	5.4	3.2
Financial intermediation	49.5	398.4	12.4	-4.0	-2.2	-7.4	-0.6
Real estate activities and business services	168.6	1,370.7	12.3	13.3	77.4	8.6	5.6
General government, defence and social security	209.6	1,096.8	19.1	7.6	50.6	3.8	4.6
Education	172.1	951.8	18.1	8.6	8.6	5.3	0.9
Health and veterinary activities	157.2	987.8	15.9	6.5	74.6	4.3	7.5
Social activities and personal services	99.6	688.1	14.5	5.1	38.6	5.4	5.6
Households employing staff	77.0	441.7	17.4	1.5	24.9	2.0	5.6
Extraterritorial entities	-	1.3	-	-	-0.6	-	-46.0
Unemployed	215.1	899.0	23.9	-3.2	41.2	-1.4	4.8
Unemployed rate	11.45	7.79	-	-0.5	0.1	-	-

**NOTE:**

Thousand people unless otherwise stated.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Lastly, production-related services showed 0.8% job growth in 2003, wholly attributable to employment gains in real-estate activities and the renting of machinery, as financial intermediation saw a fall in jobs.

## Labour market

Overall, the Andalusian service sector generated 3.6% more employment in 2003 than it did in 2002. Although this was a healthy rate of growth, it was weaker than in 2002 (4.7%) and than in Spain as a whole (4.1%). A total of 57,100 jobs were created, which brought the total number of people working in the service sector in the region up to 1,663,300, accounting for 64.3% of the total number of people in work in Andalusia.

The figures provided by the Ministry of Labour and Social Affairs show better results, estimating a year-end

increase of 5.6% in the number of people registered in Social Security files working in the Andalusian service sector, a higher increase than the previous year and than the national average of 3.7%.

A breakdown of the Labour Force Survey figures by gender shows that in the service sector, female employment saw a higher year-on-year increase (6.9%) than male employment (1%). The Andalusian service sector has a higher proportion of women workers than the average for the Andalusian economy, with 754,900 women in service sector jobs, accounting for 84.1% of all female employment in the region.

Distinguishing between part-time and full-time jobs, 11.5% of all jobs in the Andalusian service sector were part-time, making it the Andalusian sector with the highest proportion of such jobs. Full-time jobs, accounting for the remaining 88.5%, increased year on year by 4.4% in 2003.



Job growth in the service sector outstripped labour force growth (3%), resulting in a 1.4% fall in jobless numbers in the region, in contrast with the 4.8% increase registered nationally. The service sector unemployment rate in Andalusia fell to 11.45%, narrowing the differential between the region and Spain as a whole to 3.7 percentage points.

In line with this trend, jobless figures recorded at National Employment Institute (INEM) offices showed a 0.4% fall in unemployment in December 2003, compared with the 2.5% increase recorded nationally.

6.

## Aggregate Demand



## Aggregate Demand

### Introduction

According to key domestic demand indicators for Andalusia, 2003 saw consumption expenditure growth similar to the previous year and a slight acceleration in investment growth. A look at foreign trade between Andalusia and other countries reveals that the external demand components showed a significant improvement in 2003, with import growth outpacing export growth.

These demand trends were observed in a context in which job growth was practically the same as

the previous year, in which financing conditions for consumption expenditure and investment were more favourable than in 2002, as interest rates continued to fall, and in which world trade picked up following a tepid performance in 2002.

These trends encouraged businesses and households to increase borrowing from banks to implement consumption and investment decisions, with credit granted to the private sector rising year on year by 18.1% in Andalusia, the highest increase in three years and higher than the national increase.

Table 36. **DEMAND INDICATORS. ANDALUSIA. YEARS 2002-2003**

	2002	2003	02-03 growth %
<b>PRIVATE CONSUMPTION</b>			
Average expenditure per capita (euro)	6,309.7	6,514.8	3.3
- Food products beverages and tobacco	1,350.2	1,408.3	4.3
- Other spending	4,959.4	5,106.5	3.0
Consumer goods AIPI (base year 1994=100)	122.4	125.5	2.5
Total employment (thousand people)	2,499.2	2,585.1	3.4
Passenger car registrations (number)	209,296	230,446	10.1
VAT collection (in million euro)	2,256.7	2,637.0	16.9
Retail and wholesale trade index (base year 2001=100)	104.9	109.8	4.7
Index of sales in large scale retail outlets (base year 2001=100)	102.4	107.1	4.6
- Food products	100.2	99.1	-1.2
- Non-food products	103.7	111.6	7.7
Wage costs per worker per month (euro)	1,303.7	1,345.0	3.2
Consumer goods imports (in million euro)	1,383.9	1,569.1	13.4
<b>CAPITAL EXPENDITURE</b>			
Capital goods AIPI (base year 1994=100)	158.0	165.7	4.9
Construction industry GVA (in million euro at constant 1995 prices)	8,434.3	9,069.7	7.5
Goods vehicle registrations (number)	44,111	50,326	14.1
General government tendering (in million euro)	2,815.3	3,250.7	15.5
Private sector borrowing (in million euro)	82,309.0	97,199.8	18.1
Capital goods imports (in million euro)	935.8	874.7	-6.5

Sources: Bank of Spain, Directorate General of Traffic, IEA, INE, SEOPAN and Ministry of Economy and Finance.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## Consumption

Domestic demand is strongly influenced by consumption expenditure trends, since this component accounts for around three-quarters of the total. In 2003 most of the consumption indicators grew at practically the same rates as in 2002, although those most closely associated with consumer durables showed significantly faster growth.

The Household Budget Survey conducted by the INE revealed that average spending per person grew by 3.3% in nominal terms, practically the same as the year before and not far behind the national average of 3.9%. As a result, the Andalusian average was 89.3% of the national figure.

In line with the national trend, spending on food items rose at a faster rate (4.3% in nominal terms) than

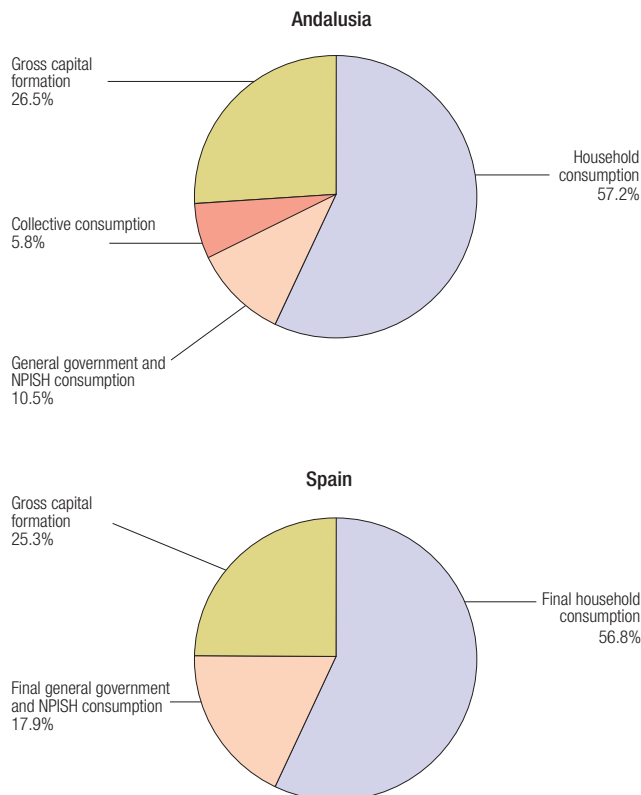
spending on non-food items (3%). The proportion of expenditure spent on food therefore rose to 21.6% of the total, six tenths of a point above the Spanish average.

Other indicators, measuring certain aspects of consumption, show slightly higher nominal increases than suggested in the Household Budget Survey. The retail index, produced by the INE, rose by 4.7% in Andalusia in 2003, while the index of large-scale retail outlets in Andalusia, compiled by the IEA, rose at a similar rate of 4.6%.

Fiscal indicators, such as VAT revenues, showed faster growth in 2003, with VAT collected in Andalusia rising by 16.9% in nominal terms, the highest growth rate in four years.

Indicators for the availability of consumer goods also showed an improvement on the previous year. Faster

Chart 71. DOMESTIC DEMAND BREAKDOWN

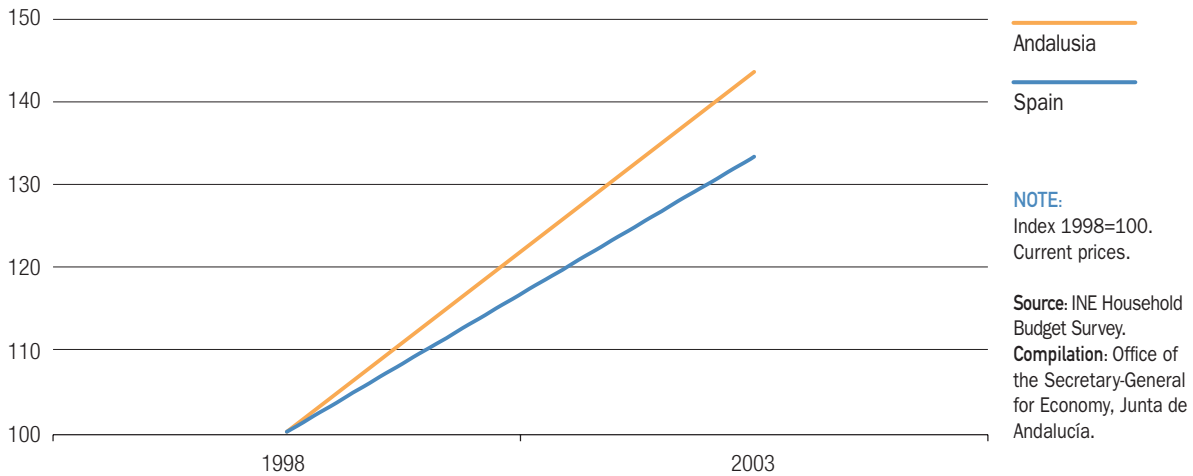


**NOTE:**  
Data from 2001.

**Sources:** IEA Andalusian Regional Accounts and INE Spanish National Accounts.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 72. **AVERAGE EXPENDITURE PER CAPITA**



growth was observed in the domestic production of consumer goods, which rose by 2.5%, and in imports of consumer goods, which rose by 13.4%, a vigorous rebound from the 3.6% reduction of the previous year.

Consumption decisions were influenced, according to the Household Budget Survey, by an increase in

the proportion of households in Andalusia reporting difficulties in making ends meet on their net monthly income. This indicator rose by five percentage points to 66.6% of Andalusian households. Nationally, the increase was smaller (2.8 percentage points), and the proportion of households with difficulties in making ends meet was lower than in Andalusia at 55.7%.

Chart 73. **INDEX OF SALES IN LARGE-SCALE RETAIL OUTLETS. ANDALUSIA**

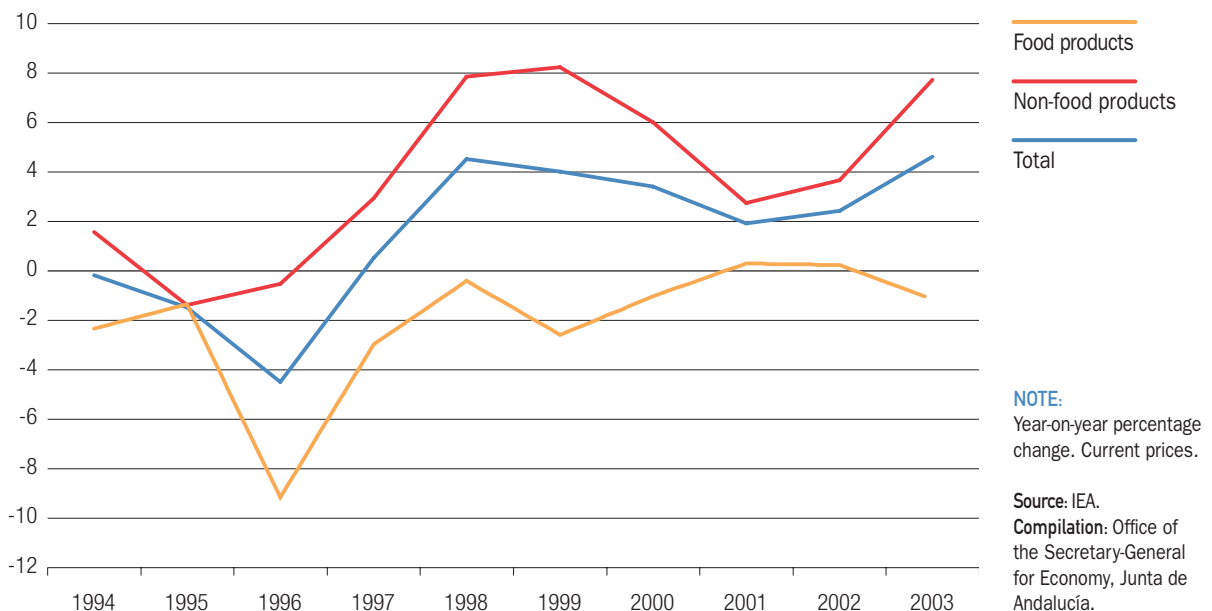
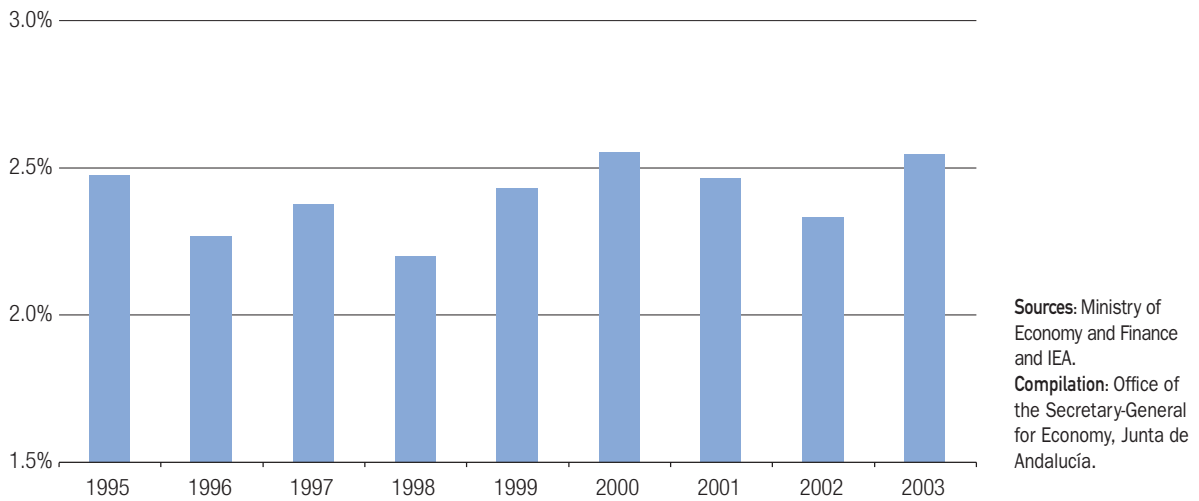


Chart 74. VAT COLLECTIONS AS A PERCENTAGE OF GDP. ANDALUSIA



The proportion of Andalusian households whose income and expenditure levels allowed them to save fell in 2003 by 1.4 percentage points to 32.6%. In Spain as a whole, the proportion of households able to save fell by the same amount to 35.3%.

Likewise, the percentage of households in Andalusia that considered it a good time to purchase big-ticket items (excluding house buying) fell in 2003 to 8.8%, 0.7 less than the previous year, while nationally it fell by one percentage point to 11.5%.

Chart 75. HOUSEHOLD EXPENDITURE BREAKDOWN

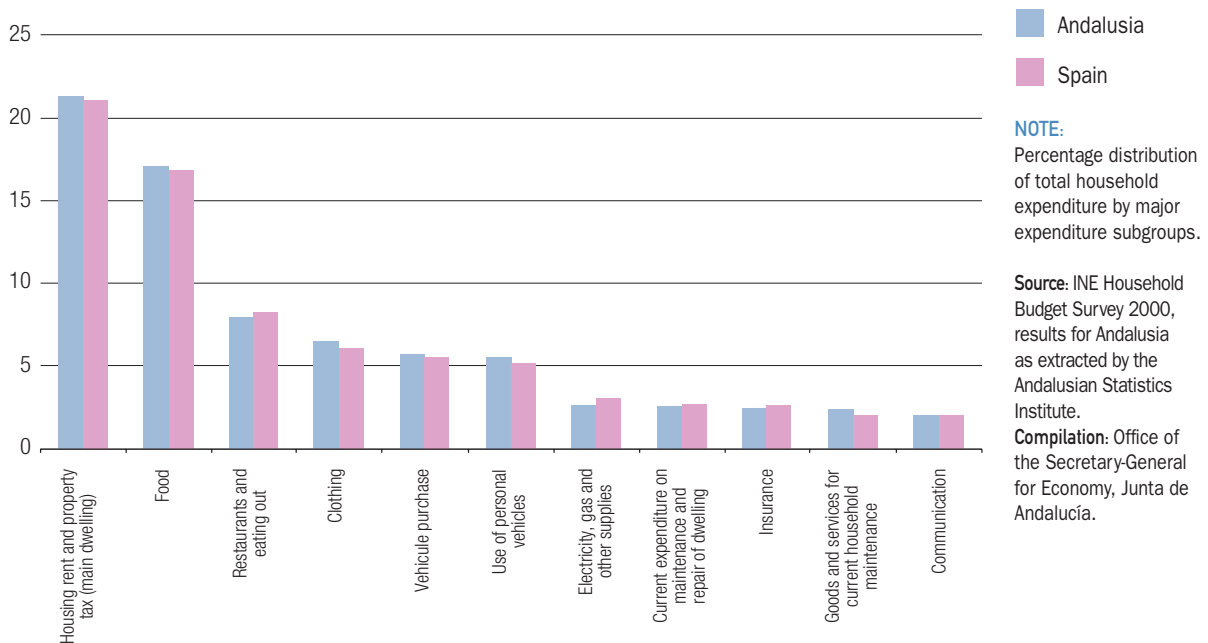
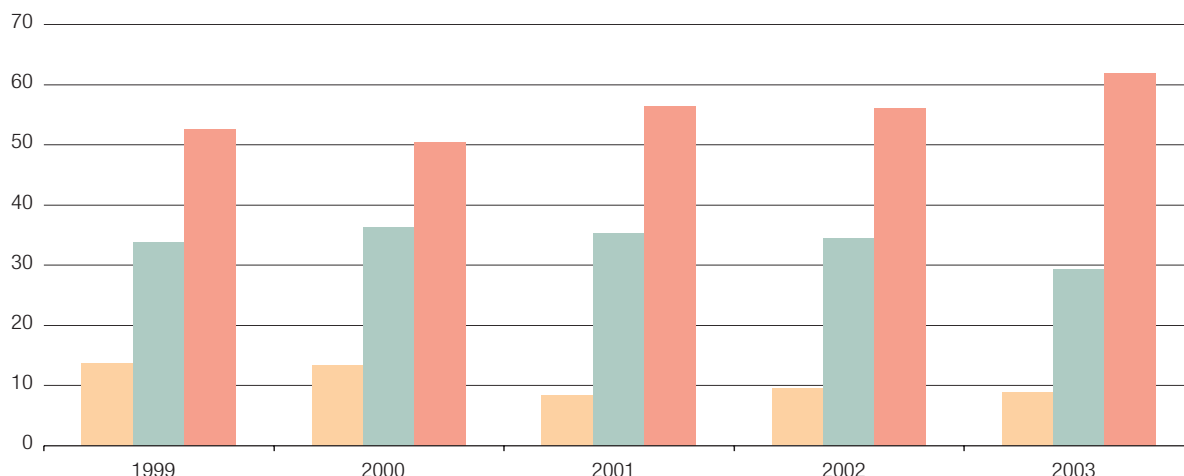




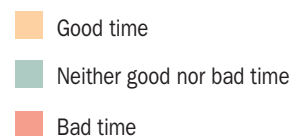
Chart 76. PURCHASE INTENTIONS FOR BIG-TICKET ITEMS. ANDALUSIA

**NOTES:**

As a percentage of total number of households. In general terms, big-ticket items are durable consumer goods other than housing, such as TV sets, refrigerators, washing machines, furniture, cars, etc.

Source: INE Household Budget Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



## Investment

Investment, which accounts for around a quarter of domestic demand in Andalusia, showed better results in 2003 than it did the previous year, with increases in investment in both construction and capital goods.

Investment in construction maintained the sustained dynamic momentum that has characterised it in recent years, in step with robust growth in the sector. The construction industry was the fastest-growing sector in Andalusia and registered a higher rate of expansion in 2003 than it did the previous year. Real GVA growth in Andalusian construction was 7.5%, 1.6 percentage points up on the 2002 rate and substantially higher than the rate averaged by the industry in Spain as a whole (3.6%).

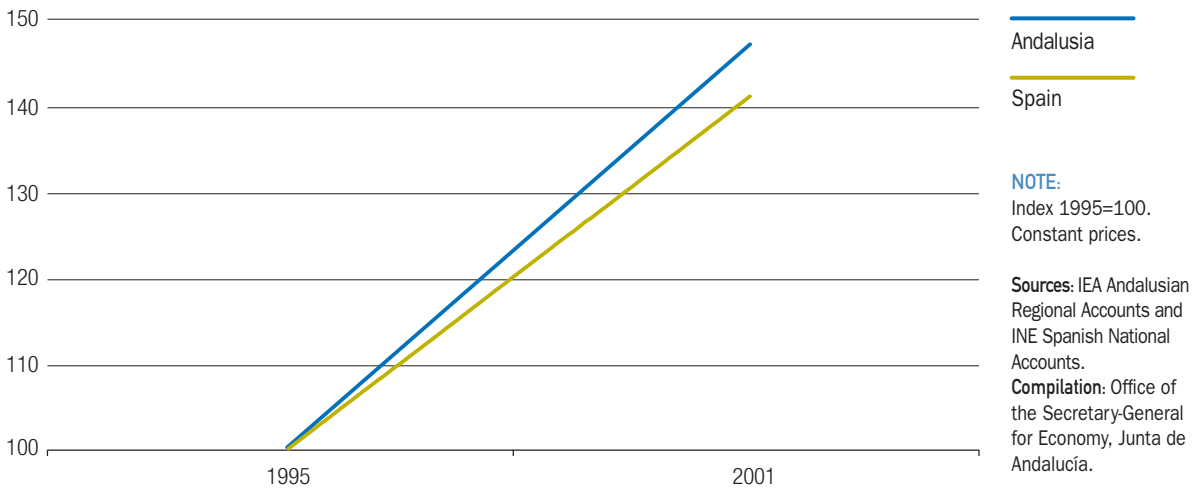
The rate of growth of domestic production of capital goods in Andalusia quickened in 2003 to 4.9%, significantly higher than the 0.8% increase registered nationally. On the contrary, imports of capital goods

fell by 6.5%, a sharp downturn after the robust growth registered in 2002, as the result of a single transaction, which was very significant in quantitative terms, that is, the importation of a ship from South Korea.

The volume of investment channelled through regional economic incentive schemes in Andalusia amounted to over 1,271 million euro, 41% more than in 2002. The number of projects approved as part of these schemes (154) was 6.2% up on the previous year's figure, so that the average amount invested per project increased by a significant 32.7% to 8.3 million euro.

A breakdown by project size highlights the importance of the highest bracket in 2003. The six projects worth over 30 million euro, including two for over 250 million euro, totalled investments amounting to 904 million euro, accounting for 71.1% of the total. The three biggest projects were for capital expenditure in the mining and quarrying of metal ores, the manufacture of aircraft and the chemical industry.

Chart 77. **GROSS CAPITAL FORMATION**



The industrial sector therefore headed the ranking of investment approved as part of these schemes, accounting for 88.6% of planned investment and 70.8% of the total number of projects.

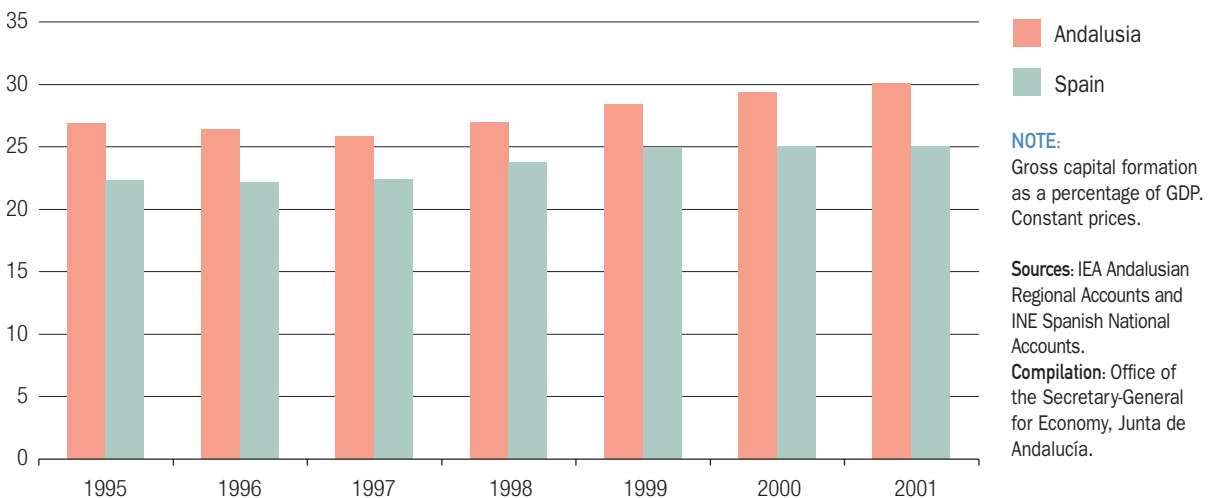
The remaining 11.4% was for investment projects in the service sector, mainly in the hotel and restaurant sector.

A provincial breakdown of these figures shows that Seville concentrated 46.4% of planned investment,

with two projects, one for the mining and quarrying of metal ores and one for the manufacture of aircraft, accounting for 87.9% of the total.

The second largest proportion of projected investment was registered in the province of Cadiz, with Jaén a distant third. These three provinces also recorded the biggest year-on-year increases in projected investment. The remaining provinces saw a fall in investment, with particularly sharp reductions in Almeria and Huelva.

Chart 78. **GROSS CAPITAL FORMATION AS A PERCENTAGE OF GDP**



### Box 9. SPENDING PATTERNS IN ANDALUSIA

The Household Budget Survey conducted by the National Statistics Institute (INE) provides information on household final consumption expenditure, income structure, household appliances and living conditions. It therefore permits an analysis of patterns of personal spending from different perspectives.

The latest detailed Household Budget Survey figures available on Andalusia are for the year 2000. They reveal that total household consumption expenditure in the region was 39,925 million euro, 16% of the national total.

Average expenditure per person in Andalusia was 5,535 euro in 2000. The region is gradually catching up with the national average; in 2000 the regional figure was 86.8% of the national average, up 3.2 percentage points on the percentage recorded in 1998, the first year for which a consistent dataset is available following the methodological changes to the survey introduced in 1997. Andalusia came third to last in the national ranking of average spending per person ahead of Extremadura and Castilla-La Mancha.

A geographical breakdown shows that expenditure per person increases with the population size of the municipality. In big towns and cities, that is, those with over 100,000 inhabitants, personal expenditure exceeded the Andalusian average by 8.6% in 2000, in medium-sized towns and cities (between 20,000 and 100,000 inhabitants) expenditure per person was 3.9% above the regional average and in small towns and rural villages (less than 20,000 inhabitants) it was 11.1% below the average.

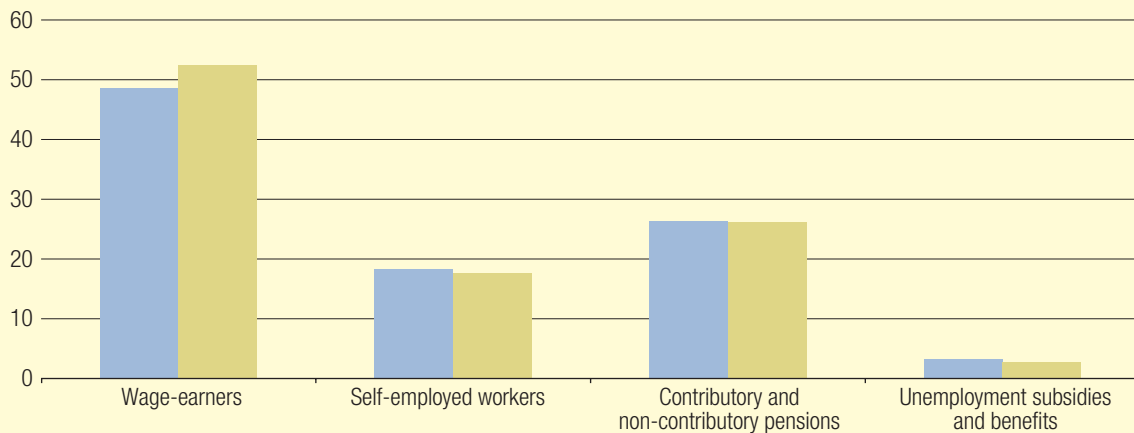
A breakdown by household size shows that spending by one-person households exceeded the Andalusian average by 52.3%, spending by households containing two or three members was also above the average, and spending by households with four or more people was 8.6% below the average.

Personal expenditure also increases according to the level of qualifications of the head of household. For people who did not progress past the first cycle of secondary education, average spending was 13.8% below the Andalusian average, for those who finished the second cycle of secondary education, it was 9.7% above the average, and for those who completed further education, it was 60% higher.

A breakdown by main source of income reveals that the highest levels of personal spending are by households whose head receives a regular income working for an employer (2.8% above the average), followed by those whose head is self-employed (2.1%). When the main source of income is a pension, average spending is 5.1% lower than the regional average, and when it is unemployment benefit, it is 25.2% lower.

Spending patterns according to broad categories of expenditure were similar in Andalusia and Spain. In 2000 in Andalusia, 21.3% of spending was on rent and property tax on the principal place of residence, food accounted for 17.1% of expenditure, followed by eating out, which accounted for 7.9%. The other three groups, which accounted for more than 5% of total expenditure, were clothing (6.5%), vehicle purchase (5.7%) and the use of personal vehicles (5.6%). These six groups accounted for almost two-thirds of all personal expenditure in Andalusia.

**TOTAL EXPENDITURE BY MAIN SOURCE OF INCOME**



**NOTE:**

Percentage distribution of expenditure by main source of income of main income provider.

Source: INE Household Budget Survey 2000.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

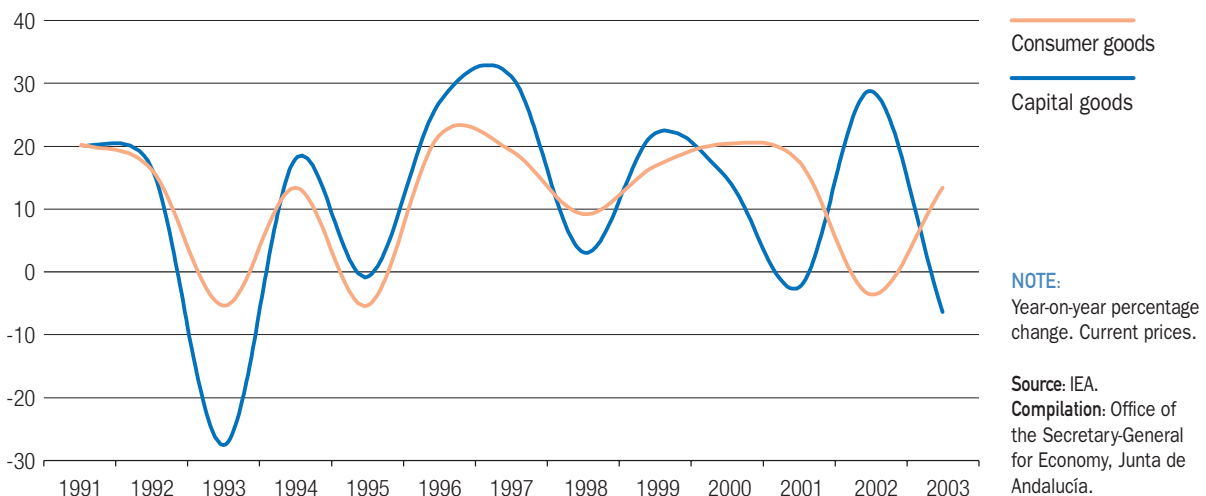
■ Andalusia  
■ Spain

**Imports and exports**

In the context of a pick up in world trade, Andalusia's trade with other countries expanded at a faster rate in 2003 than it did in 2002. Andalusia registered the highest import and export growth in three years, spurred by the strong appreciation of the euro.

Andalusian exports rose in nominal terms by 8.7% in 2003, and imports by 9.3%. Foreign trade therefore detracted from nominal GDP growth in Andalusia in 2003, and the trade deficit widened by 17.8%. However, Andalusia's trade deficit, at 0.7% of GDP, was significantly smaller than the national deficit, which was 6.2% of GDP.

Chart 79. **IMPORTS. ANDALUSIA**



**NOTE:**

Year-on-year percentage change. Current prices.

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 37. **PROJECTS APPROVED UNDER REGIONAL ECONOMIC INCENTIVE SCHEMES. ANDALUSIA. YEAR 2003**

	No. of projects	Capital expenditure	
		€ thousand	% of total
<b>INDUSTRIAL SECTOR</b>	<b>109</b>	<b>1,125,812</b>	<b>88.6</b>
Mining of metal ores	1	263,877	20.8
Other mining and quarrying	1	3,333	0.3
Manufacture of food products and beverages	7	19,723	1.6
Manufacture of textiles	4	3,590	0.3
Fur and clothing industries	1	803	0.1
Manufact. of wood and prod. of wood and cork, except furniture	2	14,713	1.2
Manufacture of pulp, paper and paper products	5	13,385	1.1
Publishing, printing and reproduction of recorded media	8	11,786	0.9
Manufact. of chemicals, chemical prod. and man-made fibres	9	197,426	15.5
Manufacture of rubber and plastic products	7	7,751	0.6
Manufacture of other non-metallic mineral products	7	8,568	0.7
Manufacture of basic metals	3	22,013	1.7
Manufacture of fabricated metal products (except machinery)	14	18,893	1.5
Manufacture of machinery and equipment n.e.c.	4	14,151	1.1
Manufacture of office machinery and computers	1	978	0.1
Manufacture of electrical machinery and apparatus n.e.c.	1	4,237	0.3
Manufact. of electronic, radio, telev. and communication equip. and apparatus	1	725	0.1
Manufact. of medical, precision and optical instrum., watches and clocks	1	5,118	0.4
Manufacture of motor vehicles, trailers and semi-trailers	7	75,069	5.9
Manufacture of other transport equipment n.e.c.	6	399,935	31.5
Manufacture of furniture; manufacturing n.e.c.	13	14,281	1.1
Recycling	6	25,457	2.0
<b>SERVICE INDUSTRIES</b>	<b>45</b>	<b>144,936</b>	<b>11.4</b>
Wholesale trade and commission trade except of motor vehicles and motorcycles	1	990	0.1
Hotels and restaurants	39	128,476	10.1
Sport, culture and recreational activities	5	15,470	0.0
<b>TOTAL</b>	<b>154</b>	<b>1,270,748</b>	<b>100.0</b>

Source: Andalusian Ministry of Innovation, Science and Business.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

# 7.

## Foreign Trade and Investment in Andalusia



## Foreign Trade and Investment in Andalusia

Andalusia's international economic activity in 2003 was characterised by an appreciable increase in trade with other countries, further advancing the integration of the Andalusian economy in world markets, and a positive balance of capital inflows and outflows in the form of investment.

Foreign trade figures for 2003 show an overall 9% nominal increase in trade flows between Andalusia and other countries, with import growth, at 9.3%, outpacing export growth, at 8.7%.

As imports rose more sharply than exports, Andalusia's trade balance with other countries deteriorated in 2003, although its trade deficit, at just 0.7% of GDP, was much smaller than the national deficit, which was 6.2% of GDP.

As the volume of Andalusia's foreign trade grew at a faster rate than GDP, the region's trade openness, measured by imports plus exports as a percentage of GDP, rose slightly to 22.5%, while its export share, that is total exports of goods as a percentage of exportable goods (agricultural and industrial goods), rose by 3.6 percentage points to 59.8%.

Foreign investment figures taken from the Investment Register compiled by the Ministry of Industry, Tourism and Trade reveal that, continuing the trend of recent

years, Andalusia registered net inflows of foreign direct investment (FDI), while Spain as a whole registered net outflows.

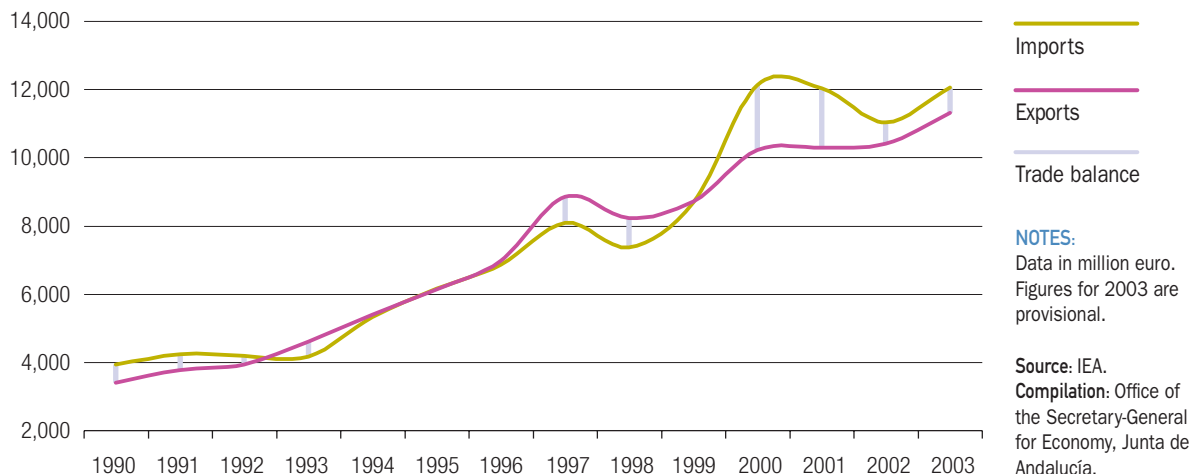
In specific terms, inward foreign investment in Andalusia exceeded outward foreign investment by 169 million euro in 2003. In Spain as a whole, however, the overall balance showed a net outflow of capital, with outward investment exceeding inward investment by 4,448 million euro.

### FOREIGN TRADE

#### Overview

Trade flows between Andalusia and other countries expanded appreciably in 2003, following two years of decline. Exports picked up in spite of the economic slowdown experienced by the European Union, the main purchaser of Andalusian products, up 8.7% on the previous year to 11,306 million euro. Imports grew by 9.3% to 12,056 million euro, and therefore at a faster rate than exports, in a context of rising crude oil prices on world markets, stronger growth in Andalusia than in comparable economies and the appreciation of the euro against the dollar.



Chart 80. **ANDALUSIAN FOREIGN TRADE**

The trade balance therefore continued to show a deficit, albeit small. Specifically, in 2003 Andalusia's trade balance showed a deficit of 750.1 million euro, equal to 0.7% of GDP, while the national deficit was 6.2% of GDP. The fact that import growth outpaced export growth also meant that the export/import ratio fell by four tenths of point, although this was half the reduction registered nationally.

The overall volume of Andalusia's trade with other countries, that is imports plus exports, amounted to 23,362 million euro in 2003, 9% up on the previous year's figure.

Trade flows between Andalusia and other countries therefore expanded two percentage points faster than GDP, so that the region's trade openness rose slightly to 22.5%.

Likewise, the export share, that is, total exports of goods as a percentage of exportable goods (agricultural and industrial goods), rose by 3.6 percentage points to 59.8% of agricultural and industrial GVA, revealing that the Andalusian economy's export propensity was higher in 2003 than it was in 2002.

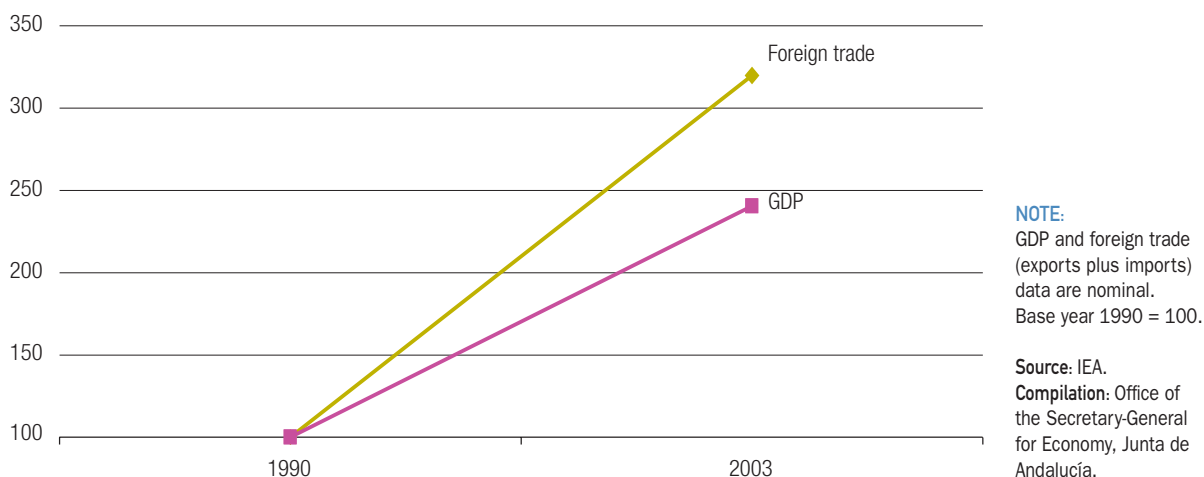
Chart 81. **GDP AND FOREIGN TRADE. ANDALUSIA**

Table 38. UNIT VALUE INDEXES OF EXPORTS AND IMPORTS. YEAR 2003

	IMPORTS		EXPORTS	
	Andalusia	Spain	Andalusia	Spain
<b>BY DESTINATION</b>				
Consumer goods	3.3	-0.1	-1.2	-0.6
Intermediate goods	2.4	1.4	-0.2	1.4
Capital goods	0.2	-7.6	-1.6	-8.0
<b>BY GEOGRAPHIC AREA</b>				
EU countries	4.9	0.6	3.1	2.2
Rest of world	3.2	-2.6	-5.4	-7.5
<b>TOTAL</b>	<b>4.3</b>	<b>-0.4</b>	<b>-0.7</b>	<b>-0.8</b>

**NOTE:**  
Percentage change on previous year.

**Sources:** IEA and Ministry of Economy and Finance.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

The unit value indices for foreign trade published by the Andalusian Statistics Institute (IEA) permit an analysis of datasets of nominal imports and exports with inflation factored out to provide an insight into the evolution of trade flows between Andalusia and other countries in real terms.

According to these figures, the unit value index for Andalusian imports shows a 4.3% increase in import prices in 2003, while nationally they fell by four tenths of a point.

Taking into account import price growth, real imports rose by 5% in Andalusia in 2003, and therefore at a slower rate than in Spain as a whole, where they rose by 7%.

On the other hand, export prices were 0.7% down on the previous year, one tenth of a point less than the reduction in export prices registered nationally.

A breakdown according to the economic destination of goods exported to other countries shows that prices for capital goods registered the sharpest fall (-1.6%), followed by consumer goods (1.4%), while prices for intermediate goods remained at practically the same level as in 2002.

Taking into account export price growth, real exports rose by 9.5% in Andalusia in 2003, compared with a 6.2% increase in Spain as a whole. The region's pace of internationalisation therefore quickened and Andalusia increased its share in the world market, as

world trade registered 4.5% real growth according to International Monetary Fund estimates.

Based on the information on Andalusian export and import prices, which is only available from the year 2000, it can be seen that the evolution of trade flows in nominal terms between the region and other countries in the last three years has been influenced by a fall in foreign trade prices. Specifically, since 2000 export prices have fallen by 1.5% and import prices by 6.6%, which means that Andalusia's nominal foreign trade growth quickened, in terms of volume, from 4.6% in 2000 to 9.1% in 2003.

### Breakdown by geographical area

A breakdown of 2003 trade flow figures for Andalusia by economic bloc reveals that Andalusian import growth was partly due to the sharp increase in imports from the OPEC area (21.2%), which accounted for just over 28% of total Andalusian imports, and partly due to the 11.8% increase in imports from the OECD, particularly Europe.

The increase in the value of OPEC imports can be attributed to the fact that world crude oil prices, after two years at around 24 US dollars a barrel, rose by 15.7% to 28.8 US dollars in 2003.

A breakdown by country reveals huge increases in imports, mainly of petroleum gas and crude oil, from

Table 39. **ANDALUSIAN FOREIGN TRADE. GEOGRAPHIC DISTRIBUTION. YEAR 2003**

	2003		EXPORT/IMPORT RATIO <sup>(1)</sup>		02-03 GROWTH %	
	Imports	Exports	2002	2003	Imports	Exports
OECD	5,905.6	9,288.5	165.0	157.3	11.8	6.6
European Union	4,605.3	7,675.6	188.7	166.7	17.8	4.1
Non EU Europe	391.5	408.1	124.6	104.2	57.7	32.0
America	637.1	935.4	104.9	146.8	-18.3	14.3
Asia	210.6	215.9	58.8	102.5	-30.4	21.3
Oceania	61.2	53.5	80.8	87.5	46.4	58.5
OPEC	3,458.8	307.6	10.3	8.9	21.2	4.3
NIC	42.4	70.2	129.1	165.7	0.4	28.9
REST OF COUNTRIES	2,649.4	1,639.7	46.7	61.9	-7.3	22.8
Europe	854.1	479.0	43.2	56.1	-8.5	18.9
America	542.5	245.8	34.5	45.3	-9.3	19.2
Asia	459.1	272.8	40.6	59.4	7.0	56.4
Africa	763.8	402.8	38.2	52.7	-14.8	17.5
Oceania	29.5	3.7	1,329.6	12.6	11,825.6	12.9
Other countries n.e.c.	0.5	235.6	33,701.1	50,587.0	-23.6	14.6
<b>TOTAL</b>	<b>12,056.2</b>	<b>11,306.1</b>	<b>94.2</b>	<b>93.8</b>	<b>9.3</b>	<b>8.7</b>

**NOTES:**

Data in million euro.  
Figures for 2003  
are provisional.  
(1) Exports/Imports  
as percentages.

Source: IEA.  
Compilation:  
Office of the  
Secretary-General  
for Economy,  
Junta de Andalucía.

Iran (88.5%), Algeria (59.7%), Libya (44.8%), Nigeria (39.6%) and Saudi Arabia (13.2%). On the contrary, there was a fall in imports from Iraq, Kuwait and the United Arab Emirates, influenced by the climate of great uncertainty in these countries since early 2003.

The overall increase in imports from the OECD countries was the result of mixed trends in different areas. While imports from Europe and Oceania rose sharply, imports from the Americas and Asia fell.

Among the European countries that do not belong to the 15-member European Union, the only reduction was in imports from Poland, and the biggest increases were in imports from Norway, Switzerland, Turkey and the Czech Republic. Imports from the European Union, which accounted for 78% of the OECD total, grew by 17.8% in 2003, the result of mixed trends in different countries. The increases were substantially higher in the EU countries belonging to the euro area, particularly Finland, Italy, Germany and the Netherlands, and imports from Greece were twice as high as the previous year. There was a smaller

increase in imports from EU countries that have not adopted the single currency, as a result of a more moderate increase in imports from the United Kingdom. Imports from France were practically the same as in 2002, although it remained the second most important EU country in terms of imports to Andalusia.

The 17.8% nominal increase in imports from the European Union was due to an increase in both the monetary value and the volume of imports. Taking into account that the unit value index for imports from the EU fell by 4.9% in 2003, in real terms purchases from these countries were up 12.9% on 2002.

OECD countries that saw a reduction in imports to Andalusia were mainly countries in the Americas, specifically Mexico (-41.3%) and the United States (-16.9%), while imports from Canada rose, and countries in Asia, namely South Korea (-45.9%) and Japan (-12%).

Imports from the newly industrialised countries (NIC) remained practically the same as in 2002. A

Table 40. **ANDALUSIAN TRADE WITH EU COUNTRIES. YEAR 2003**

	2003		EXPORT/IMPORT RATIO <sup>(1)</sup>		02-03 GROWTH %	
	Imports	Exports	2002	2003	Imports	Exports
<b>EURO AREA</b>	3,910,795.1	6,273,737.8	181.8	160.4	19.1	5.1
Germany	667,775.5	1,361,912.8	237.1	203.9	26.5	8.8
Austria	45,242.9	70,136.6	160.3	155.0	14.1	10.4
Belgium	231,536.3	366,856.8	173.8	158.4	13.8	3.8
Finland	57,705.4	32,660.4	87.8	56.6	67.7	8.1
France	695,013.8	1,546,571.3	207.3	222.5	0.6	8.0
Greece	115,255.3	84,089.1	144.3	73.0	107.0	4.7
Ireland	206,192.3	20,726.7	13.7	10.1	13.2	-17.2
Italy	819,402.2	1,202,251.8	199.4	146.7	29.6	-4.7
Luxembourg	9,708.6	6,511.2	34.3	67.1	34.7	163.5
Netherlands	551,000.3	549,829.6	114.7	99.8	21.8	6.0
Portugal	511,962.5	1,032,191.5	208.1	201.6	12.0	8.5
<b>NON EURO AREA</b>	694,486.2	1,246,973.4	199.1	179.6	11.1	0.1
Denmark	112,839.7	66,502.0	71.2	58.9	14.2	-5.5
United Kingdom	479,284.1	999,217.0	234.2	208.5	8.1	-3.8
Sweden	102,362.4	181,254.4	164.0	177.1	23.1	32.9
<b>EUROPEAN UNION (*)</b>	4,605,281.3	7,675,618.5	188.7	166.7	17.8	4.1

**NOTES:**  
Data in million euro.  
Figures for 2003 are provisional.  
(1) Exports/Imports as percentages  
(\*) Total figures do not match the sum of exports because the destination countries of some trade operations are unknown.

Source: IEA.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

look at imports from other countries not included in any of these broad economic blocs shows a year-on-year reduction of 7.3%. Particularly noteworthy were the reductions of over 50% in imports from Bulgaria, Ukraine, Trinidad and Tobago, Equatorial Guinea, Zaire, Angola and Malaysia. On the contrary, there were significant increases in imports from New Caledonia, whose main import to Andalusia was iron nickel, from China, which exports mainly textiles and textile products and recording apparatus, and Cameroon, which supplies mainly crude oil to the region.

Special reference must be made to imports from the ten countries that joined the European Union on 1 May 2004, which were up 24.5% on the 2002 figure. Estonia, Latvia, the Czech Republic, Lithuania, Hungary and Slovenia registered significant increases in imports to Andalusia, while Cyprus, Poland, Slovakia and Malta saw a fall in imports.

The main importers in 2003 were Nigeria (9.9% of the total), Saudi Arabia (6.5%) and Italy (6.8%). Crude

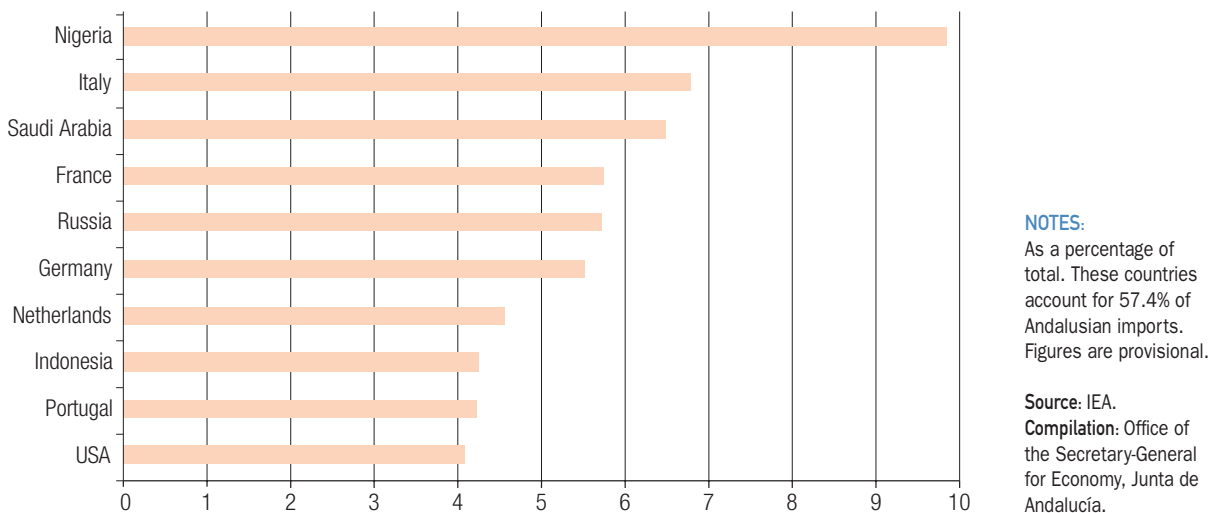
oil was the main import from the first two, and refined petroleum products from the latter.

Exports to the OECD—the destination of over 82% of the region's total exports—were 6.6% up on 2002, a significant increase, although lower than the average (8.7%), and exports to the OPEC area rose by 4.3%. There was a significant increase in exports to the NIC and other countries not included in any of these economic blocs, which increased their share in the OECD total by almost two percentage points to 15%.

There were increases in Andalusian exports to all three of the newly industrialised countries. Exports to Singapore almost doubled, those to Taiwan rose by more than 25% and there was a slight increase in exports to Hong Kong.

There were also sharp increases in exports to the countries not included in any of these economic blocs, particularly countries in Asia and the Americas. The Asian countries registering the biggest increases

Chart 82. MAIN COUNTRIES OF ORIGIN OF ANDALUSIAN IMPORTS. YEAR 2003



in Andalusian exports were Jordan, India and China, increasing their share in the total for this area from 24% in 2002 to 48.2% in 2003. China became the biggest market in Asia for Andalusian exports after Japan. Particularly noteworthy in terms of percentage share and with year-on-year increases of over 100% were Honduras, Costa Rica, Paraguay and Uruguay in the Americas. Andalusia has also seen a sharp increase in exports to African countries, particularly Egypt, Senegal, Angola and Guinea-Bissau.

The increase in Andalusian exports to the OPEC region was smaller than for other areas, at 4.3%, as a result of a fall in exports to Nigeria, Saudi Arabia, the United Arab Emirates and Venezuela, accounting for 40% of the total. The biggest increases were in exports to Libya, Indonesia and Qatar. It is significant that Iraq, which did not buy any products from Andalusia in 2002, did make purchases from the region, mainly sunflower seed, in 2003.

Exports to the OECD rose in 2003, in spite of the slight loss of price competitiveness suffered by the Andalusian economy vis-à-vis these countries. The real effective exchange rate between Andalusia and the OECD countries, which takes into account price and exchange rate differentials between the region and these countries, rose by 5.7%, resulting in a proportional loss of competitiveness.

Two factors contributed to this loss of competitiveness: the euro rose against other major currencies in 2003 and Andalusia registered higher price growth than the OECD countries.

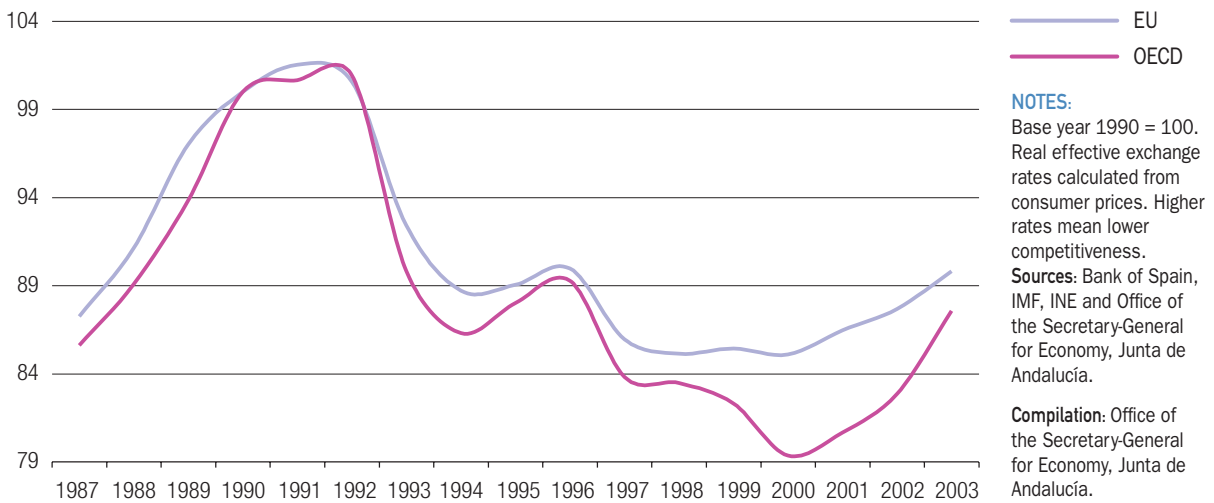
Within the OECD area, there was an increase in exports to the European Union, the destination of 68% of total Andalusian exports, although it was moderate in comparison with the increases registered for other geographic areas.

Exports to the European Union grew by 4.1% in nominal terms in 2003, in spite of the virtual economic stagnation of the European economies in 2003, where GDP growth was just 0.7%. In Andalusia's main export markets, France, Germany and Italy, which accounted for 54% of total Andalusian exports to EU countries, GDP growth was very weak or negative (0.2%, -0.1% and 0.4% respectively).

Taking into account the unit value index for exports to the European Union, sales to these countries showed 1% real growth in 2003.

These results for Andalusian exports to the EU were recorded in the context of a slight reduction in the price-competitiveness of the Andalusian economy vis-à-vis these countries. The real effective exchange rate between Andalusia and the EU increased by 2.4%,

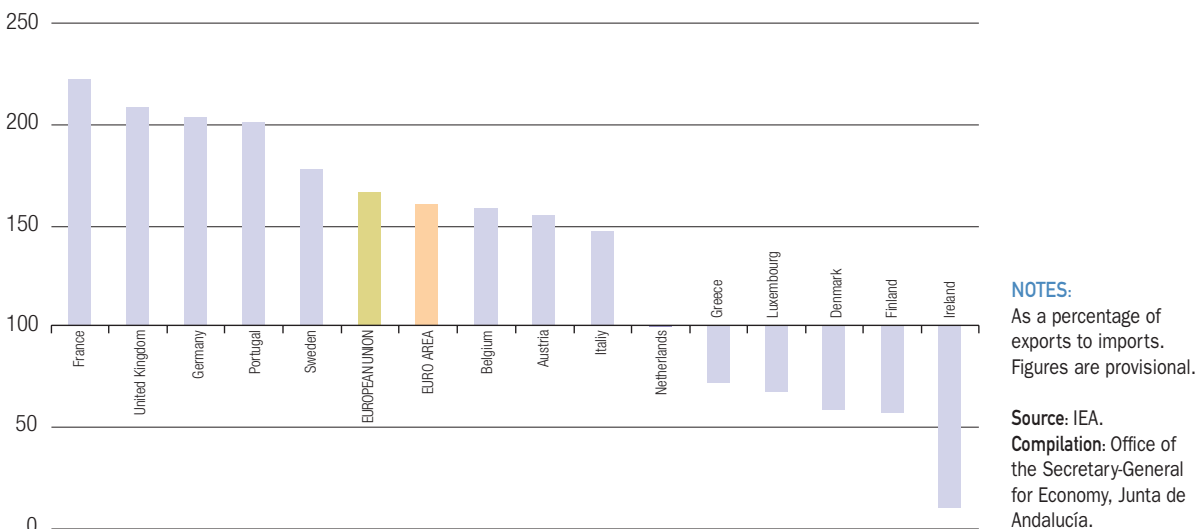
Chart 83. REAL EFFECTIVE EXCHANGE RATE FOR ANDALUSIA VIS-À-VIS THE EU AND THE OECD



which means that the region's price-competitiveness fell proportionally. The loss of competitiveness was due to relatively higher price growth in Andalusia and, to a lesser extent, exchange rate differentials, which, while only affecting competitiveness vis-à-vis the three countries which do not belong to the euro area, had an effect on exports to these countries, with a sharp fall in exports to Denmark and the United Kingdom, although exports to Sweden rose significantly, the main export being rolled stainless steel products.

Andalusia's exports to the euro area showed very good results in all the countries except Ireland and Italy, resulting in a significant overall increase of 5.1%. The highest increase was in exports to Luxembourg, almost tripling the previous year's figure. However, the overall upward trend of sales to the euro area can be largely attributed to increases in exports to Germany (8.8%), France (8%) and Portugal (8.5%), which account for a large proportion of the total.

Chart 84. EXPORT/IMPORT RATIO FOR ANDALUSIAN TRADE WITH THE EUROPEAN UNION. YEAR 2003



Concluding the analysis of Andalusian exports to OECD countries, there were increases in all the non-EU countries, except the United States, where they fell by 5.2%, influenced by the strong appreciation of the euro against the dollar. The biggest increases were in exports to Mexico, South Korea, Australia and Switzerland.

Exports to the EU enlargement countries, like imports, showed a strong upward trend, rising by 74.4%. The biggest increases were in exports to Slovenia, Slovakia and Poland. On the other hand, Andalusian exports to the Czech Republic, Malta and Cyprus fell.

France was once again the main destination of Andalusian exports, followed by Germany and Italy, which together accounted for over a third (36.4%) of total exports in 2003. Andalusia's main export to France and Italy was olive oil, followed by stainless steel, parts and accessories for motor vehicles and agricultural produce. The main exports to Germany were agricultural produce, including cucumbers, gherkins, peppers and strawberries, and stainless steel.

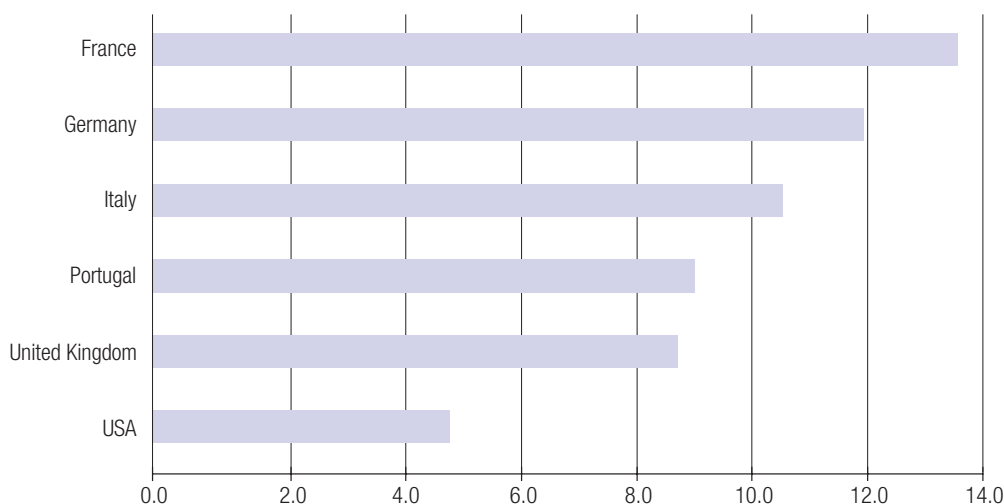
An analysis of Andalusia's trade balance by economic bloc once again reveals a surplus with the OECD, albeit slightly smaller than in 2002, and with the newly industrialised countries.

Andalusia's trade balance with the European Union, the region's main export market and the destination of 68% of Andalusian exports, evolved favourably, showing a surplus once again, although smaller than in 2002. Andalusia's trade surplus with the European Union amounted to 3,070.3 million euro in 2003, equivalent to 3% of Andalusian GDP.

A breakdown by country shows that Andalusia's trade balance showed a surplus with all the EU countries except the Netherlands, Greece, Luxembourg, Finland and Ireland within the euro area, and Denmark outside it. Andalusia's biggest trade surplus was with France, with an export/import ratio of 222.5%, which means that exports to this country were 2.2 times higher than imports from it. The export/import ratio was also higher than the EU average (166.7%) for the United Kingdom, Germany and Portugal, where exports doubled imports, and Sweden, where exports were 1.7 times higher than imports.

Andalusia's trade flows with the EU enlargement countries were particularly favourable in 2003. Andalusia's trade balance with these countries showed a surplus of 176,743.3 million euro in 2003, more than double the previous year's figure, and resulting in an export/import ratio of 350.4%. A breakdown by country shows that only the three Baltic Republics export more to Andalusia than they import

Chart 85. **MAIN DESTINATIONS OF ANDALUSIAN EXPORTS. YEAR 2003**

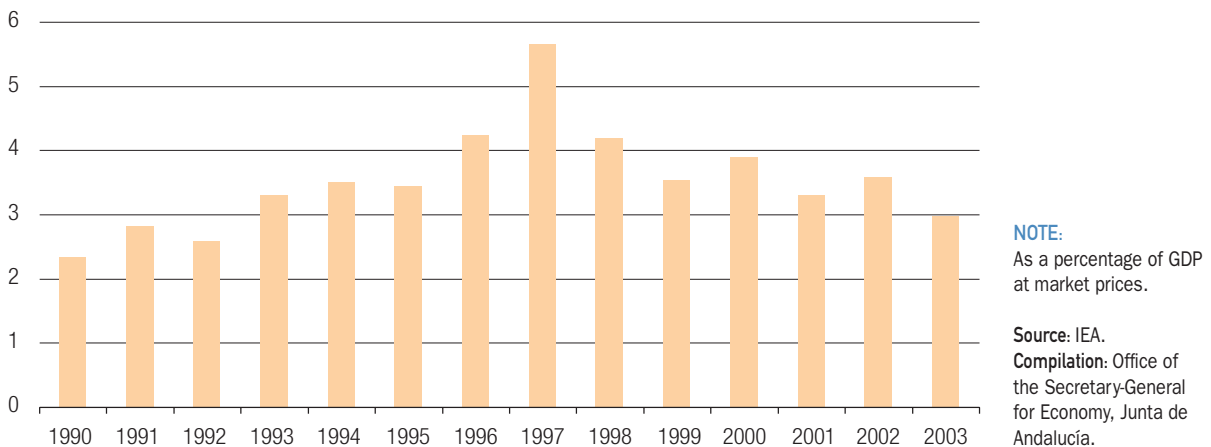


**NOTES:**

As a percentage of total. These countries account for 59.2% of Andalusian exports. Figures are provisional.

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 86. **ANDALUSIAN TRADE BALANCE WITH THE EU**

from it. Andalusia's most favourable trade exchanges were with Poland, Slovenia, Slovakia and the Czech Republic, with export/import ratios of over 300%, up on the previous year in the first three cases.

A provincial breakdown of Andalusia's foreign trade figures reveals favourable trends in all the provinces except Jaén, where both imports and exports fell, and Malaga, where exports fell.

The highest increases in imports were recorded in Cadiz (16.2%) and Granada (15.7%), while at the other end of the scale were Huelva, with a slight increase of 0.7% and Jaen with a 3.3% drop in imports. The sharpest increases in exports were observed in Cadiz (15.5%) and Seville (15.4%), while

the poorest export results were recorded in Cordova, with a 0.6% increase, and in Malaga and Jaen, where exports fell by 4.5% and 1.8% respectively.

A comparative analysis of exports and imports shows that Cadiz, accounting for over a third of total foreign trade (33.7%), was the province that recorded the highest increase in trade flows (15.9%). At the other end of the scale, Jaen, accounting for only a small proportion of total foreign trade, saw a 2.4% reduction in trade exchanges.

Almería once again showed the biggest surplus, with the value of exports 3.5 times higher than the value of imports. The provinces of Cordova, Granada, Jaen and Seville also showed a trade surplus, while

Table 41. **FOREIGN TRADE. BREAKDOWN BY PROVINCE. YEAR 2003**

	2003		EXPORT/IMPOR RATIO <sup>(1)</sup>		02-03 GROWTH %	
	Imports	Exports	2002	2003	Imports	Exports
Almeria	453,573	1,578,577	345.1	348.0	5.2	6.1
Cadiz	4,454,656	3,409,893	77.0	76.5	16.2	15.5
Cordova	355,205	783,802	241.2	220.7	10.0	0.6
Granada	431,769	591,765	144.5	137.1	15.7	9.8
Huelva	3,117,756	1,495,365	45.5	48.0	0.7	6.1
Jaen	438,161	579,474	130.2	132.3	-3.3	-1.8
Malaga	1,174,493	853,691	84.8	72.7	11.4	-4.5
Seville	1,630,538	2,013,490	118.8	123.5	11.0	15.4
<b>ANDALUSIA</b>	<b>12,056,153</b>	<b>11,306,056</b>	<b>94.2</b>	<b>93.8</b>	<b>9.3</b>	<b>8.7</b>

**NOTES:**  
In thousand euro.  
Figures for 2003 are provisional.  
(1) Exports/Imports as percentages.

**Source:** IEA.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.



Malaga, Cadiz and, to a greater extent, Huelva continued to show a deficit.

## Breakdown by sector

An analysis of Andalusia's trade exchanges with other countries according to sector of origin and destination shows that the region's foreign trade is concentrated in industry.

Specifically, industry accounted for 82.8% of trade flows in 2003, the primary sector for 14.4% and the service sector for 2.8%.

The industrial sector accounted for an even higher proportion of Andalusian imports, specifically, 92.7%

of the total. The most significant branches of industry in this regard were the mining and quarrying of energy producing materials, followed by the manufacture of basic metals and fabricated metal products and food products, beverages and tobacco, which together accounted for over half of the region's industrial imports.

With regard to exports, the industrial sector accounted for 72.3% of the regional total, the most significant branches being food products, beverages and tobacco, accounting for 26.1% of Andalusian industrial exports, and the manufacture of basic metals and fabricated metal products.

A comparison with figures for the previous year shows that industrial exports and, to a greater

Table 42. **ANDALUSIAN FOREIGN TRADE BY ECONOMIC SECTOR. YEAR 2003**

	2003				02-03 growth %	
	Imports		Exports		Imports	Exports
	€ thousand	% of total	€ thousand	% of total		
<b>PRIMARY SECTOR</b>	645,810.9	5.4	2,724,037.7	24.1	-15.7	2.0
Crop and animal farming, hunting and forestry	537,243.1	4.5	2,649,769.4	23.4	-19.2	2.0
Fishing	108,567.7	0.9	74,268.3	0.7	7.1	2.2
<b>INDUSTRY</b>	11,174,203.8	92.7	8,179,234.5	72.3	12.0	9.8
Mining and quarrying of energy producing materials	3,626,789.3	30.1	2,347.6	0.0	2.2	132.3
Mining and quarrying, except of energy producing materials	724,431.5	6.0	50,378.1	0.4	2.4	-8.6
Manufacture of food products, beverages and tobacco	1,083,360.5	9.0	2,132,949.0	18.9	6.7	-2.5
Manufacture of textiles and textile products	299,755.9	2.5	200,312.4	1.8	6.8	-1.4
Manufacture of leather and leather products	88,940.3	0.7	76,300.5	0.7	47.2	-8.2
Manufacture of wood and wood products	143,786.8	1.2	63,144.6	0.6	36.7	21.6
Manufacture of pulp, paper and paper products; publishing and printing	149,300.9	1.2	174,091.2	1.5	-0.3	-8.5
Manufacture of coke, refined petroleum products and nuclear fuel	710,932.6	5.9	987,131.8	8.7	62.6	10.7
Manufacture of chemicals, chemical products and man-made fibres	925,198.5	7.7	841,787.6	7.4	19.4	8.7
Manufacture of rubber and plastic products	145,798.5	1.2	123,306.3	1.1	2.1	14.2
Manufacture of other non-metallic mineral products	206,848.3	1.7	126,033.3	1.1	7.7	-1.8
Manufacture of basic metals and fabricated metal products	1,327,872.6	11.0	1,316,585.8	11.6	65.2	18.7
Manufacture of machinery and equipment n.e.c.	534,742.7	4.4	310,455.5	2.7	12.2	106.0
Manufacture of electrical and optical equipment	647,983.0	5.4	716,411.2	6.3	6.6	24.4
Manufacture of transport equipment	428,132.6	3.6	896,716.7	7.9	-22.0	18.6
Manufacturing n.e.c.	130,207.4	1.1	160,155.8	1.4	5.0	0.2
Production and distribution of electricity, gas, steam and hot water	122.3	0.0	1,127.2	0.0	-40.8	-94.3
<b>SERVICES</b>	236,140.4	1.9	402,785.8	3.6	-19.1	43.0
Computer-related activities	226.1	0.0	72.2	0.0	-5.2	-68.8
Other business activities	518.2	0.0	461.4	0.0	26.0	118.9
Sport, culture and recreational activities	6,174.5	0.0	1,021.7	0.0	101.8	-75.4
Extraterritorial entities	229,221.7	1.9	401,230.5	3.5	-20.4	44.8
<b>TOTAL</b>	12,056,155.1	100.0	11,306,058.0	100.0	9.3	8.7

### NOTE:

Figures for 2003 are provisional.

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

extent, imports, rose (9.8% and 12% respectively), strongly influencing overall trends, given that industry accounts for such a high proportion of total trade flows. In fact, import growth in Andalusia in 2003 was wholly attributable to the increase in industrial imports, offsetting the reductions in the other two sectors, particularly services.

The rise in industrial imports was largely due to a huge 65.2% increase in the manufacture of basic metals and fabricated metal products and a similar 62.6% increase in the manufacture of refined petroleum products and the processing of nuclear fuels. Industrial export growth was largely attributable to higher exports of machinery and equipment, basic metals and fabricated metal products, electrical, electronic and optical equipment and transport equipment, which easily outweighed the 2.5% drop in exports of food products, beverages and tobacco.

Import growth outpaced export growth in the industrial sector, so that its trade balance continued to show a deficit, which stood at 2,941 million euro.

After industry, the primary sector was the most important in terms of foreign trade transactions, recording particularly high export figures, with agricultural exports accounting for 24.1% of the total in 2003.

In contrast with the industrial sector, the primary sector saw a substantial 15.7% fall in imports, while exports rose by 2%, resulting in a trade balance surplus of almost 2,078.2 million euro, 9.2% higher than the previous year's figure.

The overall volume of foreign trade carried out by the service sector was negligible. There was a 19.1% drop in imports in 2003, while exports rose by 43%,

Table 43. **ANDALUSIAN FOREIGN TRADE. TARIFF SECTIONS. YEAR 2003**

	2003		Export/Import ratio <sup>(1)</sup>		02-03 growth %	
	Imports	Exports	2002	2003	Imports	Exports
I. Live animals; animal products	430,413.4	270,733.7	59.8	62.9	0.7	6.0
II. Vegetable products	468,406.1	2,786,963.5	480.8	595.0	-17.0	2.8
III. Animal or vegetal fats and oils	98,456.7	952,179.2	1,936.2	967.1	78.9	-10.6
IV. Food products, beverages and tobacco	679,992.8	806,808.0	119.5	118.6	2.4	1.7
V. Mineral products	5,159,515.9	1,422,174.3	27.4	27.6	7.7	8.4
VI. Products of the chemical or allied industries	800,752.2	732,786.0	103.1	91.5	22.1	8.4
VII. Plastics and articles thereof; rubber and articles thereof	266,646.9	190,847.1	74.4	71.6	10.6	6.3
VIII. Raw hides and skins, leather, furskins and articles thereof	55,503.7	62,617.7	149.1	112.8	-5.2	-28.3
IX. Wood and articles of wood; wood charcoal; cork and articles of cork	184,967.8	79,903.9	40.7	43.2	13.1	20.0
X. Pulp of wood of other cellulosic material; paper and paperboard	144,384.7	173,409.6	130.5	120.1	-0.4	-8.3
XI. Textiles and textile articles	290,721.4	219,922.4	73.5	75.6	5.9	8.9
XII. Footwear, headgear, umbrellas	51,600.9	18,774.4	63.4	36.4	159.2	48.8
XIII. Articles of stone, plaster, cement, asbestos, mica or similar materials	114,204.0	115,671.7	100.1	101.3	-0.8	0.5
XIV. Natural or cultured pearls, precious or semi-precious stones, precious metals	67,867.5	50,578.5	142.8	74.5	68.7	-11.9
XV. Base metals and articles of base metal	1,214,478.8	1,064,987.3	113.3	87.7	56.6	21.1
XVI. Machinery and mechanical appliances; electrical equipment	1,259,467.2	878,530.2	52.0	69.8	18.4	58.9
XVII. Vehicles, aircraft, vessels and associated transport equipment	381,635.3	887,060.3	151.5	232.4	-23.0	18.2
XVIII. Optical, photographic, cinematographic, etc.	111,239.7	153,082.5	194.7	137.6	24.5	-12.0
XIX. Arms and ammunition	12,071.2	3,068.8	107.3	25.4	253.0	-16.4
XX. Miscellaneous manufactured articles	113,445.3	130,634.0	106.4	115.2	9.6	18.6
XXI. Works of art, collectors' pieces and antiques	1,503.8	107.7	20.3	7.2	-27.7	-74.5
SOO. Not classifiable	148,878.0	305,215.7	70.9	205.0	-47.6	51.4
<b>Total</b>	<b>12,056,153.1</b>	<b>11,306,056.3</b>	<b>94.2</b>	<b>93.8</b>	<b>9.3</b>	<b>8.7</b>

**NOTES:**

In thousand euro. Figures for 2003 are provisional.

(1) Exports/Imports as percentages.

Source: IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

resulting in a surplus of 166.6 million euro, compared with the deficit recorded in 2002.

### Breakdown by product

A breakdown of foreign trade figures according to tariff sections reveals that the positive results in 2003 were largely due to considerable increases in mineral products (7.7%), chemicals and chemical products (22.1%), basic metals (56.6%) and electrical machinery and apparatus (18.4%).

There were, however, other significant tariff sections that recorded negative import growth, including vegetable products (-17%) and transport equipment (-23%).

A more detailed analysis of Andalusia's imports according to type of product shows that they were concentrated in a small number of products, the main one being crude oil, which accounted for 25.7% of total imports. A long way behind came imports of refined petroleum products, accounting for 5.6% of the total, petroleum gas, iron and steel waste and scrap, copper ores and concentrates and crude petroleum, natural gas and derived products, all accounting for around 3% of the total.

The best export results were achieved by electrical machinery and apparatus, which accounted for almost 8% of the region's total in 2003 and rose year on year by 58.9%.

There were also significant increases in exports of basic metals (21.1%), transport equipment (18,2%), mineral products (8.4%) and chemicals and chemical products (8.4%).

The slight 2.8% rise in exports of vegetable products was also significant, in view of the fact that they accounted for almost a quarter of total exports. This slower rate of growth compared with the average was largely due to poor output results in the primary sector in the 2002-2003 crop year.

The sharpest reductions were in exports of edible oils and fats, hides, skins and leather, pulp, paper

and paper products and optical instruments and photographic equipment.

A breakdown of exports by product reveals that they were more diversified than imports. The main Andalusian export in 2003 was refined petroleum products, which saw an 11.4% rise in sales to other countries and accounted for 8.4% of the total. Over 68% of these exports were to non-EU countries. In second place was olive oil, 80% of which was exported to EU countries and which accounted for 8% of total exports. It was followed by stainless steel (5.7% of the total) and a varied group of products, each accounting for around 3% of the total, including tomatoes, peppers, aircraft and aircraft components, processed and preserved olives and parts and accessories for motor vehicles.

An analysis of the trade balance by tariff section reveals that the fats and oils section maintained its surplus, with exports almost ten times higher than imports. This was followed by vegetable products, with an export/import ratio of 595%, up sharply on the 2002 ratio, as imports fell and exports rose slightly.

The mineral products section showed the most significant deficit, in view of its share in total trade flows, amounting to 3,700 million euro, although its export/import ratio improved slightly compared with 2002.

## FOREIGN INVESTMENT

### Introduction

In accordance with Royal Decree 664/1999 of 23 April on foreign investment and implementing rules, foreign investment transactions must be reported and entered in the Investment Register kept by the Directorate General for Trade and Investment of the Ministry of Industry, Tourism and Trade.

The register provides the information required to measure investment flows in unlisted companies or

Table 44. **ANDALUSIAN IMPORTS BY PRODUCT. YEAR 2003**

PRODUCTS	From the EU	From rest of world	World total	
	€ thousand	€ thousand	€ thousand	% of total imports
Crude petroleum	0.0	3,093,673.3	3,093,673.3	25.7
Refined petroleum products	398,834.5	272,324.6	671,159.1	5.6
Petroleum gases	4,723.5	424,982.1	429,705.6	3.6
Waste and scrap of iron and steel	345,520.1	40,347.6	385,867.7	3.2
Cooper ores and concentrates	24,846.2	311,260.2	336,106.4	2.8
Hydrocarbons and their derivatives	235,660.7	99,171.7	334,832.4	2.8
Precious metal ores and concentrates	147.6	277,836.2	277,983.8	2.3
Crustaceans and molluscs	66,331.3	182,596.3	248,927.5	2.1
Spirits, liqueurs and other spirituous beverages	117,578.2	69,821.2	187,399.4	1.6
Wood in the rough, sawn or chipped, sliced or peeled	77,479.6	64,105.8	141,585.4	1.2
Prepared foods	135,193.2	357.9	135,551.1	1.1
Motor vehicle parts and accessories	59,440.3	53,162.0	112,602.2	0.9
Oilcake and other solid residues resulting from the extraction of soybean oil	699.5	105,014.3	105,713.8	0.9
Coal	300.4	104,216.3	104,516.7	0.9
Electronic integrated circuits and microassemblies	50,488.5	46,263.1	96,751.6	0.8
Steel and iron bars and wire rods	19,225.9	72,722.1	91,948.1	0.8
Hydraulic cements	32,425.3	57,730.5	90,155.8	0.7
Ferronickel	28,094.0	61,053.9	89,147.9	0.7
Angles, shapes and sections of iron or nonalloy steel	64,128.0	17,517.7	81,645.7	0.7
Tractors	79,971.9	1,020.5	80,992.4	0.7
Wheat (including flour)	66,029.0	13,166.7	79,195.6	0.7
Fish, fresh or chilled	28,789.1	47,839.0	76,628.0	0.6
Cigars, cheroots, cigarillos and cigarettes of tobacco	66,500.5	5,059.3	71,559.8	0.6
Nickel, not alloyed	17,351.0	53,264.1	70,615.0	0.6
Olive oil	45,877.3	21,136.0	67,013.3	0.6
Seeds, frutis and spores of a kind used for sowing	50,965.9	6,499.1	57,465.0	0.5
Steam boilers	1,200.4	56,246.0	57,446.5	0.5
Calcium phosphates	0.0	57,350.4	57,350.4	0.5
Fertilizers and nitrogen compounds	11,372.1	44,552.3	55,924.5	0.5
Ethylene polymers in primary forms	52,181.5	986.7	53,168.1	0.4
Aluminium plates, sheets and strip	8,197.9	40,864.6	49,062.6	0.4
Unmanufactured tobacco	20,900.1	27,477.8	48,377.9	0.4
Electrical capacitors	8,264.9	36,502.7	44,767.6	0.4
Corn (maize)	4,308.9	39,450.9	43,759.8	0.4
Steam turbines	392.6	41,438.6	41,831.2	0.3
Flat-rolled products of stainless steel	36,749.5	4,053.6	40,803.1	0.3
Rest of imports	2,445,113.5	1,599,807.4	4,044,920.9	33.6
<b>Total</b>	<b>4,605,283.0</b>	<b>7,450,872.2</b>	<b>12,056,155.2</b>	<b>100.0</b>

**NOTE:**

Figures are provisional.

Source: Compiled with information from the IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## 7. FOREIGN TRADE AND INVESTMENT IN ANDALUSIA

Table 45. **ANDALUSIAN EXPORTS BY PRODUCT. YEAR 2003**

PRODUCTS	From the EU	From rest of world	World total	
	€ thousand	€ thousand	€ thousand	% of total exports
Refined petroleum products	296,503.7	651,940.9	948,444.6	8.4
Olive oil	724,624.2	183,192.2	907,816.4	8.0
Stainless steel	521,790.9	121,293.9	643,084.9	5.7
Tomatoes	334,466.7	32,996.7	367,463.4	3.3
Peppers	310,124.4	25,426.8	335,551.2	3.0
Aircraft and parts thereof	153,953.2	164,197.8	318,151.0	2.8
Olives, prepared or preserved	95,967.3	218,868.5	314,835.8	2.8
Motor vehicle parts and accessories	246,071.4	65,162.7	311,234.1	2.8
Cucumbers, including gherkins, fresh or chilled	272,084.9	14,925.7	287,010.6	2.5
Strawberries	259,920.6	6,780.7	266,701.3	2.4
Ash and residues (other than from the manufacture of iron or steel), containing metals	21,983.7	227,910.7	249,894.4	2.2
Melons (including watermelons)	162,720.8	8,478.8	171,199.6	1.5
Copper and articles thereof	155,414.6	12,889.8	168,304.4	1.5
Wheat (including flour)	65,270.0	101,998.5	167,268.5	1.5
Motor cars and other motor vehicles principally designed for the transport of persons	145,774.2	15,674.9	161,449.1	1.4
Wine of fresh grapes and grape must other than non-alcoholic juices	125,249.7	22,649.9	147,899.7	1.3
Vegetable marrows	127,353.2	1,666.9	129,020.2	1.1
Peaches and plums	124,216.8	3,299.5	127,516.3	1.1
Phenols	70,376.9	53,068.9	123,445.8	1.1
Test drilling and boring machinery	0.0	120,613.1	120,613.1	1.1
Oranges	109,392.2	9,628.7	119,020.9	1.1
Spirits, liqueurs and other spirituous beverages	53,130.2	64,438.5	117,568.7	1.0
Hydrocarbons and their derivatives	91,819.8	23,509.3	115,329.1	1.0
Mixed alkylbenzenes and mixed alkyl naphthalenes	45,415.2	57,175.8	102,591.0	0.9
Chemical woodpulp soda or sulphate other than dissolving grades	68,930.5	20,276.8	89,207.3	0.8
Rices	80,675.1	6,791.9	87,467.0	0.8
Colouring matter (excluding colouring matter of vegetable or animal origin, synthetic organic colouring matter, synthetic organic products and certain dyes or other colouring matter)	51,676.0	32,947.1	84,623.1	0.7
Instruments and automatic apparatus to regulate and control pressure, temperature, etc.	79,775.8	2,753.2	82,529.1	0.7
Electrical lighting or signalling equipment	29,723.4	49,904.2	79,627.6	0.7
Lettuce	68,254.9	4,126.5	72,381.4	0.6
Fish, fresh or chilled	40,319.1	28,526.4	68,845.5	0.6
Electrical capacitors	49,945.0	17,246.0	67,191.0	0.6
Acetone	52,631.0	11,270.2	63,901.2	0.6
Cut flowers and flower buds	61,865.3	1,251.6	63,116.9	0.6
Pork meat	61,256.2	1,652.0	62,908.2	0.6
Poly(ethylene terephthalate)	47,924.4	10,881.3	58,805.7	0.5
Rest of exports	2,469,018.0	1,235,022.0	3,704,040.0	32.8
<b>Total</b>	<b>7,675,619.3</b>	<b>3,630,438.7</b>	<b>11,306,058.0</b>	<b>100.0</b>

**NOTE:**

Figures are provisional.

Source: Compiled with information from the IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

### Box 10. ANDALUSIAN OLIVE OIL EXPORTS

Olive oil is of great importance in Andalusia in both economic and social terms. Edible oils and their cleavage products produced in Andalusia, valued at current prices, accounted for almost 75% of these commodities produced nationally in 2003 and around a quarter of Andalusia's final crop output. There are over 1,400,000 hectares of olive groves in Andalusia, accounting for 30% of the region's crop land and 80% of the total area of olive groves nationally. Olive growing is also a very significant sector in terms of employment, as it accounts for 30% of agricultural employment and provides in the region of 23 million days of labour a year, according to the Regional Ministry of Agriculture and Fisheries.

Its repercussion on the Andalusian economy is also reflected in the region's foreign trade. According to foreign trade figures compiled by the Tax Office Customs and Excise Department and published by the Andalusian Statistics Institute (IEA), 907.8 million euro of olive oil was exported to other countries in 2003, accounting for 42.6% of food-industry exports and 8% of total Andalusian exports. This makes it the second biggest export, after refined petroleum products.

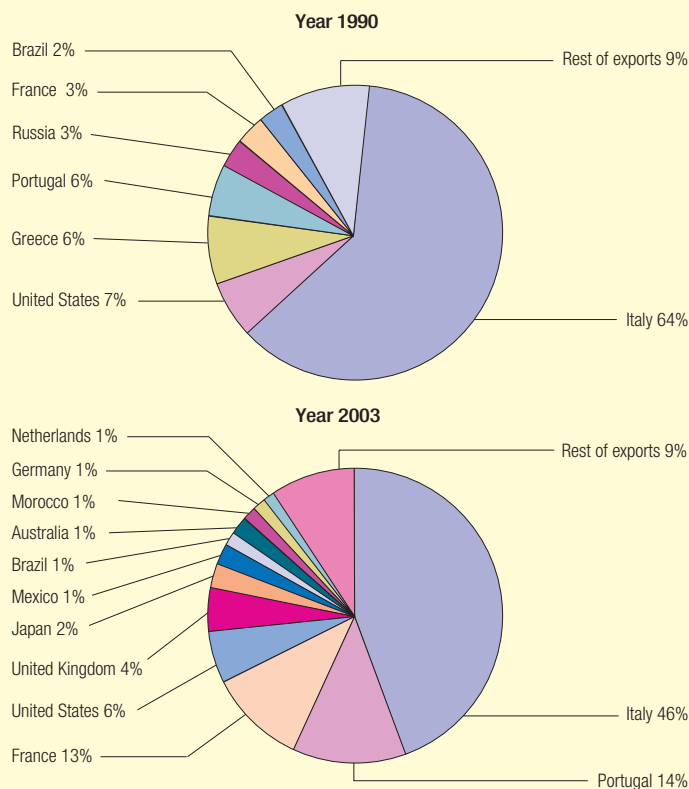
Olive oil exports are 3.6 times higher now than they were in 1990, the first year for which IEA foreign trade statistics are available, rising from 254.9 million euro to 907.8 million in 2003. Olive oil exports therefore grew at a faster rate than exports as a whole, which increased by 3.3 times in this period. The percentage share of olive oil exports in the regional total averaged 6.9%, reaching a record high of 11.8% in 1991 and exceeding the average percentage share both in 1990, at 7.5% of total exports, and in 2003, when it was 8%.

A geographical breakdown shows that the bulk of olive oil exports go to a small group of countries. Specifically, 91.4% of olive oil exports went to just twelve countries in 2003. However, export markets for this product have been diversified and expanded since 1990, when this percentage of the total went to seven countries. In any event, 80% of olive oil exports went to EU countries in 2003, almost the same as at the beginning of the nineties (80.6%). It is worth noting that, according to the European Commission, the European Union is the biggest world consumer of olive oil, averaging 1.8 million tonnes a year in the three-year period from 2000 to 2003 and accounting for around 71% of total world consumption.

A breakdown by country shows that Italy, Portugal and France accounted for over 72% of Andalusia's total exports of olive oil. However, their percentage share in the total has varied considerably. Italy is still by far the biggest purchaser of Andalusian olive oil, although its percentage share has shrunk over the period in question. On the other hand, Portugal and, to a greater extent, France have increased their percentage share in the EU total, in keeping with the substantial rise in olive oil consumption in these countries, according to the European Commission. There are also countries that, while accounting for a smaller proportion, have registered significant increases in the volume of purchases of Andalusian olive oil since 1990, such as the United Kingdom, with a 40-fold increase, Germany, with a 10-fold increase and the Netherlands, with an 8-fold increase. Belgium, Norway and Ireland recorded smaller increases. Greece, on the other hand, was one of the main purchasers of Andalusian olive oil at the beginning of this period, but from 1992 onwards has imported only small amounts or none at all.

Outside the European Union, the United States is the main consumer of Andalusian olive oil, with exports to this country tripling between 1990 and 2003 and accounting for 6% of the total at the end of this period. Behind the United States come countries such as Japan, Mexico, South Korea and Norway, where Andalusian olive oil exports increased more than 10-fold, and Brazil, Australia, Saudi Arabia and the United Arab Emirates, with smaller, but also significant, increases. Morocco is a new market conquered after 1990 and now accounts for 1% of Andalusian olive oil exports. The market in Russia, however, has shrunk, with Andalusian exports of this product falling by 35%.

## GEOGRAPHIC DISTRIBUTION OF OLIVE OIL EXPORTS. ANDALUSIA

**NOTE:**

As a percentage of total.

**Source:** IEA.**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

in listed companies when the investor holds 10% or more of the foreign enterprise's share capital and for the setting up and expansion of branches. The information is provided by geographic area and economic sector and in three different forms: gross investment, real gross investment and net investment. However, in the case of the Autonomous Communities, disaggregated data is only provided for real gross investment.

Real gross investment is understood to mean all new investment and is calculated by deducting the following from gross investment: transfers of capital held in Spanish companies with foreign capital between investors who are not resident in Spain (in the case of foreign investment in Spain), transfers of capital held in foreign companies with Spanish capital between residents (in the case of Spanish investment

abroad) and transactions carried out with the sole purpose of restructuring within a business group.

Net investment is calculated by deducting divestments filed with the Registrar as a result of whole or partial capital transfers or liquidations from gross investment.

The information available for Andalusia consists of historical datasets from 1993 to 2003 for real gross investment by economic sector and geographic area.

According to available data, 2003 saw a continuation of the trend observed since 1993, with inflows and outflows of foreign capital in the form of investment showing a positive balance in Andalusia. Specifically, inward investment exceeded outward investment by 169 million euro. In contrast, in Spain as a whole, the balance was negative, with capital outflows exceeding

inflows by 7,699.8 million euro, continuing the trend observed since 1997.

## Inward investment

Real gross foreign investment in Andalusia amounted to 231.6 million euro in 2003, 25.4% down on the previous year, in the context of a sharp contraction of investment nationally (-46.9%).

As a result, Andalusia's share in total inward investment in Spain increased slightly in 2003 to 1.39% of the total, putting the region in seventh place in the national ranking behind Madrid, Aragon, Catalonia, Murcia, Castilla-La Mancha and the Balearic Islands. However, it is important to note that these figures do not reflect the actual amounts invested in each region, as the so-called "headquarters effect" distorts the results in favour of Madrid, because foreign investors report the investment in the region where the headquarters of the enterprise is located rather than the region in which the operating facilities are located. Madrid therefore accounted for 47% of total inward investment in 2003, while its share in national GDP was just 17%.

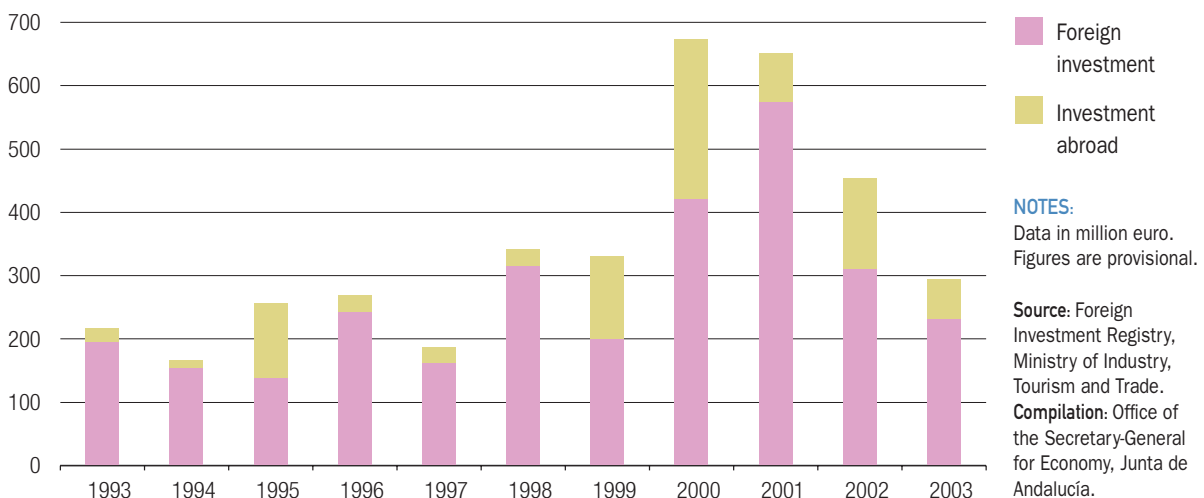
Inward investment in Andalusia in 2003 was equivalent to 0.2% of the region's GDP, compared with a national average of 2.2%.

A breakdown of inward investment by sector reveals mixed trends. There were significant increases in the primary and service sectors, in contrast with sharp reductions in industry and construction. Foreign investment as a percentage of GVA was highest in the primary sector in Andalusia, while in Spain as a whole it was highest in the service sector.

In 2003 foreign capital inflows in the primary sector were four times higher than the previous year. This trend was also observed nationally, agriculture being the only sector to register higher inward investment in 2003 than it did in 2002. Andalusia's percentage share in the national total is considerable, as the region accounts for 42.3% of all foreign capital invested in the primary sector in Spain.

The service sector accounts for almost 85% of inward investment in Andalusia, following a 33.8% year-on-year increase, while in Spain as a whole it fell by 49.4%. Within this sector, real estate, renting and business activities was the most outstanding branch in terms of investment growth and volume, accounting for 78% of investment in the sector in Andalusia and 12.5% of investment in this branch nationally. The two most important activities within this branch in terms of inward investment were real estate activities, accounting for 61.9% of the total, and research and development, accounting for

Chart 87. FOREIGN INVESTMENT AND INVESTMENT ABROAD. ANDALUSIA





34.1% and registering a record figure of 52 million euro. Other significant branches were transport and communication, mainly telecommunications, where foreign investment increased eight-fold year on year, and education, with an investment figure of 9.8 million euro in 2003.

Foreign investment in Andalusian industry fell by a huge 77.2%, a bigger drop than registered nationally (-25.5%). This was largely due to the fact that in 2003 there was no foreign investment in food products, beverages and tobacco and fabricated metal products except machinery and equipment, while in 2002 each of these branches accounted for over 40% of foreign investment in industry.

The construction sector, accounting for just a small proportion of the total (1.5%), saw a fall in foreign investment in Andalusia, as it did nationally, following a considerable increase in 2001 and a record figure in 2002 (106.6 million euro).

A look at the provenance of inward investment in Andalusia reveals that the main investor is the OECD countries, accounting for 73.7% of the total, compared with 95% in Spain as a whole. The reduction in investment from this area was sharper in Spain (-45%) than it was in Andalusia (-30.6%).

Within the OECD, the European Union was the main source of foreign investment, accounting for 62.8% of foreign capital invested in the region. A downward trend was observed, however, with investment from this area falling more sharply in Andalusia than it did nationally. A further breakdown by country reveals a significant increase in investment in the region by Denmark, which became the third biggest investor in Andalusia. Danish investment in the region accounted for 66% of the total amount invested by this country in Spain as a whole. Luxembourg and Ireland also increased the amount invested in Andalusia in 2003. On the contrary, there was a reduction in investment by Portugal and by Andalusia's two main investors, the Netherlands and the United Kingdom.

Investment by the EU enlargement countries deserves a special mention. While in 2002 only Hungary and Slovenia invested in Andalusia, in 2003 Hungary, Poland, the Czech Republic, Cyprus, Malta and Lithuania did. The biggest investor in Andalusia and Spain as a whole was the Czech Republic, with the region accounting for 95% of the total amount of capital invested by this country in Spain, followed by Cyprus and Malta. These three accounted for almost all the investment by this group of countries.

Investment in Andalusia by countries outside the European Union showed favourable results. The

Chart 88. FOREIGN INVESTMENT AND SECTOR GVA. YEAR 2003

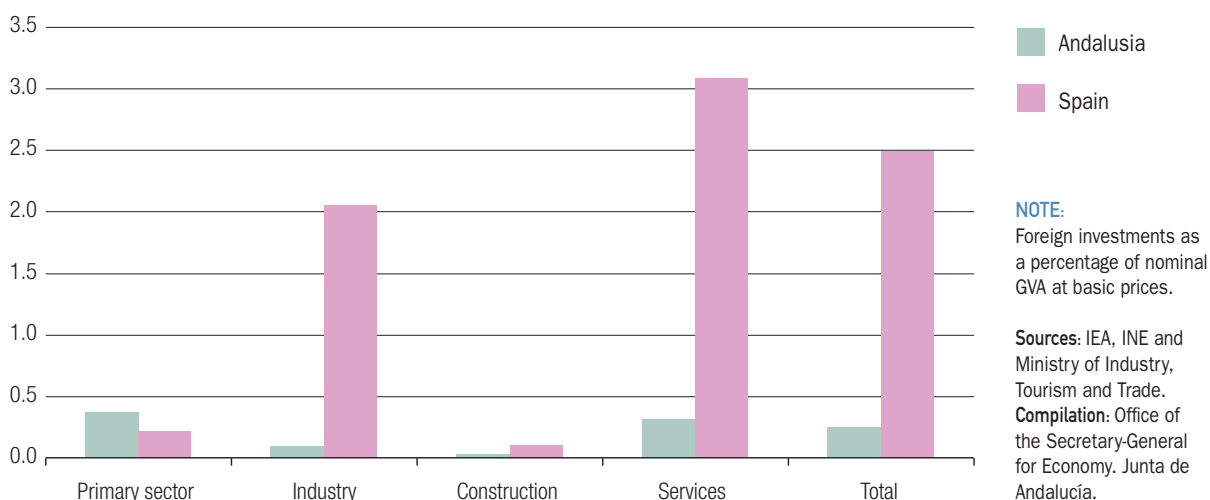


Table 46. **REAL GROSS INWARD INVESTMENT BY SECTOR. YEAR 2003**

			% change on 2002		And/Sp %
	Andalusia	Spain	Andalusia	Spain	
<b>PRIMARY SECTOR</b>	20,225	47,833	335.61	13.57	42.28
Crop and animal farming, hunting and forestry, and fishing	20,225	47,833	335.61	13.57	42.28
<b>INDUSTRY</b>	12,032	2,676,435	-77.20	-25.50	0.45
Production and distribution of electricity, gas and water	480	702,944	5,645.99	-57.94	0.07
Mining and quarrying	0	93,852	N.C.	-76.91	0.00
Food products, beverages and tobacco	0	69,821	-100.00	-58.22	0.00
Manufacture of textiles and textile products	3	9,815	-92.21	-63.18	0.03
Manufacture of pulp, paper and paper products; publishing and printing	243	298,147	7,751.61	73.31	0.08
Manufacture of chemicals, chemical products and man-made fibres	1,640	1,150,752	125.26	260.10	0.14
Manufacturing N.E.C.	9,665	351,104	-68.05	-57.66	2.75
<b>CONSTRUCTION</b>	3,600	71,323	-96.62	-81.78	5.05
<b>SERVICES</b>	195,717	13,845,498	33.74	-49.36	1.41
Wholesale and retail trade	13,736	662,672	-46.51	-32.98	2.07
Hotels and restaurants	7,468	316,293	-76.89	89.62	2.36
Transport	11,223	2,120,610	740.48	-19.18	0.53
Financial intermediation, banking and insurance	159	841,659	80.81	-16.78	0.02
Real estate activities and business services	152,695	1,221,094	76.30	-18.54	12.50
Management of companies and securities holding	552	7,847,658	636.11	-62.35	0.01
Other services	9,884	835,511	4,010.68	304.55	1.18
<b>TOTAL</b>	<b>231,574</b>	<b>16,641,090</b>	<b>-25.38</b>	<b>-46.94</b>	<b>1.39</b>

**NOTES:**

In thousand euro. Figures are provisional.

N.C.: Not calculable.

Source: Foreign Investment Registry, Ministry of Industry, Tourism and Trade.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 47. **REAL GROSS INWARD INVESTMENT. GEOGRAPHIC DISTRIBUTION. YEAR 2003**

			% change on 2002		And/Sp %
	Andalusia	Spain	Andalusia	Spain	
<b>OECD</b>	170,736	15,815,942	-30.56	-45.01	1.08
<b>EU</b>	145,540	8,810,801	-38.00	-25.38	1.65
Denmark	17,861	27,074	443.52	-93.65	65.97
United Kingdom	18,789	2,308,520	-45.82	90.52	0.81
Netherlands	70,718	2,317,847	-48.40	-12.84	3.05
Portugal	13,138	107,031	-67.06	-90.14	12.28
Rest of EU	25,033	4,050,329	26.25	-36.97	0.62
<b>OTHER EUROPEAN OECD COUNTRIES</b>	5,618	160,854	26.46	-38.43	3.49
Switzerland	5,617	153,610	102.73	-39.27	3.66
Norway	1	3,680	-99.93	-30.74	0.03
<b>NON-EUROPEAN OECD COUNTRIES</b>	15,051	6,837,987	162.05	-59.04	0.22
<b>EU ENLARGEMENT</b>	4,528	6,300	365.09	357.46	71.87
<b>NON-OECD COUNTRIES</b>	60,838	825,148	-5.60	-68.29	7.37
<b>TAX HAVENS</b>	51,756	189,003	-6.17	26.70	27.38
<b>REST OF COUNTRIES</b>	0	301	-100.00	-95.08	0.00
<b>TOTAL</b>	<b>231,574</b>	<b>16,641,090</b>	<b>-25.38</b>	<b>-46.94</b>	<b>1.39</b>

**NOTES:**

In thousand euro. Figures are provisional.

Source: Foreign Investment Registry, Ministry of Industry, Tourism and Trade.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

amount invested in the region by Switzerland, for example, doubled, while nationally it fell by 39.3%, and the United States invested almost 10 million euro more in the region than it did in 2002, while in Spain as a whole it invested 67.5% less.

Outside the OECD, the biggest investors in Andalusia were tax havens, particularly Gibraltar, the British Virgin Islands and Liechtenstein, and although capital inflows from these places fell in 2003, Andalusia still accounted for over 27% of the total amount invested by this group of countries in Spain as a whole.

### Outward investment

Real gross investment by Andalusia abroad fell year on year by 56.4% to 62.5 million euro in 2003, in keeping with national outward investment figures, down 41.6% on 2002.

Andalusia's percentage share in national outward investment therefore stood at 0.26% in 2003.

Foreign investment by Andalusia in other countries as a percentage of its GDP fell further in 2003 to just 0.06%.

Disaggregated data by productive sector reveals mixed trends in 2003. There was a significant increase in Andalusian investment in foreign industry to 5.6 million euro and in the service sector, where the amount doubled. On the other hand, Andalusian capital invested in construction in other countries fell by 87.1% and the region did not make any foreign investments in the primary sector. National trends differed, with all sectors registering a decline in outward investment.

Within the industrial sector, 98% of Andalusian outward investment was concentrated in two branches, namely food products, beverages and tobacco,

particularly the food and beverages industry, and the manufacture of fabricated metal products except machinery and equipment, which were responsible for the spectacular increase in outward investment in this sector. However, the industrial sector continued to account for a relatively small proportion of total Andalusian capital outflows in the form of foreign investment, specifically 10%.

The service sector is more important, accounting for 66% of the total. A breakdown shows that the most important branch in terms of outward investment growth and volume in 2003 was the wholesale and retail trade, accounting for 66.1% of the sectoral total, particularly the retail trade except motor vehicles, followed by real estate, renting and business activities (19% of sectoral total). The third most important branch was transport and communication, accounting for 14.6% of the sectoral total, although it registered a decline of 37.8% in 2003, which can be largely attributed to the fact that Andalusia made no foreign investment in telecommunications abroad.

A breakdown of outward investment by country shows that 95% was invested in six countries, while in 2002, a single country, namely Switzerland, absorbed over 80% of the total. Two of these six countries belong to the European Union, namely France and the United Kingdom. Capital outflows to France were 26.3 million euro higher than in 2002 and accounted for 5% of all Spanish investment in this country, while Andalusian investment in the United Kingdom fell slightly. As a result, Andalusian investment in the European Union rose significantly in 2003, while in Spain as a whole it fell by 39.5%.

Three of the other countries were in the Americas, namely Brazil and the United States, registering significant increases, and Peru, where there had been no Andalusian investment in 2002. The remaining country was Togo in Africa, Andalusia being the only Spanish region to invest in this nation.

Table 48. **REAL GROSS OUTWARD INVESTMENT BY SECTOR. YEAR 2003**

			% change on 2002		And/Sp %
	Andalusia	Spain	Andalusia	Spain	
<b>PRIMARY SECTOR</b>	0	161,586	-100.00	-38.74	0.00
Crop and animal farming, hunting and forestry, and fishing	0	161,586	-100.00	-38.74	0.00
<b>INDUSTRY</b>	5,681	17,263,275	11,880.43	-22.33	0.03
Production and distribution of electricity, gas and water	30	473,404	30.26	-35.85	0.01
Mining and quarrying	0	988,916	N.C.	-71.91	0.00
Food products, beverages and tobacco	4,233	2,650,680	N.C.	514.79	0.16
Manufacture of textiles and textile products	0	743,026	N.C.	521.02	0.00
Manufacture of pulp, paper and paper products; publishing and printing	0	477,112	N.C.	-81.39	0.00
Manufacture of chemicals, chemical products and man-made fibres	25	2,568,191	N.C.	-74.56	0.00
Manufacturing N.E.C.	1,394	9,361,947	5,614.10	96.70	0.01
<b>CONSTRUCTION</b>	15,516	54,123	-87.11	-94.76	28.67
<b>SERVICES</b>	41,344	6,861,951	98.89	-62.22	0.60
Wholesale and retail trade	27,345	1,705,451	414.40	-43.79	1.60
Hotels and restaurants	6	207,102	-99.69	-74.31	0.00
Transport	6,055	1,335,883	-37.76	-82.47	0.45
Financial intermediation, banking and insurance	90	2,316,601	8,900.00	-52.23	0.00
Real estate activities and business services	7,848	962,917	107.91	-40.16	0.82
Management of companies and securities holding	0	266,000	N.C.	N.C.	0.00
Other services	0	67,998	N.C.	-71.90	0.00
<b>TOTAL</b>	62,541	24,340,935	-56.40	-41.61	0.26

**NOTES:**

In thousand euro. Figures are provisional.

N.C.: Not calculable.

Source: Foreign Investment Registry, Ministry of Industry, Tourism and Trade.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## 7. FOREIGN TRADE AND INVESTMENT IN ANDALUSIA

Table 49. **REAL GROSS INVESTMENT ABROAD. GEOGRAPHIC DISTRIBUTION. YEAR 2003**

			% change on 2002		And/Sp %
	Andalusia	Spain	Andalusia	Spain	
<b>OECD COUNTRIES</b>	38,376.2	18,222,351.0	-72.11	-43.31	0.21
<b>EU COUNTRIES</b>	30,280.4	15,557,684.6	324.77	-39.52	0.19
France	26,841.0	552,151.0	5,261.77	-30.14	4.86
United Kingdom	3,229.8	3,710,275.7	-1.02	517.14	0.09
Portugal	5.0	1,916,116.3	-99.83	85.54	0.00
Rest of EU	204.6	9,379,141.6	N.C.	-59.74	0.00
<b>NON-EU EUROPEAN COUNTRIES</b>	0.0	39,890.0	-100.00	-98.07	0.00
<b>NON-EUROPEAN OECD COUNTRIES</b>	7,847.1	1,629,380.9	243.64	-62.00	0.48
USA	7,847.1	1,550,778.3	243.64	8.29	0.51
<b>NON-OECD COUNTRIES</b>	24,164.4	6,118,584.4	313.29	-35.87	0.39
<b>TAX HAVENS</b>	52.0	175,499.8	5,099.00	-33.92	0.03
<b>REST OF COUNTRIES</b>	24,112.4	5,943,084.7	312.47	-35.93	0.41
Togo	2,055.8	2,055.8	455.00	455.00	100.00
Mexico	1,347.4	946,951.7	123.80	-15.40	0.14
Brazil	15,605.1	1,421,185.7	4,468.65	-20.98	1.10
Peru	4,232.9	18,758.5	N.C.	-90.41	22.56
<b>TOTAL</b>	<b>62,540.6</b>	<b>24,340,935.4</b>	<b>-56.40</b>	<b>-41.61</b>	<b>0.26</b>

**NOTES:**

In thousand euro. Figures are provisional.

N.C.: Not calculable.

Source: Foreign Investment Registry, Ministry of Industry, Tourism and Trade.

Compilation: Office of the Secretary-General, Junta de Andalucía.

# 8.

## Structure of the Business Sector



## Structure of the Business Sector

### Introduction

The number of enterprises operating in Andalusia increased by 4.7% in 2003. Business sector growth was therefore one percentage point higher than the previous year, making it the region with the second highest number of enterprises. All the Andalusian provinces made a positive contribution to this increase, which was nine tenths of a point higher than the national average. A breakdown of the figures according to employment size reveals that enterprises both with and without employees increased in number, with larger enterprises showing the highest rise.

An analysis of the legal form adopted by enterprises shows that in 2003 there was a bigger increase in enterprises with legal personality than in enterprises without legal personality. The biggest increase was in private limited companies.

As a result, enterprise density, which is the ratio of enterprises to inhabitants, rose in 2003. A sectoral analysis shows that all the sectors made a positive contribution, headed by the best-performing sector in Andalusia in 2003: the construction industry.

A look at the enterprise survival rate reveals that Andalusian enterprises were once again less likely

Table 50. **NUMBER OF ENTERPRISES**

	2002	2003	02-03 growth %	% of Andalusian total for 03
Almería	32,099	33,947	5.8	8.1
Cádiz	52,320	54,462	4.1	13.1
Córdoba	40,481	41,964	3.7	10.1
Granada	48,121	49,662	3.2	11.9
Huelva	21,709	22,547	3.9	5.4
Jaén	31,576	32,444	2.7	7.8
Málaga	82,629	88,257	6.8	21.2
Seville	89,367	93,723	4.9	22.5
<b>ANDALUSIA</b>	<b>398,302</b>	<b>417,006</b>	<b>4.7</b>	<b>100.0</b>
<b>SPAIN</b>	<b>2,710,400</b>	<b>2,813,159</b>	<b>3.8</b>	

Source: INE Central Business Directory.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



to be dissolved than Spanish enterprises in general in 2003, continuing the trend in evidence throughout the current growth cycle.

### Number and location of enterprises

According to the DIRCE (Central Business Directory) compiled by the INE, a total of 417,006 enterprises (excluding primary sector enterprises) were operating in Andalusia as at 1 January 2003, accounting for 14.8% of the national total. This made Andalusia the Spanish region with the largest business sector after Catalonia. A further indication of the importance of the region's business sector is the fact that Andalusia's share in the total number of enterprises operating in Spain as a whole was greater than its contribution to national GDP.

There were 18,704 more enterprises operating in Andalusia in 2003 than there were in 2002, 4.7% up on the previous year and almost one percentage point higher than the national rate of increase.

All the Andalusian provinces contributed to the overall increase, with Malaga, Almería and Seville showing the biggest increases in the number of enterprises.

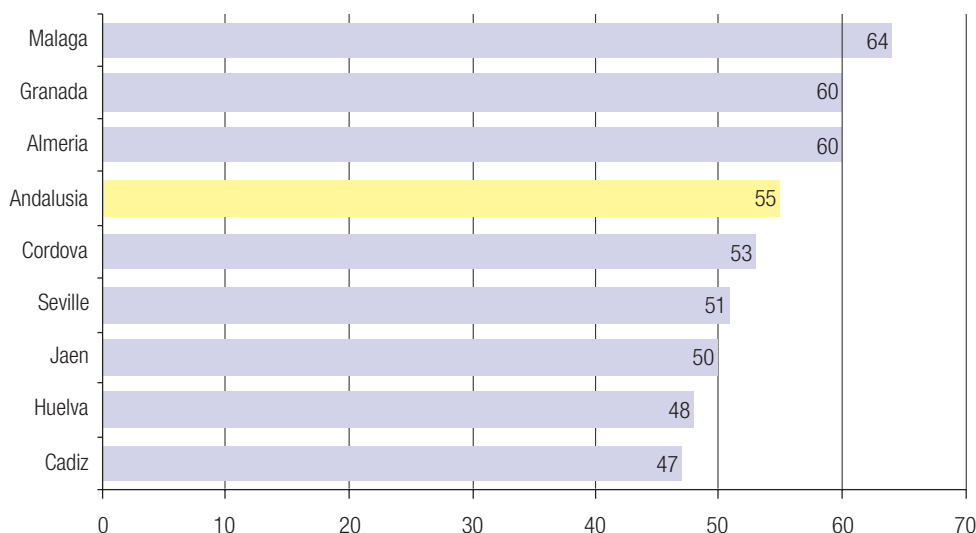
The provinces with the largest business sectors are those with the highest shares in Andalusian GDP, such as Seville and Malaga, which together accounted for 43.6% of all enterprises in the region, while Huelva was the province with the smallest business sector, accounting for just 5.4% of the total.

Malaga was the province with the highest enterprise density, with 64 enterprises per 1000 inhabitants, followed by Almería and Granada, with ratios exceeding the Andalusian average. At the other end of the scale, Cadiz and Huelva were the provinces with the fewest enterprises per inhabitant.

### Employment size

In Andalusia, as in Spain in general, there is a predominance of enterprises without employees. In 2003, 52.8% of the 417,006 enterprises (not including primary sector enterprises) operating in Andalusia had no employees, a slightly higher percentage than the national average of 51.9%. However, the proportion of such enterprises is shrinking in favour of enterprises with employees. In 2003 the number of enterprises with employees increased by 6.8%, one and a half percentage points above the national rate and significantly

Chart 89. DENSITY OF ENTERPRISES IN ANDALUSIA BY PROVINCE. YEAR 2003



**NOTE:**

Number of enterprises per thousand people.

Source: INE.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 51. **ENTERPRISES BY EMPLOYMENT SIZE BAND**

	2003		02-03 growth %		Breakdown (%)	
	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain
Without employees	220,040	1,459,938	2.9	2.4	52.8	51.9
With employees	196,966	1,353,221	6.8	5.3	47.2	48.1
1 to 9	174,376	1,182,845	6.8	5.6	41.8	42.0
10 to 49	19,748	145,442	6.4	3.6	4.7	5.2
50 to 199	2,396	19,888	6.1	1.2	0.6	0.7
200 to 499	364	3,540	13.8	8.1	0.1	0.1
500 and over	82	1,506	12.3	11.1	0.0	0.1
<b>TOTAL</b>	<b>417,006</b>	<b>2,813,159</b>	<b>4.7</b>	<b>3.8</b>	<b>100.0</b>	<b>100.0</b>

Source: INE Central Business Directory.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

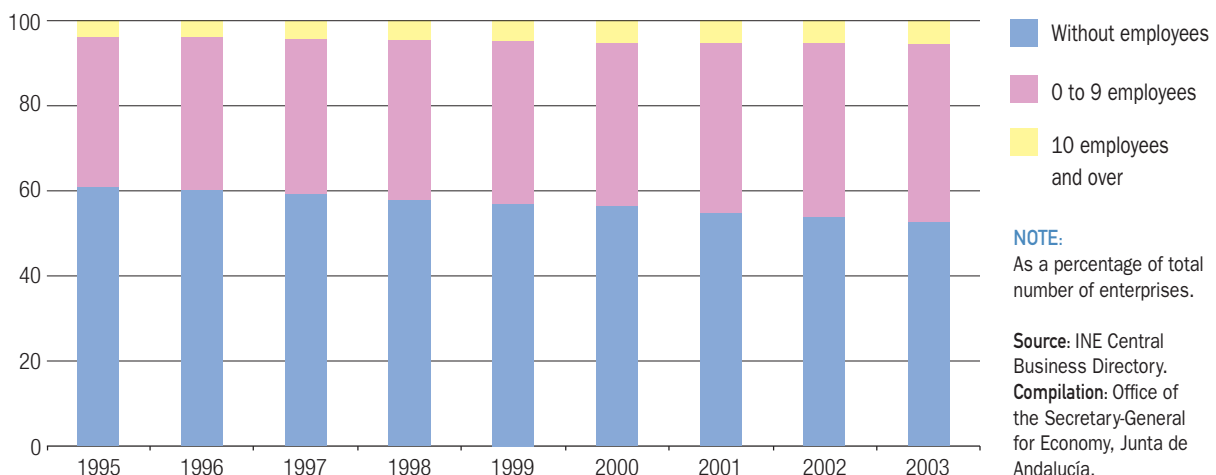
higher than the 2.9% increase in enterprises without employees.

In the category of enterprises with employees, small- and medium-sized enterprises (SMEs) predominate, as they do nationally, with enterprises with less than ten employees accounting for 88.5% of the total, very similar to the national percentage of 87.4%.

On the other hand, the proportion of large enterprises is relatively small. In 2003 there were 446

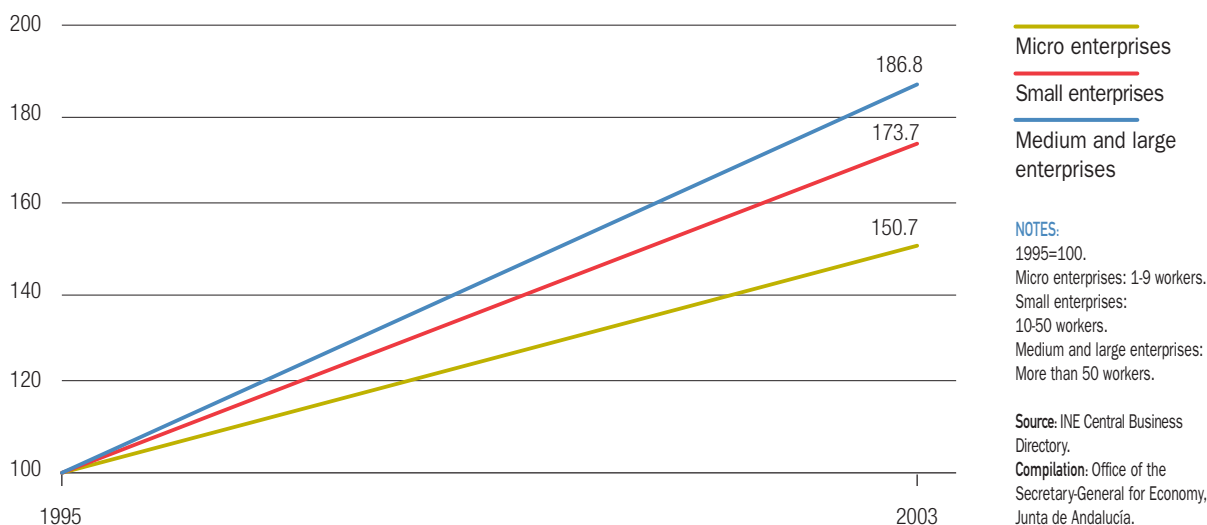
enterprises with 200 or more employees operating in Andalusia, accounting for 8.8% of enterprises in this employment-size band nationally, a significantly lower percentage than the 14.8% share of Andalusian enterprises in the national total.

However, it was this employment size band that registered the biggest increase, with enterprises with 200 or more employees rising by 13.5% in Andalusia in 2003.

Chart 90. **ENTREPRENEURIAL ACTIVITY BY BUSINESS SIZE. ANDALUSIA**

## 8. STRUCTURE OF THE BUSINESS SECTOR

Chart 91. **BUSINESS SECTOR GROWTH. ANDALUSIA**

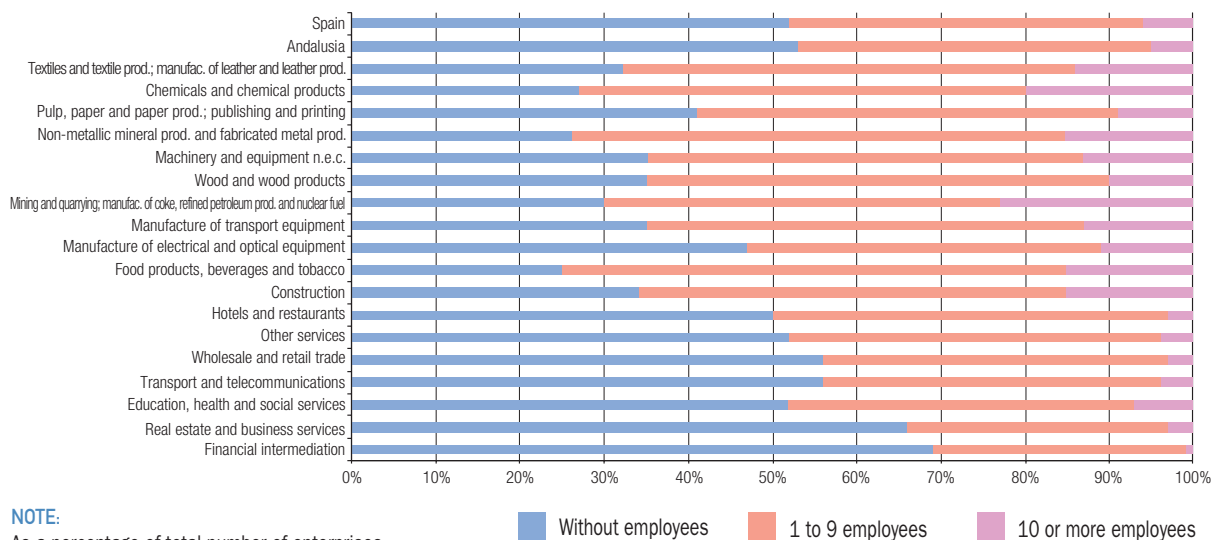


### Sectoral distribution

A breakdown of the figures by sector shows that all the Andalusian sectors contributed to the increase in the region's business sector, headed by the construction industry, which recorded a 10.8% rise, followed by services and industry.

In industry the number of enterprises rose by 1.9% in 2003, largely as a result of increases in businesses that manufacture fabricated metal products except machinery and equipment (6.1%) and non-metallic mineral products (3.7%). On the other hand, there was a reduction in the number of enterprises operating in the food and beverages industry and in the wood industry.

Chart 92. **SIZE OF ENTERPRISES. ANDALUSIA AND SPAIN. YEAR 2003**



**Source:** INE Central Business Directory.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

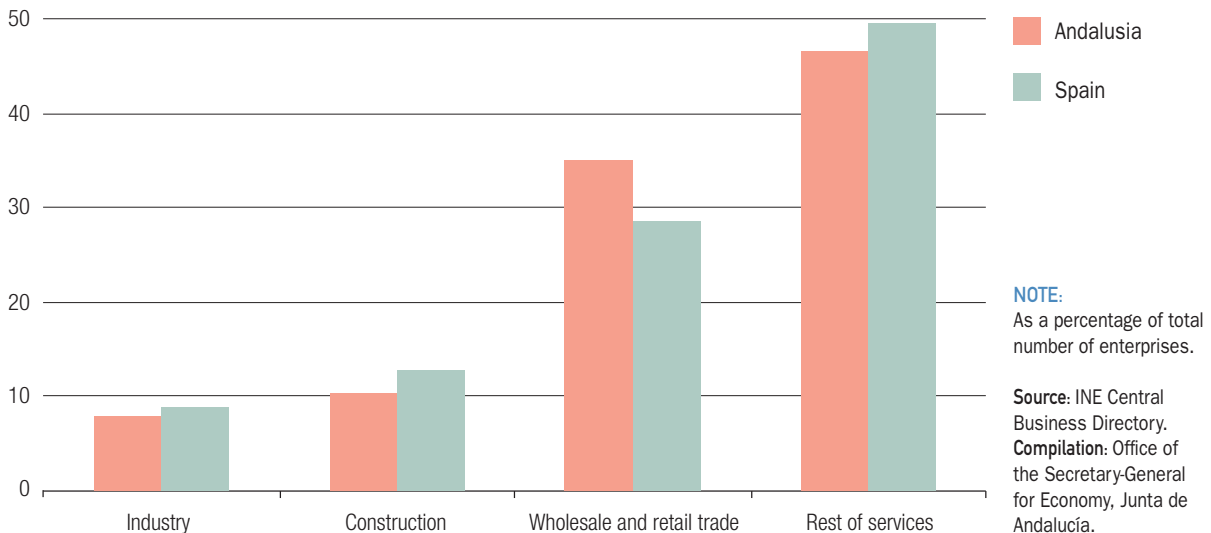
Table 52. **NUMBER OF ENTERPRISES BY ECONOMIC ACTIVITY. ANDALUSIA**

	2003	% of total	02-03 growth %
<b>TOTAL</b>	417,006	100.0	4.7
<b>INDUSTRY</b>	32,175	7.7	1.9
Manufacture of food products and beverages	6,149	1.5	-0.5
Manufacture of wood and of products of wood and cork, except furniture; esparto and wickerwork	2,213	0.5	-0.4
Manufacture of other non-metallic mineral products	2,632	0.6	3.7
Manufacture of fabricated metal products (except machinery and equipment)	5,402	1.3	6.1
Manufacture of furniture; manufacturing n.e.c.	4,754	1.1	1.1
Rest of industrial activities	11,025	2.6	1.8
<b>CONSTRUCTION</b>	41,263	9.9	10.8
<b>SERVICES</b>	343,568	82.4	4.3
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	98,545	23.6	1.6
Hotels and restaurants	44,350	10.6	2.8
Land transport; pipeline transport	29,617	7.1	0.6
Other business activities	50,939	12.2	7.0
Rest of services	120,117	28.8	7.0

Source: INE Central Business Directory.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Industry, which accounts for 7.7 % of non-agricultural enterprises in Andalusia, is largely composed of medium-sized enterprises with employees. The branches of industry with the largest number of enterprises

were food products and beverages and fabricated metal products, while the biggest enterprises were concentrated in the transport equipment, chemical and extractive and energy industries.

Chart 93. **ENTERPRISES BY ECONOMIC SECTOR. YEAR 2003**

### Box 11. THE SOCIAL ECONOMY IN ANDALUSIA

According to the Ministry of Labour and Social Affairs' Register of Social Enterprises, there were 8,653 such enterprises operating in Andalusia as at 31 December 2003, 5,255 of which were cooperatives. The other 3,398 were employee-owned commercial companies, 90.5% of which were formed as private limited companies, and the remaining 9.5% as public limited companies.

Social enterprises in Andalusia accounted for 20% of the national total, making it the Spanish region with the largest number of such enterprises, followed by Catalonia. Andalusia's percentage share in the social economy is therefore greater than its share in the business sector, which was 14.8% in 2003. The provinces with the largest number of social enterprises were Seville, Malaga and Jaén, although in terms of the number of such enterprises per inhabitant the provinces of Huelva and Jaén head the ranking, with 17 enterprises per 10,000 inhabitants, followed by Almería, with 16. Cadiz, with 8 social enterprises per 10,000 inhabitants, was the lowest-ranking province.

The number of workers in the Andalusian social economy stood at 89,484 on 31 December 2003. Of these, 79% worked in cooperatives and 21% in employee-owned commercial companies. A look at these figures in relation to Labour Force Survey data reveals that people working in the region's social economy accounted for 3.5% of the total number of people working in Andalusia in 2003, a much higher proportion than the national average of 2.6%.

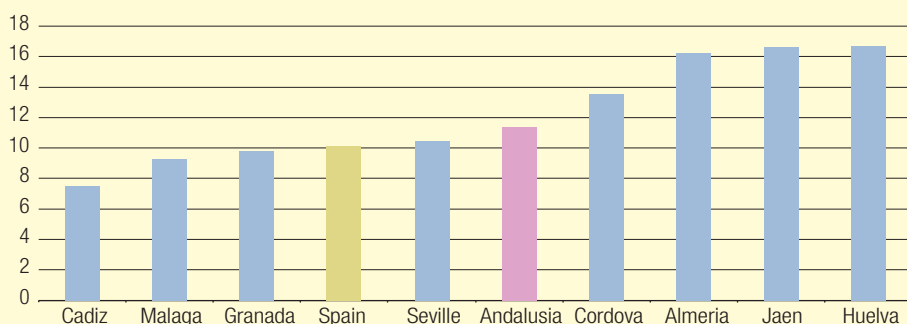
A look at employment size shows that on average cooperatives in Andalusia employed 14 people, which is more than the national average (13 employees), while employee-owned commercial companies had an average of six employees, similar to the national average.

A breakdown by age shows that 65% of people working in social enterprises are under forty years of age and 40% have been working in the enterprise for a year or more.

In the Andalusian social economy, 53.5% of workers are employed on a permanent basis and 90.8% are employed full time.

A sectoral breakdown shows that the largest proportion of social enterprises operate in the service sector (41.3%), followed by the primary sector (29.5%), industry (17.7%) and construction, which has the smallest proportion (11.5%). According to the Labour Force Survey, the sector that provides most social economy employment is the primary sector (10.3%), while the service sector provides the least (2.2%).

#### COOPERATIVES AND EMPLOYEE-OWNED COMPANIES. YEAR 2003



**NOTE:**  
Number of companies for every 10,000 people.

**Sources:** Ministry of Labour and Social Affairs and INE.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

The largest proportion of Andalusian non-agricultural enterprises operate in the service sector, accounting for 82.4% of the total. In 2003 service sector enterprises increased by 4.3% and were predominantly small enterprises with no employees.

The largest proportion of Andalusia's service sector enterprises (23.6% of the Andalusian total) operate in the wholesale and retail sector, which had 1.6 % more enterprises in 2003 than it did in 2002. Hotels and restaurants were the next most important sector, accounting for 10.6% of Andalusian enterprises and recording an increase of 2.8%. Andalusia has a higher degree of specialisation in both these activities than Spain as a whole.

A subsectoral analysis of entrepreneurial activity in Andalusia in 2003 reveals mixed trends. The subsectors in which the number of enterprises declined were the following: food products and beverages, clothing, wood, basic metals, transport equipment and insurance and pension funding.

The top entrepreneurial sectors, that is, those with increases in enterprises above the Andalusian average, were recycling, real estate activities, computer activities, construction, the manufacture of office machinery and computers, research and development activities and education.

The subsectors in which the number of enterprises increased, but at a lower rate than the Andalusian average, were the extractive industry, the textile industry, health, telecommunications, financial intermediation, sale of motor vehicles, wholesale and retail trade, hotels and restaurants and transport.

## Legal form

A breakdown of the figures according to legal structure shows that business sector growth in 2003 can be largely attributed to the increase in the number of enterprises that are legal entities (7.9%), while sole proprietorships showed a much smaller increase of 2.7%. The percentage share of sole proprietorships, the most common form of business

in Andalusia, therefore continued to decline in 2003, falling to 64.3%.

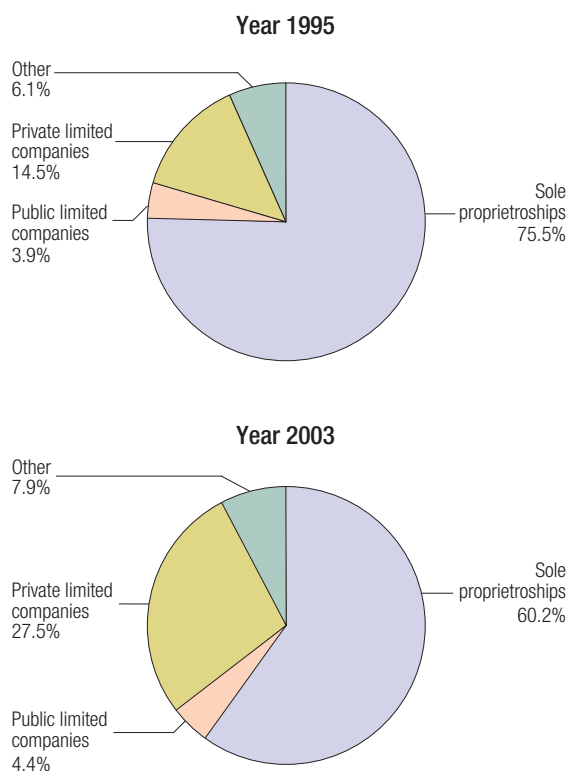
Within the category of enterprises with legal personality, the most common form of business ownership was the private limited company. It also showed the biggest increase in 2003 (9.4%), followed by cooperatives (5%). The number of public limited companies, on the other hand, fell by 1.1%, the third year of decline.

The year 2003 therefore saw a continuation of the trend observed in Andalusia in recent years. Since 1995 the proportion of enterprises that are legal entities has been increasing at the expense of sole proprietorships, whose share in the total has shrunk by eleven percentage points over this period. The private limited company is the form of business that has gained most ground, as it has increased its percentage share by eleven percentage points since 1995 to 25.7% of the total.

## Changes in the business sector

It is not possible to make a full analysis of the process of creation and dissolution of enterprises in Andalusia, because the information contained in the INE's Central Business Directory does not provide a regional breakdown. Nonetheless, some insight into these trends can be gained by examining the Statistics on Commercial Companies compiled by the INE, which provide information on company startups and closures over the year, although it must be taken into account that they do not cover sole proprietorships, which account for 64.3% of the Andalusian business sector.

The figures for commercial companies, including public and private limited companies and general and limited partnerships, show that 20,509 companies were opened in Andalusia in 2003 and 1,118 were closed, which means that company closures as a percentage of company startups was 5.5%. Andalusia therefore had a company closure rate, a measure of "company mortality", more than two percentage points below the national rate of 7.7%.

Chart 94. **BREAKDOWN OF ENTERPRISES BY LEGAL FORM. ANDALUSIA****NOTE:**

As a percentage of total number of enterprises.

**Source:** INE Central Business Directory.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

This shows that Andalusian companies had a lower propensity to close in 2003, a continuation of the persistent trend observed since 1995 in the region's business sector.

A provincial breakdown of the figures shows that, in 2003, the lowest company closure rates were registered in Almería (2.7%) and Granada (3.4%), while Jaén showed the highest ratio (9.7%), followed by Cordova (8.6%) and Seville (7%).

With regard to capitalisation, capital amounting to a total of 1,015.5 million euro, or 1% of GDP, was subscribed in newly formed companies.

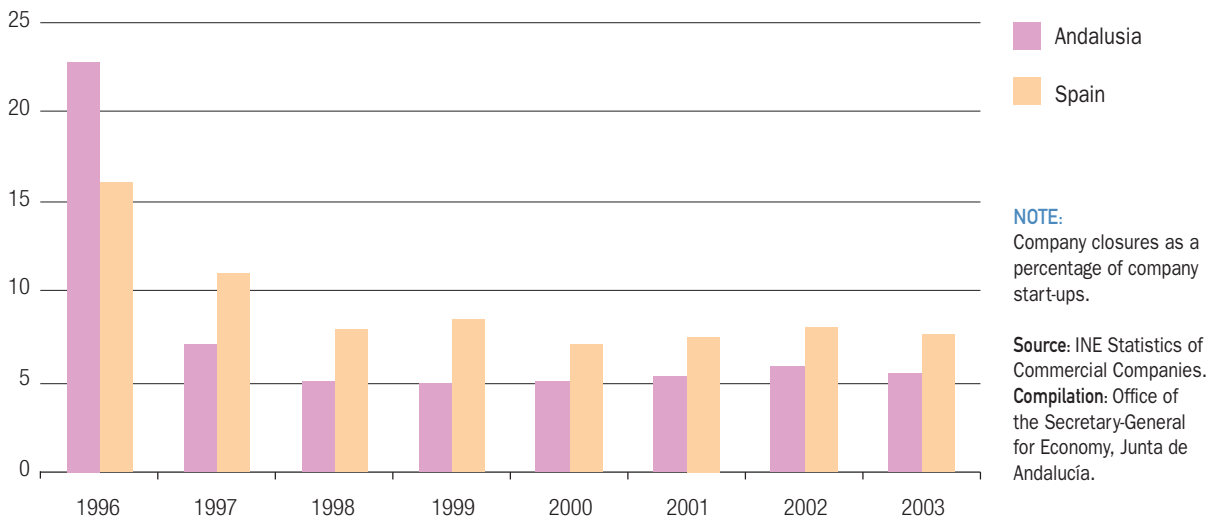
Taking into account the number of companies created in 2003, average capital per company rose to 49,500 euro, which was lower than the national average of 68,300 euro.

## Andalusian Business Barometer

The Andalusian Business Barometer, developed by the IEA, compiles information based on the responses to a survey of businesses with establishments in Andalusia, regarding the current economic situation and short-term prospects. The Barometer includes a Business Climate Index for Andalusia, which provides a gauge of the current situation of business activity in the region and prospects for the future.

The target population is businesses operating in Andalusia, except agricultural enterprises, and the survey sample consists of 341 enterprises with over 100 employees in the industrial, construction and service sectors. Businesses are asked to respond to a questionnaire on each of the productive sectors regarding output, employment, order book volume, finished goods inventories, etc.

Chart 95. **COMPANY CLOSURE RATIO**



On the basis of this data, four business climate indexes are produced, three for each of the economic sectors and one general index, expressed in the form of net balances, representing the difference between the most optimistic and the most pessimistic position.

The result ranges between +100 (totally optimistic) and -100 (totally pessimistic). For the Barometer,

the index is interpreted as follows: values between 100 and 60 are classed as “very good”; between 59 and 20 as “good”; between 19 and -19 as “normal”; between -20 and -59 as “poor”; and between -60 and -100 as “very poor”.

The Business Climate Index for Andalusia averaged 10.7 in 2003, putting it in the “normal business climate” band, an improvement on the 8.47 result

Chart 96. **TEMPORARY RECEIVERSHIPS. ANDALUSIA**

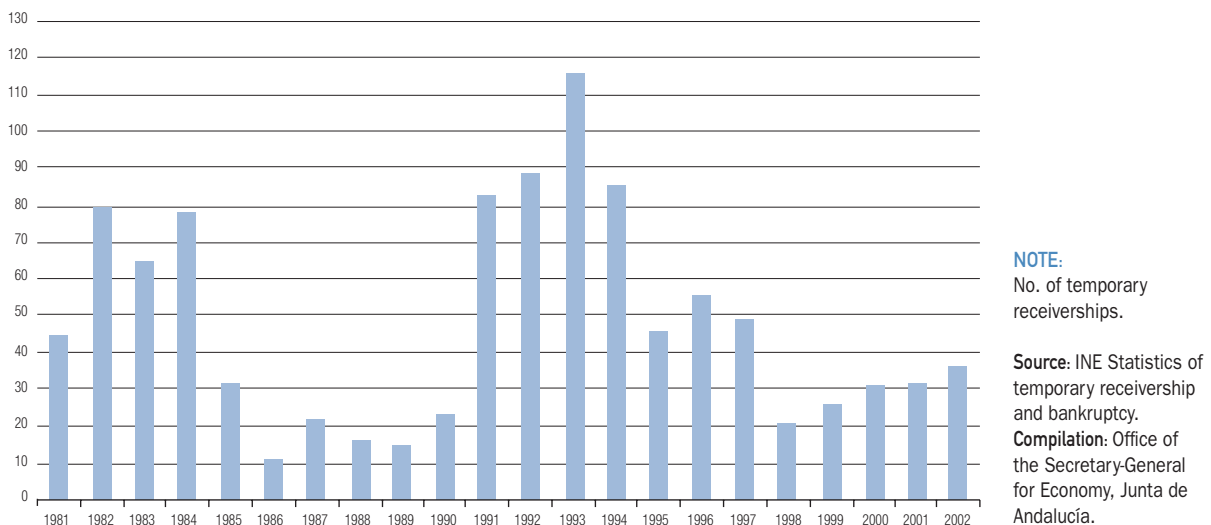
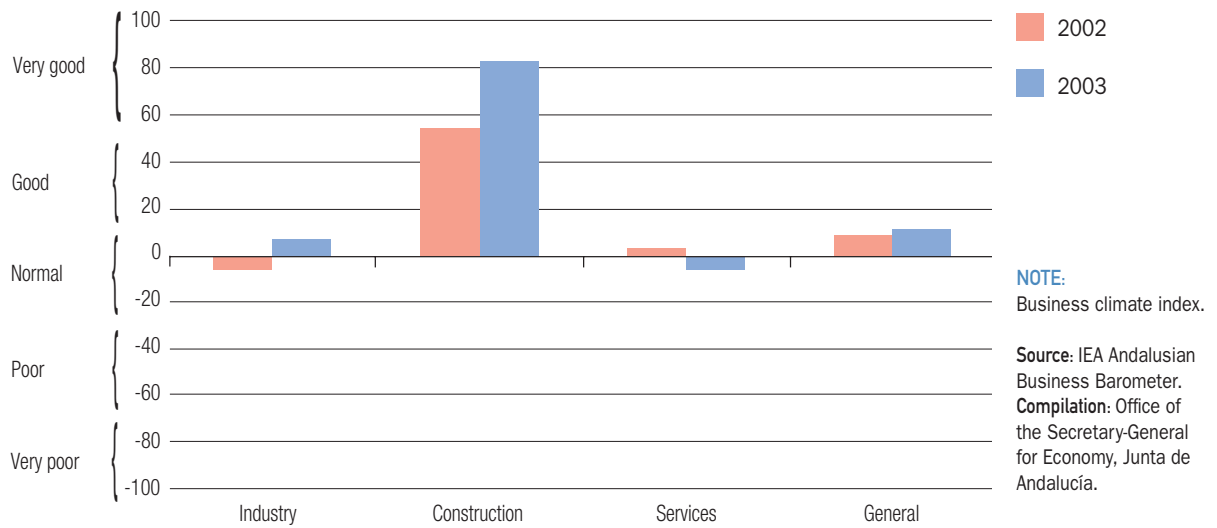




Chart 97. BUSINESS CLIMATE INDEX. ANDALUSIA



recorded in 2002. The index shows a significant improvement over the year, as it is the result of a negative value of -2.7 in the first half of 2003, which then rose to 24.1 in the second half of the year.

A sectoral breakdown shows that this upward trend was due to good results for the construction sector, as its score rose from 54.44 in 2002 to 82.26 in 2003.

In industry the business climate was “normal” (6.23) according to the index, with a more optimistic result than the previous year (-6.08).

The service sector registered the lowest business climate value (-6.10), faring worse than the previous year, when the result was positive (2.74), although it remained within the “normal” band.

9.

## Labour Market



## Labour Market

### Overview

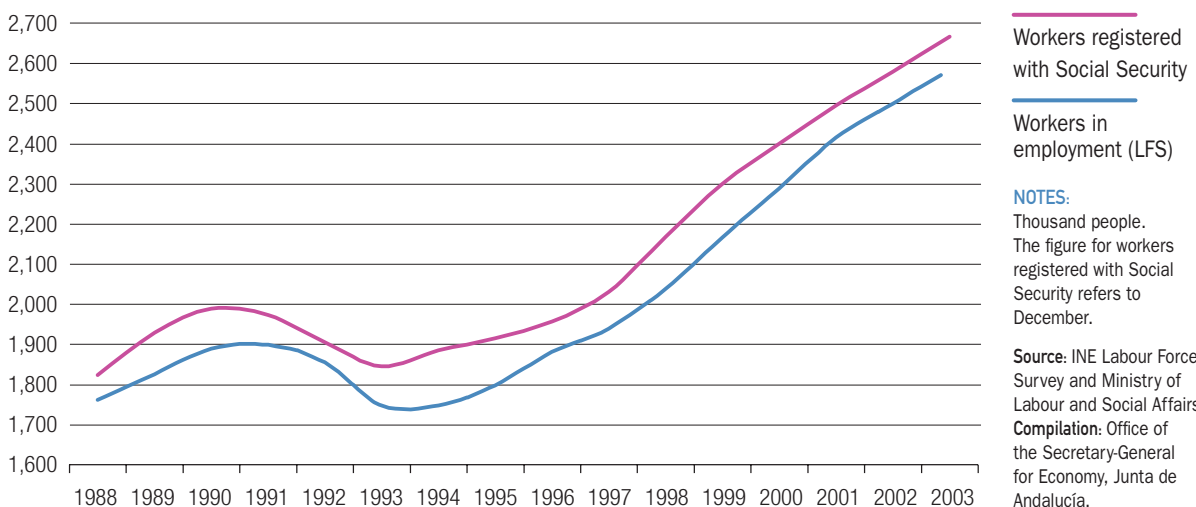
A dynamic labour market performance in Andalusia resulted in much higher job growth and a sharper drop in unemployment than recorded nationally in 2003.

According to the Labour Force Survey (LFS), employment rose year on year by 3.4% in Andalusia in 2003, faster than the national average of 2.7% and the European Union average of 0.2%, according

to Eurostat. This adds up to ten straight years of job growth in Andalusia, bringing the total number of people working in the region up to a record high of 2,585,100. There were therefore 85,900 more jobs than in 2002, which meant that Andalusia accounted for 19.7% of all new jobs created in Spain and 43% of those created in the European Union.

Similarly, the number of workers registered in Social Security files in Andalusia showed a year-end increase of 3.4% year on year, exceeding the national average

Chart 98. **EMPLOYMENT IN ANDALUSIA**



of 2.5% and bringing the total up to an all-time high of 2,666,510 in December 2003.

The labour force also grew by 2.1% in 2003, pushing the participation rate up to a record high of 52.9%, seven tenths of a point higher than in 2002.

As job growth was higher than labour force growth, jobless figures fell in 2003 in the region by 3.6%, contrasting with rising unemployment in Spain as a whole, so that the unemployment rate differential between Andalusia and Spain narrowed by one percentage point.

Similarly, jobless figures recorded at National Employment Institute (INEM) offices showed a 2.4% fall in unemployment in December 2003, compared with the 1.4% increase recorded nationally, reducing the unemployment rate in the region to 11.5%, the lowest year-end rate on record since 1977.

Labour relation trends in 2003 showed a sharp reduction in labour disputes and short-time working

or layoffs, but less dynamic collective bargaining trends.

The number of hours actually worked per worker in Andalusia in 2003 was higher than the national average, although in both cases it was lower than the previous year.

## Employment, participation and unemployment

### Employment

As mentioned above, Andalusia achieved good results on the employment front, bettering national figures. Both the Social Security figures provided by the Ministry of Labour and Social Affairs and LFS figures show the same rate of job growth in 2003.

The number of people in work registered in Social Security files in Andalusia at year-end 2003 rose

Table 53. **ANDALUSIAN AND SPANISH LABOUR MARKETS. YEAR 2003**

	CHANGE ON 2002					
	2003		Absolute		Relative (%)	
	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain
<b>LABOUR FORCE SURVEY</b>						
Population over 16	5,997.1	34,203.1	46.9	238.2	0.8	0,7
Labour force	3,174.5	18,821.9	64.1	481.4	2.1	2,6
Employed	2,585.1	16,694.6	85.9	437.0	3.4	2,7
Unemployed	589.4	2,127.4	-21.8	44.5	-3.6	2,1
Participation rate	52.93	55.03	0.7	1.0	-	-
Unemployment rate	18.57	11.30	-1.1	-0.1	-	-
<b>NATIONAL EMPLOYMENT INSTITUTE <sup>(1)</sup></b>						
Registered unemployment	366.30	1,711.5	-9.0	23.4	-2.4	1,4
Registered unemployment rate	11.51	9.04	-0.55	-0.10	-	-
<b>SOCIAL SECURITY <sup>(1)</sup></b>						
Total workers registered with Social Security	2,666.51	16,589.6	87.4	401.2	3.4	2,5
Foreign workers	100.14	925.3	11.3	93.6	12.8	11,3

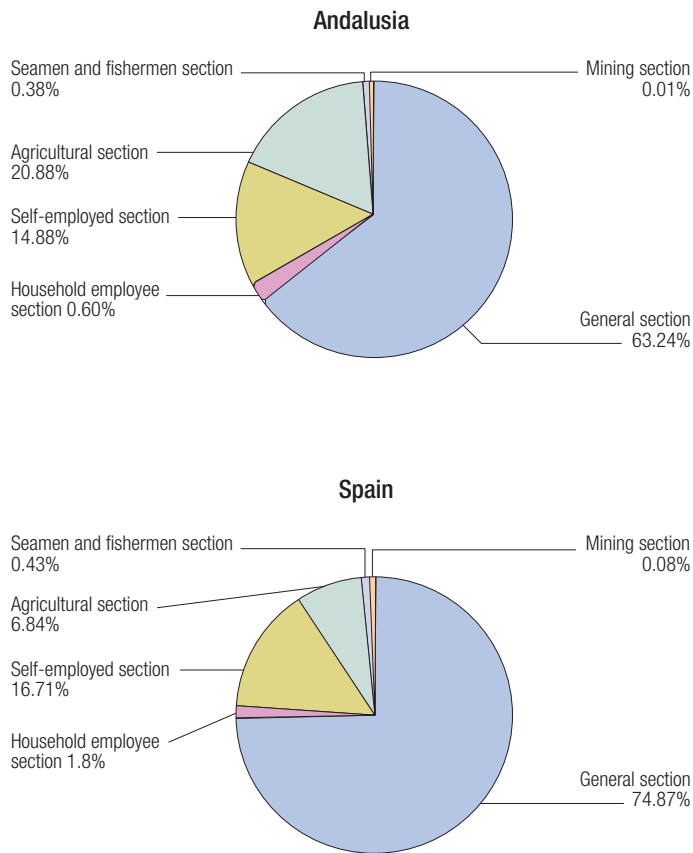
#### NOTES:

Thousand people unless otherwise stated.

(1) Data as of December.

Sources: INE Labour Force Survey, National Employment Institute and Ministry of Labour and Social Affairs.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 99. **WORKERS REGISTERED WITH SOCIAL SECURITY BY SECTION. YEAR 2003****NOTE:**

As a percentage of total registrations.

**Source:** Ministry of Labour and Social Affairs.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

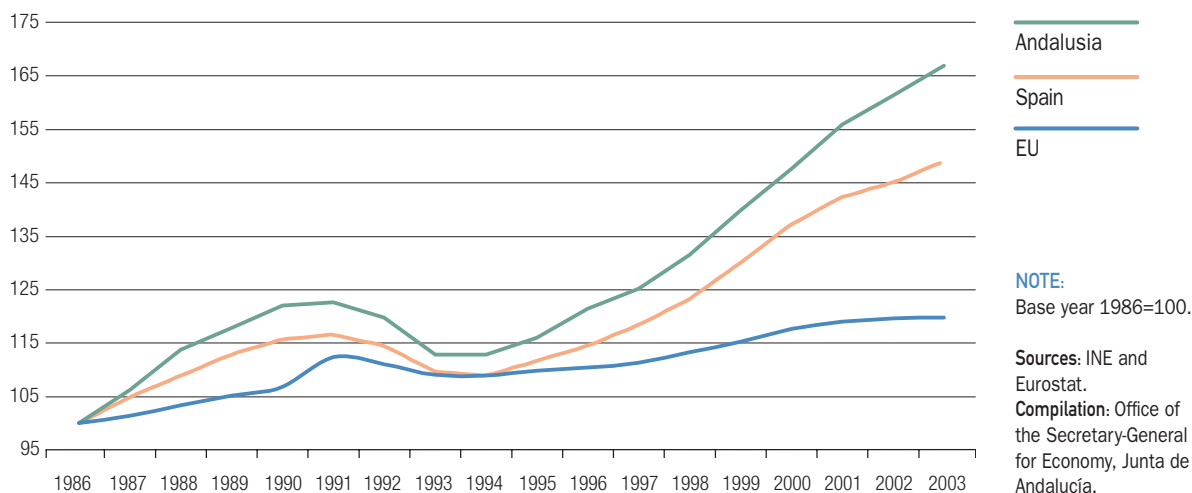
by 3.4%, exceeding the 2.5% increase registered nationally. There was a significant 12.8% year-on-year increase in the number of foreign people in work based on Social Security files, a faster rate than recorded nationally (11.3%). This brought the total number of foreign people registered as employed with the Social Security up to 100,138, accounting for 3.8% of the regional total, a lower percentage than observed nationally (5.6%).

A breakdown according to employment status shows that the fastest-growing category was the self-employed, with a year-end, year-on-year increase of 5.6%, 2.2 percentage points up on the previous year. The number of employees registered under the general section of the Social Security also rose (4.9%), as did the number of domestic employees registered under this special section (2%). On the

other hand, the number of workers registered under the special sections for miners, seamen and fishermen and agricultural workers fell in 2003.

Job growth in Andalusia, which was 3.4% in 2003 according to the LFS, can be wholly attributed to an increase in jobs in the non-agricultural sectors, among employees as opposed to the self-employed and among the over-twenty-fives. Job growth was stronger among women, people with higher qualifications, public sector workers and part-time workers.

A breakdown according to economic activity reveals that, in line with the national trend, all job growth was in the non-agricultural sectors, where employment rose year on year by 4.1% in 2003, exceeding the increase registered by these sectors nationally

Chart 100. **EMPLOYMENT**

3%, while employment in the primary sector fell by 1.8%.

In line with GVA trends, construction showed the biggest rise in employment, with an 8% increase, more than doubling the national rate of 3.7%.

Employment also rose in the service sector. All the branches of the service industry contributed to the 3.6% job growth recorded in 2003, with the highest increases in business activities and social activities.

The industrial sector also registered job growth (2.3%), thanks to new jobs in the manufacturing industries and, to a greater extent, in the extractive industries. This contrasts with the 1.3% decline observed in 2002 and the 1% fall registered nationally in 2003.

A breakdown according to employment status shows that, in keeping with national trends, job growth in Andalusia in 2003 was confined to employees (5% year on year), as the number of self-employed people in work fell by 3.3%.

A breakdown of the figures for employees, who accounted for 82.7% of the regional total, according to contract term, reveals that there was stronger job growth among wage earners with open-ended

contracts of work, with an increase of 6.5%, exceeding the national average of 4.1%. This was more than double the increase in temporary employment (3.1%), so that 66% of new employee jobs in Andalusia in 2003 were created under open-ended contracts.

A breakdown of self-employment figures shows a 2.6% increase in cooperative members and a 1% increase in sole proprietorships with employees. The latter category, the largest of the two, totalled 128,200 and accounted for 28.7% of all self-employed people. They were mainly engaged in wholesale, retail, construction and manufacturing activities.

On the contrary, there was a 4.4% fall in employment among sole proprietorships without employees, the most numerous category, accounting for over half of non-wage earners in Andalusia. There was an even sharper 6.2% drop in the category referred to as “unpaid family help”, that is, people working in the business of a family member living in the same household and receiving no wage as such.

A breakdown of employment figures according to age reveals that employment gains were recorded only among over-twenty-fives (4.2%), as there was a 1.7% reduction in the number of people under this

Table 54. **CHARACTERISTICS OF EMPLOYMENT. ANDALUSIA. YEAR 2003**

	2003		CHANGE ON 2002	
	Thousand people	% of total	Absolute (thousand people)	Relative (%)
<b>TOTAL</b>	2,585.10	100.0	85.9	3.4
<b>Gender:</b>				
Female	897.58	34.7	54.3	6.4
Male	1,687.47	65.3	31.6	1.9
<b>Age:</b>				
< 25	319.40	12.4	-5.7	-1.7
25-45	1,560.10	60.3	65.4	4.4
> 45	705.60	27.3	26.4	3.9
<b>Sector:</b>				
Private	2,067.75	80.0	57.2	2.8
Public	517.30	20.0	28.7	5.9
<b>Economic activity:</b>				
Agriculture	256.43	9.9	-4.8	-1.8
Industry	299.10	11.6	6.6	2.3
Construction	366.28	14.2	27.0	8.0
Services	1,663.30	64.3	57.2	3.6
<b>Hours worked:</b>				
Full time	2,358.08	91.2	69.2	3.0
Part time	226.97	8.8	16.7	8.0
<b>Qualifications:</b>				
No academic qualifications	183.06	7.1	-11.9	-6.1
Primary school	541.15	20.9	28.4	5.5
Secondary school	1,352.28	52.3	19.9	1.5
University degree	508.59	19.7	49.5	10.8
<b>Type of job:</b>				
Wage earners	2,138.24	82.7	101.1	5.0
Non-wage earners	446.80	17.3	-15.2	-3.3
- sole proprietors with employees	128.2	5.0	1.3	1.0
- sole proprietors without employees	249.3	9.6	-11.5	-4.4
- cooperative members	15.5	0.6	0.4	2.6
- Unpaid family help <sup>(1)</sup>	50.3	1.9	-3.3	-6.2
- Other	3.6	0.1	-2.1	-36.8
<b>Duration of contract:</b>				
Open-ended contracts	1,188.04	54.6	72.2	6.5
Temporary contracts	950.18	45.4	28.9	3.1

**NOTE:**

(1) People working without a formal salary in the business of a family member living in the same household.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



age in work, although this was a smaller drop than registered nationally (-3.5%). Within the over-twenty-fives age group, there was job growth among both the under-forty-fives and the over-forty-fives, who generally have greater difficulty finding a job.

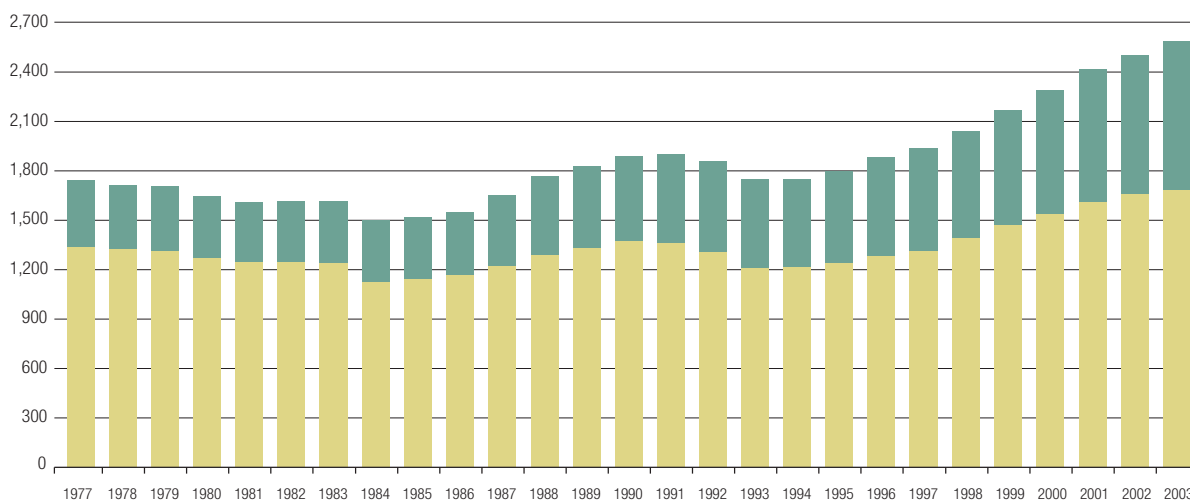
A breakdown of employment figures by gender reveals that job growth among women was higher than among men in Andalusia, with female employment rising year on year by 6.4% (male employment by 1.9%) and therefore at a faster rate than the previous year (4.9%) and nationally (4.9%). In absolute terms, there were 54,300 more women in work than in 2002, accounting for 63.2% of all jobs created in the region over the year. These figures confirm the continuation of the upward trend in female employment in the Andalusian labour market, with its share in total jobs rising from just over 25% in the mid-eighties to 34.7% in 2003. A look at female employment according to job type shows that the biggest year-on-year increase was in scientific, intellectual, technical and professional work (18%), which accounted for 17.6% of all jobs held by women. However, almost a quarter had unskilled jobs and 23.4% worked in restaurant, personal service, retail or wholesale

activities, while just 5.7% held management positions in the private or public sector. A comparison with male employment shows that more women than men work in administrative, restaurant, personal service, retail and wholesale jobs.

A breakdown of employment figures according to academic qualifications shows that there were increases in employment for all levels, except for people with no academic qualifications, highlighting the growing importance of education and training in finding a job.

The highest job growth was among university graduates, with a year-on-year increase of 10.8%, which was higher than the previous year and than the national average (5.9%). This means that 49,505 people with university degrees found a job in 2003, accounting for almost 60% of job growth in Andalusia in 2003. The highest job growth was among those who had completed the second cycle of university studies to obtain a full degree (13.1%), which was also the largest category, accounting for 49.5% of the total. The second biggest increase (6.6%) was among people who had completed the first cycle

Chart 101. **TRENDS IN EMPLOYMENT BY GENDER. ANDALUSIA**



**NOTE:**  
Thousand people.

Male Female

Source: INE Labour Force Survey.  
Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 55. **EMPLOYMENT BY OCCUPATION AND GENDER. ANDALUSIA**

	2003			CHANGE ON 2002					
				Absolute			Relative (%)		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Managers and administrators	51.5	123.6	175.1	-7.0	-1.4	-8.4	-12,0	-1,1	-4,6
Professionals	158.3	165.1	323.4	24.1	9.8	33.9	18,0	6,3	11,7
Associate professionals	88.1	151.3	239.4	5.7	9.5	15.2	6,9	6,7	6,8
Clerical workers	115.6	87.7	203.3	7.3	-4.1	3.2	6,7	-4,5	1,6
Restaurant, personal services, private security and sales workers	210.0	184.9	394.9	15.0	0.7	15.7	7,7	0,4	4,1
Skilled agriculture and fishing workers	13.5	79.7	93.2	-0.8	-0.5	-1.3	-5,6	-0,6	-1,4
Artisans and qualified workers in the manufact., construction and mining industries	24.2	407.6	431.8	1.7	12.1	13.8	7,6	3,1	3,3
Machine operators and assemblers	14.1	178.2	192.3	-2.2	3.0	0.8	-13,5	1,7	0,4
Non-skilled workers	220.6	287.2	507.8	10.9	2.2	13.1	5,2	0,8	2,6
Armed forces	1.7	22.1	23.8	-0.3	0.2	-0.1	-15,0	0,9	-0,4
<b>Total</b>	<b>897.6</b>	<b>1,687.5</b>	<b>2,585.1</b>	<b>54.4</b>	<b>31.6</b>	<b>86.0</b>	<b>6,5</b>	<b>1,9</b>	<b>3,4</b>

**NOTE:**

Thousand people.

Source: INE Labour Force Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

of university studies, that is the first three years, to obtain a diploma, also accounting for a large proportion of the total. Employment among those with a doctorate, the smallest of the three categories of university graduates, rose by just 0.9%.

Within the category of people with qualifications, there was also a 1.5% increase in the number of people with secondary-school certificates in work in Andalusia, the most numerous category, accounting for 52.3% of the total. There was a 2.5% increase in employment among people with the highest level of training in this category, that is, advanced vocational training.

The number of unqualified people in work in 2003 grew year on year by 2.3%, thanks to the 5.5% rise in employment among people with primary-school certificates, as employment among those with no academic qualifications at all fell by 6.1%. The percentage share of these latter two groups has fallen dramatically from two-thirds in the mid-eighties to 28% in 2003, as the share of qualified people in work has risen.

Job growth in 2003 was higher in the public sector (5.9%) than in the private sector (2.8%), in keeping with national trends. This increase brought the total number of people working in the Andalusian public sector up to 517,300, accounting for 20% of all jobs in the region. It was distributed as follows: 42.2% in regional government, 21.5% in local government, 17.5% in central government, 11.4% in the Social Security and 7.2% in public corporations and institutions.

Part-time employment increased by 8% in Andalusia in 2003, at a faster rate than full-time employment, which rose by 3%, in line with national trends (4.6% and 2.5% respectively).

The increase in part-time employment was higher among women (9.3%) than men (3.8%), pushing their percentage share in total part-time jobs up to 77% in 2003. A breakdown shows that the increase in part-time employment was observed in all the economic sectors except construction, with the biggest increases in the primary sector (42.5%) and in the service sector (6.4%). Significantly, 84.4% of all part-time workers were employed in the service sector,

particularly in the retail and wholesale trade and private households with employed persons, activities in which female employment is predominant.

A provincial breakdown of the figures shows that job growth was observed in all of Andalusia's provinces, with the biggest increases in Almería (7.2%) and Huelva (6%), and above-average increases in Cordova (5.7%) and Granada (4.1%). The province with the weakest job growth was Jaén, where employment rose by 1.6%.

### Labour force participation

Job growth in Andalusia in 2003 was accompanied by weaker year-on-year labour force growth of 2.1%. In 2003 a total of 64,100 job seekers joined the Andalusian labour market, bringing the Andalusian labour force total up to 3,174,450 people, the highest figure on record, and pushing the participation rate up to an all-time high of 52.9%.

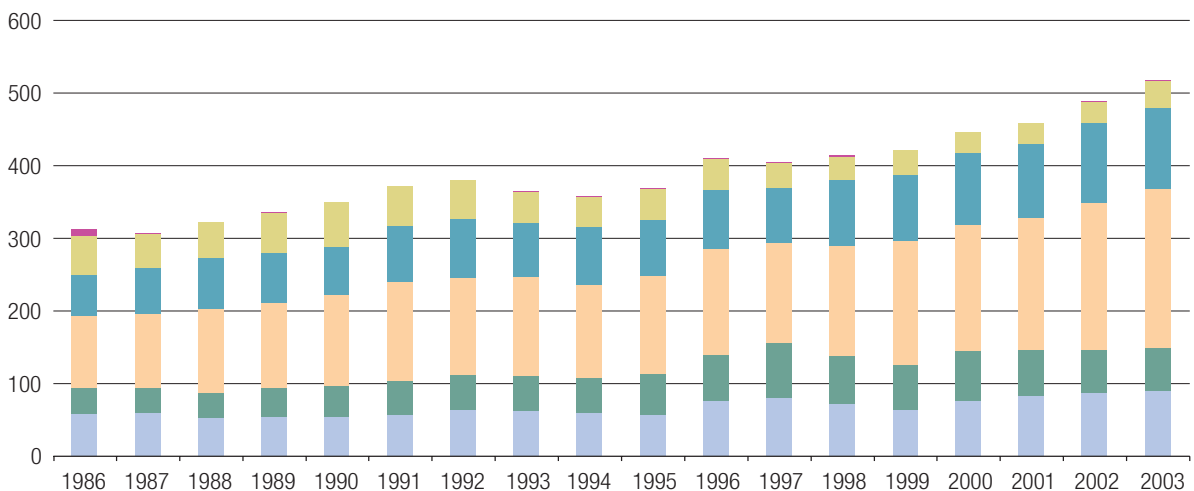
A breakdown according to gender reveals that in 2003 the size of the female labour force grew at a

faster rate than the male labour force (3.5% and 1.2% respectively). As a result, the female participation rate rose by one percentage point to 39.7%, narrowing the differential with the male participation rate by almost one percentage point to 27.3 points.

The higher increase in women joining the labour market was largely due to a 3% reduction in the number of women who were classed as economically inactive because they were studying, a 2.6% fall in those classed as such because they worked in the home and a 0.7% reduction in inactivity owing to retirement. A total of 35,500 women ceased to be classified as economically inactive for these three reasons, accounting for 86.2% of the total number of female job seekers joining the labour force.

A breakdown of the figures by age group shows that labour force growth was observed among over-twenty-fives only (3%), as it fell by 3.3% among under-twenty-fives. These figures confirm the trend of young people joining the labour force at a later age because they study longer, which also explains the reduction in the participation rate among people aged between 16 and 19 to 27.1% in 2003.

Chart 102. PUBLIC-SECTOR EMPLOYMENT BY GOVERNMENT TIER. ANDALUSIA



NOTE:  
Thousand people.

Source: INE Labour Force Survey.  
Compilation: Office of the Secretary General for Economy, Junta de Andalucía.

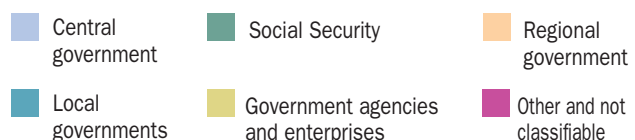


Table 56. **CHARACTERISTICS OF LABOUR FORCE. ANDALUSIA. YEAR 2003**

	2003		CHANGE ON 2002	
	Thousand people	% of total	Absolute (thousand people)	Relative (%)
TOTAL	3,174.45	100.0	64.1	2.1
Gender:				
Female	1,221.00	38.5	41.2	3.5
Male	1,953.40	61.5	22.9	1.2
Age:				
< 25	459.15	14.5	-15.6	-3.3
25-45	1,896.10	59.7	54.7	3.0
> 45	819.30	25.8	25.2	3.2
Economic activity:				
Agriculture	377.30	11.9	-8.2	-2.1
Industry	334.75	10.5	7.6	2.3
Construction	428.08	13.5	23.0	5.7
Services	1,878.35	59.2	54.0	3.0
Not classifiable	156.00	4.9	-12.3	-7.3
Qualifications:				
No academic qualifications	243.83	7.7	-17.1	-6.6
Primary school	676.47	21.3	27.0	4.1
Secondary school	1,678.67	52.9	8.2	0.5
University degree	575.47	18.1	46.1	8.7

Source: INE Labour Force Survey.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

In the over-twenty-fives category, there was significant 9.8% labour force growth among those over sixty, in sharp contrast to the 1.9% reduction recorded in 2002.

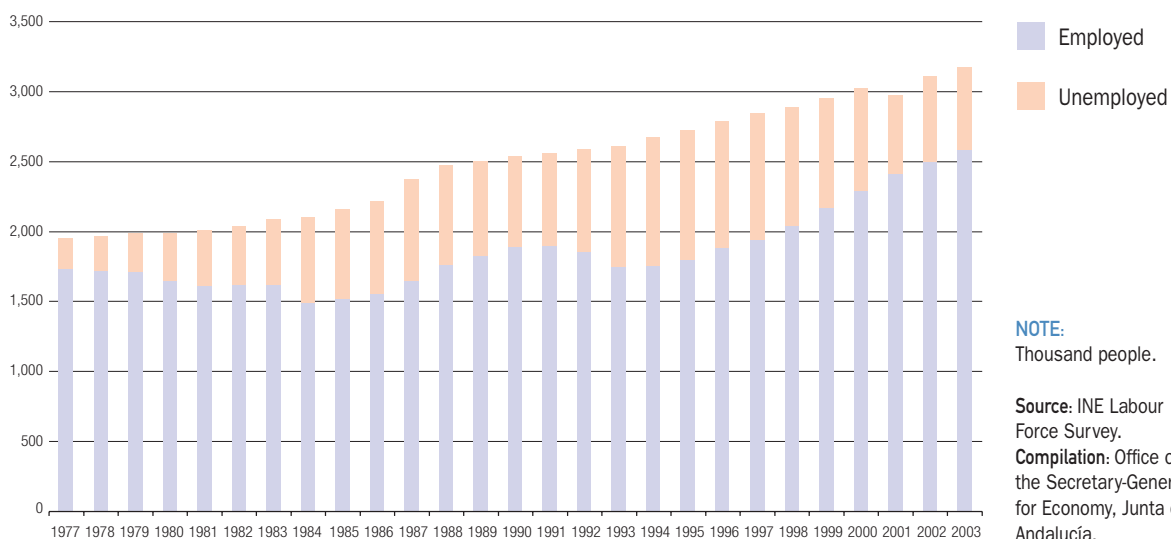
Labour force growth was recorded for all levels of education in 2003, except among people with no academic qualifications, where it fell by 6.6%. The biggest increase was among university graduates (8.7%), followed by people with primary-school certificates only (4.1%) and, lastly, people with secondary-school certificates (0.5%).

As a result of these trends, 71% of the Andalusian labour force was considered qualified in 2003, that is, with secondary-school certificates or university degrees, up on the previous year and more than double the percentage recorded in 1986, the first year for which this information is available.

It is also significant that the participation rate varies greatly among women according to their marital status, while this is not true for men. The participation rate was higher for separated or divorced women (72.6%) and single women (53.4%) than for married women (37.9%). Furthermore, the participation rate differential between men and women is widest in the case of married people.

Taking level of education into account, it can be seen that the difference between male and female participation rates, regardless of marital status, narrows significantly for higher levels of education, and the participation rate differential between unmarried men and women with a university education was 1.3 percentage points narrower.

Chart 103. **LABOUR FORCE. ANDALUSIA**



### Unemployment

As job growth outpaced labour force growth, according to the LFS, there was a 3.6% fall in jobless numbers in the region in 2003, in contrast with the 2.1% increase registered nationally.

It is also significant that the fall in unemployment in Andalusia benefited the long-term unemployed, defined as people who have been seeking employment

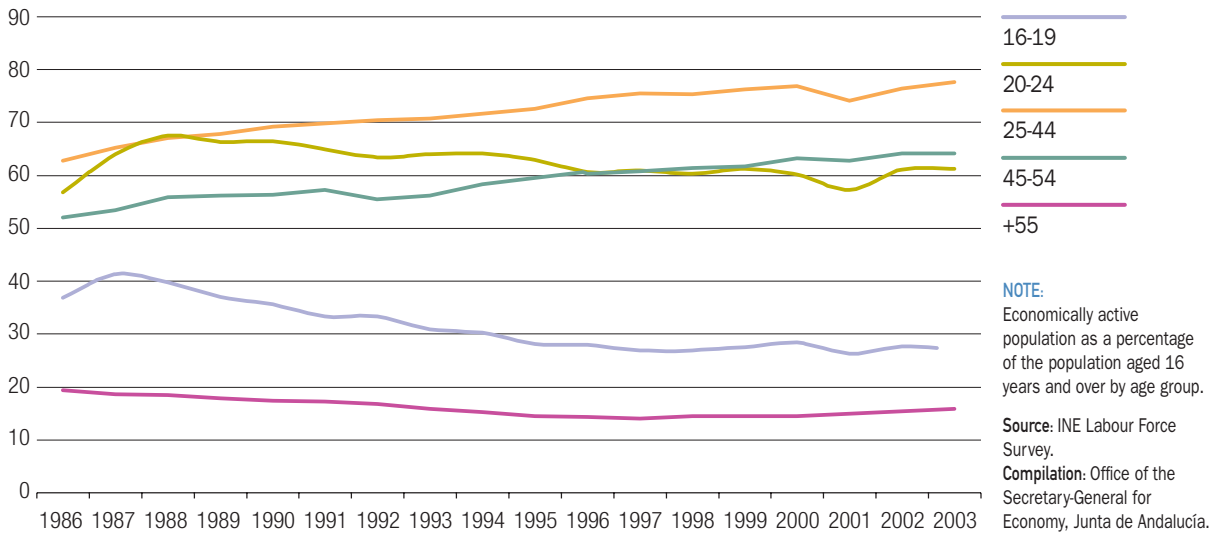
for two years or more, as unemployment among this group fell by 8.8%, a sharper drop than registered nationally (-1.7%). Structural unemployment therefore accounted for 20.9% of the regional jobless figure, 1.2 percentage points less than the previous year and four tenths of a point below the national average.

A breakdown of unemployment figures according to age reveals that the reduction was sharper among the under-twenty-fives (6.6% year on year) than among

Chart 104. **PARTICIPATION RATES BY GENDER. ANDALUSIA**



Chart 105. PARTICIPATION RATES BY AGE. ANDALUSIA



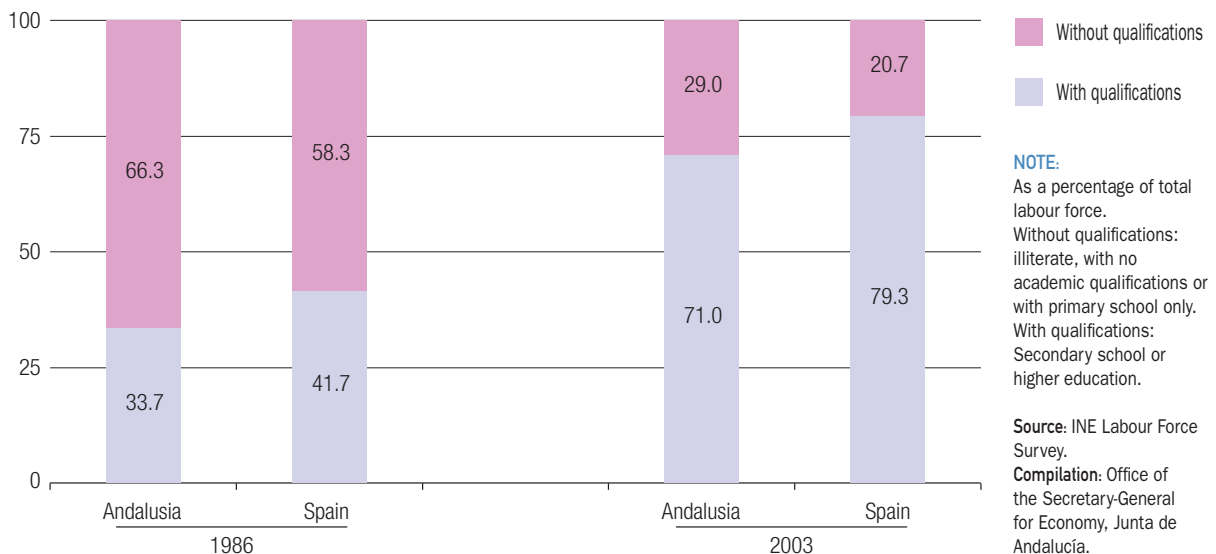
people over this age, the age group with the largest number of unemployed people, particularly among those aged between 25 and 45, who accounted for 57% of the jobless total in Andalusia.

A breakdown of unemployment figures according to gender reveals that, as job growth was higher than labour force growth among women in 2003, female

unemployment fell by 3.9%, while male unemployment fell less sharply (3.2%), contrasting with the increases recorded nationally (1.5% and 3% respectively).

Unemployment figures fell in all the economic sectors in Andalusia, except industry. The biggest reduction was observed in construction (-6%), followed by the primary sector and services.

Chart 106. BREAKDOWN OF LABOUR FORCE BY EDUCATIONAL LEVEL



A breakdown according to level of education reveals that unemployment fell at a similar rate among more highly qualified people (with secondary-school certificates and university degrees) and among the category of people with no academic qualifications or with primary-school certificates only.

As a result of these trends, the unemployment rate fell by 1.1 percentage points to 18.6%, so that the unemployment rate differential between Andalusia and Spain narrowed to 7.3 points, the lowest on record since 1983.

The female unemployment rate remained higher than the male rate (26.5% and 13.2% respectively).

However, the female rate fell more sharply than the male rate, so that the gap between the two narrowed to 1.4 percentage points.

The unemployment rate was down on 2002 for both under-twenty-fives and over-twenty-fives, with the latter registering the lower rate, in line with the national trend.

The unemployment rate fell for all levels of education. The lowest unemployment rate, which also showed the biggest drop in 2003, was among people with a university education.

Table 57. **CHARACTERISTICS OF UNEMPLOYED POPULATION. ANDALUSIA. YEAR 2003**

	2003		CHANGE ON 2002	
	Thousand people	% of total	Absolute (thousand people)	Relative (%)
<b>TOTAL</b>	589.38	100.0	-21.8	-3.6
<b>Gender:</b>				
Female	323.43	55.1	-13.2	-3.9
Male	265.95	44.9	-86	-3.2
<b>Age:</b>				
< 25	139.73	23.7	-10.0	-6.6
25-45	336.10	57.0	-10.6	-3.1
> 45	113.55	19.3	-1.3	-1.1
<b>Economic activity:</b>				
Agriculture	120.88	20.5	-3.4	-2.8
Industry	35.65	6.0	1.0	2.9
Construction	61.80	10.5	-4.0	-6.0
Services	215.05	36.5	-3.2	-1.5
Not classifiable	156.03	26.5	-12.3	-7.3
<b>Qualifications:</b>				
No academic qualifications	60.77	10.3	-5.3	-8.0
Primary school	135.32	23.0	-1.5	-1.1
Secondary school	326.40	55.4	-11.7	-3.5
University degree	66.89	11.3	-3.4	-4.9
<b>Time seeking job:</b>				
Less than 6 month	260.00	44.1	-11.8	-4.3
6 to 11 months	112.40	19.1	-4.2	-3.6
1 to 2 years	94.00	15.9	6.0	6.8
2 years and over	123.00	20.9	-11.9	-8.8

Source: INE  
Labour Force  
Survey.  
Compilation: Office  
of the Secretary-  
General for  
Economy, Junta  
de Andalucía.

Table 58. **CHARACTERISTICS OF UNEMPLOYMENT RATE. ANDALUSIA-SPAIN. YEAR 2003**

	2003		CHANGE ON 2002	
	Andalusia	Spain	Andalusia	Spain
TOTAL	18.57	11.30	-1.1	-0.1
Gender:				
Female	26.49	15.91	-2.0	-0.5
Male	13.62	8.17	-0.6	0.1
Age:				
< 25	30.43	22.75	-1.1	0.5
25-45	17.73	11.08	-1.1	0.1
> 45	13.86	7.15	-0.6	-0.2
Economic activity:				
Agriculture	32.04	15.51	-0.2	0.2
Industry	10.65	7.35	0.1	0.4
Construction	14.44	8.98	-1.8	-0.5
Services	11.45	7.79	-0.5	0.1
Qualifications:				
No academic qualifications	24.92	18.11	-0.4	1.9
Primary school	20.00	11.13	-1.1	-0.1
Secondary school	19.44	11.97	-0.8	0.0
University degree	11.62	8.41	-1.7	-0.3

Source: INE Labour Force Survey.  
 Compilation:  
 Office of the Secretary-General for Economy, Junta de Andalucía.

## Contracts of work

According to INEM figures, 3,575,681 contracts of work were registered in Andalusia in 2003, accounting for 24.4% of the national total. In keeping with LFS figures, this shows faster job growth in the region, with a year-on-year increase of 7.3%, more than double the national rate.

Of these contracts, 98.4% were new, and the remainder were existing contracts converted into open-ended contracts in 2003.

It is significant that open-ended contracts showed a bigger increase than fixed-term contracts, up 7.9% on the previous year, contrasting with the 1% reduction in this type of contract nationally. Within this category of open-ended contracts, job creation contracts showed the biggest increase, followed by ordinary open-ended contracts. In absolute terms,

those converted into open-ended contracts were the most numerous, accounting for 42.4% of the total.

The number of fixed-term contracts also increased (7.3%) at a faster rate than the previous year and than the national average of 3.9%.

Within the category of fixed-term contracts, temporary contracts designed to meet market and production requirements and contracts for the performance of specific work or services continued to be the most numerous group, accounting for 88.3% of the total, in line with national trends. Provisional contracts were the next biggest group, accounting for 3.8%, almost half the national average.

There was a bigger increase in employment contracts for women (11.4%) than for men (4.7%) in Andalusia in 2003. This resulted in an increase of 1.5 percentage points in the share of contracts for women to 41.8%



### Box 12. EMPLOYMENT DYNAMICS IN ANDALUSIA BY MUNICIPALITY

The Labour Force Survey (LFS), as a basic statistical source to analyse employment, must be supplemented with other alternative sources that go beyond the limitations of the survey, if an analysis is to be made on a more detailed scale than the provincial level. The **Population and Housing Census** is one such source.

According to the most recently published census, the Population and Housing Census 2001, there were a total of 2,474,179 people in work in Andalusia in that year. There is therefore a discrepancy between the two sources, with the Census recording 59,359 more people in work in the region than the LFS.

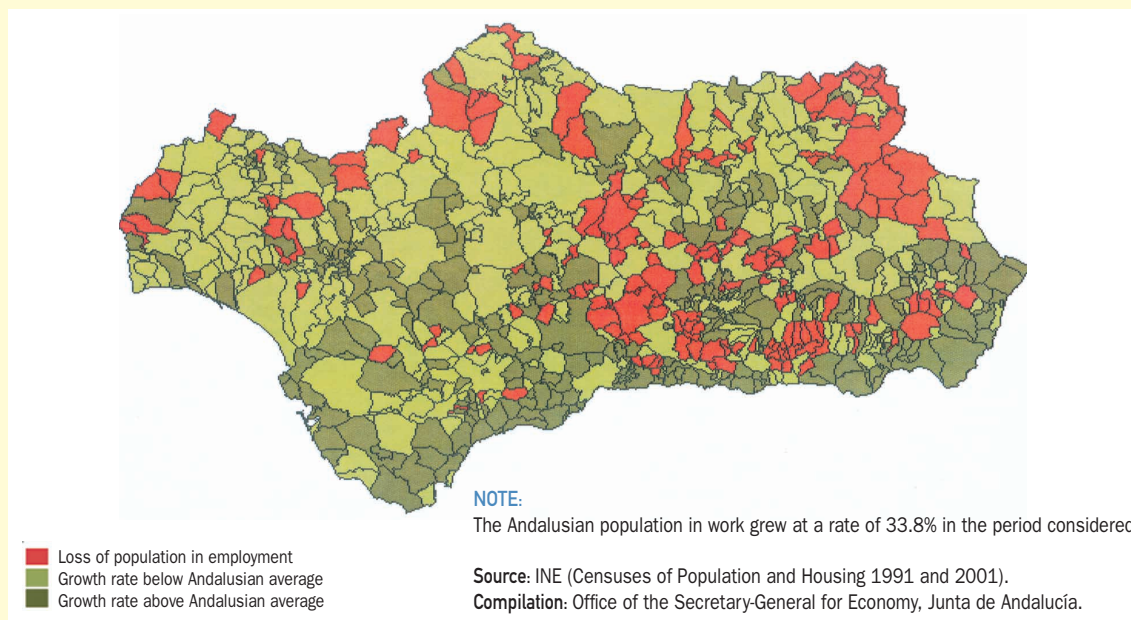
According to the Census, the number of people in work in Andalusia has grown since the previous Census in 1991 by 33.8%, a bigger increase than registered nationally (30.8%).

According to the LFS, employment rose by 27.1% in Andalusia and by 22.1% in Spain over this period, both lower rates than those recorded in the Census, highlighting the fact that the Census data reveals faster job growth than the LFS. In specific terms, according to the Population Census, a total of 625,162 jobs were created in Andalusia in the period from 1991 to 2001, 110,042 more than estimated in the LFS.

The municipal information provided by the Population Census shows that in the decade 1991-2001, there was job growth in municipalities that accounted for 81.3% of the region's area and in which 94.5% of the Andalusian population lived. This means that employment fell in parts of Andalusia that accounted for less than 20% of the region's area and in which just over 5% of Andalusians lived.

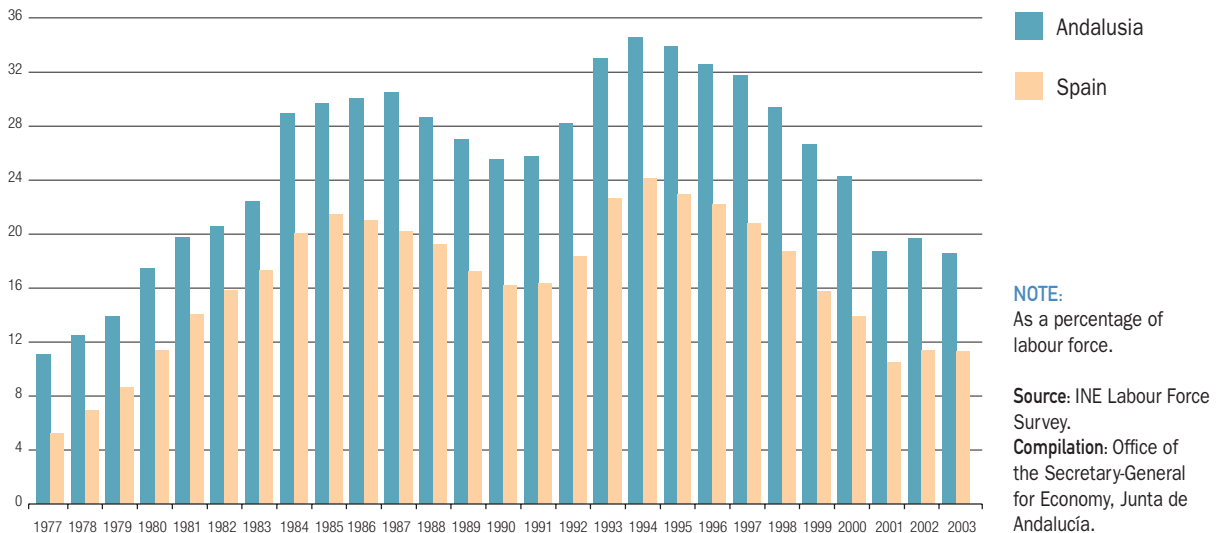
In this period growth has been concentrated in the coastal areas, that is, in municipalities bordering on the coast and neighbouring municipalities (57.7% from 1991 to 2001).

#### JOB GROWTH IN ANDALUSIA. YEARS 1991-2001



A breakdown by municipality size shows that job growth was stronger in medium-sized towns, that is, those with between 20,000 and 100,000 inhabitants, where employment rose by 50.9% between 1991 and 2001 according to the Population Census. They were followed by towns with a population of between 5,000 and 20,000 inhabitants, which registered employment gains of 39.1%. Employment grew below the Andalusian average in big towns and cities, with over 100,000 inhabitants, which registered 26.9% job growth, and in rural villages, with less than 5,000 inhabitants, which registered 20.1% job growth in this period.

Chart 107. **UNEMPLOYMENT RATE. ANDALUSIA-SPAIN**



of the total, a lower percentage than the national average (43.9%).

The overall figure for contracts registered in Andalusia includes contracts made through temporary employment agencies, known as temporary placement contracts, which totalled 173,863 in 2003, accounting for 4.9% of all contracts made in the region in 2003. This was a lower percentage than recorded in 2002 (5.1%) and than the national average (13.5%), highlighting the fact that these temporary employment agencies play a smaller role in the Andalusian labour market than they do in Spain as a whole.

## Labour relations

Significant developments in the area of labour relations in Andalusia in 2003 included a sharp

reduction in the number of labour disputes compared with the previous year, less dynamic collective bargaining trends and a similar number of workers affected by short-time working or layoffs.

In 2003 there were very few working days lost as a result of strikes in Andalusia, down 97.9% on the previous year, a sharper drop than registered nationally (-84%).

In spite of the sharp 21% drop in the number of filings for short-time working and layoffs in Andalusia, the number of workers affected increased slightly (1.2%), although this was a smaller increase than registered nationally. The increase was wholly due to permanent layoffs, which rose by 19.2% and accounted for three-quarters of the total, as the number of workers affected by temporary layoffs or short-time working fell by 24.3% and 96.5% respectively.

Table 59. **EMPLOYMENT CONTRACTS. ANDALUSIA-SPAIN. YEAR 2003**

	NO. OF CONTRACTS		% OF TOTAL		02-03 GROWTH %	
	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain
Ordinary open-ended contract	43,160	423,732	1.2	2.9	8.5	-2.4
For performance of specific works of service	1,417,851	5,323,303	39.7	36.3	11.5	5.2
Determined by market and production requirements	1,737,904	6,466,845	48.6	44.1	7.6	3.7
For temporary replacement of workers	137,067	1,067,405	3.8	7.3	10.8	6.4
Open-ended contracts under job creation incentives	34,022	283,934	1.0	1.9	15.9	-5.5
Temporary contracts for disabled workers	1,317	9,567	0.0	0.1	6.6	4.2
Substitution contracts	125	1,135	0.0	0.0	27.6	-24.2
Work-experience contracts	10,678	76,471	0.3	0.5	1.3	-2.2
Training contracts under Law 63/1997	32,328	125,774	0.9	0.9	4.3	-0.6
Disabled worker contracts	914	8,279	0.0	0.1	0.3	-0.9
Replacement contracts	460	10,766	0.0	0.1	49.8	47.2
Partial retirement contracts	474	10,327	0.0	0.1	92.7	51.7
Temporary contracts under Law 12/2001	7,468	89,247	0.2	0.6	272.5	69.3
Other contracts	94,323	217,455	2.6	1.5	-37.2	-31.8
<b>Total new contracts</b>	<b>3,518,091</b>	<b>14,114,240</b>	<b>98.4</b>	<b>96.2</b>	<b>7.4</b>	<b>3.5</b>
<b>FIXED-TERM CONTRACTS</b>						
CONVERTED INTO OPEN-ENDED	57,590	553,823	1.6	3.8	3.2	2.6
<b>TOTAL CONTRACTS</b>	<b>3,575,681</b>	<b>14,668,063</b>	<b>100.0</b>	<b>100.0</b>	<b>7.3</b>	<b>3.4</b>
<b>OPEN-ENDED CONTRACTS</b>	<b>135,686</b>	<b>1,269,768</b>	<b>3.8</b>	<b>8.7</b>	<b>7.9</b>	<b>-1.0</b>
- Ordinary	43,160	423,732	1.2	2.9	8.5	-2.4
- Contracts under job creation incentives	34,022	283,934	1.0	1.9	15.9	-5.5
- Fixed-term contracts converted into open-ended	57,590	553,823	1.6	3.8	3.2	2.6
- Disabled worker contracts	914	8,279	0.0	0.1	0.3	-0.9
<b>TEMPORARY CONTRACTS</b>	<b>3,439,995</b>	<b>13,398,295</b>	<b>96.2</b>	<b>91.3</b>	<b>7.3</b>	<b>3.9</b>

Source: National Employment Institute.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

According to the provisional figures provided by the Ministry of Labour and Social Affairs, 22 fewer collective agreements were signed in Andalusia, making a total of 750, including new agreements signed in 2003 and the annual revisions of contracts signed previously for two years or more. These collective agreements covered a total of 1,274,055 workers, 4% down on the 2002 figure, a smaller reduction than recorded in Spain as a whole (-6.3%).

Therefore, taking into account the number of wage earners in Andalusia according to the LFS, the coverage of collective agreements in 2003 was 5.6 percentage points lower than in 2002,

with the proportion of wage earners covered by collective agreements in the region falling to 59.6%.

A breakdown by scope shows that the number of workers covered by broad agreements, accounting for 94.2% of the total, fell by 6%, while the number of workers covered by enterprise-specific collective agreements rose by 28%.

## Hours worked

Information on hours worked in Spanish enterprises is provided by the Ministry of Labour and Social Affairs

in its Labour Situation Survey and by the INE in its Labour Cost Index.

The Labour Situation Survey provides statistics on number of hours actually worked, overtime and hours not worked and the reasons why. The scope of the survey includes wage earners registered under the general Social Security section and the special mining section and covers industrial, construction and service activities, except public administration, defence, compulsory Social Security, extra-territorial organisations and bodies and religious organisations.

The number of hours actually worked is calculated as the number of hours legally agreed in collective bargaining or agreements between employers and employees, plus overtime and minus any hours not worked for any reason, including temporary disability, personal leave, industrial disputes, unjustified absenteeism, etc.

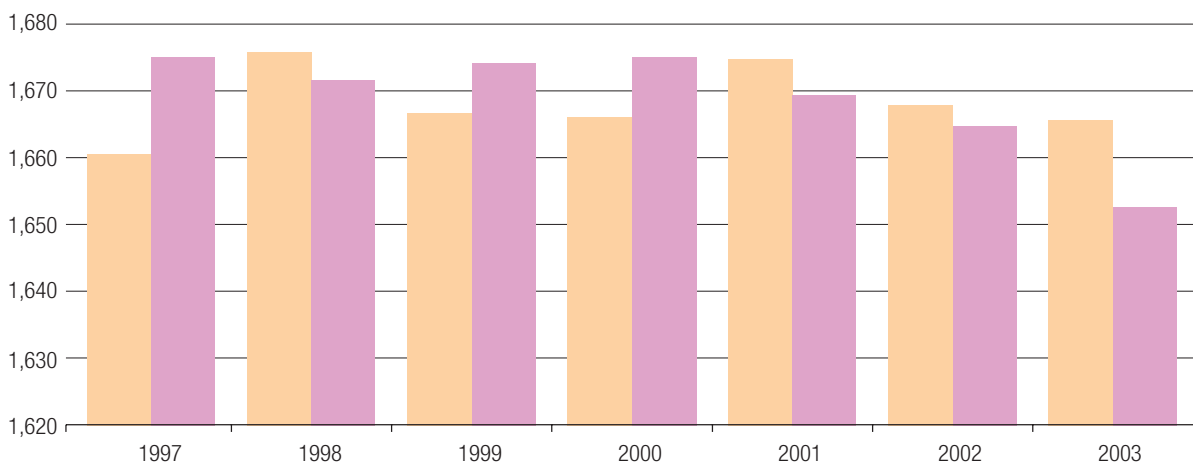
According to the survey, the average number of hours actually worked per worker in Andalusia in

2003 was 1,665.7, which was 12.9 hours more than the national average. This difference was due to the fact that workers in Andalusia lost fewer hours of work, owing to holiday entitlements, temporary disability, personal leave, industrial disputes, etc., than they did in Spain as a whole, and because they worked more overtime.

The average number of hours actually worked per worker was 2.3 hours less than in 2002, a smaller reduction than recorded in Spain as a whole (12.1 hours). The reduction can be wholly attributed to full-time workers, as the average number of hours actually worked by part-time workers increased, in line with the national trend.

A breakdown by sector reveals that the construction industry recorded the highest average number of hours actually worked, 7.2% higher than the regional average, followed by industry, while the average number of hours actually worked in the service sector was lower than the regional average, in line with national trends.

Chart 108. **HOURS ACTUALLY WORKED PER WORKER**



**NOTES:**

Number of hours. Hours actually worked include annual hours bargained plus overtime minus hours not worked for occasional reasons such as temporary disability, paid leave, labour disputes, unjustified absence, etc.

Andalusia  
Spain

Source: Labour Situation Survey, Ministry of Labour and Social Affairs.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

There was a year-on-year reduction in the number of hours worked in 2003 in construction and services, industry being the only sector to see a rise.

An analysis by enterprise size shows that in 2003 the number of hours actually worked per worker was highest in small enterprises, with between 11 and 50 workers, as in Spain as a whole. It was lowest in micro-enterprises, with between 1 and 10 workers, and second to lowest in big enterprises, with over 250 workers. Specifically, in a small enterprise, 4.5% more hours were worked than in a micro-enterprise, and 3% more than in a big enterprise.

Year on year, the number of hours actually worked per worker fell, both in Andalusia and in Spain as a whole, in micro-enterprises and medium-sized enterprises (between 51 and 250 workers). The number of hours actually worked increased year on year in Andalusia in small and big enterprises, while

nationally only big enterprises registered a higher figure than in 2002.

Average overtime per worker in Andalusia in 2003 was 103.8 hours, 5.8 hours more than the national average. In both cases there were reductions in the amount of overtime worked in respect of 2002, wholly owing to a sharp reduction in the service industries.

The number of hours not worked for reasons including temporary disability, personal leave, industrial disputes, unjustified absenteeism, etc. amounted to 211.7 per worker in Andalusia, compared with 236.2 in Spain. The number of hours not worked owing to holiday entitlements and public holidays and for extraordinary reasons was lower in both cases in Andalusia than in Spain. It should be noted that both in Andalusia and nationally, the majority of hours not worked for extraordinary reasons corresponded to temporary disability and maternity leave.

Table 60. **HOURS ACTUALLY WORKED PER WORKER. ANDALUSIA-SPAIN. YEAR 2003**

	2003		CHANGE ON 2002	
	Andalusia	Spain	Andalusia	Spain
<b>TOTAL</b>	1,665.7	1,652.8	-2.3	-12.1
<b>Work week</b>				
Full-time	1,784.6	1,758.5	-4.8	-9.1
Part-time	1,052.0	1,023.9	1.1	-2.6
<b>Economic activity</b>				
Industry	1,707.9	1,705.8	0.9	-10.9
Construction	1,785.0	1,766.5	-6.8	-10.7
Services	1,625.6	1,612.8	-2.5	-12.1
<b>No. of workers</b>				
Between 1 and 10	1,628.1	1,645.2	-12.1	-18.2
Between 11 and 50	1,701.0	1,686.2	0.3	-3.8
Between 51 and 250	1,685.8	1,651.0	-0.6	-16.2
More than 250	1,652.1	1,622.7	7.5	88.9

**NOTES:**

Number of hours. Hours actually worked include annual hours bargained plus overtime minus hours not worked for occasional reasons such as temporary disability, paid leave, labour disputes, unjustified absence, etc.

Source: Labour Situation Survey, Ministry of Labour and Social Affairs.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

This analysis based on the Labour Situation Survey can be supplemented by the information provided by Labour Cost Index, produced by the INE, which shows similar results. The index also covers the concepts of negotiated working hours, hours actually worked, hours not worked and overtime, on the same population and sectoral basis, but excluding domestic service.

The number of hours actually worked is calculated as the number of hours legally agreed in verbal agreements, individual contracts or collective bargaining between employers and employees, plus overtime and minus any hours not worked for any reason, including holiday entitlements and public holidays, temporary disability, maternity leave, personal leave, industrial disputes, unjustified absenteeism, etc.

According to the survey, the average number of hours actually worked per worker in Andalusia in 2003 was 1,670.1, which was 3.3 hours more than the national average. Taking into account that a lower number of hours was legally agreed between employers and employees in Andalusia, the 2003 result can be attributed to the fact that Andalusian workers worked more overtime and lost 28 hours less owing to holiday entitlements and public holidays, temporary disability, maternity leave, personal leave, industrial disputes, non-justified absenteeism, etc. than Spanish workers did.

The average number of hours actually worked per worker in Andalusia was 13.8 hours less than in 2002, a sharper reduction than recorded in Spain as a whole (7.8 hours). The reduction can be largely attributed to the sharp drop in time worked by part-time workers (-38.7 hours), as full-time workers showed a smaller reduction (3%).

A breakdown by sector reveals that, in line with the national trend, the construction industry recorded the highest average number of hours actually worked, 161.4 hours above the regional average, followed by industry. The average number of hours actually worked in the service sector was, on the other hand, lower than the regional average.

All the sectors saw a reduction in the number of hours worked in 2003, with the biggest drop recorded in the service sector.

Average overtime per worker in Andalusia in 2003 was 9.8 hours, almost the same as the national average. However, while in Andalusia it was up on the previous year, thanks to sharp increases in industry and services, in Spain as a whole, it remained practically unchanged.

The average number of hours not worked for any reason amounted to 219.7 in Andalusia and 247.6 in Spain, industry being the sector with the most hours not worked in both cases.

## Quality of life at work

The Ministry of Labour and Social Affairs publishes a Survey on the quality of life at work, which provides information on the situation of workers in the labour market and their attitudes and perceptions with regard to the work they do. The survey is a tool that can be used to obtain and relate objective information on the real situation of activities and relationships in the workplace to subjective information on how workers perceive their working conditions and labour relations.

At the regional level, the survey provides series of indicators conceived to assess job satisfaction and examine the work environment, looking at aspects such as job interest, monotony and stress, and work organisation, taking into account factors such as participation, knowledge of corporate objectives and employees' pride in their work.

The indicator measuring job satisfaction on a scale of one to ten showed an improvement on the previous year, with the value for Andalusia rising from 6.6 in 2002 to 6.8 in 2003, similar to the national average.

One of the factors analysed to assess the work environment is the extent to which workers consider their jobs attractive and interesting. Andalusia scored 6.7, which was higher than the 2002 score (6.5), but

lower than the national average of (6.8). The score was higher for men than for women.

With regard to job monotony and boredom, Andalusia fared well, with a low score of 3.4, less than in 2002 (3.7), but higher than the national average (3.2).

The job stress level indicator shows that Andalusia is a region where job-related stress is increasingly low, with the score falling from 5.1 in 2002 to 4.9 in 2003, although this was higher than the national average of 4.4.

The survey analyses work organisation based on the responses of employees. The survey reveals that the level of participation was higher for Andalusian employees (5.7) than nationally (5.2). Andalusia also scored higher than Spain as a whole in terms of employees' pride in their work (8.1 in Andalusia and 7.5 in Spain), making it the third highest scoring region after Asturias and Extremadura. Andalusia did not fare as well with regard to degree of knowledge of corporate objectives, scoring less than the national average (6.6 points in Andalusia and 6.9 in Spain).

# 10.

## Prices, Labour Costs and Income





## Prices, Labour Costs and Income

### Prices

In keeping with price growth trends observed nationally and in the industrialised countries in general, indicators for Andalusia revealed a downward trend over the year, in contrast with the upward trend of the previous year.

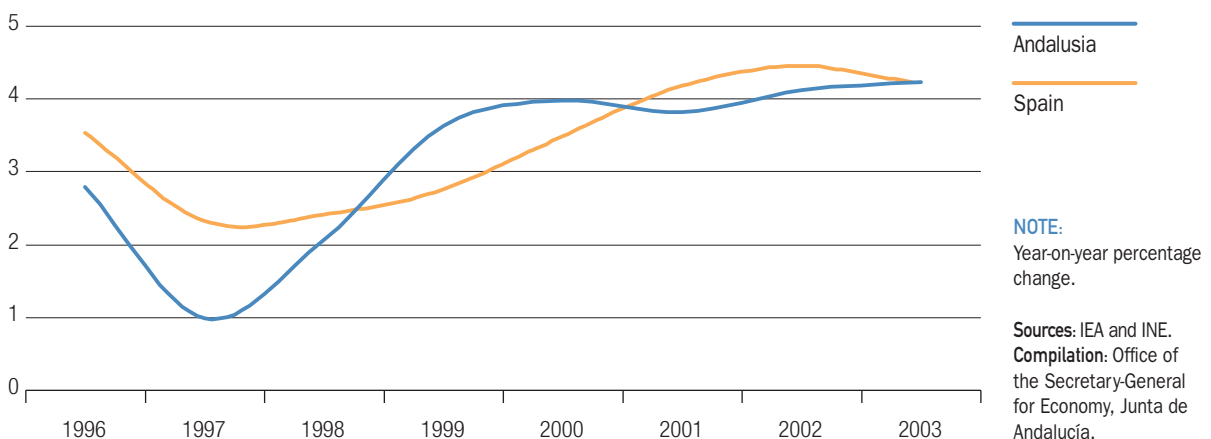
On the supply side, the overall deflator for GDP at market prices, which measures the change in prices of goods and services produced by an economy, rose by 4.2% in 2003, with growth slowing as the year progressed.

Producer price growth in Andalusia matched that observed in the Spanish economy and was practically the same as the previous year (4.1%).

A breakdown by sector reveals that the lowest price growth was observed in industry, where the deflator for GVA at basic prices rose by 2.6%, nine tenths of a point less than in 2002.

It was followed by the primary sector, with a 3.2% increase in the deflator in 2003. Prices therefore rose at a slightly faster rate than the previous year,

Chart 109. **GROSS DOMESTIC PRODUCT DEFLATOR**



although almost a percentage point slower than in the sector nationally (4.1%).

Price growth in the service sector was also lower in Andalusia than nationally. The deflator for the Andalusian service industries rose by 3.9%, three tenths of a point slower than nationally.

Construction was, for the fourth consecutive year, the most inflationary sector, registering a 5.8% rise in producer prices, nine tenths of a point up on the previous year's rate, but almost two points below the national rate.

Overall, producer prices in the non-agricultural sectors grew by 4% in 2003, the same rate as the previous year and two tenths of a point below the national average.

A comparison of producer price and GDP trends reveals that in 2003, continuing the trend observed the previous year, GDP deflator growth in Andalusia outpaced real GDP growth, as it did nationally.

Specifically, while real GDP growth in Andalusia was 2.6%, the deflator rose by 4.2%, so that for every percentage point of real GDP growth, producer prices rose by 1.6 percentage points. This was more pronounced in the Spanish economy, where producer

prices rose by 1.8 points for every percentage point of real GDP growth.

However, the effect of production growth on prices was not the same in all the economic sectors in Andalusia in 2003. Construction was the sector that experienced less pressure on prices, with the deflator rising by 0.8 points for every percentage point of real GVA growth, in contrast to the situation in Spain as a whole, where prices grew at twice the rate of production.

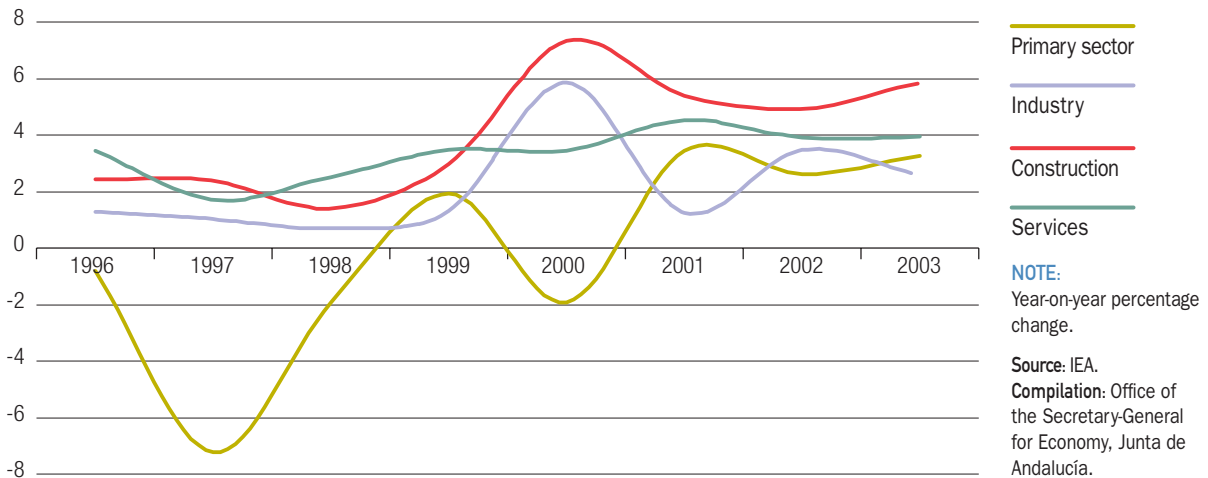
In agriculture and fishing, which had experienced the lowest inflationary pressure in the previous two years, the results show a 7.2% fall in real GVA in the sector, accompanied by a significant 3.2% increase in producer prices.

In the Andalusian service sector prices also grew at a proportionally faster rate than production, with the deflator rising by 1.5 points for every point of real GVA growth, although this was lower than in Spain as a whole (2 points).

In Andalusian industry, in contrast to the previous year, when real growth had a more than proportionate effect on prices, in 2003 the deflator rose at the same rate as GVA (2.6%). This was not the case in Spain as a whole, where industrial prices rose

Chart 110. **OUTPUT DEFLATORS. YEAR 2003**



Chart 111. **GROSS VALUE ADDED DEFLATOR. ANDALUSIA**

by 1.5 points for every percentage point of GVA growth.

On the demand side, the consumer price index (CPI) averaged a year-end, year-on-year increase of 2.6% in Andalusia, matching the national average. This was 1.3 percentage points below the previous year's rate of increase, so that Andalusia's inflation rate fell to its lowest level since 1999.

The easing off of inflation observed in Andalusia was also seen in the euro area, although to a lesser extent.

According to the harmonised index of consumer prices (HICP), the year-end inflation rate for the euro area countries was 2%, three tenths of a point lower than in 2002 and two tenths of a point higher than in the European Union as a whole.

As price growth slowed more sharply in Andalusia than in the euro area, the inflation rate differential between the region and the euro area shrank to 0.6 percentage points, the narrowest in four years.

The trend of receding inflation extended to all the countries in this area, except France and Belgium. The countries with the highest inflation rates, however, were Greece (3.1%) and Ireland (2.9%), which had higher rates than Andalusia.

A look at the pattern of inflation over the year reveals that, although it showed a clearly downward trend, some inflation spikes were observed in the summer months, largely owing to the effect of the heat wave on food prices and, to a lesser extent, to a reversal in the downward trend of world crude oil prices in the first half of the year.

In the first half of the year, year-on-year CPI growth fell sharply by 1.1 percentage points from 3.9% at the end of 2002 to 2.8% in June 2003. This was followed by an uptick in inflation, which spiked at 3% in August and September and then fell again in the last quarter to a year-end rate of 2.6%.

As mentioned above, price growth was largely influenced by unprocessed food products and, to a lesser extent, energy products.

After a steady upward trend in 2002, the unprocessed food CPI showed much slower growth in the first four months of 2003, with the year-on-year rate of increase falling from 7.5% in January to 3.6% in April.

The following months, particularly August and September, saw a reversal of this trend, as the heat wave affected unprocessed food prices, which spiked at around 8%.

Table 61. EUROPEAN UNION CPI BREAKDOWN. YEAR 2003

	All-item CPI	Food and non-alcoholic beverages	Alcoholic beverages and tobacco	Clothing and footwear	Housing	Household equipment	Health	Transport	Communication	Recreation and culture	Education	Restaurants, and hotels	Miscellaneous goods and services
Germany	1.1	1.4	5.1	-0.5	1.9	0.1	0.7	1.9	0.8	-1.3	2.2	0.3	1.9
Austria	1.3	2.7	2.2	0.7	0.9	1.1	0.8	0.9	-0.7	0.1	1.9	2.5	1.7
Belgium	1.7	2.1	4.6	1.0	1.1	1.0	2.3	1.4	1.3	0.8	0.5	2.7	2.6
Finland	1.2	2.2	1.1	-0.8	3.6	0.1	3.8	-2.0	-3.0	1.4	5.6	2.5	2.3
France	2.4	2.4	17.3	0.0	1.9	1.4	2.9	1.9	0.5	-0.6	2.7	2.7	2.3
Greece	3.1	3.0	7.0	2.9	2.8	1.8	4.1	1.8	-2.3	2.3	4.4	5.0	2.2
Netherlands	1.6	-0.2	2.1	-1.7	4.3	0.6	1.1	2.1	1.9	-0.1	3.2	2.1	3.1
Ireland	2.9	0.1	6.4	-2.7	4.2	-1.4	7.0	2.6	2.3	3.4	6.4	4.8	2.5
Italy	2.5	3.9	7.9	2.5	2.8	2.0	1.9	2.3	-4.7	1.6	1.8	3.5	2.9
Luxembourg	2.4	2.1	5.2	1.2	2.4	1.7	-1.6	1.8	-1.5	2.4	1.2	2.6	2.6
Portugal	2.3	2.5	3.1	1.3	3.3	1.9	1.5	1.5	-2.1	0.9	11.3	3.4	3.0
EURO AREA	2.0	2.6	7.7	1.0	2.3	1.1	1.8	1.9	-0.7	-0.2	3.1	2.8	2.4
Denmark	1.2	1.2	-6.2	1.8	1.4	0.5	3.2	2.2	-3.5	1.3	15.8	2.4	2.6
United Kingdom	1.3	3.0	1.8	-3.6	2.2	-0.6	3.0	3.0	-0.2	-2.2	4.7	3.0	2.6
Sweden	1.8	1.5	1.3	-2.7	7.2	0.6	2.9	1.6	-2.2	-1.5	-3.3	2.9	2.1
EU COUNTRIES	1.8	2.6	6.1	0.3	2.4	0.8	1.9	2.0	-0.7	-0.7	3.7	2.8	2.4
Spain	2.6	4.1	2.8	2.5	2.8	1.7	2.0	1.0	-0.2	0.1	4.3	4.1	3.1
Andalusia	2.6	4.1	2.7	2.3	3.6	1.5	1.8	0.8	-0.1	-0.1	4.7	4.0	2.5

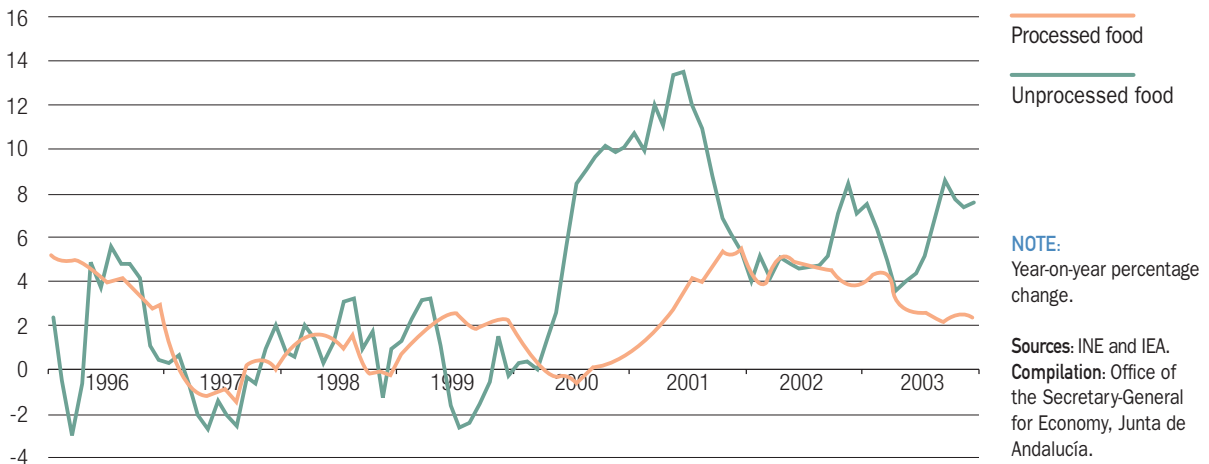
## NOTE:

Year-on-year percentage change as of December.  
HICP except for Spain and Andalusia.

Sources: INE and Eurostat.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 112. **FOOD COMPONENT OF CPI. ANDALUSIA**



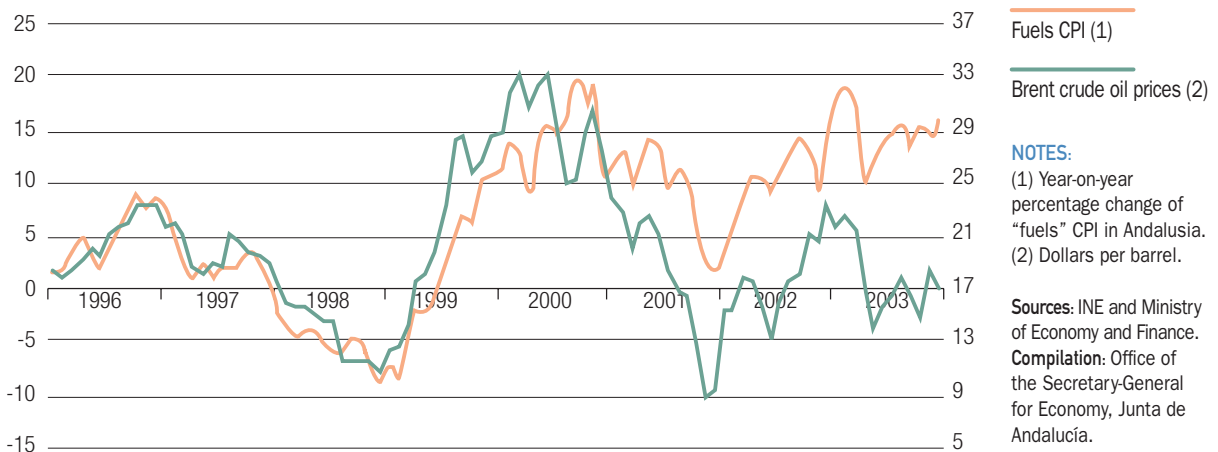
The price of energy products followed an upward trend in the first quarter, owing to the effects of the war in Iraq on crude oil prices, but then trended downwards in the middle of the year, once the conflict was over and in line with oil prices on world markets. In the second half of 2003, Brent crude prices in dollars began to climb, but were offset by the sharp appreciation of the euro against the dollar, so that the price of crude per barrel remained practically the same, and the energy product CPI remained very subdued.

However, if the most volatile components, namely unprocessed food prices and energy prices, are

excluded from the all-item CPI to measure the structural behaviour of prices, it can be seen that underlying inflation in Andalusia fell steadily in 2003 to a year-end rate of 2.3%, 1.1 percentage points below the previous year's rate and two tenths of a point below the national average rate.

To a greater or lesser extent, all three of the broad groups of expenditure into which the index can be disaggregated, namely food, industry and services, contributed to the overall falloff in CPI growth in 2003, particularly industry.

Chart 113. **FUELS CPI AND CRUDE OIL PRICES**



Industrial goods showed the lowest price rises over the year, resulting in a year-end rate of 1%, almost two points below the 2002 rate. Taking into account the weight of this group in the all-item CPI (40.6%), the falloff in industrial price growth accounted for 0.8 percentage points, that is almost 60%, of the overall 1.3 point fall in inflation recorded in Andalusia in 2003.

Within the industrial goods group, there was a 0.1% year-on-year fall in fuel prices, a sharp decline from the substantial 7.5% increase registered the previous year, when the price of a barrel of crude oil rose by a staggering 50.5%.

However, it is important to note that the near-flat growth of the fuel CPI in 2003 was largely influenced by the significant appreciation of the euro against the dollar on exchange markets, which offset the increase in the price of crude. Between December 2002 and December 2003, the euro rose 17.1% against the dollar, wiping out the 6.8% increase in the price of a barrel of crude oil and resulting in a reduction of 11.5% in the price in euros.

The energy products CPI therefore rose slightly year on year by 0.3%, a much smaller increase than the 5% rise registered the previous year.

The price of non-energy industrial products grew at a slower rate in 2003 at 1.2% year on year, half the previous year's rate. It is significant that the price of industrial durable goods remained practically unchanged, maintaining a very stable trend, as in 2002, to end the year with a year-on-year rate of 0.1%.

The food products, beverages and tobacco group, accounting for 28.6% of the all-item CPI, also showed decelerating price growth, which fell from 4.9% year on year in December 2002 to 3.9% at the end of 2003, thus contributing almost three tenths of a point to the reduction in inflation.

At any event, as in the previous two years, this was the group that registered the highest price rises, exceeding the CPI average, mainly attributable to unprocessed food prices, which ended the year with an inflation rate of 7.6%, half a percentage point up on the previous year and 1.2 points above the national year-end rate.

The most inflationary item within this class was potatoes and potato products, which registered a 20.2% rise in prices, as a result of a significant reduction in output according to figures on crop areas and production published by the Regional Ministry of Agriculture and Fisheries. There were

Chart 114. **CONSUMER PRICE INDEX. ANDALUSIA**

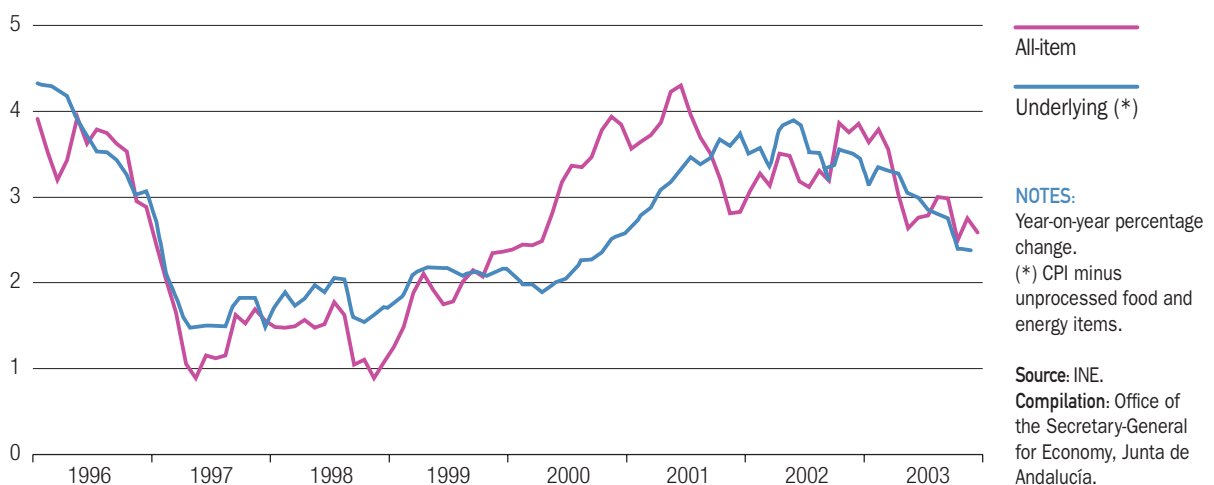


Table 62. **CONSUMER PRICE INDEX FOR SPECIAL PRODUCT GROUPS. YEAR 2003**

	Andalusia (1)	Spain (2)	Difference (1-2)
Food products, beverages and tobacco	3.9	3.9	0.0
Processed food plus beverages and tobacco	2.2	2.7	-0.5
Unprocessed food	7.6	6.4	1.2
Industrial goods	1.0	0.9	0.1
Energy products	0.3	-0.1	0.4
Fuels	-0.1	-0.6	0.5
Minus energy products	1.2	1.2	0.0
Durable consumer goods	0.1	0.0	0.1
Services	3.6	3.6	0.0
ALL-ITEM INDEX	2.6	2.6	0.0
Minus food, beverages and tobacco	2.1	2.2	-0.1
Minus renting	2.6	2.6	0.0
Minus energy products	2.8	2.9	-0.1
Minus fuels	2.8	2.8	0.0
Minus unprocessed food and energy items	2.3	2.5	-0.2

**NOTE:**

Year-on-year percentage change as of December.

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

also significant increases in the prices of other food products, such as eggs (18.1% year on year) and fresh fruit (13.2%).

The processed food products, beverages and tobacco group showed more subdued price growth of 2.2% at year end, half a percentage point below the national average and lower than the 3.8% increase registered at the end of 2002.

Within this class, sugar prices fell year on year by 1.1%, and the rate of increase of tobacco prices almost halved, falling from 5.6% at the end of 2002 to 3% in 2003

The CPI for services was the second most inflationary group, behind food products, beverages and tobacco, accounting for 30.9% of the total and registering an increase of 3.6% in Andalusia, the same rate as recorded nationally. This was eight tenths of a point lower than the previous year, a significant reduction taking into account the strong resistance of this group to downward pressure.

A breakdown according to the twelve major divisions into which CPI expenditure items are classified shows that in Andalusia, as in Spain and some euro area countries, such as Portugal and Finland, the most inflationary division in 2003 was education, with year-on-year price growth of 4.7%, which was higher than the national average (4.3%) and the euro area average (3.1%).

However, price growth in this division slowed, particularly in the latter part of the year, so that it closed the year with an inflation rate half a percentage point below the previous year's rate.

The next most inflationary division, behind education, was food products and non-alcoholic beverages, with year-on-year price growth of 4.1%, matching the national average and exceeding the euro area average of 2.6%.

Within this group, as mentioned above, the biggest increases were in the prices of some unprocessed food products, such as potatoes, eggs and fresh fruit, as in Spain as a whole.



### Box 13. UNIT LABOUR COSTS IN ANDALUSIA

Labour costs are the amount paid by employers for the labour input required to carry out their economic activity. The main components are wages and salaries, compulsory and voluntary Social Security contributions and non-wage costs, such as redundancy payments and direct social benefits.

Unit labour costs are calculated by dividing these labour costs by the total number of units produced, that is, labour compensation per unit of real output.

In macroeconomic terms, unit labour costs are calculated by dividing the total labour costs of an economy, that is, wages and other labour costs relating to the work force, by GDP measured in constant currency. It can also be calculated by dividing labour costs per worker by the overall productivity of the economy, which is known as apparent labour productivity and is measured in terms of GDP in constant currency per employee.

Therefore, increases in unit labour costs over a period of time indicate that labour costs per worker have increased at a faster rate than labour productivity, which rises when production growth outpaces job growth. One of the main consequences of higher productivity is that it results in slower unit labour cost growth and therefore lower price growth and inflation.

Considering real unit labour costs, after factoring out the effect of overall price growth, gains in productivity can result in increases in labour costs per worker that are above the inflation rate, without this necessarily leading to higher unit labour costs.

#### UNIT LABOUR COSTS. ANDALUSIA.SPAIN

	2000-2003			
	Accumulated growth (%)		Cumulative annual growth (%)	
	Andalusia	Spain	Andalusia	Spain
Real GDP (1)	9.4	7.5	3.1	2.4
Employment (2)	13.0	8.6	4.2	2.8
Labour productivity (3)=(1-2)	-3.6	-1.1	-1.1	-0.4
Labour costs per worker (4)	14.2	13.3	4.5	4.3
Unit labour costs (5)=(4-3)	17.8	14.5	5.6	4.6
CPI (6)	10.3	10.6	3.3	3.4
Real unit labour costs (7)=(5-6)	7.5	3.9	2.3	1.2

Sources: IEA and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Information on labour costs per worker is available for Andalusia and Spain from the year 2000 in the Labour Cost Index (LCI) compiled by the National Statistics Institute (INE), allowing an analysis to be made of unit labour cost trends over the past three years.

Unit labour costs in Andalusia grew at a cumulative annual rate of 5.6% between 2000 and 2003, one percentage point above the average national rate.

Unit labour cost growth in the region can be attributed to an annual increase of 4.5% in labour costs per worker, two tenths of a point above the national average, coupled with a downward trend in labour productivity, which was sharper in Andalusia than in Spain as a whole, as job growth in the region was higher.

In the period from 2000 to 2003, the number of people in work in Andalusia rose at an annual rate of 4.2%, 1.2 percentage points faster than the national rate and 1.1 points faster than real GDP growth (3.1%). In Spain as a whole, economic growth was slower, with a cumulative annual rate of 2.4%, 0.4 points slower than job growth (2.8%).

Therefore, unit labour costs grew at a faster rate than labour costs per worker in nominal terms both in Andalusia and Spain in this period.

A look at real labour cost growth, factoring out inflation, shows that Andalusia registered an annual increase of 2.3% in unit labour costs between 2000 and 2003, which was higher than the 1.2% increase registered nationally.

In third place was hotels, cafes and restaurants, with a year-end inflation rate of 4%, one tenth of a point below the national rate and below price growth for this CPI division in some euro area countries, such as Greece (5%) and Ireland (4.8%). On average, however, price growth in this class was lower in the euro area (2.8%).

Other CPI divisions recording price growth above the regional all-item CPI average included housing (3.6%) and alcoholic beverages and tobacco (2.7%). This last result contrasted sharply with the trend in the euro area, where this class saw a 7.7% increase in prices year on year, making it the most inflationary category, particularly in France (17.3%).

CPI divisions with price growth below the regional average in 2003 included miscellaneous goods and services, clothing and footwear, health, household equipment and transport.

The miscellaneous goods and services division, which includes items such as tourist services, financial services, personal care, etc., showed a year-on-year increase of 2.5% in Andalusia, practically the same as in the euro area (2.4%) and six tenths of a point below the Spanish average (3.1%).

Clothing and footwear prices rose by 2.3%, which although higher than the euro area average (1%),

Chart 115. **INDUSTRIAL GOODS AND SERVICES CPI. ANDALUSIA**

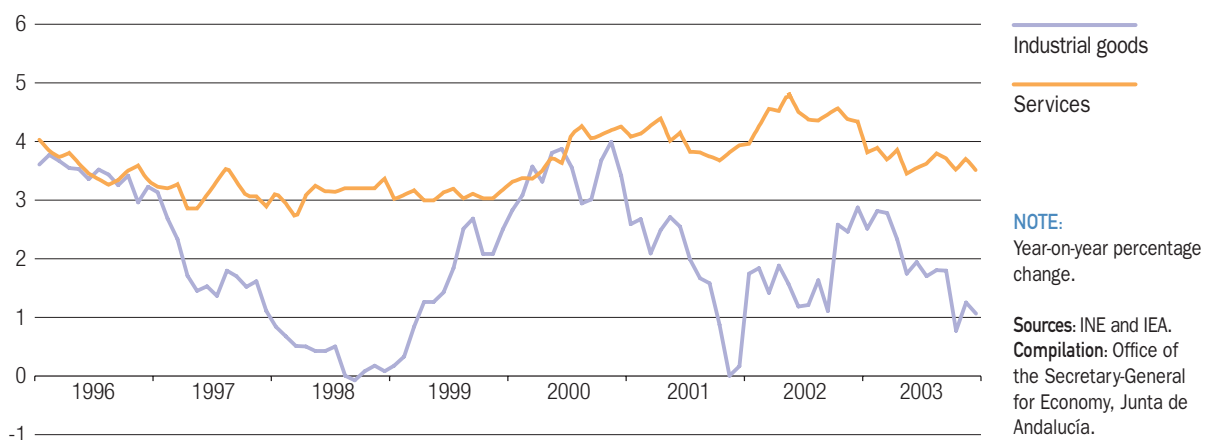


Table 63. CONSUMER PRICE INDEX. YEAR 2003

	Andalusia (1)	Spain (2)	Difference (1-2)
All-item CPI	2.6	2.6	0.0
Food and non-alcoholic beverages	4.1	4.1	0.0
Alcoholic beverages and tobacco	2.7	2.8	-0.1
Clothing and footwear	2.3	2.5	-0.2
Housing, water, electricity, gas and other fuels	3.6	2.8	0.8
Furnishings, household equipment and routine maintenance of the house	1.5	1.7	-0.2
Health	1.8	2.0	-0.2
Transport	0.8	1.0	-0.2
Communication	-0.1	-0.2	0.1
Recreation and culture	-0.1	0.1	-0.2
Education	4.7	4.3	0.4
Restaurants and hotels	4.0	4.1	-0.1
Miscellaneous goods and services	2.5	3.1	-0.6

**NOTE:**

Year-on-year percentage change as of December.

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

was practically half the previous year's rate and two tenths of a point lower than the national rate.

Health and household equipment price growth, which was 1.8% and 1.5% respectively, was lower than the euro area average and similar to the rates recorded in euro area countries, with the exception of Ireland, where the health CPI rose sharply by 7%.

The CPI for transport showed very moderate price growth, with a significantly lower increase than the previous year, specifically 0.8%, four tenths of a point below the previous year's rate and lower than the national rate (1%) and the euro area rate (1.9%).

As in Spain and the euro area, the CPI for communication, which includes telephone services, showed a deflationary trend once again in 2003, with a 0.1% year-on-year fall in prices, a smaller reduction than recorded nationally (-0.2%) and in the euro area (-0.7%), with Italy recording a steep 4.7% drop in communication prices.

Recreation and culture also experienced a deflationary trend, with a 0.1% fall in prices, practically the same as the euro area rate (-0.2%) and in contrast with the slight rise in prices registered nationally (0.1%).

An analysis of the different groups into which the CPI is divided, taking into account the weighting of each one in the all-item CPI, reveals that the strongest upward effects on inflation in Andalusia came from tourist services, with stubbornly high price growth, and a number of highly volatile items, mainly in the unprocessed food category, which were adversely affected by poor output results in 2003.

Two CPI classes, namely tourism, hotels and restaurants and fresh fruit, were responsible for 0.7 percentage points of price growth and therefore for a quarter of Andalusia's inflation rate in 2003, double their share in the CPI weighting structure.

These were followed by maintenance and repair of dwelling, heating, lighting and water supply, personal transport and fresh vegetables, which also exerted

an upward effect on price growth, with the six of them responsible for almost half of the overall increase in the all-item CPI in 2003.

On the other hand, communication, recreational items and equipment and household appliances and repairs were the only categories to exert a downward effect on CPI growth.

## Labour costs

According to the Labour Cost Index (LCI), produced by the INE, average labour costs per worker per month for the non-agricultural sectors amounted to 1,832 euro in Andalusia in 2003, 4.4% up on the previous year.

This increase was slightly higher than in Spain as a whole (4.2%), resulting in a narrowing of the gap between average labour costs in the region and Spain, so that Andalusia's average labour costs per worker per month accounted for 91.8% of the national average in 2003.

A breakdown of these figures reveals that labour costs grew more rapidly in Andalusia than nationally because of a larger increase in non-wage costs, which include Social Security contributions and other non-wage items such as payments for temporary disability, unemployment benefits, etc.

Specifically, non-wage costs, which accounted for just over a quarter of the total (26.6%), rose by 7.9% in Andalusia in 2003, well in excess of the national average (5.4%).

On the other hand, wage costs recorded a smaller increase of 3.2% in Andalusia, compared with 3.8% in Spain.

A breakdown by productive sector shows that, both in Andalusia and nationally, the lowest labour cost growth was observed in services, with a 3.4% rise in the region, four tenths of a point lower than the national average.

Industry and construction recorded labour cost growth that exceeded the regional average,

Table 64. **HEADLINES DETERMINING CPI TRENDS IN ANDALUSIA. YEAR 2003**

	Weight (%)	Year-on-year % increase	Contribution (*)
<b>Major positive contributors</b>			
Tourism, hotels and restaurants	11.6	3.8	0.44
Fresh fruit	1.7	13.2	0.22
Maintenance and repair of dwelling	3.5	4.4	0.16
Heating, lighting and water distribution	4.8	3.0	0.14
Personal transport	16.3	0.7	0.11
Fresh vegetables	1.0	9.9	0.10
<b>Negative contributors</b>			
Recreational items and equipment	2.4	-4.1	-0.10
Household appliances and repair	1.1	-1.1	-0.01
<b>All-item CPI</b>	<b>100.0</b>	<b>2.6</b>	<b>2.6</b>

### NOTES:

CPI as of December.

(\*) Percentage points contributed to overall CPI growth.

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

specifically 5.8% and 7.3% respectively, and was higher than the national average (4.8% in industry and 6.3% in construction).

The highest labour costs were once again observed in industry, rising to 2,060.1 euro per worker per month, so that they were 12.5% higher than the average for the non-agricultural sectors in Andalusia in 2003. However, a comparison with the national industrial sector shows that average labour costs per worker per month were significantly lower in Andalusia, representing 90.8% of the national average.

Likewise, in the Andalusian service sector, labour costs were also lower than nationally, at 92.7% of the national figure, while in construction, they were similar at 97.2%.

Labour costs for hours actually worked, like average labour costs per worker per month, increased at a faster rate in Andalusia (5.2%) than nationally (4.7%) in 2003. However, while the rate of increase remained practically the same as the previous year nationally, in Andalusia hourly labour cost growth slowed, as it did in the euro area countries, where, according to

Eurostat, the hourly labour cost index rose by 2.9% over the year.

These figures taken from the Labour Cost Index compiled by the INE can be supplemented with information on wage trends provided by the Ministry of Labour and Social Affairs, based on pay rises negotiated in collective bargaining agreements signed over the year, covering all the productive sectors.

Pay rises negotiated in collective agreements in 2003, incorporating the impact of the safeguard clauses agreed the previous year, averaged 3.8%, which was a smaller rise than recorded in 2002 (3.95%).

The increase in wages negotiated in collective agreements in Andalusia was slightly higher than recorded nationally (3.67%) and also higher than the inflation rate, resulting in an increase in real wages.

The negotiated increase in wages was 1.2 percentage points above the inflation rate, resulting in a proportional gain in purchasing power for wage earners, which was a little bigger than averaged nationally (1.1 percentage points).

Table 65. **LABOUR COSTS. YEAR 2003**

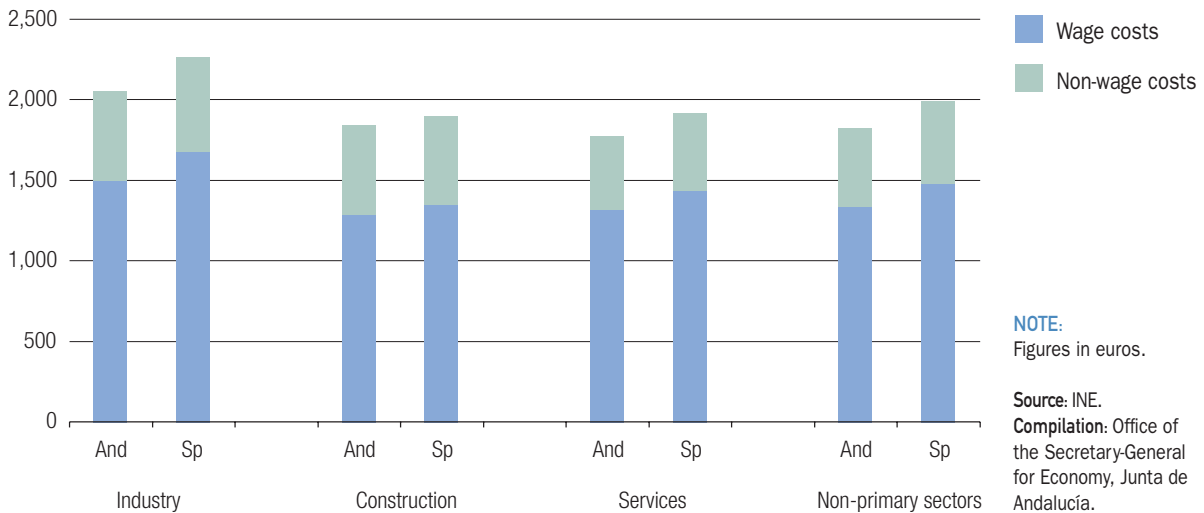
	Euro			% change on 2002	
	Andalusia	Spain	And/Sp (%)	Andalusia	Spain
Total labour costs per worker per month	1,832.0	1,992.4	91.95	4.39	4.24
Economic sector:					
Industry	2,060.1	2,269.4	90.78	5.82	4.75
Construction	1,848.7	1,902.3	97.18	7.30	6.26
Services	1,777.3	1,918.2	92.65	3.41	3.79
Cost component:					
Wage costs	1,345.0	1,480.2	90.87	3.17	3.84
Non-wage costs (*)	487.0	512.2	95.07	7.90	5.42
Wages negotiated in collective agreements	–	–	–	3.80	3.70
Enterprise-specific agreements	–	–	–	3.01	2.90
Broader agreements	–	–	–	3.87	3.80

**NOTE:**

(\*) Non-wage items and compulsory Social Security contributions.

Sources: INE and Ministry of Labour and Social Affairs.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 116. **LABOUR COSTS PER WORKER PER MONTH. YEAR 2003**

A total of 1,273,229 workers benefited from the pay rises resulting from collective bargaining in Andalusia in 2003, 4.1% fewer than the previous year. The reduction registered nationally was significantly sharper (-6.7%).

A breakdown by scope shows that the majority of workers (92.3% of the total) were covered by broad agreements, which established wage rises averaging 3.86%. This was higher than wage rises established in enterprise-specific collective agreements (3.04%).

## Income

The Annual Regional Accounts for Andalusia, published by the Andalusian Statistics Institute (IEA), provide information on how income is distributed in the Andalusian productive process for the period from 1995 to 2001.

According to the latest figures, which are for 2001, Andalusia's GDP was distributed as follows: 43.4% was compensation of employees, 36.5% was gross operating surplus, 9.7% was mixed income and 10.4% was net taxes on production and imports.

A comparison of this distribution with national percentages (national level figures are not disaggregated

into gross operating surplus and mixed income) shows that compensation of employees accounted for a smaller proportion of the total in Andalusia than nationally, while the other components accounted for a larger proportion.

Specifically, according to INE figures, compensation of employees accounted for 50.1% of GDP nationally in 2001, almost seven percentage points more than in Andalusia. Gross operating surplus and mixed income together accounted for 40% of GDP in Spain as a whole compared with 46.2% in Andalusia. The share of net taxes on production and imports was also slightly smaller, at 9.9% in Spain as a whole compared with 10.4% in Andalusia.

An analysis of distribution trends based on the information available for the period from 1995 (the first year for which this information is available) to 2001 shows that, as in Spain as a whole, the component that has grown the fastest is net taxes on production and imports, outpacing overall GDP growth and therefore increasing its weight in primary income distribution.

Specifically, net taxes on production and imports in Andalusia increased in nominal terms by 79.7% in the period between 1995 and 2001, a bigger rise than the

70.7% registered nationally and than the 55.3% nominal increase in the region's GDP. As a result, the share of net taxes on production and imports in Andalusia increased from 9% of GDP in 1995 to 10.4% in 2001.

This component has increased its share in total income at the expense of compensation of employees and, to a greater extent, mixed income. Compensation of employees, which has increased by 51.9% over this six-year period, has seen a reduction of almost one percentage point in its share in Andalusian GDP. This trend was not echoed in Spain as a whole, where compensation of employees has grown at a slightly faster rate than GDP (49.7% and 49.2% respectively), increasing its share in GDP to 50.1%, two tenths of a point more than in 1995.

Similarly, a breakdown of the figures for gross operating surplus and mixed income, which is only available at the regional level, shows that mixed

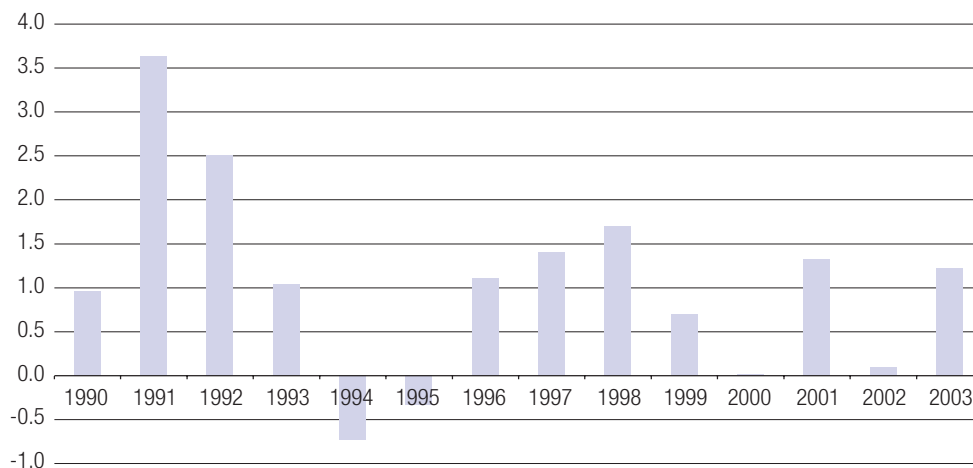
income has grown at a significantly slower rate than GDP, so that its percentage share has shrunk from 12% in 1995 to 9.7% in 2001.

Gross operating surplus, on the other hand, has grown by 63.9% in Andalusia, increasing its percentage share by almost two percentage points to 36.6% in 2001.

Mixed income and gross operating surplus, taken together with a view to comparison with national figures, grew at a slower rate than GDP both in Spain and in Andalusia over this six-year period.

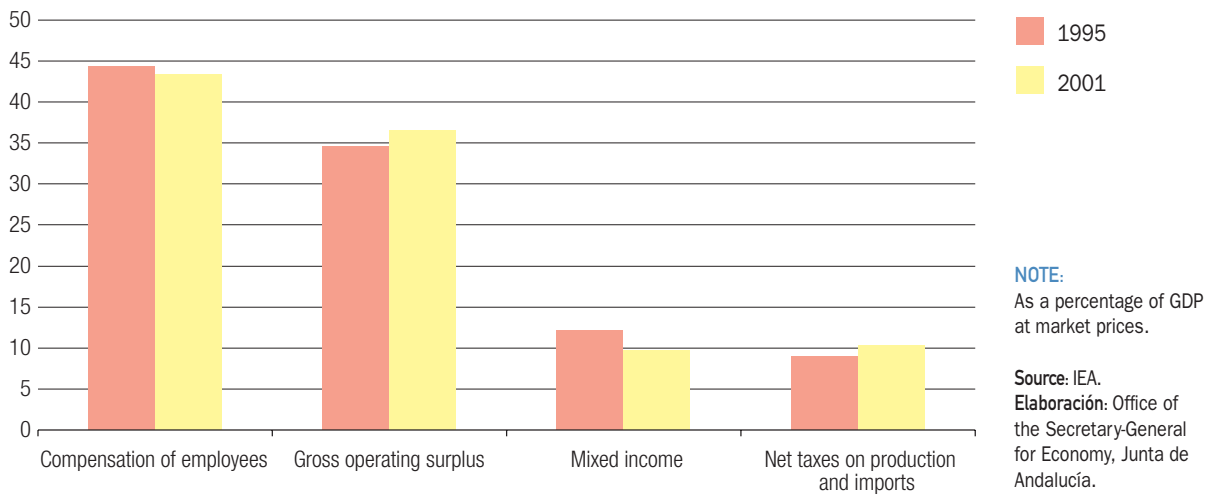
In specific terms, mixed income and gross operating surplus grew by 53.8% in nominal terms in Andalusia, 1.5 points slower than GDP, so that their share in total income was 46.2% in 2001. In Spain as a whole, these components increased by 44.2%, putting their percentage share at 40%.

Chart 117. **REAL WAGES. ANDALUSIA**



**NOTE:**  
Difference between the bargained wage increase (%) and the December year-on-year CPI growth.

**Sources:** Ministry of Labour and Social Affairs and INE.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 118. **PRIMARY DISTRIBUTION OF INCOME. ANDALUSIA**





11.

## Banking System



# Banking System

## Introduction

The economic and financial environment in which the Andalusian banking system operates is determined to a large extent by the financial decisions taken by the European Central Bank (ECB).

The main objective of the monetary policy strategy of the ECB, implemented since 1998, is to ensure price stability. To this end, it has established a quantitative definition of price stability, which is a year-on-year increase in the harmonised index of consumer prices (HICP) for the euro area of below, but close to, 2%. Price stability is to be maintained over the medium term.

In order to achieve this goal, the ECB assigns a prominent role to money and monetary growth in the assessment of risks to price stability. Although it maintained the reference value for M3 growth at 4.5% in 2003, in the middle of the year the ECB underscored the longer term nature of the benchmark and announced that it would no longer conduct a review of the reference value on an annual basis. M3 money supply growth was well in excess of the reference value at around 8%, peaking in the summer months, in a climate of economic and geopolitical uncertainty. However, ample liquidity has not jeopardised price stability, because the weak

economic environment has kept price pressures muted.

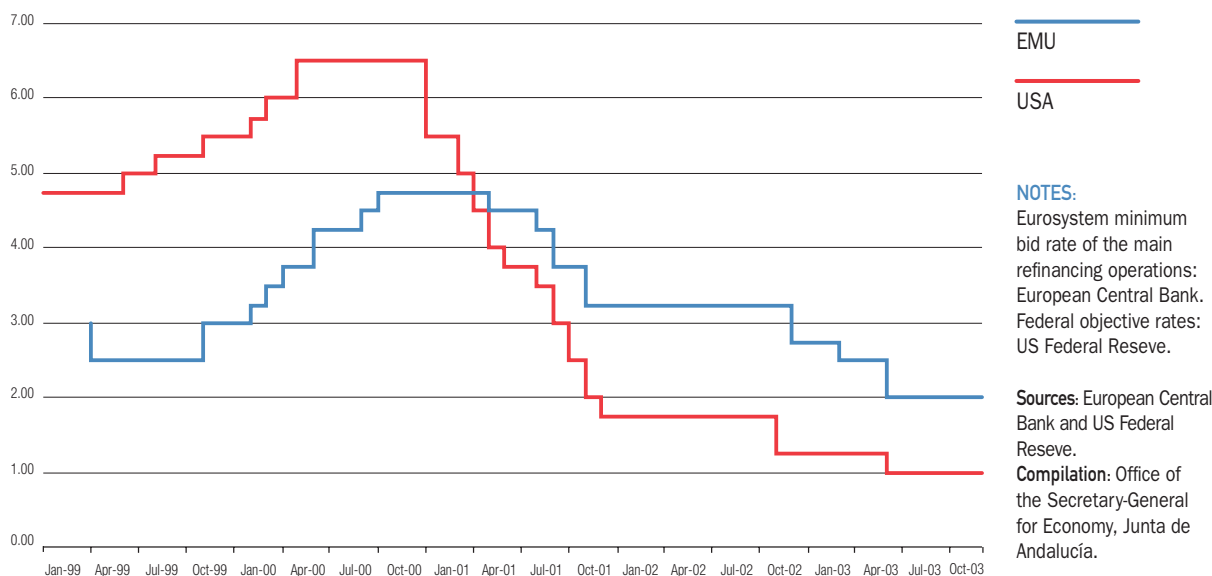
The ECB also assesses the current economic and financial situation and identifies short to medium risks to price stability.

At the start of 2003, the ECB's minimum bid rate on the main refinancing operations was 2.75%. The ECB Governing Council, in a climate of uncertainty about economic recovery and geopolitical tensions, decided to trim its refinancing rate by a quarter of a point in March. There was a further cut of half a point in June, with a view to stimulating economic growth in an environment of more subdued inflationary pressures and the appreciation of the euro.

The refinancing rate therefore stood at 2%, the lowest on record since the ECB was created and an all-time low in Spain.

This was the scenario in which Spanish financial markets operated in 2003. The interest rate cuts were passed on to operations, so that the average rate applied to short-term interbank market operations in Spain fell by around one percentage point in 2003, putting the one-year rate at 2.35%. There were also interest-rate cuts in the public debt market of around one percentage point for short-

Chart 119. INTERVENTION RATES



term operations and around half a percentage point for longer-term operations.

In the face of this trend of lower interest rates applied in financial markets, both the Spanish and the Andalusian banking systems lowered their rates accordingly. The weighted average lending rate applied by banks in Spain stood at 4.09%, which meant that the real interest rate ducked below 1.5%. The weighted average deposit rate stood at 1.15% at the end of 2003, resulting in negative real interest rates.

Bank credit saw a nominal increase of 14.6% in Spain in 2003, 2.3 points higher than in 2002, while in Andalusia, credit growth was even faster at 17.6% year on year, the highest increase since 2000.

Deposits, which offered negative real interest, saw a further deceleration of growth in Spain in 2003, closing the year with a rate of increase of 6.7%, 1.8 percentage points less than the previous year. In Andalusia deposit growth remained practically the same at 9.9%, just one tenth of a point less than the 2002 year-end rate.

## Andalusian banking system structure and size

The total number of branches operated by commercial banks, savings banks and credit cooperatives in Andalusia was 5,799 at the end of 2003. This was 187 branches more than in 2002 and brought the total number of branches up to a record high. In Spain as a whole, the increase in the number of branches was much smaller, so that just over a quarter of the total increase in the size of the Spanish banking system was due to the increase recorded in Andalusia.

As a result, the region increased its share of branches in the national total to 14.7%, two tenths of a point up on the previous year.

The branch to inhabitant ratio differential between Andalusia and Spain also narrowed in 2003. In Andalusia there was one bank branch for every 1,312 inhabitants, while in Spain there was one for every 1,084 inhabitants. The number of inhabitants per branch was therefore 21% higher than the national average, 2.2 percentage points less than in 2002,

Table 66. **BASIC INDICATORS OF THE BANKING SYSTEM** <sup>(1)</sup>. YEAR 2003

	ANDALUSIA	SPAIN
<b>BRANCHES</b>		
Number	5,799	39,405
Breakdown by type of bank (%)		
Commercial banks	28.8	35.7
Savings banks	53.7	53.0
Credit cooperatives	17.5	11.3
Inhabitants per branch	1,312	1,084
<b>DEPOSITS</b>		
€ million	72,049	674,399
As a percentage of GDP at market prices	69.3	90.8
Breakdown by sector (%)		
Public sector	3.4	5.1
Private sector	96.6	94.9
Private deposits per inhabitant (in thousand euro)	9.1	15.0
Private deposits per branch (in million euro)	12.0	16.2
Breakdown of private deposits by type of bank (%)		
Commercial banks	27.6	39.1
Saving banks	58.7	54.1
Credit cooperatives	13.8	6.8
Breakdown of private deposits by type of account (%)		
Sight deposits	24.9	27.0
Savings deposits	31.6	22.7
Time deposits	43.5	50.4
<b>BORROWING</b>		
€ million	102,842	794,400
As a percentage of GDP at market prices	98.9	106.9
Breakdown by sector (%)		
Public sector	5.5	4.1
Private sector	94.5	95.9
Private credit per inhabitant (in thousand euro)	12.8	17.8
Private credit per branch (in million euro)	16.8	19.3
Breakdown of private deposits by type of bank (%)		
Commercial banks	42.0	47.7
Savings banks	47.6	46.8
Credit cooperatives	10.3	5.5
Deposits/Credit (%)	70.1	84.9

**NOTES:**

Data as of 31 December 2003. Population as of 1 January 2003 (revised municipal census). (1) Commercial and savings banks and credit cooperatives.

Sources: Bank of Spain, INE and IEA. Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

## 11. BANKING SYSTEM

as the number of branches grew at a faster rate in Andalusia than in Spain and its population at a slower rate.

A breakdown of these figures according to type of institution shows that, following the pattern of recent years, the biggest increase was in the number of savings bank branches (125 more than in 2002), followed by credit cooperative branches (40 more) and commercial bank branches (22 more). As a result, at the end of 2003, savings banks accounted for 53.7% of all branches located in Andalusia, commercial banks for 28.8% and credit cooperatives for 17.5%.

There are certain differences between the Andalusian and Spanish bank branch structures. Commercial banks had a weaker presence in Andalusia (28.8%) than in Spain as a whole (35.7%). On the other hand, the proportion of credit cooperative branches was higher in Andalusia (17.5%) than nationally (11.3%), largely owing to the fact that the primary sector accounts for a larger part of the region's production structure than it does nationally.

A provincial breakdown of these figures reveals that the only provinces where the increase in branches exceeded the regional average were Malaga, where the number of savings bank and credit cooperative

branches rose significantly, and Almería. Cordova and Jaén saw the smallest increases in the size of their banking systems. It is also significant that while none of the provinces recorded reductions in the number of savings bank or credit cooperative branches, some did see reductions in the number of commercial bank branches.

A look at bank credit figures shows that Andalusia continued to close the gap on national averages in 2003. The year-end volume of credit granted by Andalusia's banks was 98.9% of the region's GDP, 9 percentage points more than the previous year. Credit growth was weaker in Spain as a whole, with the year-end volume equal to 106.9% of national GDP.

A look at financial performance shows that, in this respect also, Andalusia continued to close the gap on the national average in 2003. Private sector credit per inhabitant in Andalusia amounted to 12,800 euro, so that the figure for the Andalusian branch network was 71.6% of the national average, 2.1 percentage points more than the previous year. Private sector credit per branch in Andalusia amounted to 17.8 million euro, equal to 86.7% of the national average.

A comparison of national and regional deposit figures shows that although Andalusia continued to

Chart 120. **DEPOSIT/CREDIT RATIOS IN THE BANKING SYSTEM\***

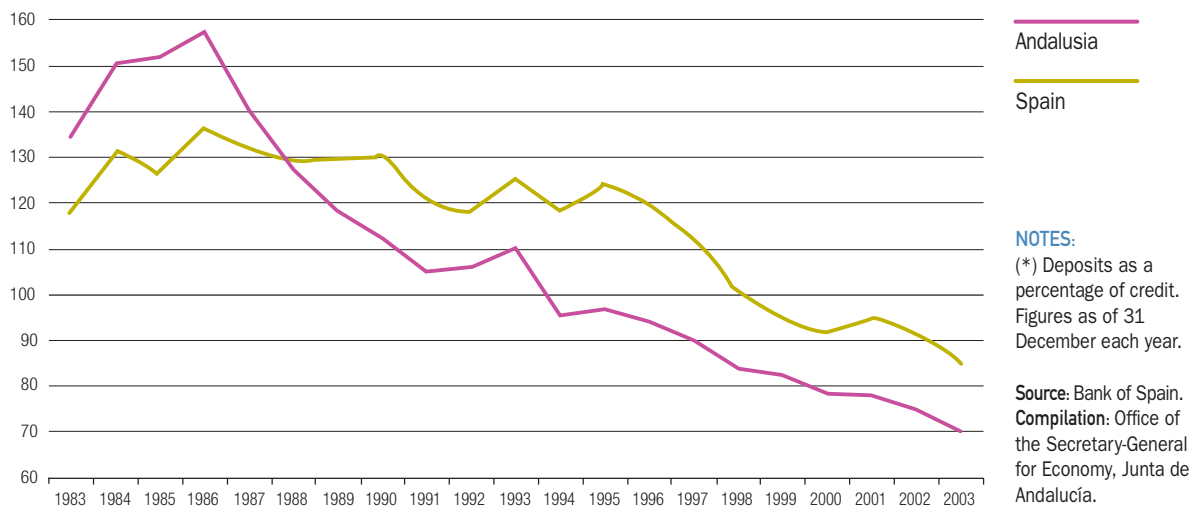
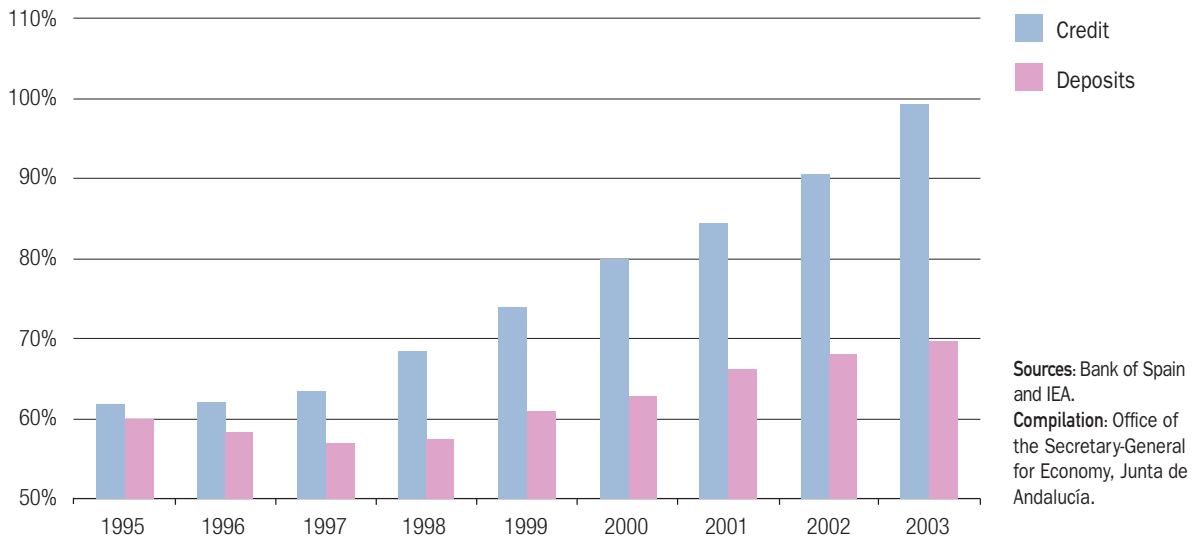


Chart 121. CREDIT AND DEPOSITS OVER GDP. ANDALUSIA



catch up with national average ratios, it still lagged further behind than with regard to credit. Private sector deposits in Andalusia were 69.3% of GDP at the end of 2003, 1.9 percentage points more than in 2002, but still below the national average of 90.8% of GDP. The volume of deposits per branch in Andalusia was 73.9% of the national average, continuing to close on the national average, as did deposits per inhabitant, which were 61.1% of the national figure.

The ratio of loans to deposits, which is the financial savings ratio, fell to an all-time low, as deposits grew at a slower rate than credit. This ratio, which indicates the need for savings from outside the region to finance economic growth, stood at 70.1% in 2003, almost five percentage points below the 2002 ratio. Spain as a whole did not have a sufficient level of deposits to cover the demand for credit either, recording a ratio of 84.9%.

## Bank credit

In 2003 the amount of credit granted in Andalusia rose year on year by 17.6% to 102,842 million euro, the biggest year-end increase in three years and higher than the national average of 14.6%.

Of this figure, 94.5% was granted to businesses and households, and the remaining amount to the public sector.

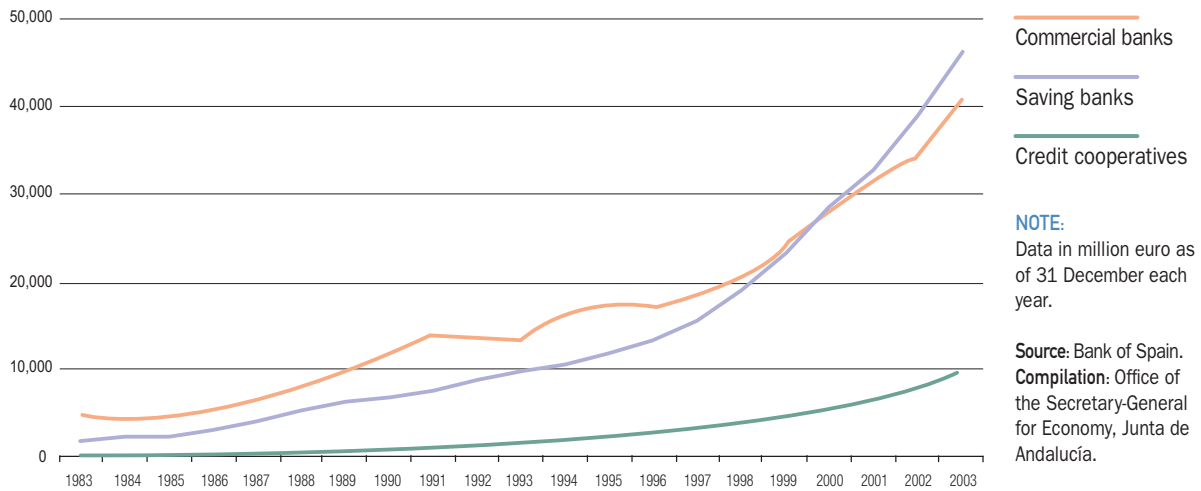
An analysis of credit granted to businesses and households, which, following the usual pattern, grew at a faster rate than credit granted to the public sector (18.1% and 10.2% respectively), shows that trends were similar for all types of institutions. Both commercial banks and savings banks recorded an increase of 18.1%, and credit cooperatives a 17.9% increase.

Savings banks therefore accounted for 47.6% of all private sector credit in Andalusia. Commercial banks manage 42% of this type of credit and credit cooperatives have a 10.3% market share. In Spain, commercial banks had the largest market share of private sector credit (47.7%), although only by a small margin, as savings banks increased their share by nine tenths of a point to 46.8%. Credit cooperatives had a proportionately smaller market share of private sector credit in Spain (5.5%) than they did in Andalusia.

Lending to the private sector by Andalusia-based savings banks rose by 15.3% in 2003, while savings banks based outside Andalusia with branches in the



Chart 122. PRIVATE SECTOR BORROWING BY TYPE OF BANK. ANDALUSIA



region recorded a 26.5% increase. As a result of these changes, Andalusia-based savings banks controlled 34.8% of private sector credit in 2003, 0.9 percentage points less than the previous year, while those based outside the region managed 12.8%, 0.8 points more than in 2002.

A breakdown of private sector credit figures by destination shows that 53.1% of lending by Andalusia-based savings banks was for businesses. The main sectors that borrowed from financial institutions

were construction, accounting for 11.5% of private sector credit granted by these savings banks, real-estate activities (10.5%), agriculture (8.3%) and the wholesale and retail trade (6.8%).

Lending to businesses was 31.6% up on the previous year. Almost half of this increase can be attributed to the rise in lending to real-estate businesses, which doubled in 2003. There was also a sharp increase in lending to finance the manufacture of transport equipment and the extractive industries.

Chart 123. SAVINGS BANKS LENDING TRENDS IN ANDALUSIA

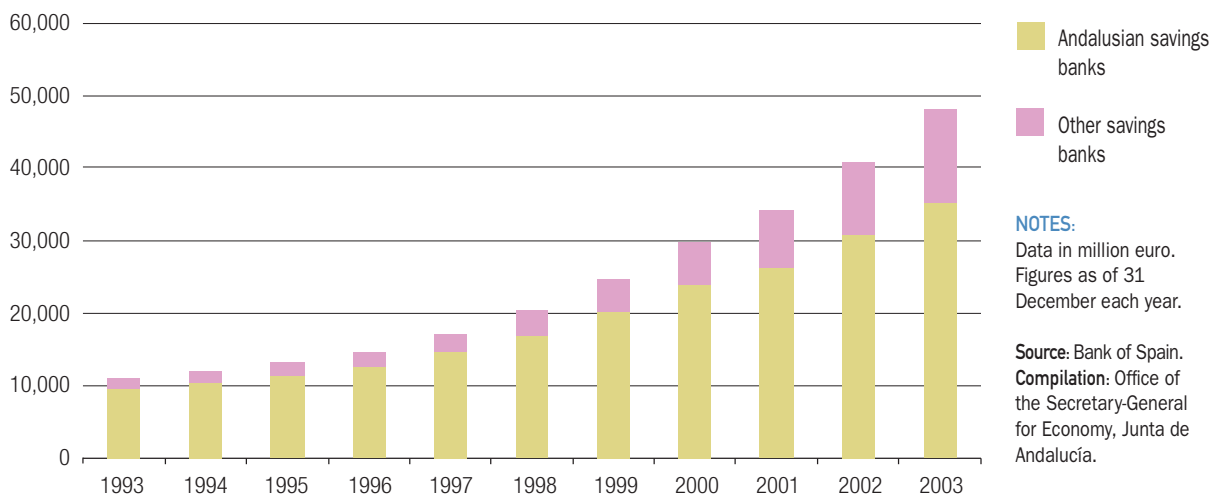
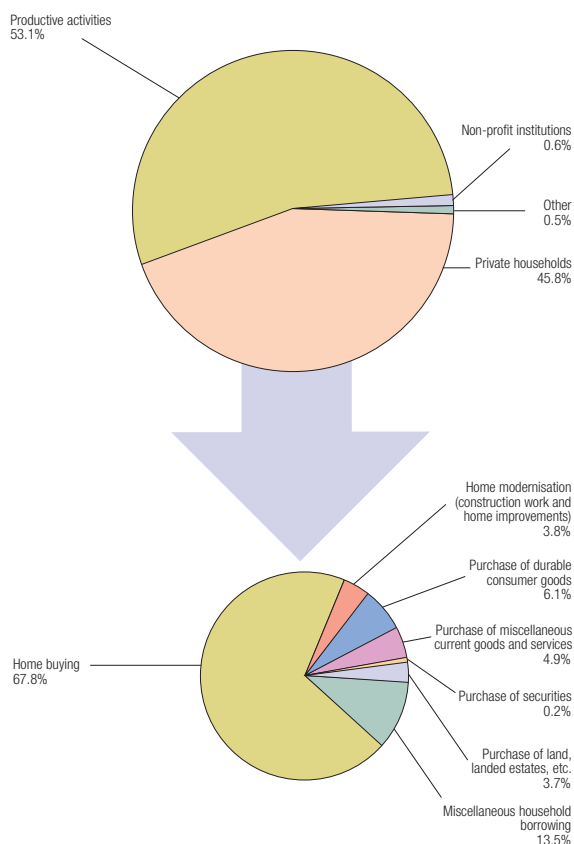


Table 67. PRIVATE SECTOR BORROWING FROM ANDALUSIAN SAVINGS BANKS

	2003		Growth rate (%)
	€ thousand	% of total	03/02
<b>PRODUCTIVE ACTIVITIES</b>	19,588,169	53.08	31.6
Crop and animal farming, hunting and forestry	3,065,179	8.31	26.1
Fishing	51,901	0.14	66.3
Mining and quarrying	96,620	0.26	62.1
Manufacturing n.e.c.	1,823,624	4.94	34.4
Manufacture of food products, beverages and tobacco	575,189	1.56	29.8
Manufacture of refined petroleum products	7,238	0.02	-80.1
Manufact. of chemic., chemic. prod. and man-made fibres	73,834	0.20	47.2
Manufacture of glass, ceramic and construction products	177,819	0.48	47.7
Manufact. of basic metals and fabricated metal products; manufact. of machinery and equip.; manufact. of electrical and optical equip.	283,558	0.77	55.1
Manufacture of transport equipment	99,249	0.27	67.9
Manufacturing n.e.c.	606,737	1.64	30.5
Production and distribution of electricity, gas and water	562,570	1.52	-1.6
Construction	4,253,423	11.53	7.6
Buildings and civil works	3,652,067	9.90	4.9
Motorways, roads and railways	182,829	0.50	16.2
Installations and finishings	293,210	0.79	46.3
Site prepar.; renting of construc. or demolition equip. with operator	125,317	0.34	13.1
Wholesale and retail trade and repairs	2,523,166	6.84	23.4
Hotels and restaurants	607,130	1.65	61.8
Transport, storage and communication	703,327	1.91	28.4
Financial intermediation, except banking	357,896	0.97	90.7
Insurance	3,349	0.01	-94.6
Other financial intermediation	354,547	0.96	180.9
Real estate activities and business services	4,539,321	12.30	94.2
Real estate activities	3,892,845	10.55	102.2
Other business services	646,476	1.75	56.9
Other services	1,004,012	2.72	1.0
<b>PRIVATE HOUSEHOLDS</b>	16,901,966	45.80	3.5
Home buying	11,460,583	31.05	-1.3
Home modernisation (construction work and home improvements)	639,377	1.73	-27.4
Purchase of durable consumer goods	1,037,198	2.81	32.6
Purchase of miscellaneous current goods and services	826,195	2.24	20.8
Purchase of securities	31,903	0.09	-27.0
Purchase of land, landed estates, etc.	633,393	1.72	25.4
Miscellaneous household borrowing	2,273,317	6.16	24.8
<b>NON-PROFIT INSTITUTIONS</b>	238,313	0.65	-27.0
<b>OTHER (unclassified)</b>	177,435	0.48	-2.4
<b>TOTAL</b>	36,905,883	100.00	16.3

Source: Andalusian saving banks.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 124. PRIVATE SECTOR RESIDENT BORROWING BY DESTINATION. ANDALUSIAN SAVINGS BANKS. YEAR 2003



**NOTES:**  
Private sector borrowing as of 31 December 2003. As a percentage of total borrowing.

**Source:** Andalusian savings banks.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Loans to individuals accounted for 45.8% of the total. The single biggest item for which loans were granted was home buying, which accounted for almost a third (31.1%) of those granted by Andalusia-based savings banks and for 68% of all loans to individuals.

Credit granted to individuals grew at a slower rate in 2003 (3.5%), owing to a slight reduction in loans granted to home buyers, as loans granted for other purposes, such as the purchase of consumer durables, which registered a 32.6% increase, benefited from low interest rates.

A provincial breakdown of the figures shows that private sector credit granted by the Andalusian banking system was concentrated in the most populous provinces with high levels of economic activity, such as Seville and Malaga, together

accounting for 52.3% of the total. A ranking by volume of credit per inhabitant shows that Almería tops the list with a ratio of 18,139 euro per person, followed by Seville and Malaga. At the other end of the scale, Jaén, Cadiz and Huelva were the provinces with the lowest borrowing per inhabitant.

Malaga, Huelva and Cordova were the provinces that recorded the highest private sector credit growth, with increases of over 20%, while Seville registered the weakest growth (14.4%).

### Bank deposits

In spite of negative real interest rates, the amount of deposits continued to grow at a brisk pace of 9.9% in 2003, although this was two tenths of a point below the 2002 growth rate. In Spain as a whole, the

Table 68. PRIVATE SECTOR BORROWING AND DEPOSIT IN THE ANDALUSIAN PROVINCES. YEAR 2003

	BORROWING			DEPOSITS		
	€ million	02-03 growth %	€ thousand per inhabitant	€ million	02-03 growth %	€ thousand per inhabitant
Almeria	10,254	16.0	18.1	5,645	11.9	10.0
Cadiz	12,405	16.5	10.7	7,705	7.0	6.7
Cordova	10,034	20.3	12.9	8,224	13.4	10.6
Granada	10,211	17.2	12.3	8,592	12.2	10.4
Huelva	5,193	20.5	11.0	3,403	4.6	7.2
Jaen	6,086	15.8	9.3	5,882	3.8	9.0
Malaga	18,495	25.1	13.5	14,129	10.8	10.3
Seville	24,521	14.4	13.8	15,988	12.1	9.0
ANDALUSIA	97,200	18.1	12.8	69,568	10.3	9.1
SPAIN	761,927	15.0	17.8	639,816	7.9	15.0

**NOTE:**

Data as of 31 December 2003.

Sources: Bank of Spain and INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

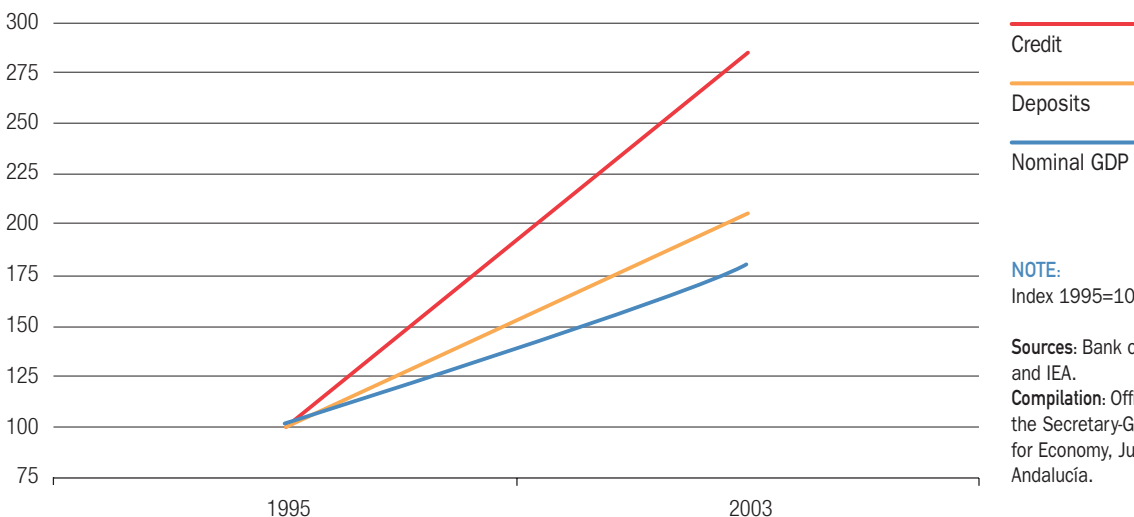
deceleration of deposit growth was sharper, as it fell by 2.2 points to 6.7%.

Bank deposits in Andalusia therefore stood at 72,049 million euro at the end of 2003, which was 69.3% of GDP. Deposits made by businesses and households

accounted for 96.6% of the total and rose year on year by 10.3% in 2003, while deposits by the public sector fell slightly.

A breakdown of private sector deposits by type reveals that the more liquid positions, such as sight

Chart 125. CREDIT, DEPOSITS AND GDP TRENDS. ANDALUSIA

**NOTE:**

Index 1995=100.

Sources: Bank of Spain and IEA.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

### Box 14. BORROWING BY BUSINESSES AND HOUSEHOLDS FROM THE FINANCIAL SECTOR

In recent years, the level of borrowing by economic agents has become a prominent issue in the economic debate in Spain.

At the end of 2003, borrowing by businesses and households from the Spanish banking system amounted to 762 thousand million euro, with the Andalusian banking system accounting for 12.8% of this amount, that is, 97 thousand million euro. In Spain as a whole, borrowing therefore exceeded GDP, representing 102.5%, while in Andalusia, borrowing was lower than GDP at 93.4%.

In the last two decades, the weight of private sector credit as a percentage of GDP has more than doubled in Andalusia and increased at nearly the same rate in Spain. In 1983 private sector borrowing was 61.1% of GDP in Spain and 38% of GDP in Andalusia.

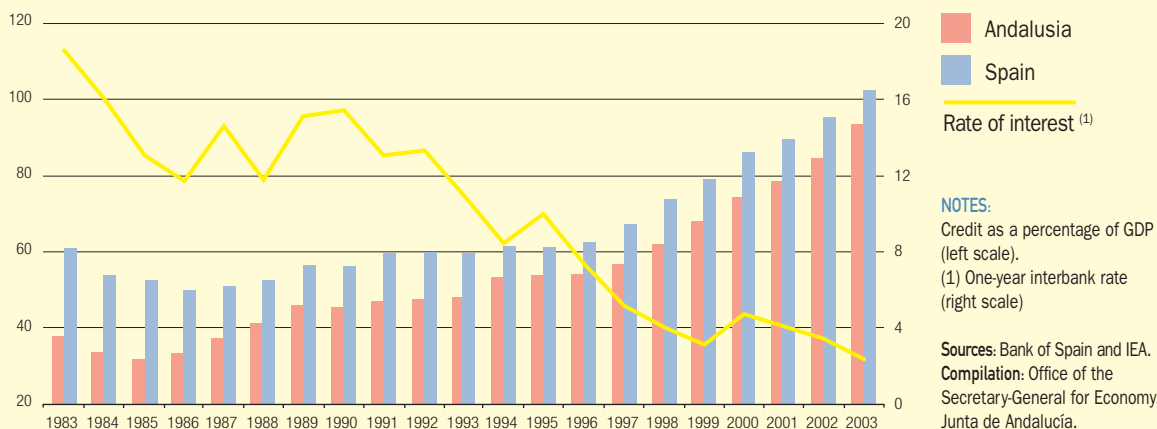
Although there has been a continuous increase in borrowing by businesses and households over this twenty-year period, it was from 1997 onwards that significantly high growth rates were recorded.

In the period between 1983 and the mid-nineties, there was a steady, moderate increase in borrowing as a percentage of GDP to just over 60% in Spain and 45% in Andalusia.

However, borrowing growth accelerated from 1997 onwards, in a context of stability promoted by the process of nominal convergence preceding the third phase of economic and monetary union. The economic conditions prevailing at that time, characterised by a progressive downward trend in interest resulting in all-time low, near-zero real interest rates, boosted credit growth, particularly mortgages. Specifically, the cumulative annual rate of GDP growth since 1997 is 7.9%, while private credit growth registers a rate of 17.2%.

A historical analysis therefore demonstrates that the increase in borrowing in the Spanish and Andalusian economies is closely related to the structural change brought about by economic and monetary union.

#### RATES OF INTEREST AND BUSINESS AND HOUSEHOLD BORROWING



and savings deposits, showed the biggest increases, rising by 16.8% and 10.8% respectively. Time deposits rose by 6.5%, the lowest rate of growth in five years, influenced by falling interest rates.

The percentage share of the different types of private sector deposits in the total was not the same in Spain as they were in Andalusia. Time deposits accounted for a smaller proportion of deposits in Andalusia (43.5%) than they did in Spain (50.4%), and the reverse was true for more liquid deposits.

A breakdown by type of institution shows that the smallest increase was in private funds deposited in commercial banks (2.8%), while credit cooperatives showed an increase of 10% and savings banks of 14.2%. Savings banks were the only type of financial institution to see higher deposit growth in 2003 than in 2002.

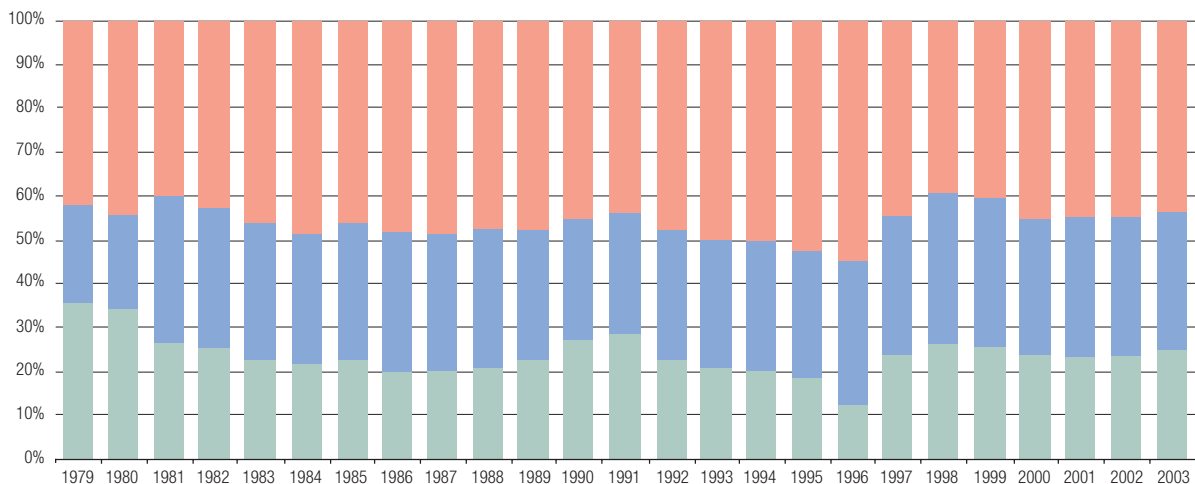
Savings banks therefore continued to increase their market share of deposits, extending even further their lead over the other types of institution, which they have maintained for the past ten years. Savings banks

accounted for 58.7% of all private sector deposits in Andalusia, 2.1 percentage points up on the previous year. Credit cooperatives had a 13.8% market share of deposits, and the share of commercial banks shrank further to 27.6%. A comparison with national figures shows that commercial banks hold a larger market share of deposits in Spain as a whole (39.1%) than they do in Andalusia, while credit cooperatives account for a much smaller proportion (6.8%), which can be explained by the fact that the primary sector is larger in Andalusia than it is nationally.

Private sector deposits in Andalusia-based savings banks rose by 13.3%, three percentage points more than average deposit growth. They therefore increased their market share to almost half (49.3%) of all private sector deposits held by the Andalusian banking system. Savings banks based outside Andalusia saw the biggest increase in deposits by businesses and households (19.6%), accounting for 9.4% of the total, seven tenths of a point more than in 2002.

A provincial breakdown of the figures shows that private sector deposits held by Andalusian financial

Chart 126. PRIVATE SECTOR DEPOSIT STRUCTURE. ANDALUSIA



**NOTES:**

As a percentage of total private sector deposits. Figures as of 31 December each year.

Source: Bank of Spain.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

- Sight deposits
- Saving deposits
- Time deposits

institutions were concentrated in Seville, accounting for 25.3% of the total, and Malaga, accounting for 22.4%. The highest deposit growth was recorded in Cordova, Granada and Seville, with increases of over 12%, while at the other end of the scale Jaén and Huelva saw the smallest increases. A ranking by volume of deposits per inhabitant shows that Cordova, Granada and Malaga head the list with ratios of over 10,000 euro per person, while Cadiz came bottom in the ranking with 6,667 euro per person.

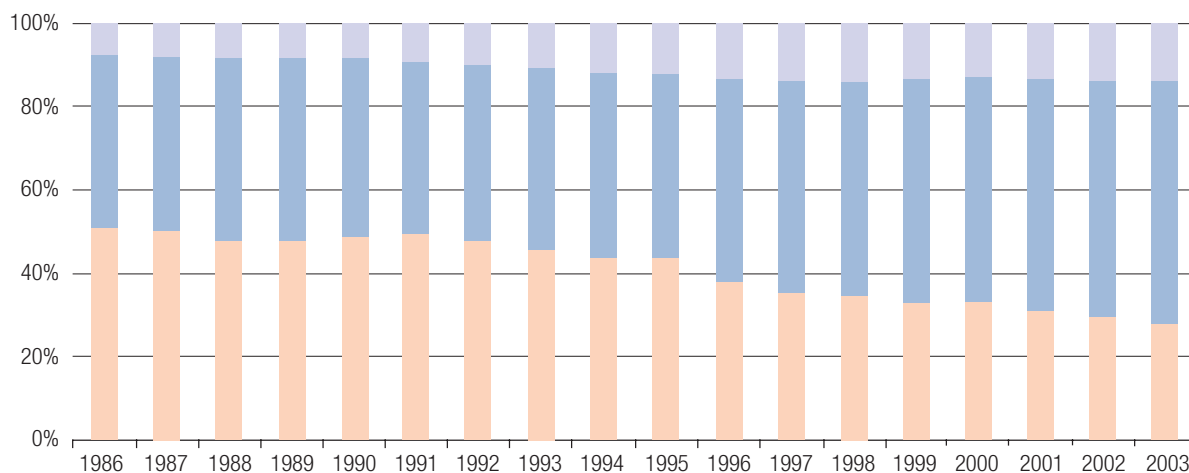
These statistics show that net interest income, the difference between interest income and interest expense, earned by deposit-taking institutions in Andalusia, grew by 3% in 2002, one percentage point above the national rate of increase. Of total net interest income, 41.9% was generated by commercial banks, 47.2% by savings banks and the rest by credit cooperatives. These figures show that the share of commercial banks in net interest income is greater than their presence in the region, whether measured in terms of the number of branches or the volume of deposits and credit.

### Profit and loss accounts in deposit-taking institutions

In 2003 the National Statistics Institute (INE) published Statistics on the Andalusian Financial System for the year 2002. There are therefore datasets for 2001 and 2002, which provide the information required to make an overall analysis of the profit and loss accounts of all the deposit-taking institutions in Andalusia and compare them with national figures.

Gross operating income, obtained by adding commission income and income from financial operations to net interest income, grew by a robust 6.5% in Andalusia in 2002, while in Spain it saw near-flat growth. The percentage share of commission income and income from financial operations in gross operating income was greater in the Andalusian banking system (24.7%) than nationally (20.9%). In Andalusia, this percentage is higher for commercial banks (27%) and savings banks (25%) than for credit cooperatives (13%).

Chart 127. PRIVATE SECTOR DEPOSITS BY FINANCIAL INSTITUTION. ANDALUSIA



**NOTES:**

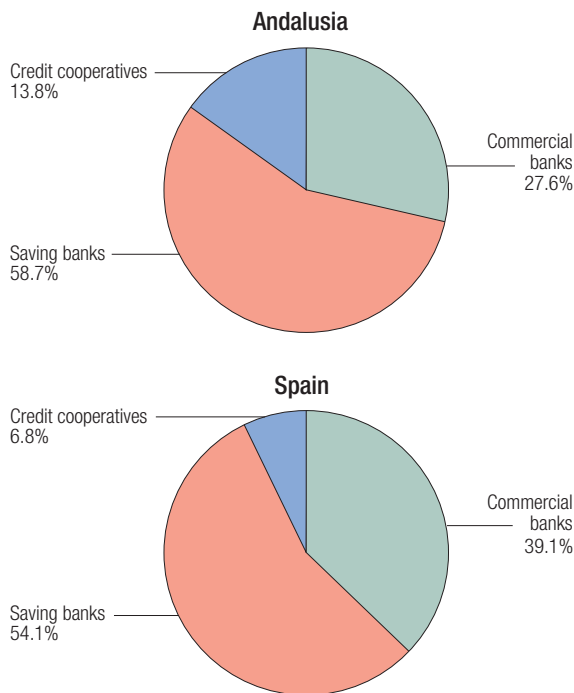
As a percentage of total private sector deposits. Figures as of 31 December each year.

Source: Bank of Spain.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

- Commercial banks
- Savings banks
- Credit cooperatives

Chart 128. MARKET SHARE OF PRIVATE SECTOR BANK DEPOSITS. YEAR 2003

**NOTES:**

Total private sector deposits at each type of financial institution as a percentage of total deposits (%). Data as of 31 December 2003.

**Source:** Bank of Spain.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Net operating income, which is calculated by deducting operating expenses (personnel, overheads, taxes and depreciation and amortisation) from gross operating income, fell more sharply in Andalusia (-6.8%) than it did nationally (-4%), as a result of a 16.4% increase in operating expenses. Operating expenses as a percentage of gross operating income, which is a measure of efficiency, was 62.5% in Andalusia, compared with 58.6% in Spain. In Andalusia, commercial banks recorded the best results, devoting 54.8% of its gross operating income to operating expenses, while for savings banks the percentage was 69.5%. As a result of their higher level of efficiency, commercial banks accounted for 52.1% of total net operating income earned by the Andalusian banking system, which is a higher proportion than they represent in terms of branches, while savings banks accounted for 38.6%.

Profit before tax, which is calculated by applying the disposal of assets, extraordinary charges for debt refinancing, write-offs, etc. and the profit or loss from previous years to net operating income, fell by 4.1% in Andalusia, while nationally it saw a slight 1.6% increase.

Net profit after tax, calculated by deducting tax on profit from profit before tax, rose slightly (0.6%) in 2002, while nationally it showed a significant 4.5% increase. The Andalusian banking system therefore reported net profit after tax of almost 950 million euro, with commercial banks accounting for 48.2%, savings banks for 44% and credit cooperatives for the remaining 7.8%. This means that commercial banks retained 33.7% of net interest income as net profit, while savings banks and credit cooperatives retained a smaller percentage (27.3% and 21.2% respectively).



## 11. BANKING SYSTEM

Table 69. **PROFIT AND LOSS ACCOUNTS OF DEPOSIT-TAKING INSTITUTIONS. YEAR 2002**

	€ thousand		Percentage change 2002/2001		As a percentage of total banking system figures (%)	
	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain
<b>Banking System</b>						
Net interest income	3,235,934	28,461,044	3.0%	2.0%	–	–
Gross operating income	4,298,861	35,979,947	6.5%	0.0%	–	–
Net operating income	1,611,078	14,903,981	–6.8%	–4.0%	–	–
Profit before tax	1,009,015	9,913,721	–4.1%	1.6%	–	–
Profit for the year	949,722	8,981,948	0.6%	4.5%	–	–
<b>Commercial banks</b>						
Net interest income	1,355,874	14,167,961	–6.1%	–6.5%	41.9%	49.8%
Gross operating income	1,857,999	19,456,810	–2.1%	–2.9%	43.2%	54.1%
Net operating income	839,977	8,817,318	–12.8%	–5.4%	52.1%	59.2%
Profit before tax	531,273	5,756,982	2.5%	10.6%	52.7%	58.1%
Profit for the year	457,341	4,896,167	–3.5%	4.3%	48.2%	54.5%
<b>Savings banks</b>						
Net interest income	1,528,191	12,749,799	11.1%	12.7%	47.2%	44.8%
Gross operating income	2,036,571	14,720,861	15.1%	3.2%	47.4%	40.9%
Net operating income	621,836	5,398,841	–0.3%	–2.4%	38.6%	36.2%
Profit before tax	390,829	3,698,013	–11.3%	–9.3%	38.7%	37.3%
Profit for the year	417,897	3,677,223	7.0%	5.1%	44.0%	40.9%
<b>Credit cooperatives</b>						
Net interest income	351,869	1,543,284	9.1%	7.4%	10.9%	5.4%
Gross operating income	404,291	1,802,276	9.1%	7.4%	9.4%	5.0%
Net operating income	149,265	687,822	5.1%	3.5%	9.3%	4.6%
Profit before tax	86,913	458,726	–6.5%	–2.3%	8.6%	4.6%
Profit for the year	74,484	408,558	–6.4%	1.0%	7.8%	4.5%

Source: IEA Statistics of the Andalusian financial system.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

# 12.

## Andalusia in the Context of the Spanish Regions



## Andalusia in the Context of the Spanish Regions

### Introduction

According to Spain's Quarterly National Accounts published by the National Statistics Institute (INE), real GDP grew by 2.4% in Spain in 2003, four tenths of a point more than the previous year.

In the context of an improving world economy, this growth performance broke the trend of slowing growth in evidence in recent years, in contrast with the euro area countries, where GDP grew by just 0.4%, the lowest rate in ten years.

On the demand side, GDP growth in Spain can be wholly attributed to the positive contribution of domestic demand, with increases in both consumption expenditure and investment, as foreign trade detracted from growth. On the supply side, the Spanish economy showed broadly based growth, with all the sectors making a positive contribution, particularly construction and services.

The stronger growth performance was also mirrored in the labour market, where employment grew more rapidly than in 2002. This, coupled with a smaller increase in job seekers entering the labour market, resulted in a slight reduction in the unemployment rate.

Price growth slowed in 2003, so that the year closed with an inflation rate of 2.6%, which was significantly lower than the 2002 year-end rate of 4% and resulted in a one-point reduction in the inflation rate differential between Spain and the euro area.

In general terms, the Spanish regions, taking into account differences arising from their individual distinctive features, experienced a slight recovery of economic growth and job growth, accompanied by slower price growth. In this context, available partial economic indicators for production, demand, entrepreneurial activity and employment show that Andalusia achieved better results than averaged by the Spanish regions as a whole.

### Population

According to the most recent official figures published by the INE, based on the Municipal Population Census of 1 January 2003, the population of Spain grew year on year by 2.1% or 879,170 people, bringing the total up to 42,717,064.

A breakdown of these figures by region shows that the biggest increases, in absolute terms, were recorded in Catalonia, Madrid, Valencia and Andalusia, in that order, and that these four regions accounted for

Table 70. **RESIDENT POPULATION. YEAR 2003**

			Change on 2002	
	Population	% of total	Absolute	Relative
Andalusia	7,606,848	17.8	128,416	1.7
Aragon	1,230,090	2.9	12,576	1.0
Asturias	1,075,381	2.5	1,410	0.1
Balearic Islands	947,361	2.2	30,393	3.3
Canary Islands	1,894,868	4.4	51,113	2.8
Cantabria	549,690	1.3	7,415	1.4
Castilla-La Mancha	1,815,781	4.3	33,743	1.9
Castilla y León	2,487,646	5.8	7,277	0.3
Catalonia	6,704,146	15.7	197,706	3.0
Valencia	4,470,885	10.5	144,177	3.3
Extremadura	1,073,904	2.5	854	0.1
Galicia	2,751,094	6.4	13,724	0.5
Madrid	5,718,942	13.4	191,790	3.5
Murcia	1,269,230	3.0	42,237	3.4
Navarre	578,210	1.4	8,582	1.5
Basque Country	2,112,204	4.9	3,923	0.2
La Rioja	287,390	0.7	5,776	2.1
SPAIN	42,717,064	100.0	879,170	2.1

Source: INE Revised Municipal Census.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

three-quarters (75.3%) of the overall increase in the Spanish population.

In relative terms, the highest population growth was registered in Madrid (3.5%), Murcia (3.4%), Valencia (3.3%) and the Balearic Islands (3.3%), all exceeding the national average by more than one percentage point. They were followed by Catalonia (3%) and the Canary Islands (2.8%), also with population growth exceeding the national average. The rest of the regions saw more moderate population growth. The lowest rates were recorded in Extremadura and Asturias, where growth stagnated (0.1% in both cases).

Andalusia's population grew by 1.7% in 2003, which was slightly lower than the national average rate, although, with 7,606,848 inhabitants, it remained the region with the largest population, accounting for 17.8% of the national total. Catalonia has the second largest population, accounting for 15.7% of the Spanish population, and Madrid the third

largest, accounting for 13.4%. Between the three of them, they account for almost half of the Spanish population. At the other end of the scale, the regions with the smallest populations were La Rioja (0.7% of the Spanish population), Cantabria (1.3%) and Navarre (1.4%).

## Production

All the sectors contributed to economic expansion in Spain, although their year-on-year growth performances trended differently. Growth picked up in industry, services maintained practically the same rate of growth as the previous year and growth slowed in the primary sector and, to a greater extent, in the construction sector.

In the absence of a consistent indicator to measure production in the **primary sector** in the different Autonomous Communities, employment figures from the Labour Force Survey are used. Weak GVA growth

Table 71. **EMPLOYMENT IN THE PRIMARY SECTOR. YEAR 2003**

	Thousand people	% of total	02-03 growth %
Andalusia	256.4	27.2%	-1.8%
Aragon	29.3	3.1%	-14.3%
Asturias	27.2	2.9%	1.1%
Balearic Islands	7.8	0.8%	5.4%
Canary Islands	35.7	3.8%	6.2%
Cantabria	13.5	1.4%	-2.5%
Castilla y León	84.3	8.9%	-1.4%
Castilla-La Mancha	62.0	6.6%	1.2%
Catalonia	71.5	7.6%	2.0%
Valencia	68.2	7.2%	-3.9%
Extremadura	50.8	5.4%	5.8%
Galicia	136.7	14.5%	-1.0%
Madrid	15.1	1.6%	-17.4%
Murcia	49.0	5.2%	1.1%
Navarre	14.2	1.5%	-9.6%
Basque Country	13.1	1.4%	-24.8%
La Rioja	7.3	0.8%	-27.3%
<b>SPAIN</b>	<b>942.1</b>	<b>100.0%</b>	<b>-2.0%</b>

Source: INE Labour Force Survey.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

(0.7%) recorded in the national primary sector, was echoed in the labour market, where employment fell by 2%, as a result of a reduction in jobs in most of the regions.

Regions that saw a fall in primary sector employment included Andalusia (-1.8%), Castilla y León (-1.4%) and Galicia (-1%), which together account for just over half of all agricultural jobs in Spain.

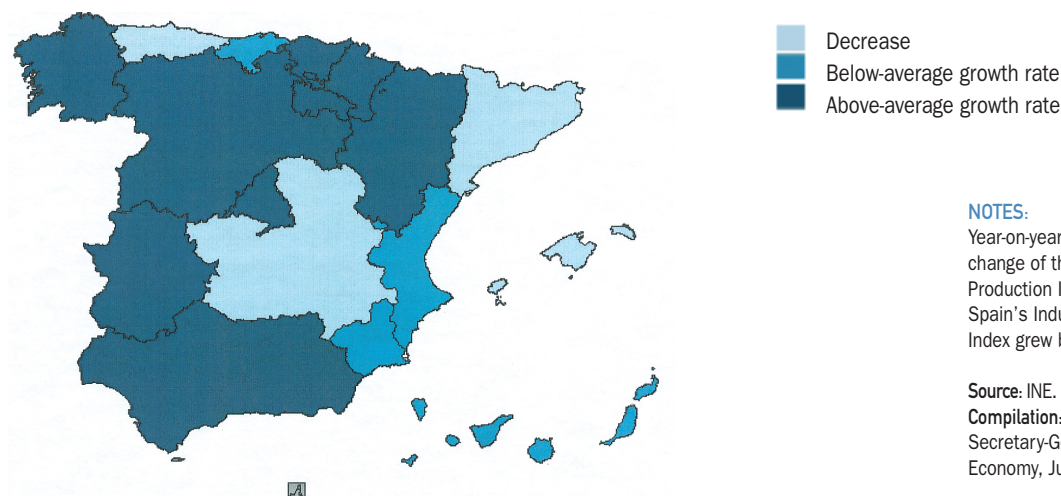
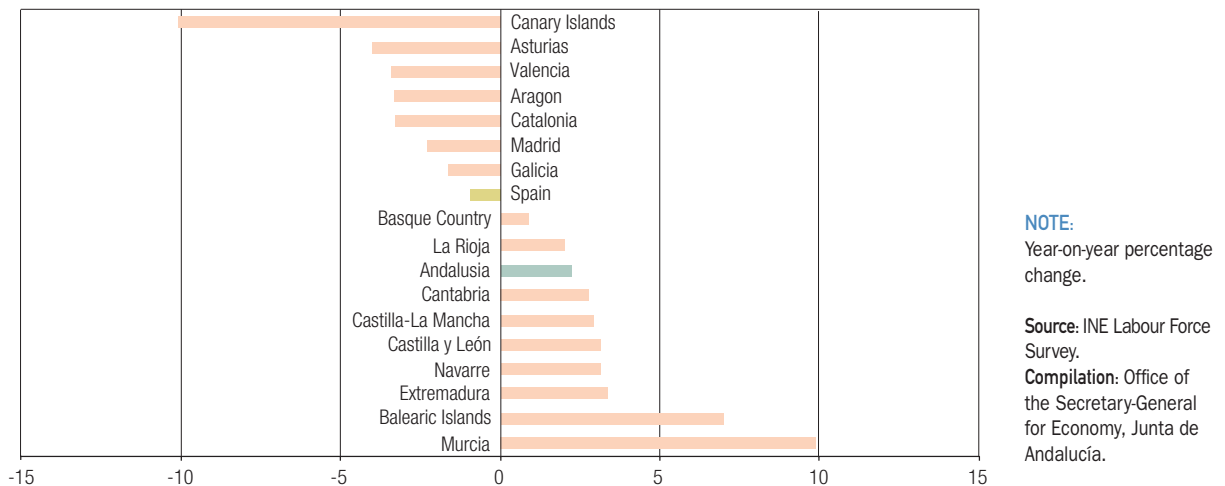
Chart 129. **TRENDS IN INDUSTRIAL PRODUCTION. YEAR 2003**

Chart 130. **EMPLOYMENT IN INDUSTRY. YEAR 2003**

There was an improvement in the performance of the **industrial sector** in 2003, with growth quickening to 1.3%, seven tenths of a point higher than the previous year's rate.

This GVA growth performance was substantiated by production figures, with the industrial production index (IPI), produced by the INE for all the Spanish regions, rising by 1.6% in Spain as a whole, picking up after the virtual stagnation of the previous year and showing an improvement in most of the regions. The biggest increase was recorded in Extremadura, followed by Aragon, Andalusia, where the Andalusian industrial production index (AIPI), produced by the IEA, rose by 3.3%, more than double the 2002 rate, Madrid and Castilla y León. The smallest increases were observed in Castilla-La Mancha, the Balearic Islands and Asturias.

The sector's capacity utilisation rate also showed an improvement, rising by 0.6 percentage points to 79.1% nationally, an upward trend echoed in Aragón, the Balearic Islands, Castilla-La Mancha, Catalonia, Extremadura and Madrid. The highest capacity utilisation rate was observed in Asturias (86.6%), and Galicia, Cantabria, Navarre and the Basque Country all achieved rates exceeding the national average.

These results were not mirrored in the labour market, where, according to the Labour Force Survey,

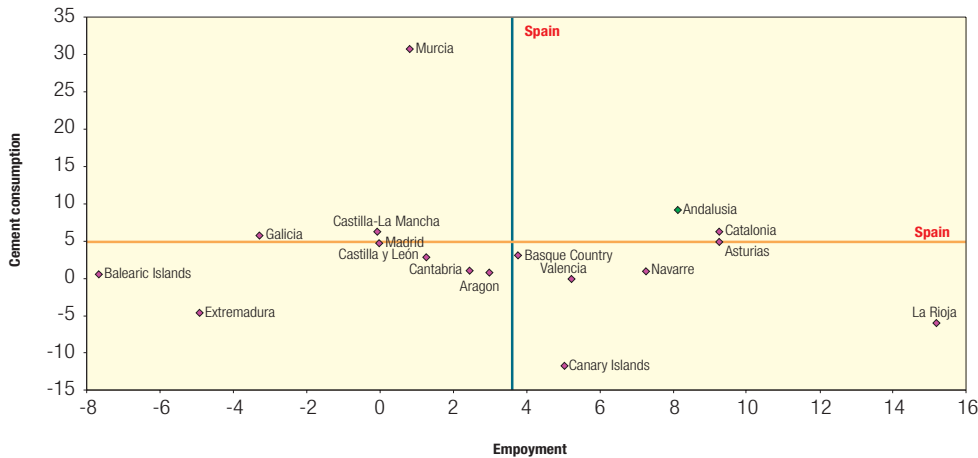
employment in industry fell year on year by 1% in 2003, although trends varied significantly from one region to another. In ten of them, including Andalusia (2.3%), employment rose. Murcia and the Balearic Islands recorded the highest job growth, while the Canary Islands saw a fall in employment.

The **construction sector** continued to be the best performing sector in the Spanish economy in 2003, registering 3.6% GVA growth.

Construction industry inputs also increased in 2003. The consumption of cement increased by 4.8% in Spain as a whole and only fell in the Canary Islands, Extremadura and La Rioja. Andalusia registered the highest cement consumption figure, accounting for 19.6% of the national total, and the second biggest year-on-year increase, after Murcia, with a rise of 9.4%, almost doubling the national rate.

The labour market confirmed this dynamic trend, with employment in construction in Spain as a whole rising by 3.7%. Andalusia, with an 8% increase in employment in 2003, was the region with the fourth highest construction industry job growth, behind La Rioja, Asturias and Catalonia. The regions that registered a fall in employment were the Balearic Islands, Extremadura, Galicia and Madrid.

Chart 131. **EMPLOYMENT AND CEMENT CONSUMPTION IN THE CONSTRUCTION INDUSTRY. YEAR 2003**



**NOTE:**  
Year-on-year percentage change.

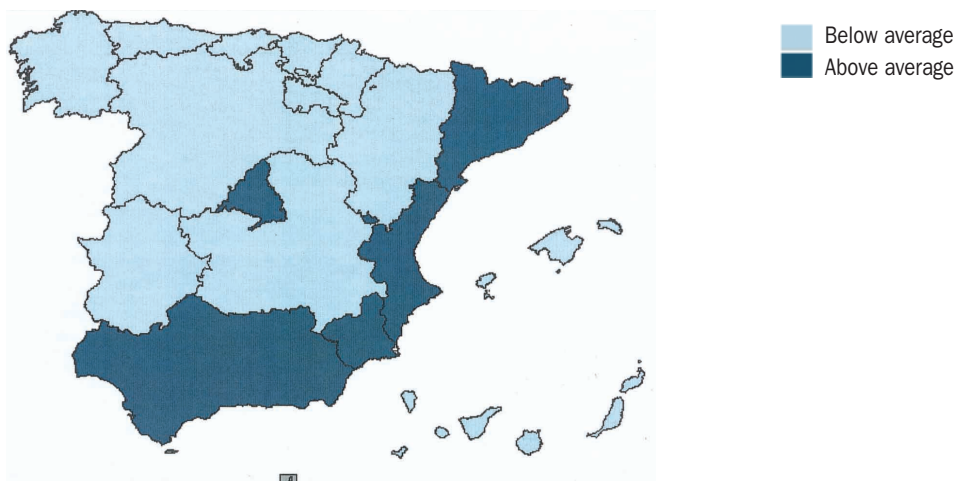
**Sources:** Oficemen and INE.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

The residential construction sector deserves a special mention, in view of the prominence it has acquired, with prices soaring to staggeringly high levels. According to the Housing Ministry, in 2003 the average price of open-market dwellings in Spain was 1,428.16 euro/m<sup>2</sup>, and the regions with the highest prices were Madrid (2,485.08 euro/m<sup>2</sup>), the Basque Country (2,140.09 euro/m<sup>2</sup>) and Catalonia (1,850.92 euro/m<sup>2</sup>). At the other end of the scale, the lowest house prices were observed in Extremadura, Castilla-La Mancha, Galicia and Murcia, where the average price was under 1,000 euro/m<sup>2</sup>.

Average house prices in Spain rose year on year by 17%. Data disaggregated by region reveals that although this upward trend was observed in all the Autonomous Communities, the rate of increase varied from one region to another. At one end of the scale, the average price of a dwelling rose by 25% in Madrid and by around 20% in Murcia and Catalonia, while at the other end, Castilla y León, Galicia and the Canary Islands recorded increases of under 10%. The biggest increases were observed in Madrid and on the Mediterranean coast, an area with a high level of investment in residential construction for tourism.

Chart 132. **HOUSING PRICE TRENDS. YEAR 2003**



**NOTE:**  
Year-on-year percentage change of price of open-market housing per square metre. Growth was 17% for Spain in 2003.

**Source:** Ministry of Housing.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.



Table 72. TRAVELLERS STAYING AT HOTELS. YEAR 2003

	No. of travellers	02-03 growth %	Overnight stays	02-03 growth %	Hotel occupancy rate (%) <sup>(*)</sup>
Andalusia	11,901,660	4.4	36,686,352	4.2	50.8
Aragon	1,849,104	1.9	3,872,436	0.1	36.9
Asturias	1,088,268	2.0	2,479,080	3.3	31.4
Balearic Islands	6,717,372	6.5	48,657,480	2.7	61.6
Canary Islands	4,852,272	2.8	38,147,376	3.8	68.3
Cantabria	934,248	0.7	2,227,596	-0.8	36.5
Castilla y León	3,648,396	-2.2	6,303,420	-2.6	34.2
Castilla-La Mancha	1,804,704	-0.7	3,044,388	0.4	30.6
Catalonia	10,778,064	1.9	36,664,608	-0.8	51.3
Valencia	5,578,200	14.8	21,629,640	5.5	58.8
Extremadura	1,000,008	0.6	1,723,260	1.7	30.4
Galicia	3,041,352	16.4	6,457,368	3.1	31.6
Madrid	5,748,924	1.1	12,232,236	-0.9	50.6
Murcia	882,504	9.2	2,640,756	7.5	48.1
Navarre	557,664	-0.1	1,093,932	-4.1	34.6
Basque Country	1,540,380	5.4	2,951,484	4.4	44.8
La Rioja	446,244	4.0	822,252	4.4	29.7
SPAIN	62,474,160	4.4	227,859,480	2.3	52.7

## NOTE:

(\*) Year's average.

Source: INE Hotel Occupancy Survey.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

On the basis of these figures, families buying a home in 2003 had to pay an average of 207.23 euro more per square metre than they would have done in 2002. The average price of a 100 m<sup>2</sup> dwelling was therefore 142,816 euro. A comparison of these figures with average earnings in 2003, according to the INE's Labour Cost Index for the Spanish regions, reveals that the earnings of approximately eight years were needed to buy a home in Spain in 2003.

However, this figure varied from one region to another. For example, the earnings of just over four years were needed in Extremadura, between five and seven in Castilla-La Mancha, Galicia, Murcia, Asturias, Valencia, Aragon, Andalusia, Castilla y León, Navarre and La Rioja, between eight and nine in Cantabria, the Canary Islands and Catalonia and more than ten in the Basque Country, the Balearic Islands and Madrid.

In the Spanish **service sector** real GVA growth remained practically the same as in 2002 at 2.1%, one tenth of a point lower than the previous year's rate.

Employment, however, showed a significant upward trend, with the sector recording 4.1% job growth, almost one percentage point up on the previous year's rate. This trend was echoed in all the Autonomous Communities, with the highest job growth in Galicia and Aragon and job growth exceeding the national average in eight other regions. Andalusia recorded 3.6% service sector job growth, making it the region with the third largest number of people employed in the service industries in absolute terms. On the contrary, Castilla y León and Navarre saw the weakest service sector job growth (0.7% and 0.9%, respectively).

Growth picked up in the tourist industry in 2003. According to the Hotel Occupancy Survey conducted by the INE, almost 62.5 million visitors stayed in Spanish hotels in 2003, up 4.4% on the previous year, a vigorous rebound from the decline of 2002. A breakdown shows that the number of visitors rose in almost all the Spanish regions, with Andalusia showing the sixth biggest increase and receiving the largest number of hotel guests in absolute terms, accounting for 20% of the total. At the other end of the scale, there was a fall in the number of visitors at hotels in Castilla y León, Castilla-La Mancha and Navarre.

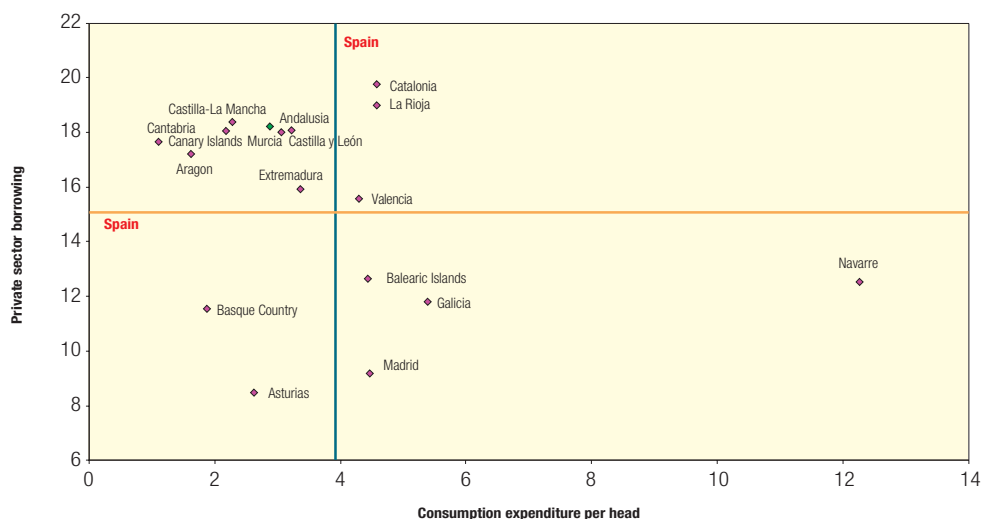
The transport subsector also fared well, showing a 7.4% rise in passenger air travel measured at Spanish airports in 2003, a sharp bounce-back from the 1% reduction registered the previous year. A regional breakdown shows that passenger air travel rose in all the regions except Cantabria and Navarre, where it continued to fall, although at a slower rate than in 2002. The national ranking for air travel growth was headed by Murcia, followed by Extremadura, Castilla y León, Valencia, the Basque Country, Andalusia and Catalonia. In Andalusia it rose year on year by 10.5%, bringing the total number of air passengers up to 15.8 million, the fifth highest figure.

## Domestic demand

Stronger domestic demand in 2003 was due to an improvement in consumption expenditure and a significant recovery by investment, particularly investment in capital goods. Stronger domestic demand is reflected in an increase in credit granted to private households and businesses to implement their spending and investment decisions. In Spain this type of credit grew by 15%, two percentage points faster than the previous year. Andalusia registered the fourth highest credit growth behind Catalonia, La Rioja and Castilla-La Mancha. At the bottom end of the national ranking, with credit growth of less than 10%, were Asturias and Madrid.

Consumption expenditure, which accounts for around three-quarters of domestic demand, experienced sustained growth in 2003. The Household Budget Survey conducted by the INE revealed that spending increased in all the Autonomous Communities. Average spending per person rose by 3.3% in Andalusia, a lower increase than recorded nationally (3.9%). The highest increase in spending was in Navarre, followed, at a great distance, by Galicia, La Rioja and Catalonia. The smallest increases were recorded in Cantabria, Aragon and the Basque Country.

Chart 133. **CONSUMPTION EXPENDITURE AND PRIVATE SECTOR BORROWING. YEAR 2003**



**NOTE:**  
Year-on-year percentage change.

**Sources:** INE and Bank of Spain.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Table 73. **DOMESTIC DEMAND INDICATORS. YEAR 2003**

	Average spending per capita on goods and services (€)	02-03 growth %	Passenger car registrations	02-03 growth %	Goods vehicle registrations	02-03 growth %	Private sector borrowing (1)	02-03 growth %
Andalusia	6,515	3.3	230,446	10.1	50,326	14.1	97,200	18.1
Aragon	7,578	1.5	31,767	6.9	9,269	12.0	20,867	17.2
Asturias	7,043	2.6	26,580	1.7	5,091	-0.4	12,731	8.4
Balearic Islands	8,423	4.4	53,727	-3.2	6,700	2.5	19,235	12.6
Canary Islands	6,572	2.2	57,394	9.8	19,588	17.9	25,425	18.1
Cantabria	7,919	1.1	16,482	6.0	3,341	12.4	7,737	17.7
Castilla y León	6,851	3.1	61,618	8.5	13,795	9.7	34,318	18.0
Castilla-La Mancha	5,991	2.3	43,206	11.0	13,517	12.0	20,918	18.3
Catalonia	7,898	4.6	248,714	11.2	52,711	11.8	150,070	19.7
Valencia	7,071	4.3	177,741	11.5	34,245	9.5	72,935	15.6
Extremadura	5,686	3.3	21,298	11.8	5,789	23.8	10,237	16.0
Galicia	6,763	5.3	73,063	8.4	11,993	5.8	30,364	11.8
Madrid	8,688	4.5	319,846	1.9	67,821	16.6	176,959	9.3
Murcia	6,600	2.9	39,241	6.1	10,833	14.3	18,377	18.1
Navarre	8,886	12.3	16,445	0.5	4,928	7.2	11,094	12.5
Basque Country	8,230	1.8	58,868	2.0	12,300	8.5	45,602	11.4
La Rioja	7,524	4.6	6,828	2.6	2,371	14.7	5,679	19.0
SPAIN	7,296	3.9	1,487,976	7.1	325,734	12.5	761,927	15.0

**NOTES:**

(1) Data in million euro. Balances as of 31 December.

Sources: INE Household Budget Survey, Bank of Spain and Directorate General of Traffic, Ministry of Interior.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Other partial consumption indicators reveal a brighter outlook than the findings of the Household Budget Survey.

Registrations of passenger cars can be used as a measure of spending on consumer durables. Following the decline in registrations in 2002, they increased in all the Spanish regions in 2003 except in the Balearic Islands. In Spain registrations rose by 7.1% and in Andalusia by 10.1%, making it the region with the fifth biggest increase behind Extremadura, Valencia, Catalonia and Castilla-La Mancha.

Registrations of goods vehicles, a partial indicator of investment in capital goods, also increased in all the regions except Asturias. The 14.1% increase recorded in Andalusia was higher than the national average

(12.5%). Extremadura registered the highest increase (23.8%), and the Balearic Islands the smallest.

## Foreign Trade

Trade between Spain and other countries grew at a considerably faster rate than in 2002. According to foreign trade figures compiled by the Economy and Finance Ministry Customs and Excise Department, Spain's volume of trade, that is, the sum of imports and exports, increased by 6% to 321,910 million euro in 2003. In spite of this significant increase in overall trade flows between Spain and other countries, foreign trade was outpaced by GDP growth (6.7%) for the third year in a row, so that Spain's trade openness fell by three tenths of a point.

Total imports from other countries amounted to 184,095 million euro, up 6.5% on the previous year, well in excess of the 0.6% increase observed in 2002.

A breakdown reveals that all the regions registered an increase in imports. Regions with import growth exceeding the national average were Castilla-La Mancha (19.8%), Extremadura (19.4%), La Rioja (17.7%), Cantabria (15.9%) and Aragon (14%). Andalusia, with 9.3% import growth, also exceeded the national average, and the increases of 5.4% recorded by the two biggest importers, Catalonia and Madrid, were also significant, as these two regions accounted for 53% of total imports. In Asturias and the Balearic Islands, import figures were practically the same as the previous year (0.6% and 0.2% respectively).

Export growth was also much higher, quickening from 1.7% in 2002 to 5.4% in 2003, bringing the

total export figure up to 137,815 million euro.

A regional breakdown reveals mixed trends. The regions with the highest export growth were Extremadura (44.2%), Aragon (22.8%), Asturias (18.2%) and Navarre (15.6%). The main exporters, Catalonia, Madrid, Valencia, the Basque Country and Andalusia, together accounting for over 66% of total exports, showed very mixed trends. While the first two saw export growth of around 4%, Valencia registered a 0.3% decline in exports, the Basque country a slight increase of 0.9%, and Andalusia a considerable increase of 8.7%. Three regions recorded a fall in exports to other countries in 2003, namely the Balearic Islands, with the biggest reduction (–20.6%), Cantabria (–5%) and the Canary Islands (–1.5%).

These results led to a widening of Spain's trade deficit to 46,279 million euro, 10.3% more than in

Table 74. **FOREIGN TRADE. YEAR 2003**

	€ thousand		% of Spain's total		Export/import ratio		02-03 growth %	
	Imports	Exports	Imports	Exports	2002	2003	Imports	Exports
Andalusia	12,056,153	11,306,056	6.5	8.2	94.2	93.8	9.3	8.7
Aragon	6,023,442	6,822,572	3.3	5.0	105.1	113.3	14.0	22.8
Asturias	2,142,897	2,113,381	1.2	1.5	84.0	98.6	0.6	18.2
Balearic Islands	1,739,250	964,188	0.9	0.7	69.9	55.4	0.2	–20.6
Canary Islands	3,633,565	725,278	2.0	0.5	22.6	20.0	11.6	–1.5
Cantabria	1,672,400	1,446,697	0.9	1.0	105.6	86.5	15.9	–5.0
Castilla y León	8,077,139	8,625,429	4.4	6.3	100.7	106.8	2.7	8.9
Castilla-La Mancha	4,516,846	2,194,068	2.5	1.6	56.3	48.6	19.8	3.3
Catalonia	53,697,481	37,277,703	29.2	27.0	70.3	69.4	5.4	4.0
Valencia	14,478,123	16,673,962	7.9	12.1	120.8	115.2	4.6	–0.3
Extremadura	525,216	1,170,280	0.3	0.8	184.5	222.8	19.4	44.2
Galicia	10,179,685	9,914,816	5.5	7.2	104.3	97.4	11.8	4.4
La Rioja	791,561	885,805	0.4	0.6	130.3	111.9	17.7	1.1
Madrid	43,898,485	14,808,061	23.8	10.7	34.3	33.7	5.4	3.6
Murcia	4,887,304	3,954,564	2.7	2.9	80.6	80.9	3.8	4.2
Navarre	4,150,164	5,093,522	2.3	3.7	109.4	122.7	3.1	15.6
Basque Country	10,449,536	11,402,181	5.7	8.3	112.2	109.1	3.8	0.9
<b>SPAIN</b>	<b>184,094,526</b>	<b>137,815,320</b>	<b>100.0</b>	<b>100.0</b>	<b>75.7</b>	<b>74.9</b>	<b>6.5</b>	<b>5.4</b>

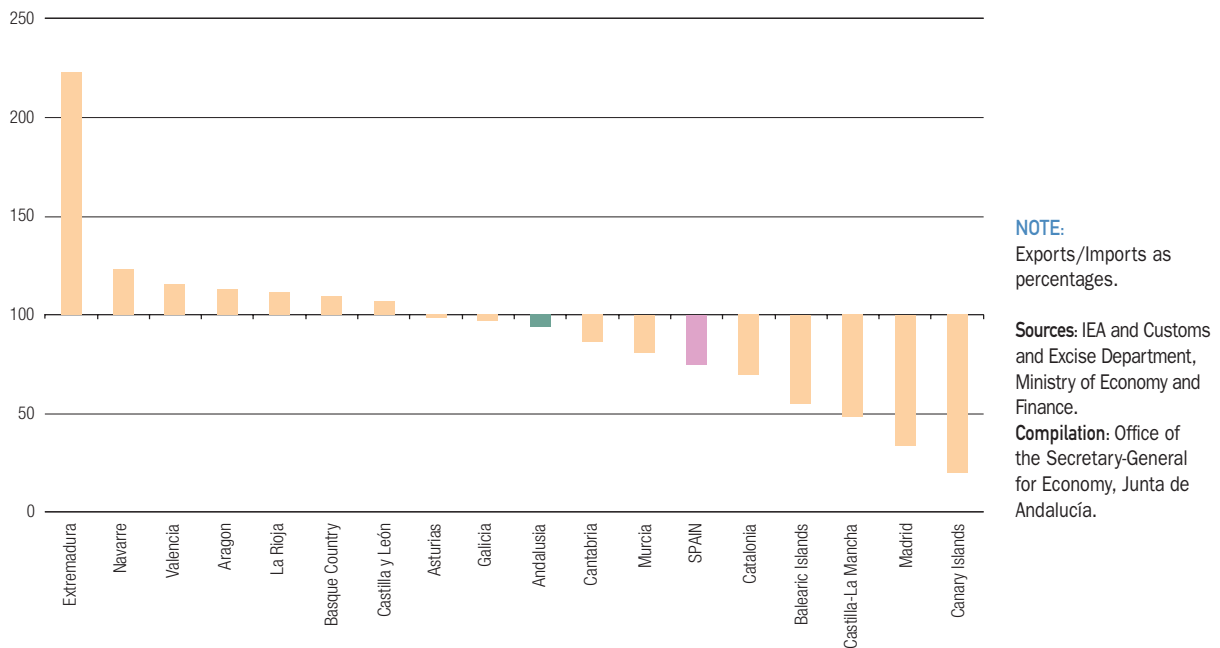
**NOTE:**

Figures are provisional.

Sources: IEA and Customs and Excise Department, Ministry of Economy and Finance.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 134. EXPORT/IMPORT RATIO. YEAR 2003



2002 and equivalent to 6.2% of GDP. The fact that import growth outpaced export growth led to a fall of eight tenths of a point in the export/import ratio to 74.9%.

A deterioration of the trade balance was observed in all the regions except Aragon, Asturias, Castilla y León, Extremadura and Navarre. The rest of the regions recorded a reduction or no change in the export/import ratio in 2003 compared with the previous year.

Seven regions, two less than in 2002, had export/import ratios of over 100% and therefore showed a trade surplus. The highest surplus was recorded in Extremadura, where the level of imports was less than half that of exports and where the surplus rose significantly. It was followed by Navarre, with a ratio of 122.7%, 13.3 points up on 2002, Valencia, Aragon, La Rioja, the Basque Country and Castilla y León. Cantabria and Galicia were the two regions whose trade balance deteriorated from a surplus in 2002 to a deficit in 2003, owing largely to a considerable increase in imports, coupled with a fall in exports in the case of Cantabria.

Andalusia’s trade with other countries accounted for 7.3% of the national total, putting it in fourth place in the national ranking. Like Spain, it closed the year with a trade deficit (–750.1 million euro), as import growth outstripped export growth. Andalusia’s export/import ratio fell slightly to 93.8%, 4 tenths of a point lower than in 2002, but significantly higher than the national average (74.9%).

### Foreign investment

According to the Foreign Investment Register of the Ministry of Industry, Tourism and Trade, 2003 saw a reduction in real gross foreign investment in Spain and a sharper fall in real gross foreign investment by Spain abroad.

Real gross outward investment was down 41.6% on the previous year to 24,341 million euro. A breakdown by region reveals that Madrid was the biggest investor, accounting for 48.49% of the total, although the so-called “headquarters effect” distorts the results to some degree, followed, some way behind, by Aragón, accounting for 20.63%, and

Catalonia, accounting for 16.75%. A long way behind these three regions came the Basque Country, the Balearic Islands and Valencia, which together accounted for 13.71% of all foreign investment abroad. The remaining regions together accounted for just 2.19% of the total.

This downward trend in real gross investment extended to almost all the Autonomous Communities in 2003. The regions that registered significant reductions were Asturias, Cantabria, the Canary Islands, Madrid and Galicia. Some regions did, however, see an increase in foreign investment abroad, such as Aragon, with a figure four times that of the previous year, and the Basque Country, the Balearic Islands, Castilla-La Mancha, Murcia, Navarre and Catalonia, which all recorded significant increases.

Real gross foreign investment in unlisted Spanish enterprises fell by 46.9% to 16,641 million euro in 2003. Madrid once again headed the ranking, absorbing

46.92% of inward investment, a percentage pumped up by the “headquarters effect” mentioned above. The biggest recipients of foreign investment, after Madrid, were Aragon, Catalonia, Murcia, Castilla-La Mancha, the Balearic Islands, Andalusia and the Basque Country.

Inward investment, like outward investment, showed mixed results in the different regions, although negative growth was the dominant trend. The most significant cases were Aragon, which received five times more foreign investment than in 2002, and Murcia, which received 869 million euro in foreign investment in 2003, compared with just 3 million euro the previous year. Inward investment also increased in the Balearic Islands, Castilla-La Mancha and Extremadura. Foreign investment fell in all the other regions, the most significant cases being Madrid, Asturias and Catalonia.

In Spain as a whole, outward investment exceeded inward investment, in gross terms, by 7,669.8 million

Table 75. **REAL GROSS OUTWARD INVESTMENT. YEAR 2003**

	€ thousand	% of Spain's investment	02-03 growth %
Andalusia	62,541	0.3	-56.4
Aragon	5,021,677	20.6	316.7
Asturias	59,178	0.2	-97.2
Balearic Islands	579,162	2.4	273.2
Canary Islands	146,547	0.6	-85.4
Cantabria	18,600	0.1	-94.3
Castilla y León	22,863	0.1	-51.8
Castilla-La Mancha	13,612	0.1	367.8
Catalonia	3,642,907	15.0	3.9
Valencia	568,230	2.3	-32.5
Extremadura	59,121	0.2	734.3
Galicia	111,456	0.5	-60.5
Madrid	11,803,874	48.5	-61.1
Murcia	10,284	0.0	537.2
Navarre	15,163	0.1	168.2
Basque Country	2,190,322	9.0	30.4
La Rioja	15,198	0.1	N.C.
Ceuta and Melilla	200	0.0	208.8
<b>SPAIN</b>	<b>24,340,935</b>	<b>100.0</b>	<b>-41.6</b>

**NOTE:**

N.C.: not calculable.

**Source:** Foreign Investment Registry, Ministry of Industry, Tourism and Trade.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Table 76. REAL GROSS INWARD INVESTMENT. YEAR 2003

	€ thousand	% of investment in Spain	02-03 growth %
Andalusia	231,574	1.4	-25.4
Aragon	4,997,531	30.0	417.6
Asturias	10,434	0.1	-99.3
Balearic Islands	313,452	1.9	188.8
Canary Islands	146,777	0.9	-85.0
Cantabria	581	0.0	-96.2
Castilla y León	6,866	0.0	-97.4
Castilla-La Mancha	359,161	2.2	845.0
Catalonia	1,444,149	8.7	-61.4
Valencia	71,014	0.4	-7.9
Extremadura	92,848	0.6	1,029.3
Galicia	28,422	0.2	-93.9
Madrid	7,808,542	46.9	-65.2
Murcia	869,124	5.2	33,819.7
Navarre	10,379	0.1	-55.3
Basque Country	216,539	1.3	-40.1
La Rioja	27,658	0.2	-64.7
Ceuta and Melilla	6,040	0.0	-20.0
SPAIN	16,641,090	100.0	-46.9

Source: Foreign Investment Registry, Ministry of Industry, Tourism and Trade.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

euro, which meant that outflows were 1.5 times higher than inflows. Spain therefore maintained its position as a net exporter of capital for the fifth year in a row. Particularly significant cases included Madrid, Catalonia, the Basque Country and, to a lesser extent, Valencia and the Balearic Islands, where outward investment was well in excess of inward investment. On the other hand, Andalusia, Castilla-La Mancha, Extremadura, Murcia and La Rioja registered net inflows of foreign investment, receiving more foreign capital than they invested abroad.

## Business sector

The Spanish business sector, influenced by a more buoyant economy, grew by 3.8% in 2003, over one percentage point more than the previous year.

This increase brought the total number of enterprises (excluding primary sector enterprises) operating in

Spain up to 2,813,159, according to the Central Business Directory (DIRCE) produced by the INE. All the regions contributed to this growth, with Castilla-La Mancha heading the national ranking with a 6.8% increase in the size of its business sector, followed by Madrid, Galicia and Andalusia, which saw a 4.7% increase in the number of enterprises operating in the region, almost one percentage point higher than the national average. Andalusia therefore continued to have the largest business sector in Spain, after Catalonia, with a total of 417,006 enterprises.

The Statistics on Commercial Companies compiled by the INE, provide an insight into company startups and closures over the year, as they contain data disaggregated by region. In Spain the company closure rate, a measure of “company mortality”, calculated as company closures as a percentage of company startups, was 7.7%. The regions with the highest company closure rates were Aragon (16.5%), the Basque Country (15.1%) and Asturias (14%), and

Table 77. **ENTERPRISES BY AUTONOMOUS REGION. YEAR 2003**

	No. enterprises <sup>(1)</sup>	% of total	02-03 growth %
Andalusia	417,006	14.7%	4.7%
Aragon	82,750	3.0%	1.5%
Asturias	65,062	2.3%	2.9%
Balearic Islands	75,951	2.7%	3.5%
Canary Islands	117,871	4.2%	4.2%
Cantabria	34,017	1.2%	3.0%
Castilla y León	151,448	5.4%	2.7%
Castilla-La Mancha	107,294	3.7%	6.8%
Catalonia	525,557	19.0%	2.0%
Valencia	299,452	10.6%	3.8%
Extremadura	58,306	2.1%	1.5%
Galicia	174,077	6.1%	5.0%
Madrid	407,655	14.2%	6.0%
Murcia	75,973	2.7%	4.7%
Navarre	38,936	1.4%	4.3%
Basque Country	154,703	5.6%	1.6%
La Rioja	20,094	0.7%	3.1%
SPAIN	2,813,159	100.0%	3.8%

**NOTE:**

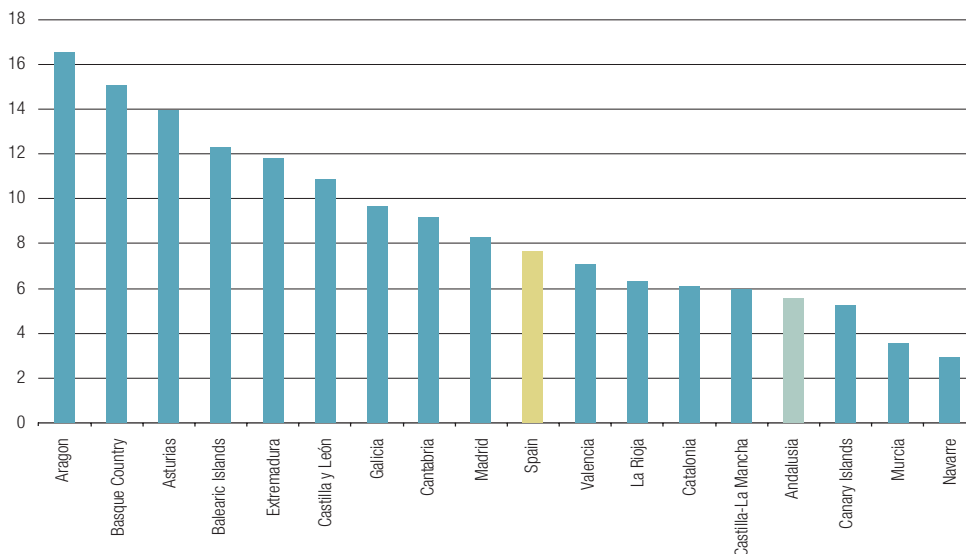
(1) Non-agricultural sectors only.

Source: INE Central Business Directory.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

those with the lowest were Navarre (2.9%), Murcia (3.5%) and the Canary Islands (5.2%). Andalusia, with a ratio of 5.5%, was the region with the fourth lowest company mortality rate in 2003.

## Labour market

The general improvement in the Spanish economy was mirrored in the labour market in the form of more robust job growth.

Chart 135. **COMPANY CLOSURE RATIO. YEAR 2003****NOTE:**

Company closures as a percentage of company start-ups.

Source: INE Statistics of Commercial Companies.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



## 12. ANDALUSIA IN THE CONTEXT OF THE SPANISH REGIONS

The number of people in work registered in Social Security files in December 2003 increased in all the regions. Nationally, it rose year on year by 2.5%, with La Rioja registering the highest increase (5%). Murcia, Castilla-La Mancha, Andalusia, Navarre, Aragon and Valencia also recorded increases that exceeded the national rate, while the Balearic Islands saw the smallest increase (0.8%).

The 3.4% increase in employment registered in Andalusia brought the total number of people registered as employed with the Social Security up to 2,666,500, a record year-end figure. It was therefore the region with the fourth highest job growth and the second largest number of people in work, after Catalonia, according to Social Security figures.

The Labour Force Survey provides a higher estimate of job growth. According to the survey, employment rose year on year by 2.7% nationally in 2003, an improvement on the 2% job growth recorded the previous year. All the regions registered a rise in

employment, with the highest job growth observed in the Canary Islands and Murcia, followed by Extremadura, Andalusia and Cantabria. The weakest job growth was observed in Castilla y León, Navarre and Madrid.

This job growth was accompanied by weaker labour force growth (2.6%) than in 2002, when the labour force grew by 3%. This trend of deceleration was observed in over half of the regions. The fact that labour force growth grew at a similar rate to job growth led to an 2.1% year-on-year rise in jobless numbers in Spain in 2003, while unemployment fell in seven regions, with the biggest reductions observed in La Rioja, Extremadura, Andalusia and Murcia.

Jobless figures recorded at National Employment Institute (INEM) offices nationally showed a smaller increase in unemployment of 1.4% year on year in December 2003, with all the regions except La Rioja, Aragon, Navarre, Andalusia, Madrid and the Basque

Table 78. **EMPLOYMENT. YEAR 2003**

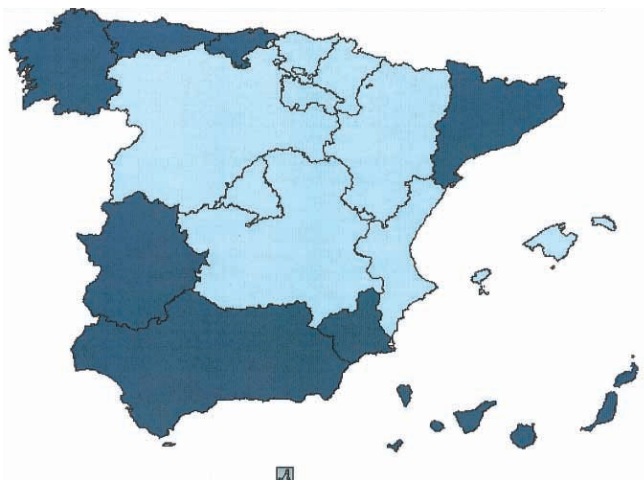
	Workers registered with Social Security <sup>(1)</sup>	02-03 growth %	Employed	02-03 growth %
Andalusia	2,666.5	3.4	2,585.08	3.4
Aragon	498.1	3.0	486.38	2.5
Asturias	361.9	1.4	384.10	3.2
Balearic Islands	346.4	0.8	386.75	2.2
Canary Islands	712.3	2.2	770.78	4.5
Cantabria	193.4	2.1	215.15	3.4
Castilla y León	847.2	1.2	941.05	1.0
Castilla-La Mancha	596.4	3.6	661.35	2.1
Catalonia	2,997.5	2.3	2,861.83	3.3
Valencia	1,740.4	2.8	1,785.88	2.1
Extremadura	351.4	2.2	375.75	3.7
Galicia	940.6	1.9	1,105.43	3.1
Madrid	2,568.2	2.3	2,352.33	1.5
Murcia	492.7	3.8	472.68	4.4
Navarre	246.2	3.2	240.85	1.4
Basque Country	878.6	1.5	905.93	2.2
La Rioja	118.0	5.0	113.70	2.2
<b>SPAIN</b>	<b>16,589.6</b>	<b>2.5</b>	<b>16,694.55</b>	<b>2.7</b>

**NOTES:**

Thousand people.  
(1) Data as of December.

**Sources:** Ministry of Labour and Social Affairs and INE Labour Force Survey.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 136. **JOB GROWTH. YEAR 2003**



Below average  
Above average

**NOTES:**

Year-on-year percentage change. The number of people in work in Spain grew by 2.7% in 2003.

**Source:** INE Labour Force Survey.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Country, registering higher unemployment, according to these figures.

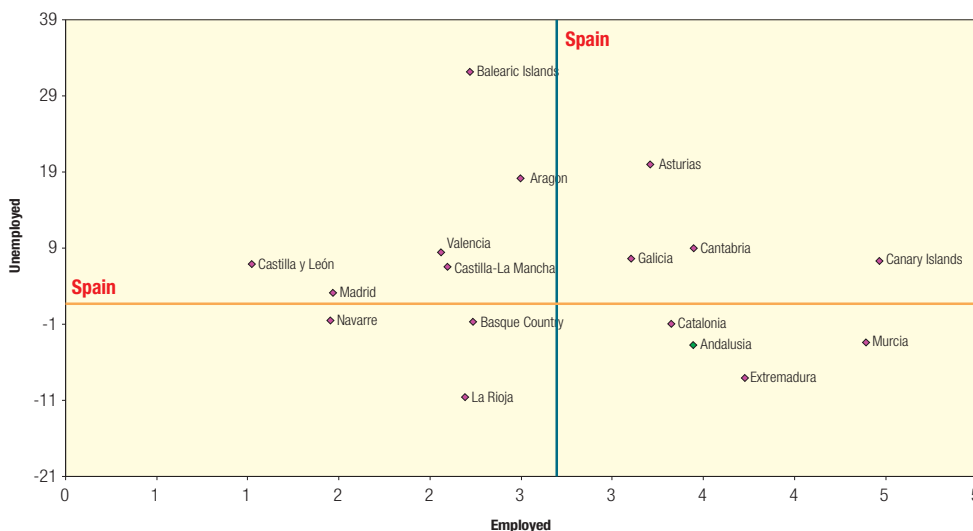
**Prices and labour costs**

Following the upward trend in price growth observed in Spain in 2002, stoked by rising world crude oil prices, 2003 saw tamer inflation, with the consumer price index (CPI) registering a year-on-year, year-end rate of 2.6%, 1.4 percentage points below the 2002 rate.

The trend of receding inflation was common to all the Autonomous Communities. The sharpest deceleration in price growth was observed in the Balearic Islands, where the inflation rate was almost half the previous year's rate, falling from 4.5% in 2002 to 2.3% in 2003.

A comparison of regional and national price growth reveals that the Canary Islands, with a year-on-year, year-end rate of 1.9%, registered the lowest inflation, 0.7 percentage points below the national rate.

Chart 137. **EMPLOYMENT AND UNEMPLOYMENT. YEAR 2003**



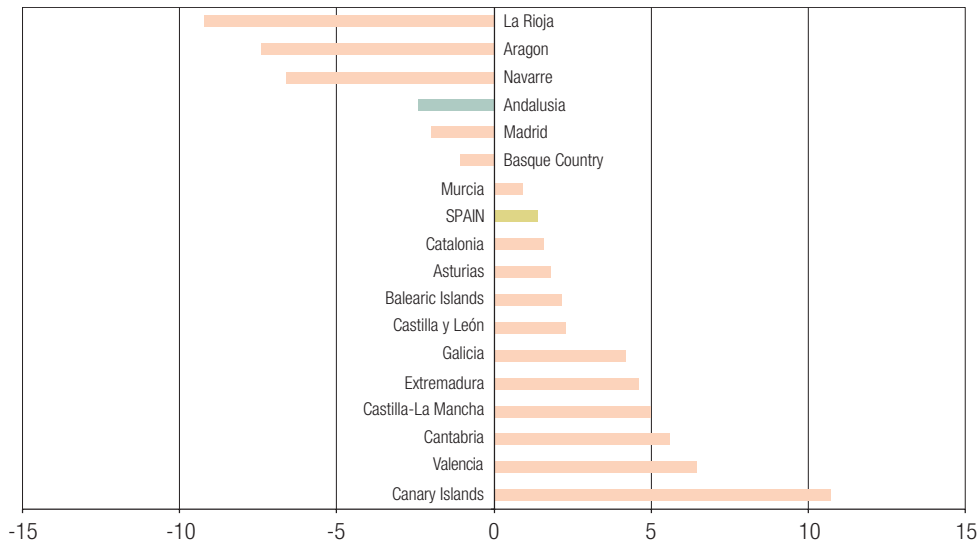
**NOTE:**

Year-on-year percentage change.

**Source:** INE Labour Force Survey.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 138. REGISTERED UNEMPLOYMENT. YEAR 2003



**NOTE:**  
Year-on-year percentage change as of December.

**Source:** National Employment Institute.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Other regions with below-average inflation rates were Castilla y León, Extremadura, Galicia, the Balearic Islands, Valencia, Aragon, Asturias and La Rioja.

The most inflationary region was Murcia, which recorded an inflation rate of 3.2% in 2003, six tenths of a point above the national average.

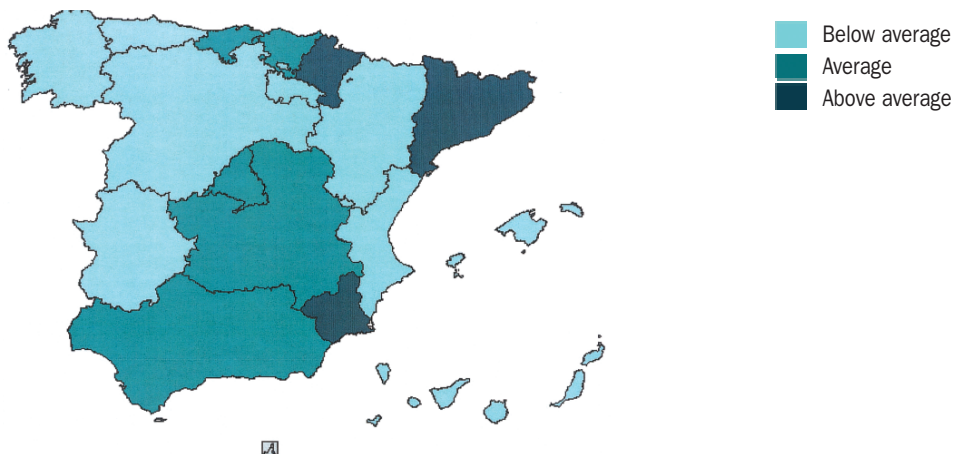
Andalusia, like Cantabria, Castilla-La Mancha, Madrid and the Basque Country, registered the same inflation

rate as the Spanish economy as a whole, that is, 2.6%.

With regard to labour costs, the INE estimates average labour costs per worker per month in Spain in 2003 at 1,992.4 euro, 4.2% up on the previous year.

A regional breakdown shows that the Canary Islands recorded the smallest increase in labour costs (2.3%), which was significantly lower than the national rate.

Chart 139. INFLATION RATE. YEAR 2003



**NOTES:**  
Year-on-year CPI growth as of December.  
The inflation rate for Spain was 2.6% in 2003.

**Source:** INE.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Other regions with below-average increases in labour costs were the Basque Country, Galicia, Castilla-La Mancha, Aragon and La Rioja.

At the other end of the scale, Castilla y León and Murcia recorded the sharpest increases in labour costs (6.4% and 6.1% respectively).

The highest labour costs, in absolute terms, were once again observed in Madrid, where they rose to 2,360.6 euro per worker per month, 18.5% above the national average. Other regions with labour costs above the national average were the Basque Country, Navarre, Catalonia and Asturias, while those with the lowest labour costs were Extremadura, the Canary Islands and Murcia, at around 83% of the national average.

A breakdown of these figures reveals a bigger increase in non-wage costs, which include Social Security contributions and non-wage items such as payments for temporary disability, unemployment, etc., than in wage costs in all the regions except Asturias and Catalonia.

In Spain as a whole, non-wage costs, accounting for around a quarter of the total, rose by 5.4%, more sharply than wage costs, which rose by 3.8%.

The highest non-wage cost growth was recorded in Castilla y León (8.7%), and the highest wage cost growth in Murcia (6%).

In Andalusia, non-wage cost growth was more than double wage cost growth (7.9% and 3.2%

Table 79. **LABOUR COSTS. YEAR 2003**

	Labour costs per worker per month			% of Spain's costs	02-03 growth %		
	Wage costs	Non-wage costs	Total costs		Total costs	Wage costs	Non-wage costs
Andalusia	1,345.0	487.0	1,832.0	91.9	3.2	7.9	4.4
Aragon	1,455.5	511.8	1,967.2	98.7	3.6	4.9	4.0
Asturias	1,468.0	543.4	2,011.3	100.9	5.4	5.3	5.4
Balearic Islands	1,339.9	468.4	1,808.3	90.8	5.1	7.3	5.7
Canary Islands	1,217.2	430.2	1,647.4	82.7	1.9	3.3	2.3
Cantabria	1,358.5	495.1	1,853.6	93.0	4.3	6.7	5.0
Castilla y León	1,265.7	449.7	1,715.4	86.1	5.6	8.7	6.4
Castilla-La Mancha	1,361.6	492.1	1,853.6	93.0	2.9	5.6	3.6
Catalonia	1,584.7	525.1	2,109.9	105.9	4.2	3.3	3.9
Valencia	1,319.1	479.7	1,798.7	90.3	4.5	6.6	5.0
Extremadura	1,210.9	423.6	1,634.5	82.0	4.6	6.2	5.0
Galicia	1,271.5	462.7	1,734.2	87.0	2.4	7.2	3.6
Madrid	1,777.5	583.1	2,360.6	118.5	4.3	5.4	4.6
Murcia	1,217.0	452.3	1,669.3	83.8	6.0	6.2	6.1
Navarre	1,653.6	562.1	2,215.6	111.2	5.3	6.0	5.5
Basque Country	1,708.0	585.3	2,293.2	115.1	2.9	4.3	3.2
La Rioja	1,348.5	485.4	1,833.8	92.0	3.9	4.7	4.1
SPAIN	1,480.2	512.2	1,992.4	100.0	3.8	5.4	4.2

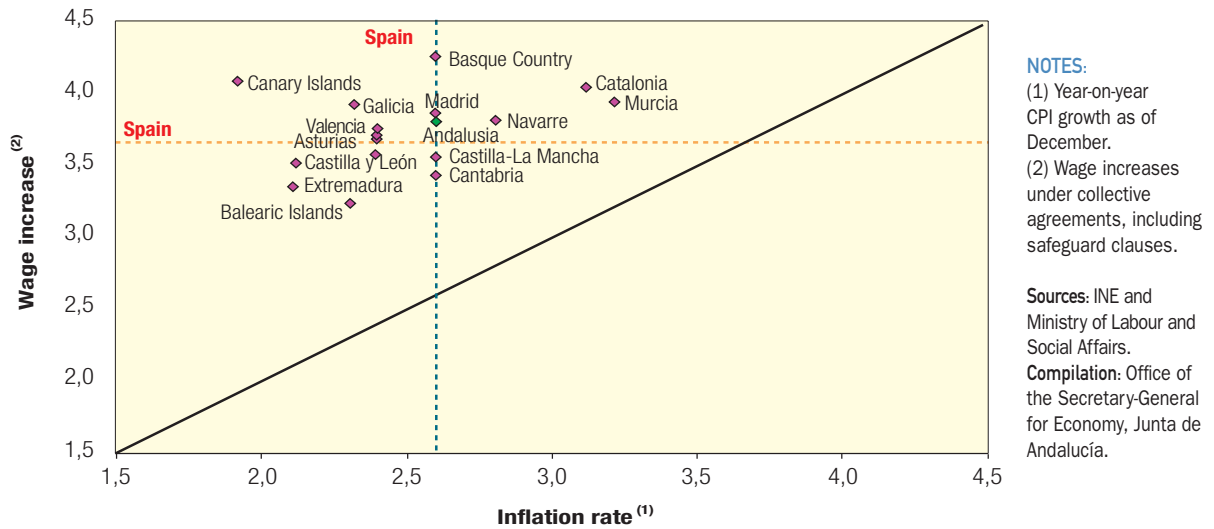
**NOTE:**

Figures in euro unless otherwise stated.

Source: INE.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 140. INFLATION AND WAGES. YEAR 2003



**NOTES:**  
 (1) Year-on-year CPI growth as of December.  
 (2) Wage increases under collective agreements, including safeguard clauses.  
**Sources:** INE and Ministry of Labour and Social Affairs.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

respectively), resulting in an overall increase in labour costs of 4.4%, slightly higher than the national average (4.2%). However, average labour costs per worker per month in Andalusia in 2003 remained lower than in Spain as a whole, at 1,832 euro, which was 91.9% of the national average.

The Ministry of Labour and Social Affairs also provides information on wage trends, based on collective bargaining agreements signed in the productive sectors. According to this data, pay rises negotiated in collective agreements in 2003, incorporating the impact of the safeguard clauses agreed the previous year, averaged 3.67%, which was a slightly smaller rise than recorded in 2002.

The lowest wage growth was recorded in the Balearic Islands (3.22%), Extremadura (3.37%)

and Cantabria (3.44%). All of them, together with Castilla y León, La Rioja and Castilla-La Mancha, recorded wage growth below the national average. The remaining regions showed above-average wage growth, the highest in the Basque Country, with an increase of 4.25%.

A comparison of wage and price trends shows purchasing power gains of 1.1 percentage points nationally, a trend echoed in all the Autonomous Communities.

The Canary Islands, with 4.08% wage growth and 1.9% inflation, recorded the highest real wage growth, with a gain in purchasing power of 2.2 percentage points, double the national gain. Murcia fared the worst, with a 0.7 point gain in purchasing power.

14.

## New Economy and Knowledge Society in Andalusia



## New Economy and Knowledge Society in Andalusia

### Overview of the position of Andalusia in relation to the new economy and the information society

Increasingly, private organisations and official bodies publish statistics on what has come to be known as the information society and the position of Spanish regions with regard to the new economy, although they fail to provide an overall picture of the situation. A more comprehensive insight can be achieved by constructing composite indicators from available information to analyse different aspects of the new economy and the information society.

The *Centro de Predicción Económica* (CEPREDE - Economic Forecast Centre) of the faculty of Economics and Business Science at the Autonomous University of Madrid produces such an indicator, as does the AUNA Foundation, which publishes the results in its annual report on the development of the information society in Spain.

The “composite indicator for the regional penetration of the new economy”, compiled by CEPREDE, is based on four categories: technological innovation and the

penetration of the new economy in businesses, in the home and in public administration. Each of the first three categories has a 30% weighting in the overall index, and the partial indicator of penetration of the new economy in public administration accounts for the remaining 10%.

These four categories, or partial indicators, include fourteen new economy penetration indicators. Technological innovation is measured on the basis of figures for R&D expenditure and personnel, the number of high-technology businesses and the number of patents. The development of the new economy in businesses is measured by the proportion of enterprises that have their own websites and use e-commerce, the number of workers in high-technology businesses and foreign trade figures for the information and communication technology (ICT) sector. Penetration in the home is measured on the basis of the proportion of homes with personal computers and telephone lines, people with access to the internet and people who shop on the internet. Lastly, the presence of the new economy in public administration is measured on the basis of expenditure on information technology and the PC-to-employee ratio in regional and local government.



The new economy penetration indicator was 77 for Andalusia in 2002, against a value of 100 for Spain as a whole, putting it in eleventh position in the ranking of Autonomous Communities ahead of Extremadura, the Canary Islands, the Balearic Islands, Galicia, Castilla y León and Castilla-La Mancha. The highest-ranking regions were Madrid, Catalonia and the Basque Country.

An analysis of the index's composite indicators by category reveals that Andalusia has a value that is 20% above the average in the public administration category. Andalusia's next highest score is in the category relating to penetration of the new economy in the home, in which it scored 86 against Spain's 100, followed by the businesses category (70). Its lowest score was in the technological innovation category (62).

The AUNA Foundation's composite index is compiled on the basis of twenty-eight indicators, grouped into five subindexes: state of R&D and innovation, human capital in ICT, ICT penetration in public administration, internet use by individuals and connectivity.

The first of these subindexes, the state of R&D and innovation, is measured on the basis of R&D

expenditure by businesses and R&D jobs, employment in high-technology sectors and R&D expenditure per capita. The human capital category is based on the number of university places for ICT students, university training in technical areas and the number of researchers. ICT penetration in public administration is based on indicators relating to ICT budgets, website access, public sector employees with access to PCs and the internet, online financial and administrative transactions and online form submission. The fourth subindex, relating to internet use by individuals, is measured by the proportion of homes with PCs and internet access, internet users, public computer terminals and teaching and educational establishments with internet access. The connectivity subindex is measured by the proportion of homes with fixed telephones and broadband internet access.

Most of the indicators are for the year 2002, although in some cases, such as data published by the INE, figures are for 2001. According to AUNA's composite index, the differences among the Spanish regions levelled out in 2002, and significant progress was made towards convergence. The gap between the highest and lowest index scores<sup>1</sup> narrowed sharply from 46.6 percentage points between Madrid and

Chart 142. **COMPOSITE INDICATOR FOR REGIONAL PENETRATION OF THE NEW ECONOMY. YEAR 2002**

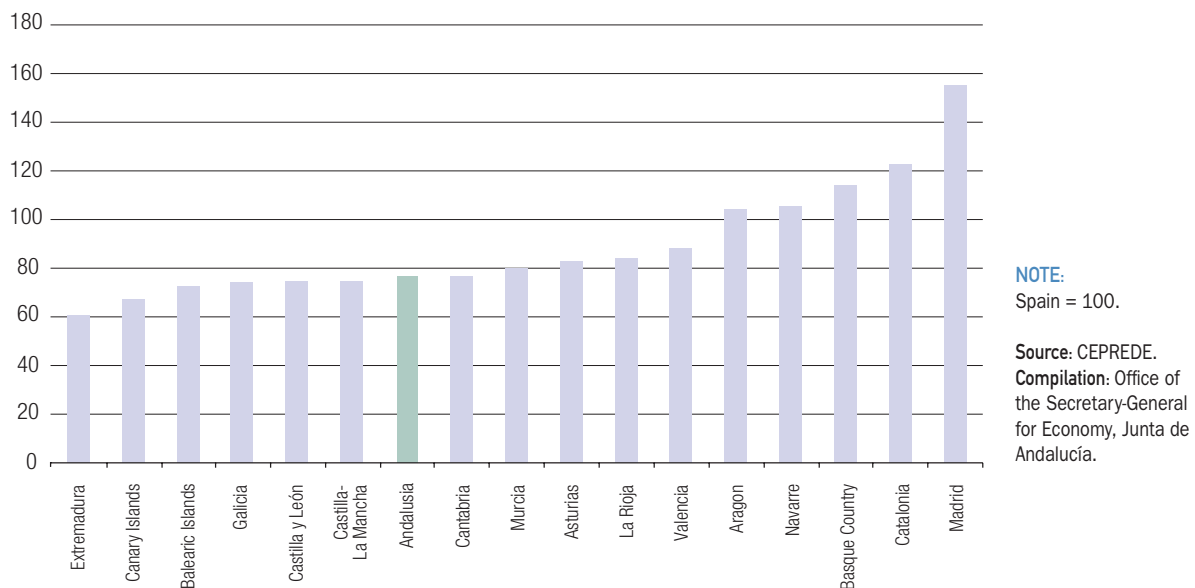


Table 83. **INFORMATION SOCIETY AND AUTONOMOUS REGIONS. OVERALL RANKING**

	General Index 2001	General Index 2002
Andalusia	69.2	88.3
Aragon	62.4	90.1
Asturias	72.9	91.6
Balearic Islands	62.0	90.2
Canary Islands	60.6	90.0
Cantabria	62.0	91.6
Castilla-La Mancha	57.6	84.0
Castilla y León	62.7	89.8
Catalonia	94.6	98.3
Valencia	70.1	91.2
Extremadura	55.9	85.0
Galicia	53.4	88.2
La Rioja	63.2	91.5
Madrid	100.0	100.0
Murcia	66.1	87.3
Navarre	69.2	93.6
Basque Country	79.7	98.6

Source: AUNA Foundation, annual report on information society development in Spain.  
 Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Galicia in 2001 to 16 points between Madrid and Castilla-La Mancha in 2002.

Andalusia ranks thirteenth on the latest AUNA index, measuring the development of the information society, with a score of 88.3 against Madrid's 100, ahead of Galicia, Murcia, Extremadura and Castilla-La Mancha.

A more detailed analysis of the five categories included in the composite index on the information society<sup>2</sup> reveals that Andalusia ranks higher in the subindexes relating to human capital in ICT and internet use by individuals. It ranks fifth in the human capital category and is the region with the third highest score in university places for ICT-related studies. Andalusia ranks sixth in the internet use by individuals category and is the highest scoring region in public computer terminals and library user internet access.

In the remaining categories, however, Andalusia ranks lower than on the overall index. Andalusia is

fourteenth in R&D and innovation and fifteenth in connectivity. The poor showing in R&D and innovation can be largely attributed to low expenditure on R&D by businesses and low R&D expenditure per inhabitant, compared with other regions. In the category of ICT in public administration, Andalusia fared well in budgeted ICT expenditure per inhabitant, ranking seventh. In the connectivity category, Andalusia scored higher in homes with broadband internet access, ranking ahead of eight other regions, than it did in homes with fixed telephones.

### Technological research and development in Andalusia

Technological research and development (R&D) encompasses three types of activity: basic research, applied research and technological development. The first refers to original work carried out with a view to acquiring new knowledge and know-how

without reference to a particular application or use, which is what differentiates it from the second, applied research, in which the knowledge acquired is used for a specific, practical purpose. The third, technological development, can be defined as work based on existing knowledge aimed at producing new materials or products, implementing new processes, systems and services or substantially improving existing ones.

The information published by the National Statistics Institute (INE) in its statistics on scientific research and technological development activity provides a general picture of the state of technological R&D in Andalusia, consisting mainly of data on R&D expenditure and people employed in R&D activities.

Expenditure on R&D is one of the indicators used to measure research activity inputs and is calculated as all amounts allocated to such activities carried out within the research centre or unit and outside it, that is, both internal expenditure and amounts spent on the outsourcing of R&D services through contracts, agreements, etc.

The information available reveals that, in 2002, total expenditure on R&D in Andalusia amounted to 585,667 thousand euro, accounting for 8.1% of the national total. Andalusia is therefore the Autonomous

Community with the third highest share of R&D expenditure after Madrid and Catalonia. A look at the period from 1987, the first year for which such information is available, reveals that over these fifteen years R&D expenditure has grown at a faster rate in Andalusia than it has nationally (annual rate of 12.1% and 11.6% respectively) and Andalusia's percentage share in the national total has steadily increased.

R&D intensity, measured by R&D expenditure as a percentage of GDP, was 0.62% in Andalusia in 2002. R&D intensity in Spain rose above the 1% mark for the first time since this information has been available to 1.03%. However, it remains significantly lower than the R&D intensity recorded in other countries in its economic sphere.

Figures for 2001 show that R&D intensity averaged 1.93% in the EU countries and 2.29% in the OECD. However, Andalusia has advanced at a faster pace in this respect. In the period from 1987 to 2001, R&D intensity remained practically unchanged in the European Union and the OECD, while in Andalusia it increased significantly from 0.36% to 0.61% according to INE data.

Based on Eurostat data for 1999, 39 (18.5%) of the 211 regions defined by level 2 of the nomenclature of statistical territorial units (NUTS 2), which include

Chart 143. **R&D EXPENDITURE**

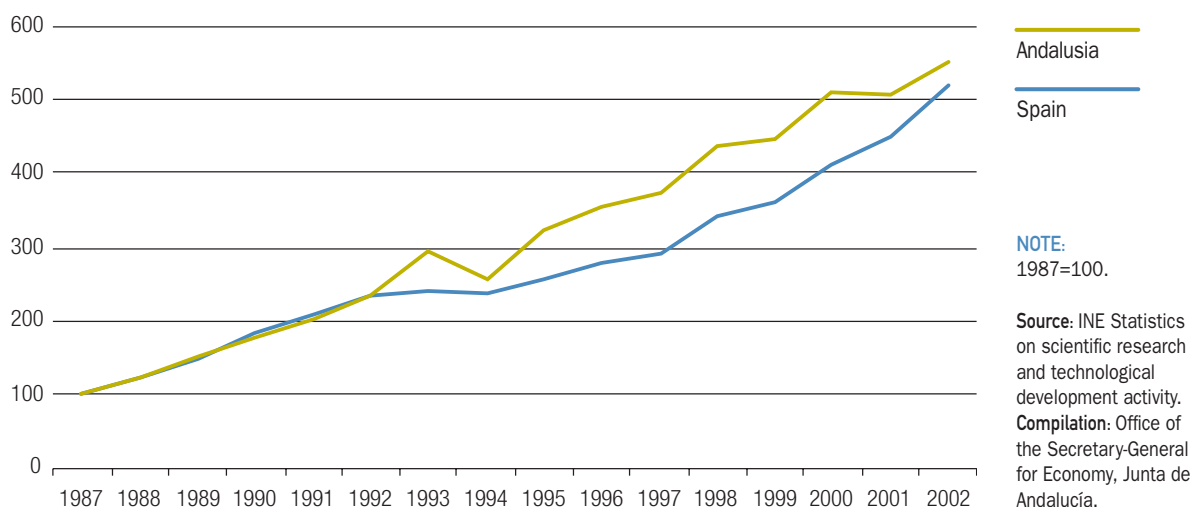


Table 84. R&amp;D EXPENDITURE IN TERMS OF GDP

	ANDALUSIA	SPAIN
1987	0.36	0.64
1988	0.40	0.72
1989	0.44	0.75
1990	0.46	0.85
1991	0.47	0.87
1992	0.52	0.91
1993	0.64	0.91
1994	0.52	0.85
1995	0.62	0.85
1996	0.64	0.87
1996	0.62	0.83
1997	0.61	0.82
1998	0.68	0.90
1999	0.65	0.89
2000	0.67	0.94
2001	0.61	0.96
2002	0.62	1.03

**NOTES:**

1987-1996: GDP at market prices as shown in the Spanish Regional Accounts. Base year 1986.

1996-2002: GDP at market prices as shown in the Spanish Regional Accounts. Base year 1995.

**Source:** INE Statistics on scientific research and technological development activity.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

the Spanish Autonomous Communities, had a lower R&D intensity than Andalusia and 13 had a lower GDP per capita level than Andalusia, which means that Andalusia ranks higher in terms of R&D than in terms of income per capita.

A breakdown by R&D implementing sectors, distinguishing between the private sector, including businesses and non-profit institutions, and the public sector, including public administration and further education, and based on INE figures for 2002,

Chart 144. R&amp;D INTENSITY. YEAR 2001

**NOTE:**

R&D expenditure as a percentage of GDP.

**Sources:** INE Statistics on scientific research and technological development activity and OCDE Main Science and Technology Indicators 2003.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

reveals that in Andalusia the public sector accounted for a larger proportion of R&D expenditure (65.3%) than the private sector (34.7%), while nationally the reverse was true, with the private sector accounting for 54.8% and the public sector for 45.2%. The share of public sector R&D expenditure in Andalusia has shrunk slightly since the mid eighties, falling from 66.7% in 1987 (44.2% in Spain) to 65.3% in 2002. R&D expenditure in the public sector grew at a similar rate in Andalusia and Spain between 1987 and 2002 (nominal annual growth of 11.9% and 11.8% respectively).

A breakdown by type of R&D expenditure based on figures for 2001 shows that in Andalusia, as nationally, the most part is current expenditure (78.4% and 79.2% respectively), including expenditure on personnel, non-inventoried items and supplies, while a smaller proportion is capital expenditure, that is, gross fixed-capital formation, including land, buildings and inventoried items used in R&D work.

The statistics published by the INE on scientific research and technological development activity, which provide figures for personnel engaged in R&D activities, can also be used to assess the state of technological research and development in Andalusia. According to the most recent data, which is for

2002, 14,033 full-time equivalent R&D jobs were registered in Andalusia, accounting for 10.4% of the national total, a sharp rise from the 7% it represented in 1987. Andalusia's position has therefore improved appreciably in this respect.

R&D personnel as a percentage of the labour force, a measure of R&D intensity in terms of human resources, confirms this upward trend. While in 1987 R&D personnel accounted for 1.5% of the Andalusian labour force, by 2002 this percentage had risen to 4.5%, although the region is still lagging far behind the Spanish average, which was 7.3% in 2002, and the EU average, which was 13.9% in 2001.

The Statistics on scientific research and technological development activity for 2002 do not provide a regional breakdown of figures on human resources in R&D. Therefore, as this is an important aspect of the analysis, the figures for 2001 are examined.

They show that 17.9% of full-time equivalent R&D jobs were in enterprises in 2001, a significantly lower proportion than the 37.9% national average. The remaining 82.1% were in the public sector, particularly in further education, so that in terms of human resources, the weight of the public sector is also greater in Andalusia than it is in Spain as a whole in terms of R&D personnel.

Chart 145. **R&D EXPENDITURE. PUBLIC AND PRIVATE SECTORS. YEAR 2002**

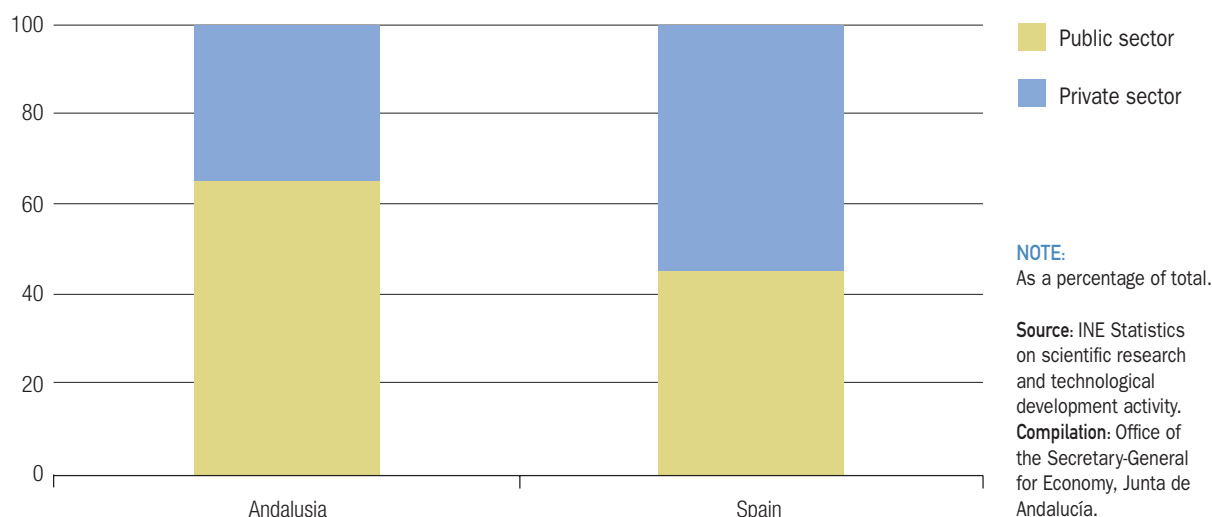
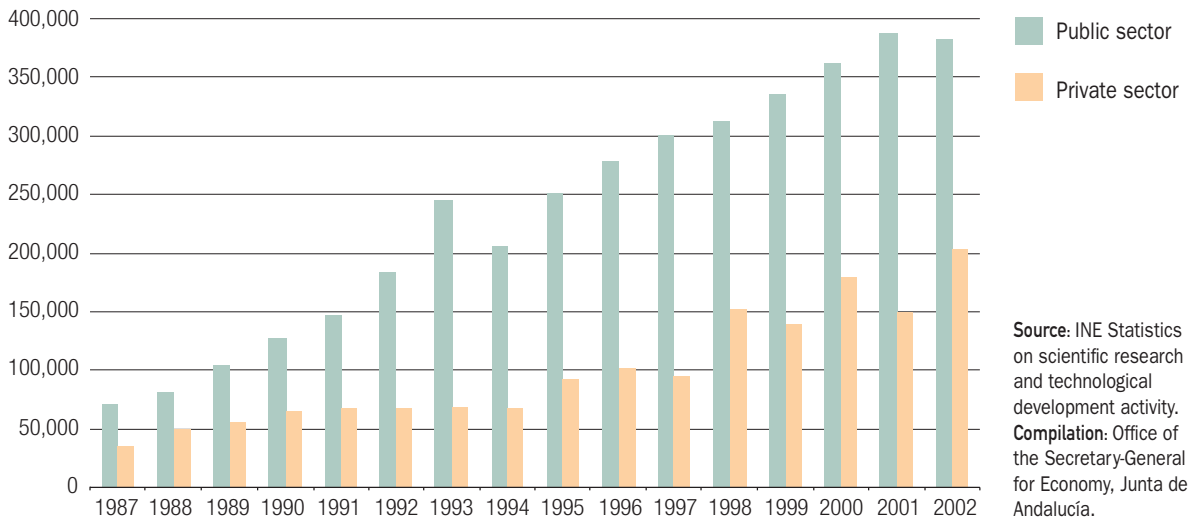


Chart 146. **R&D EXPENDITURE. PUBLIC AND PRIVATE SECTORS. ANDALUSIA**

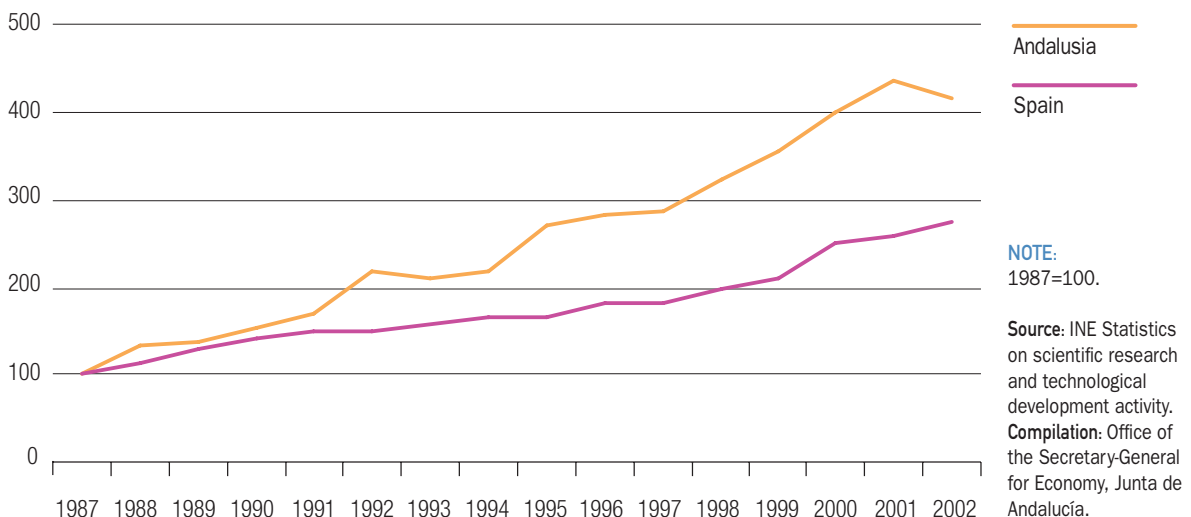


A breakdown by R&D job type reveals that, in 2001, 73.2% were held by researchers (63.7% nationally), that is, scientists and engineers engaged in conceiving and creating new knowledge, products, processes, methods and systems and in project management in these areas.<sup>3</sup> A further 15.7% were held by technicians (22.6% nationally), that is, people who carry out scientific and technical tasks in R&D projects, applying operational principles and methods, one of their main duties being to

perform experiments, tests and trials. The distinction between the two lies in the fact that researchers are responsible for directing research work. The fact that applied research requires more technical personnel than basic research suggests that the research carried out in Andalusia, and in Spain as a whole, is essentially basic research work.

The proportion of full-time equivalent jobs held by researchers was even higher in further education,

Chart 147. **R&D PERSONNEL**



where they accounted for 91.6% of the total in 2001, compared with just 29.4% in businesses, where technicians accounted for 36%. This suggests that businesses both in Andalusia and Spain as a whole tend to carry out more applied research than the public sector, where most R&D is basic research work.

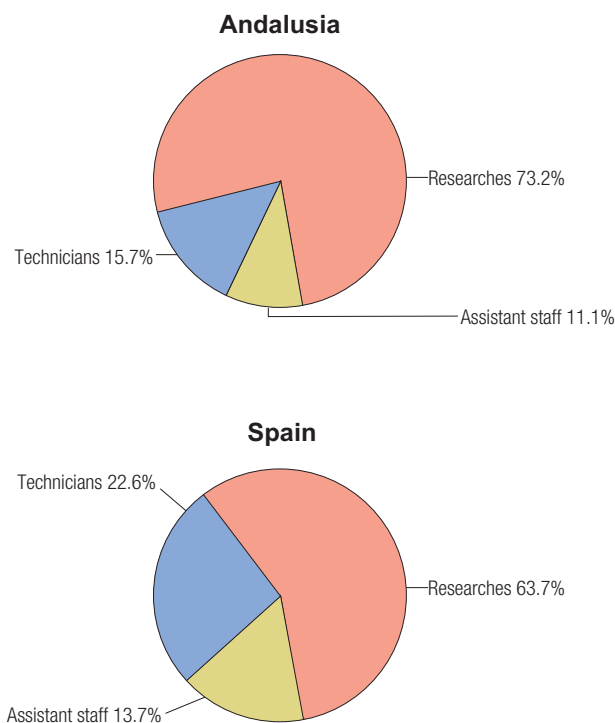
Expenditure per researcher was lower in Andalusia than nationally, because the proportion of R&D personnel that are researchers is higher in Andalusia than it is in Spain. Specifically, in 2001, 49.8 thousand euro was spent in Andalusia per researcher, while in Spain as a whole, the figure was 77.8 thousand euro. In the case of businesses, average expenditure per researcher was higher in Andalusia than nationally (192.8 and 167.6 thousand euro respectively), because researchers accounted for a smaller proportion of private sector R&D personnel in the region than they did nationally.

## Technological innovation in businesses

Innovation activity in the business sector is considered one of the critical factors that influence economic growth, as businesses play a vital role in the RDI<sup>4</sup> system, in that they are the hub of economic relations, major production and investment decision-makers and key agents in the job creation process.

It is difficult to analyse this aspect of the business world because there is a lack of information, particularly at the regional level. However, since 1994, the INE has been publishing a Survey on technological innovation in business<sup>5</sup> once every two years, providing information disaggregated by region on technological innovation carried out by businesses. The provisional findings of the survey for 2002 were published in December 2003, although no regional figures were provided. The observations made here on the regional situation of technological innovation in businesses are therefore based on the most recent figures available, which are for the year 2000. However, before analysing these figures,

Chart 148. **R&D PERSONNEL. YEAR 2001**



**NOTE:**

Full-time equivalent personnel.

**Source:** INE Statistics on scientific research and technological development activity.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Table 85. **TECHNOLOGICAL INNOVATION BY PRODUCTIVE SECTOR. YEAR 2000**

	Innovation expenditure		Turnover		Technological intensity <sup>(1)</sup>	
	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain
<b>INDUSTRY</b>	443,268	6,932,617	35,278,091	420,012,032	1.26	1.65
Mining and quarrying; manufact. of coke, refined petroleum prod. and nuclear fuel; electricity, gas and water supply	6,402	160,033	8,343,884	60,358,922	0.08	0.27
Food products, beverages and tobacco	103,796	701,949	8,902,128	65,270,802	1.17	1.08
Manufact. of textiles and textile products; manufact. of leather and leather prod.	12,393	290,957	1,007,367	23,163,736	1.23	1.26
Wood and wood products	9,068	138,623	562,297	8,685,716	1.61	1.60
Manufact. of pulp, paper and paper prod.; publishing and printing	32,171	544,016	1,282,530	25,203,746	2.51	2.16
Manufact. of chemicals, chemical prod. and man-made fibres	33,986	731,143	2,436,198	35,771,084	1.40	2.04
Plastics, rubber and articles thereof	16,804	238,484	572,920	15,110,093	2.93	1.58
Non-metallic mineral products n.e.c.	19,770	417,053	2,255,439	22,037,428	0.88	1.89
Manufact. of basic metals and fabricated metal prod.	23,255	703,223	4,454,746	45,682,266	0.52	1.54
Manufacture of machinery and equipment n.e.c.	14,264	411,042	758,599	20,594,589	1.88	2.00
Manufact. of electrical and optical equipment	39,426	767,457	1,481,576	26,553,415	2.66	2.89
Manufacture of transport equipment	118,983	1,615,586	2,205,862	59,309,163	5.39	2.72
Manufacturing n.e.c.	12,950	213,051	1,014,545	12,271,072	1.28	1.74
<b>CONSTRUCTION</b>	8,773	292,534	–	–	–	–
<b>SERVICES</b>	182,013	2,943,715	–	–	–	–
Wholesale and retail trade; hotels and restaurants	19,072	353,901	–	–	–	–
Transport and storage	11,029	238,578	–	–	–	–
Postal and telecommunication services	69,683	393,333	–	–	–	–
Financial intermediation	16,328	363,829	–	–	–	–
Real estate activities and business services	33,485	1,378,854	–	–	–	–
Public, social and collective services	32,416	215,220	–	–	–	–
<b>TOTAL</b>	634,054	10,168,866	–	–	–	–

**NOTES:**

In thousand euro.

(1) Innovation expenditure as a percentage of turnover.

**Sources:** INE survey on technological innovation in business and INE survey on industrial enterprises.**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

some conclusions are provided on the process of technological innovation in businesses in Spain as a whole in 2002, based on the provisional findings of this Survey on technological innovation in business published by the INE.

According to these findings, in 2002 expenditure on innovation<sup>6</sup> by Spanish businesses amounted to 11,089.5 million euro, up 9% on the 2000 figure. Of this amount, 46.7% was spent on R&D and 32.5% on the acquisition of machinery and

equipment for innovation purposes. A breakdown by branch of activity shows that the biggest spenders on innovation were enterprises engaged in the manufacture of motor vehicles (16.1%) and the post and telecommunications sector (13%).

Turning now to the figures for Andalusia for 2000, innovation expenditure by Andalusian businesses amounted to 634,056 thousand euro, accounting for 6.2% of the national total. Of this amount, 28% was spent on R&D, while the remaining 72% was spent



on other innovation-related activities, including the acquisition of technology, machinery and equipment, expenditure on design, industrial engineering, tool development, production startup, new product marketing and training.

At the national level, the share of R&D in total innovation expenditure was slightly higher (30.2% in 2000), although both in Andalusia and Spain as a whole R&D expenditure as a percentage of the total has been shrinking since the mid-nineties, while investment in strictly innovative activities ("I") has increased its share. In 1994, the first year for which the INE's survey on technological innovation in business was published, R&D expenditure accounted for 43.7% of total innovation expenditure in Andalusia (63.5% nationally), falling to 28% in 2000.

Average innovation expenditure per business in Andalusia was almost half the national average (47.9%). For R&D expenditure alone, the proportion was even lower, while average expenditure per business on other innovation activities in Andalusia was 51.9% of the national average

Business expenditure on innovation as a percentage of GDP was 0.8% in Andalusia in 2000, compared with 1.7% nationally, putting Andalusia ahead of the Balearic Islands, Extremadura and the Canary Islands.

The Survey on technological innovation in business also provides the information required to analyse the distribution of innovation expenditure according to business size and branch of activity.

In 2000, 54% of total business expenditure on innovation in Andalusia was made by businesses with less than 250 workers, while in Spain as a whole, the majority was made by businesses with more than 250 workers.

A breakdown by branch of economic activity reveals that in Andalusia almost 70% of innovation expenditure was in the industrial sector. Services accounted for slightly less than a third, and construction for just 1.4%. The ratio of innovation expenditure to GVA as a measure of technological intensity in the different economic sectors shows that industry registered the highest intensity (4.2%), with significantly lower percentages in construction (0.1%) and services (0.3%).

Within the industrial sector, over a quarter of innovation expenditure was in the transport equipment industry (26.8%), with the largest amount spent on innovation in the manufacture of aircraft and spacecraft. In second place was the manufacture of food products, beverages and tobacco (23.4%), followed by the manufacture of electrical, electronic and optical equipment (8.9%), within which the

Chart 149. **INNOVATION EXPENDITURE IN INDUSTRY. YEAR 2000**

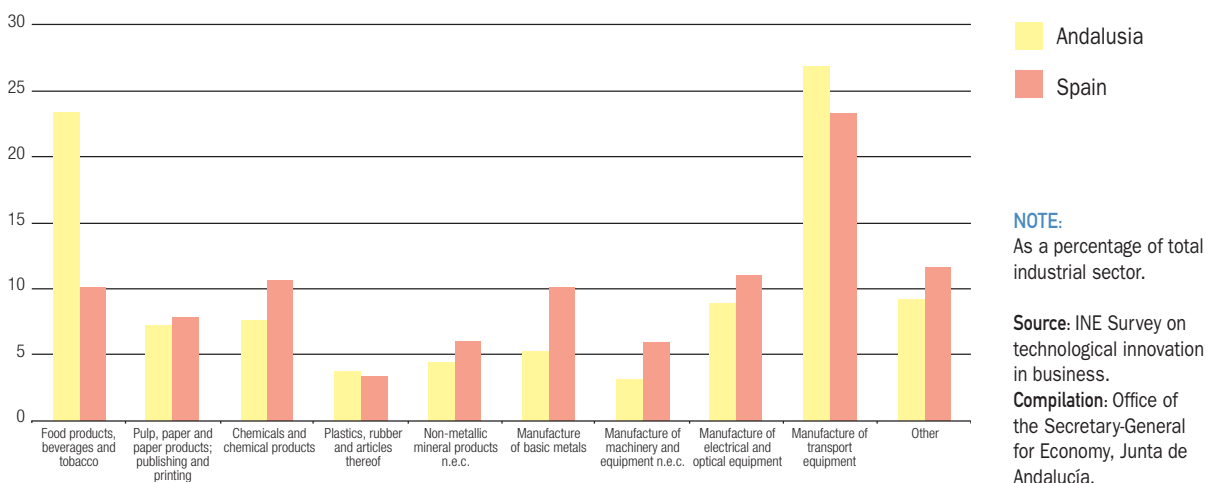
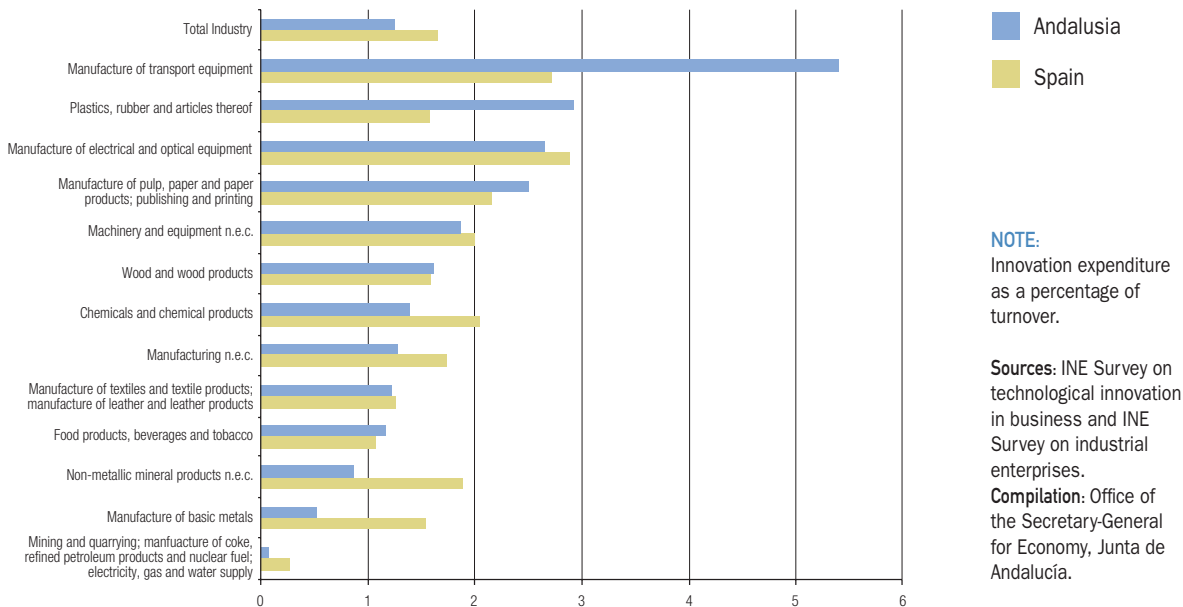


Chart 150. **TECHNOLOGICAL INTENSITY IN INDUSTRY. ANDALUSIA AND SPAIN. YEAR 2000**

manufacture of electrical machinery and equipment accounted for almost two thirds of the total.

A look at technological intensity in the different branches of industry, measured in terms of innovation expenditure as a percentage of turnover, reveals that the manufacture of transport equipment ranks first, with a much higher rate than the national average for the sector. Other sectors with high rates include electrical, electronic and optical equipment and paper, publishing and printing, which also registered the highest levels of technological intensity at the national level. At the other end of the scale, the extractive industries and the oil, energy and water industries registered the lowest levels both in Andalusia and Spain as a whole.

The Survey on technological innovation in business 2000 provides figures for innovation expenditure by service businesses for the first time, revealing that in this sector in Andalusia a large proportion was concentrated in the post and telecommunications sector, (38.3%), with 93% corresponding to telecommunications services. In second place were real estate and business activities (18.4%), in which computer-related activities accounted for the

highest proportion of innovation expenditure. In third place were community, social and personal services (17.8%), followed by the wholesale and retail trade and hotels and restaurants (10.5%).

At the national level, almost half of innovation expenditure by service industry businesses was in real-estate and business activities, particularly R&D services. Post and telecommunications were in second place, followed by financial intermediation and the wholesale and retail trade and hotels and restaurants.

## High-technology sectors

When analysing the situation in Andalusia with regard to high-technology sectors, it should be taken into account that there is no precise definition of this term and that any definition must necessarily vary with time, as today's high technology is tomorrow's traditional technology

The economic sectors are therefore classified in terms of technological intensity according to international conventions developed by international organisations.

Table 86. **SECTORS WITH HIGH R&D INTENSITY**

YEARS 1970-1980	YEARS 1980-1995
<b>HIGH TECHNOLOGY</b>	<b>HIGH TECHNOLOGY</b>
1. Aerospace	1. Aerospace
2. Office, accounting and computing machinery	2. Office, accounting and computing machinery
3. Manufact. of pharmac., medic. chemic. and botanic. prod.	3. Electronics & communication
4. Electronics & communication	4. Manufact. of pharmaceuticals, medicinal chemicals and botanical prod.
5. Scientific instruments	
6. Electrical machinery	
<b>MEDIUM TECHNOLOGY</b>	<b>MEDIUM-HIGH TECHNOLOGY</b>
7. Automobile industry	5. Scientific instruments
8. Manufact. of chemicals and chemical prod.	6. Electrical machinery
9. Manufact. of machinery and equipment n.e.c.	7. Automobile industry
10. Plastics, rubber and articles thereof	8. Manufacture of chemicals and chemical products
11. Manufacturing n.e.c.	9. Manufacture of machinery and equipment n.e.c.
<b>LOW TECHNOLOGY</b>	<b>MEDIUM-LOW TECHNOLOGY</b>
12. Manufacture of other transport equipment	10. Building and repairing of ships and boats
13. Stone, clay and glass products	11. Plastics, rubber and articles thereof
14. Refined petroleum products	12. Manufacture of other transport equipment
15. Building and repairing of ships and boats	13. Stone, clay and glass products
16. Non-iron metals	14. Non-iron metals
17. Iron metals	15. Manufacturing n.e.c.
18. Metallic products	16. Metallic products
19. Pulp paper and paper products, publishing and printing	<b>LOW TECHNOLOGY</b>
20. Food products, beverages and tobacco	17. Refined petroleum products
21. Wood and wood products	18. Iron metals
22. Textiles and textile prod.; manufact. of leather and leather prod.	19. Pulp, paper and paper products; publishing and printing
	20. Textiles and textile products; manufact. of leather products
	21. Wood and wood products
	22. Food products, beverages and tobacco

Source: OECD.  
 Compilation: Office  
 of the Secretary-  
 General for  
 Economy, Junta de  
 Andalucía.

The OECD has developed a technology classification<sup>7</sup>, and Eurostat has matched this classification to the NACE, the statistical classification of economic activities employed in the EU. The INE has matched the NACE to the CNAE-93 (Spanish national classification of economic activities), distinguishing between high-technology and medium-high-technology manufacturing industries and high-technology service industries.

Adding to the problem of conceptual complications, the lack of statistics also hinders accurate analysis

of high-technology sectors. The INE provides information on this subject in several different sets of statistics, which it has used to compile a series of statistics, published in January 2003, under the name *High-technology indicators*<sup>8</sup>, based on the OECD classification of high-technology sectors. The following section of this report is based on these figures and those provided in the Central Business Directory (DIRCE).

It is important to note that these sectors play a very important role in the innovation process. In 2000,

48% of total innovation expenditure by Andalusian enterprises was in high-technology sectors (47.9% nationally). Furthermore, this percentage increases to 78.8% for the part of innovation expenditure that is allocated to R&D activities, more than three percentage points higher than the national average (75.5%).

According to DIRCE figures for January 2003, there is a smaller proportion of enterprises belonging to high-technology sectors in Andalusia (4.3%) than in Spain as a whole (5.9%).<sup>10</sup>

Specifically, 8,433 of the 80,186 Spanish enterprises classified, according to the INE classification, as belonging to high-technology sectors, are in Andalusia, accounting for 10.5% of the total, up from 9.5% in the mid-nineties. In the period from 1995 to 2003 the number of such businesses therefore increased at a faster rate in Andalusia than it did in Spain as a whole, with the number of enterprises in high-technology sectors increasing at an annual rate of 5.3% in Andalusia, compared with 4% in Spain.

In Andalusia 56.2% of high-technology enterprises belonged to the service sector, compared with 55.6% nationally. Both in Andalusia and Spain, the service sector has witnessed a higher rate of

increase in high-technology businesses than the manufacturing sector since the mid-nineties. While in high-technology manufacturing enterprises the average annual increase between 1995 and 2002 was 2.3%, in high-technology service enterprises it was 8.5%. In Spain as a whole high-technology manufacturing enterprises increased by 0.4% and service enterprises by 7.9%.

In both the national and Andalusian manufacturing sector, 91.9% of enterprises were engaged in activities classified as medium-high-technology, while the remaining 8.1% carried out in high-technology activities. The most significant high-technology sector was the office machinery and computers industry, which accounted for 63.2% of the total. The main medium-high-technology sectors were machinery and equipment, accounting for 39.1% of the total, and the chemical industry, accounting for 15.3%.

A breakdown of the figures according to size reveals that the majority were enterprises with less than ten employees. This is also true nationally, although to a lesser extent than in Andalusia, where, in 2003, 79.1% of enterprises belonging to high-technology sectors had between one and ten employees, compared with 71.4% nationally. The trend was more pronounced in the service sector, where 84.7% of such enterprises

Chart 151. **MANUFACTURING ENTERPRISES IN ADVANCED TECHNOLOGY SECTORS**

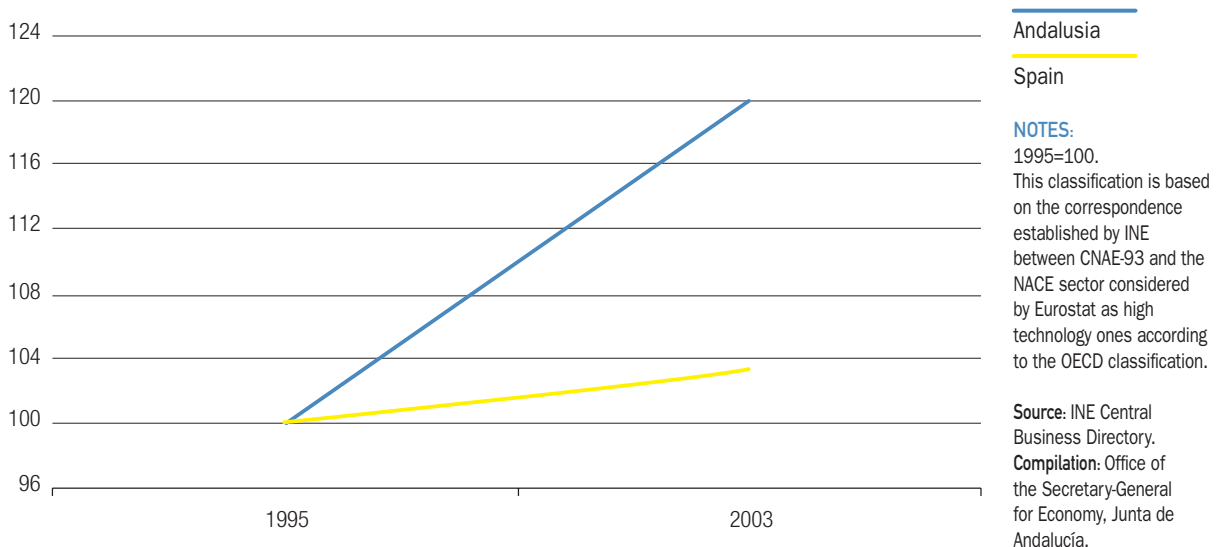


Table 87. ENTERPRISES IN ADVANCED TECHNOLOGY SECTORS. YEAR 2003

	WITH EMPLOYEES			WITHOUT EMPLOYEES			TOTAL		
	Andalusia	Spain	And/Sp %	Andalusia	Spain	And/Sp %	Andalusia	Spain	And/Sp %
High technology manufacturing sectors	170	1,842	9.23	129	1,031	12.51	299	2,873	10.41
Manufact. of pharmac., medicinal chemicals and botanical prod.	16	401	3.99	7	65	10.77	23	466	4.94
Office, accounting and computing machinery	92	593	15.51	97	569	17.05	189	1,162	16.27
Electronic components	26	410	6.34	15	237	6.33	41	647	6.34
Radio television and communication equipment and apparatus	21	345	6.09	6	128	4.69	27	473	5.71
Aeronautical and space construction	15	93	16.13	4	32	12.50	19	125	15.20
Medium-high technology manufacturing sectors	2,190	22,429	9.76	1,204	10,098	11.92	3,394	32,527	10.43
Chemical industry except pharmaceutical industry	381	3,388	11.25	137	814	16.83	518	4,202	12.33
Machinery and equipment n.e.c.	886	10,060	8.81	441	4,727	9.33	1,327	14,787	8.97
Electrical machinery and apparatus n.e.c.	137	2,536	5.40	33	596	5.54	170	3,132	5.43
Manufact. of medical, precision and optical instrum., watches and clocks	353	3,116	11.33	417	2,613	15.96	770	5,729	13.44
Automobile industry	183	1,858	9.85	58	383	15.14	241	2,241	10.75
Manufacture of other transport equipment	250	1,471	17.00	118	965	12.23	368	2,436	15.11
High technology services	1,589	15,544	10.22	3,151	29,242	10.78	4,740	44,786	10.58
Postal and telecommunication services	470	3,555	13.22	284	2,804	10.13	754	6,359	11.86
Computer-related activities	931	10,425	8.93	1,360	14,452	9.41	2,291	24,877	9.21
Research and development	188	1,564	12.02	1,507	11,986	12.57	1,695	13,550	12.51
Total advanced technology sectors	3,949	39,815	9.92	4,484	40,371	11.11	8,433	80,186	10.52

**NOTE:**

This classification is based on the correspondence established by INE between CNAE-93 and the NACE sectors considered by Eurostat as high technology ones according to the OECD classification.

Source: INE Central Business Directory.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

had less than ten employees, compared with 81.7% nationally. The aircraft and spacecraft industry was the sector with the largest proportion of large enterprises, as a third of enterprises in this sector in Andalusia had 50 or more employees (almost a quarter nationally).

A fuller picture can be ascertained with the information published by the INE in *High-technology indicators*. The figures available for 2001 show that Andalusian enterprises belonging to high-technology manufacturing sectors accounted for 5.7% of the value added generated by such enterprises nationally, although, in number, they accounted for a larger proportion, specifically 10.2% of the national total.

In Andalusia the manufacture of chemicals, excluding pharmaceuticals, was the most important in terms of value added, accounting for 30.6% of the total, followed by machinery and equipment (18.2%) and medical, precision and optical instruments and watches and clocks (12.4%). Nationally, however,

the manufacture of motor vehicles generated the highest proportion of value added (22.1%), followed by machinery and equipment.

Special reference must be made to the Andalusian aircraft and spacecraft industry, as it accounts for 21.9% of the GVA generated by the sector nationally, revealing Andalusia's high degree of specialisation in this sector. The specialisation ratio for this sector in Andalusia, calculated as the ratio of GVA generated by the sector in Andalusia as a percentage of total GVA generated by the high-technology manufacturing sectors in the region to the national percentage, was 3.4. Andalusia also has a higher degree of specialisation in medical, precision and optical instruments and watches and clocks, other transport equipment<sup>11</sup>, office machinery and computers and the manufacture of chemicals.

In 2001, 11.8% of all Spain's high-technology service enterprises were located in Andalusia. This was lower than the percentage share of Andalusia's service

Table 88. **ADVANCED TECHNOLOGY MANUFACTURING SECTORS. YEAR 2001**

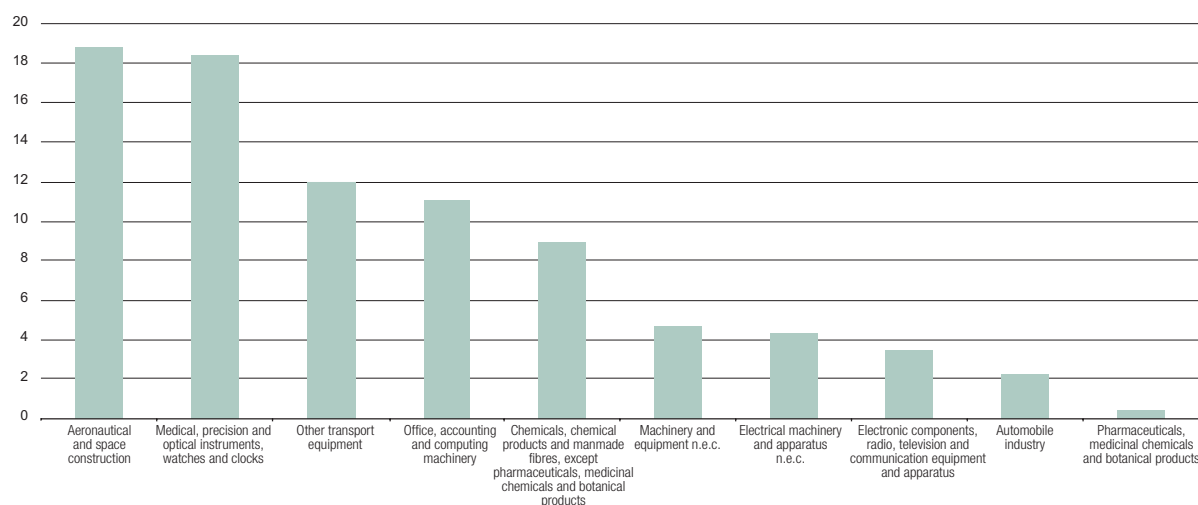
	TURNOVER			VALUE ADDED		
	Andalusia	Spain	And/Sp %	Andalusia	Spain	And/Sp %
High technology manufacturing sectors	907.6	22,746.9	4.0	268.9	5,937.1	4.5
244 Manufact. of pharmac., medic. chemicals and botanical prod.	32.4	9,984.0	0.3	13.0	2,998.9	0.4
30 Manufacture of office machinery and computers	276.3	4,084.2	6.8	77.1	696.4	11.1
32 Manufacture of radio, television and communication equipment and apparatus	156.6	6,842.1	2.3	55.1	1,585.2	3.5
353 Manufacture of aircraft and spacecraft	442.3	1,836.6	24.1	123.7	656.6	18.8
Medium-high technology manufacturing sectors	6,010.2	121,470.1	4.9	1,691.9	28,371.6	6.0
24-244 Manufact. of chemic. and chemic. prod., except pharmac., medic. chemic. and botanical prod.	2,383.7	27,729.7	8.6	599.4	6,704.2	8.9
29 Manufacture of machinery and equipment n.e.c.	977.0	22,669.4	4.3	356.0	7,532.0	4.7
31 Manufacture of electrical machinery and apparatus n.e.c.	542.8	13,926.3	3.9	168.2	3,922.2	4.3
33 Manufact. of medical, precision and optical instrum., watches and clocks	404.7	3,189.4	12.7	243.8	1,326.4	18.4
34 Manufacture of motor vehicles, trailers and semi-trailers	1,148.6	48,868.8	2.4	167.2	7,575.1	2.2
35-353 Manufacture of other transport equipment	553.4	5,086.5	10.9	157.3	1,311.7	12.0
Total advanced technology manufacturing sectors	6,917.8	144,217.0	4.8	1,960.8	34,308.7	5.7

**NOTES:**

Data in million euro. This classification is based on the correspondence established by INE between CNAE-93 and the NACE sectors considered by Eurostat as high technology ones according to the OECD classification.

Source: INE High technology indicators.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 152. **IMPORTANCE OF ADVANCED TECHNOLOGY MANUFACTURING SECTORS IN ANDALUSIA AND SPAIN. YEAR 2001****NOTES:**

Value added in Andalusia in each economic branch as a percentage of value added in Spain.

This classification is based on the correspondence established by INE between CNAE-93 and the NACE sectors considered by Eurostat as high technology ones according to the OECD classification.

Source: INE High technology indicators.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

enterprises (15.8%) in the national total, according to DIRCE figures for 2001. In Andalusia the vast majority of high-technology service enterprises belonged to the post and telecommunications sector (85.3%), while in Spain as a whole, computer and related activities accounted for the largest proportion (64.7%).

According to figures published by the INE in *High-technology indicators*, in 2001 there were 91,300 people employed in high-technology sectors in Andalusia, accounting for 7% of the national total, while the percentage share of Andalusian jobs in the national total was 15.1%.

The proportion was higher, however, in high-technology services, where the number of people employed accounted for 9.3% of the national total, while in the high-technology manufacturing sectors it was just 6%.

The number of people working in high-technology sectors in Andalusia accounted for 3.8% of the

region's total, compared with 8.1% nationally, and the majority were employed in the manufacturing industries (57.2% in Andalusia and 67.7% in Spain). High-technology services accounted for 42.8% of employment in high-technology sectors in Andalusia, a higher proportion than in Spain as a whole, were they accounted for 32.2% of the total.

Foreign trade carried out by high-technology sectors is also an important aspect of this analysis. Overall trade flows, that is, imports plus exports, in the high-technology sectors accounted for 22.7% of Andalusia's total volume of foreign trade in 2003, a significantly higher proportion than this sector's 2% share in the total number of enterprises in the region. The figures show that these sectors are closely involved in foreign trade and have a high export propensity, with Andalusian high-technology sectors exporting 12.2% more than the regional average.

Both in terms of imports and exports, the highest levels of trade exchanges were in the manufacturing

industries, particularly in the manufacture of chemicals excluding pharmaceuticals, which accounted for 29.1% of total exports by high-technology sectors and 35.9% of imports. The next biggest importer was the machinery and equipment sector, accounting for 21.1% of imports, and the next biggest exporter was the motor vehicle sector, accounting for 18% of exports.

The trade balance of Andalusia's high-technology sectors showed a surplus of 229.160.2 thousand euro in 2003, in contrast to the aggregate trade deficit registered in the region. This overall result can be attributed to the surplus shown by the high-technology manufacturing sectors, as the medium-high-technology manufacturing sectors and high-technology service sectors showed a trade deficit.

The highest trade surplus was registered by the aircraft and spacecraft industry, followed by the

pharmaceutical industry, which are classified as high-technology sectors. The deficit shown by the medium-high-technology sectors can be attributed to the chemical industry and the machinery and equipment sector.

## ICT-related sectors

Sectors related to information and communication technologies (ICT), that is, those branches of economic activity relating to computers, electronic components, software, telecommunications, etc., are classed as high-technology sectors.

The OECD classification can be used as the basis for an analysis of the ICT sectors. It is important to note that the OECD includes the wholesale of machinery and equipment and the renting of office machinery

Table 89. **EMPLOYMENT IN ADVANCED TECHNOLOGY SECTORS. YEAR 2001**

	ANDALUSIA		SPAIN	
	Thousand people	% of total	Thousand people	% of total
High technology manufacturing sectors	7.0	8.3	120.3	11.0
Manufact. of pharmac., medic. chemic. and botanical prod.	1.8	2.1	43.6	4.0
Office, accounting and computing machinery	0.4	0.5	20.8	1.9
Electronic components	0.7	0.8	20.5	1.9
Radio, television and communication equipment and apparatus	1.7	2.0	21.5	2.0
Aeronautical and space construction	2.4	2.8	13.9	1.3
Medium-high technology manufacturing sectors	45.5	53.7	656.1	59.7
Manufact. of chemic., chemic. prod. and man made fibres, except pharm., medic. chemic. and botanic. prod.	9.1	10.7	103.8	9.4
Manufacture of machinery and equipment n.e.c.	8.0	9.4	186.7	17.0
Electrical machinery and apparatus n.e.c.	6.0	7.1	82.0	7.5
Manufact. of medical, precision and optical instrum., watches and clocks	2.0	2.4	23.2	2.1
Automobile industry	10.1	11.9	211.3	19.2
Manufacture of other transport equipment	10.3	12.1	49.1	4.5
High technology services	32.3	38.1	322.1	29.3
Postal and telecommunication services	22.7	26.8	207.9	18.9
Computer-related activities	5.6	6.6	95.1	8.7
Research and development	4.0	4.7	19.1	1.7
Total advanced technology sectors	84.8	100.0	1,098.5	100.0

### NOTE:

This classification is based on the correspondence established by INE between CNAE-93 and the NACE sectors considered by Eurostat as high technology ones according to the OECD classification.

Source: INE High technology indicators.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



and equipment as ICT services, although they are not classified as high-technology sectors.

According to the OECD classification and information provided in the INE's Central Business Directory, there were 6,821 enterprises operating in ICT sectors in Andalusia in 2003. By excluding the wholesale of machinery and equipment and the renting of office machinery and equipment, which, as mentioned above, are not classified as high-technology activities, a calculation can be made of the weight of ICT enterprises in the high-technology sectors. In Andalusia, they accounted for 33.9% in 2003, compared with a slightly higher percentage share of 37.6% nationally. This percentage share has grown considerably since 1995, when they accounted for 21% of high-technology enterprises.

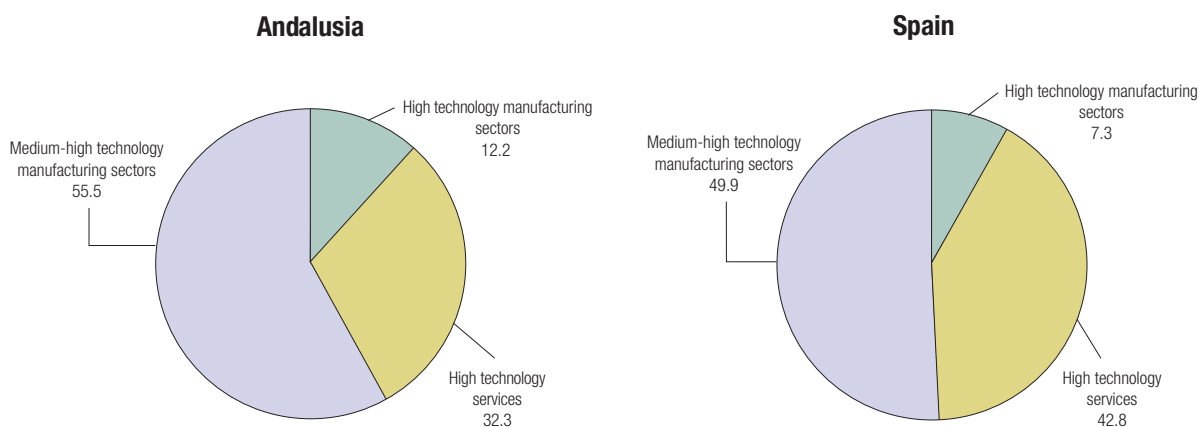
The 6,821 enterprises belonging to the ICT sector in Andalusia accounted for 11.5% of the national total. The proportion of Andalusian ICT enterprises in the total number of Spanish ICT enterprises was therefore smaller than that of Andalusian enterprises in general in the total number of Spanish enterprises, which in 2003 was 14.6%. However, the ICT sector has grown at virtually the same pace in Andalusia as

it has nationally since the mid-nineties. Specifically, between 1995 and 2003, the number of enterprises belonging to the ICT sector increased in Andalusia at an annual rate of 7%, compared with 7.1% in Spain as a whole.

An analysis of the relative importance of ICT sectors in the business sector as a whole shows that the proportion is lower in Andalusia than it is nationally, echoing the situation described in the analysis of Andalusian high-technology enterprises. Figures for 2003 show that ICT enterprises accounted for 1.6% of all enterprises in Andalusia, compared with 2.1% in Spain as a whole.

A breakdown of ICT enterprises by branch of production shows that the structure is similar regionally and nationally. The majority of ICT businesses belong to the service sector (95.5% in Andalusia and 94.2% in Spain as a whole), mainly the wholesale of machinery and equipment, which accounted for over a third of ICT enterprises (35.5% in Andalusia and 36.5% in Spain), followed by the renting of office machinery and equipment, the maintenance and repair of office, accounting and computing machinery and software consultancy and supply.

Chart 153. **EMPLOYMENT IN ADVANCED TECHNOLOGY SECTORS. YEAR 2001**



Source: INE High technology indicators.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Table 90. FOREIGN TRADE IN ADVANCED TECHNOLOGY SECTORS. ANDALUSIA. YEAR 2003

	IMPORTS			EXPORTS			TRADE BALANCE
	€ thousand	% of total	02-03 growth %	€ thousand	% of total	02-03 growth %	€ thousand
High technology manufacturing sectors	372,496.8	14.7	2.0	695,314.8	25.1	41.0	322,818.0
Manufact. of pharmac., medic. chemic. and botanical prod.	13,457.7	0.5	15.6	36,546.0	1.3	20.2	23,088.3
Office, accounting and computing machinery	69,163.5	2.7	22.1	73,633.0	2.7	88.6	4,469.5
Electronic components	175,141.6	6.9	13.3	120,437.5	4.4	12.9	-54,704.1
Radio, television and communication equipment and apparatus	73,437.5	2.9	-34.6	141,847.1	5.1	14.4	68,409.6
Aeronautical and space construction	41,296.5	1.6	36.4	322,851.2	11.7	67.3	281,554.7
Medium-high technology manufacturing sectors	2,163,560.1	85.3	5.9	2,070,056.2	74.9	17.3	-93,503.9
Chemical industry except pharmaceutical industry	911,740.9	35.9	19.5	805,241.6	29.1	8.2	-106,499.3
Machinery and equipment n.e.c.	534,742.7	21.1	12.2	310,455.5	11.2	106.0	-224,287.2
Electrical machinery and apparatus n.e.c.	220,967.6	8.7	12.8	229,575.1	8.3	70.2	8,607.5
Manufact. of medical, precision and optical instrum., watches and clocks	109,272.8	4.3	23.2	150,918.5	5.5	-12.0	41,645.7
Automobile industry	331,262.6	13.1	6.3	499,043.3	18.0	-0.6	167,780.7
Manufacture of other transport equipment	55,573.5	2.2	-73.2	74,822.2	2.7	22.0	19,248.7
High technology services	226.1	0.0	-5.2	72.2	0.0	-68.0	-153.9
Postal and telecommunication services							
Computer-related activities	226.1	0.0	-5.2	72.2	0.0	-68.0	-153.9
Research and development							
Total advanced technology manufacturing sectors	2,536,283.0	100.0	5.3	2,765,443.2	100.0	22.5	229,160.2

**NOTE:**

Figures are provisional.

Source: Compiled with information from the IEA and the INE classification.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

Industrial ICT enterprises accounted for 4.5% of ICT enterprises in Andalusia and 5.8% in Spain as a whole. The most significant industrial ICT sectors were the manufacture of office, accounting and computing machinery and the manufacture of electronic valves and tubes and other electronic components.

A breakdown by employment size shows that the majority of enterprises engaged in these activities both in Andalusia and nationally are small. In Andalusia 88% of ICT enterprises employ less than ten employees, while in Spain as a whole the percentage is 82.7%.

The ICT sector maintains a high level of foreign trade activity. The sector's overall foreign trade flows, that is, exports plus imports, accounted for 3.9%

of Andalusia's total volume of foreign trade, which is significantly higher than its percentage share in the total number of enterprises in Andalusia (1.6%).

The importance of foreign trade by Andalusian ICT enterprises can also be appreciated in the fact that their volume of trade with other countries is more than double that averaged by Andalusian enterprises in general.

The ICT sector accounted for 17.1% of foreign trade exchanges carried out by high-technology businesses, while the percentage share of ICT businesses in the total number of high-technology businesses was 31.9%, which means that the other high-technology activities have higher levels of foreign trade activity.

Table 91. ENTERPRISES IN THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SECTOR. ANDALUSIA. YEAR 2003

	WITH EMPLOYEES			WITHOUT EMPLOYEES			TOTAL		
	Andalusia	Spain	And/Sp %	Andalusia	Spain	And/Sp %	Andalusia	Spain	And/Sp %
<b>INDUSTRY</b>	175	2,276	7.69	132	1,199	11.01	307	3,475	8.83
Manufacture of office accounting and computing machinery	92	593	15.51	97	569	17.05	189	1,162	16.27
Manufacture of insulated wire and cable	3	189	1.59	5	61	8.20	8	250	3.20
Manufacture of accumulators, primary cells and primary batteries	0	20	0.00	0	4	0.00	0	24	0.00
Manufacture of electronic valves and tubes and other electronic components	26	410	6.34	15	237	6.33	41	647	6.34
Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	18	220	8.18	1	78	1.28	19	298	6.38
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	3	125	2.40	5	50	10.00	8	175	4.57
Manufacture of instrument and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment	27	582	4.64	9	193	4.66	36	775	4.65
Manufacture of industrial process control equipment	6	137	4.38	0	7	0.00	6	144	4.17
<b>SERVICES</b>	3,397	30,573	11.11	3,117	25,518	12.21	6,514	56,091	11.61
Wholesale of machinery, equipment and supplies	1,711	15,837	10.80	709	6,006	11.80	2,420	21,843	11.08
Telecommunications	154	1,072	14.37	111	762	14.57	265	1,834	14.45
Renting of machinery and equipment	601	3,239	18.56	937	4,298	21.80	1,538	7,537	20.41
Hardware consultancy	37	517	7.16	5	58	8.62	42	575	7.30
Software consultancy and supply Computer software	306	4,137	7.40	551	6,842	8.05	857	10,979	7.81
Data processing	88	873	10.08	239	2,185	10.94	327	3,058	10.69
Data base activities	45	414	10.87	0	23	0.00	45	437	10.30
Maintenance and repair of office, accounting and computing machinery	339	2,684	12.63	562	5,280	10.64	901	7,964	11.31
Other computer related activities	116	1,800	6.44	3	64	4.69	119	1,864	6.38
<b>TOTAL</b>	3,572	32,849	10.87	3,249	26,717	12.16	6,821	59,566	11.45

**NOTE:**

This classification is based on the correspondence between CNAE-93 and the sector considered as ICT by the OECD.

Source: Central Business Directory.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

The ICT sector's trade balance showed a surplus of 69,829.9 thousand euro in 2003, which can be attributed to positive results in industrial ICT sectors, as the service ICT sectors registered a deficit.

The manufacture of radio and television transmitters and apparatus for line telephony and line telegraphy showed the largest trade surplus, followed by the manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment. Other branches of activity that showed a surplus were the manufacture of office, accounting and computing machinery and the manufacture of television and radio receivers, sound or video recording or reproducing apparatus, while the remaining industrial ICT activities showed a deficit.

With regard to services classified under the ICT category, the highest level of foreign trade was registered in the software consultancy and supply sector, which showed a trade deficit in 2003.

## Use of information and communication technologies

The rapid development and spread of information and communication technologies in recent years has led

to significant economic and social transformations, as their expansion and use in businesses, public administration and homes has become more and more widespread.

The figures published by the *Asociación Española de Empresas de Tecnologías de la Información* (SEDISI - Spanish Association of Information Technology Enterprises), on the net domestic information technology market<sup>12</sup> provide an insight into the growing importance of ICT in recent years. The latest available figures reveal that net information technology (IT) sales on the domestic market amounted to 8,340.79 million euro in Spain in 2002. Madrid, with 3,933.1 million euro, was the region that accounted for the largest market share, followed by Catalonia. These two Autonomous Communities accounted for two-thirds of total net IT sales on the domestic market in 2002 (67.1%). Andalusia ranked third behind these two regions.

In the last two years, net domestic IT sales grew at a faster rate in Andalusia than nationally. Between 2000 and 2002, they increased by 5.4% in Andalusia and by 1.2% in Spain as a whole.

Further information available from various sources, as specified below, has been used to analyse how and where these technologies are employed in different

Chart 154. **ENTERPRISES IN THE INFORMATION AND COMMUNICATION TECHNOLOGY SECTOR. ANDALUSIA**

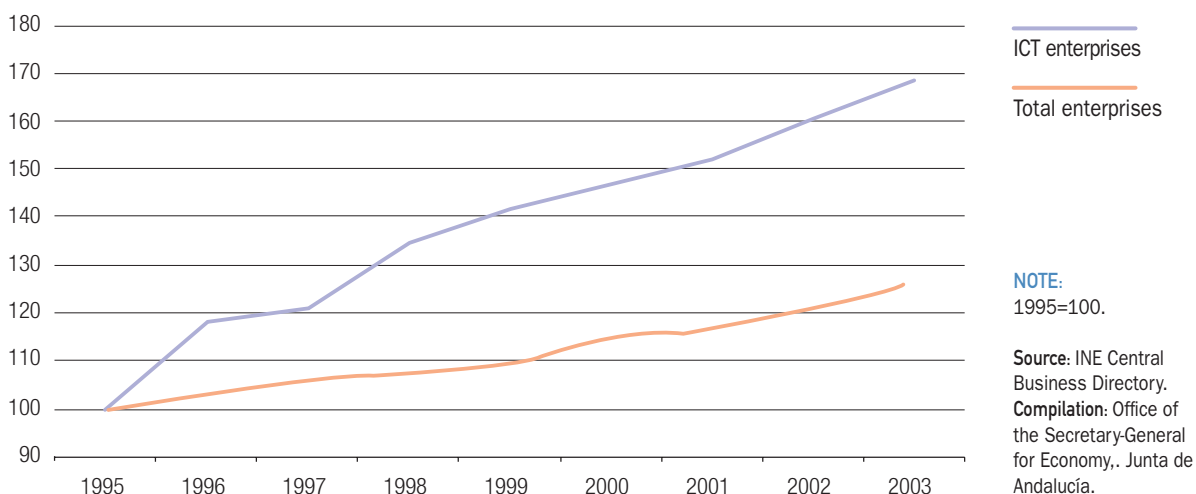


Table 92. **FOREIGN TRADE IN THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SECTOR. ANDALUSIA. YEAR 2003**

	IMPORTS			EXPORTS			TRADE BALANCE
	€ thousand	% of total	02-03 growth %	€ thousand	% of total	02-03 growth %	€ thousand
<b>INDUSTRY</b>	419,094.9	99.9	5.5	489,078.6	100.0	11	69,983.7
Manufacture of office, accounting and computing machinery	69,163.5	16.5	22.1	73,633.0	15.1	88.6	4,469.5
Manufacture of insulated wire and cable	41,375.2	9.9	176.6	8,064.0	1.6	311.6	-33,311.2
Manufact. of accumulators, primary cells and primary batteries	4,554.9	1.1	-0.4	1,783.4	0.4	-29.4	-2,771.5
Manufacture of electronic valves and tubes and other components	175,141.6	41.8	13.3	120,437.5	24.6	12.9	-54,704.1
Manufact. of television and radio transmitters and apparatus for line telephony and line telegraphy	15,494.7	3.7	-79.2	82,829.0	16.9	16.2	67,334.3
Manufact. of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	57,942.7	13.8	53.9	59,018.1	12.1	12	1,075.4
Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment	55,422.2	13.2	2.0	143,313.6	29.3	-13.8	87,891.4
<b>SERVICES</b>	226.0	0.1	-5.2	72.2	0.0	-68.8	-153.8
Wholesale of machinery, equipment and supplies							
Telecommunications							
Renting of machinery and equipment							
Hardware consultancy							
Software consultancy and supply	226.0	0.1	-5.2	72.2	0.0	-68.8	-153.8
Data processing							
Data base activities							
Maintenance and repair of office, accounting and computing machinery							
Other computer related activities							
<b>TOTAL</b>	419,320.9	100.0	5.5	489,150.8	100.0	11.0	69,829.9

**NOTE:**

Figures are provisional.

Source: Compiled with information from the IEA and the OECD classification.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

spheres, namely business, public administration and households.

## ICT use in business

The growing need for data on the use of information and communication technologies in businesses has prompted several international organisations to

conduct surveys on this subject. Based on an OECD proposal, Eurostat developed a model questionnaire at the end of 2000 on e-commerce to gather data on this subject in EU countries for subsequent analysis.

The e-commerce pilot survey was carried out in 2001, providing information for 2000, in thirteen member states, including Spain, and was the forerunner of the Survey on ICT usage and e-commerce.

In 2002 the fifteen EU member states carried out the survey for the first time, with a view to analysing the use and spread of information communication technologies and electronic commerce in business.<sup>13</sup>

Neither the e-commerce pilot survey nor the first survey on ICT usage and e-commerce provide a regional breakdown. However, the 2003 survey does provide disaggregated data for 2002.<sup>14</sup>

The variables for the survey on the use of information and communication technologies in business as established in the questionnaire included the availability of computer and telecommunication services, such as computers, local area networks and internet access, and the proportion of enterprises using intranet, extranet and e-mail.

In 2002 the use of information and communication technologies was widespread in Andalusian enterprises. Specifically, 92.5% of businesses in the region used computers, almost three quarters (74.8%) had internet access, of which 30.8% had a web site or home page, and 67.5% had e-mail.

A breakdown of the information on the availability and use of these resources by sector shows that the lowest figures for most of the categories were registered in the construction industry both in Andalusia and Spain as a whole. The service sector fared the best, exceeding regional averages and, in some cases, for example, the availability of computers, the national average. The proportion of service enterprises using computers was 98.2% in Andalusia and 97.5% nationally.

The survey provides data on the type of internet connection used —modem, ISDN (integrated services digital network), broadband, xDSL (digital subscriber line), satellite, etc.— and on the purposes for which enterprises use the internet. Both in Andalusia and Spain as a whole, the most widely used types of internet connection were broadband and xDSL, while other systems, such as satellite connection, were less common.

The main purpose for which enterprises used the internet was to search for information (92.2% of enterprises with internet access in Andalusia and 93.2% in Spain), followed by banking and financial services (80.6% in the region and 81.7% nationally).

The proportion of enterprises that use the internet for dealing with the public administration was 53.7% in Spain and 52% in Andalusia.

There were more enterprises using their web sites or home pages to market their products in Andalusia than nationally. Specifically, in 2002, 78.1% of Andalusian enterprises with internet access and a web site or home page used them to sell their products, compared with 74.4% nationally.

The survey also provides information on computer use by employees, specifically the proportion of employees who use computers at least once a week in their normal work routine and the share who use computers connected to the internet. These proportions are lower in Andalusia than in Spain, with the service sector once again achieving the best results. The share of employees engaged in software development was similar in Andalusia and Spain (1%).

## ICT in public administration

ICT is also widely used in government to facilitate its work and improve the quality of services provided to citizens. The introduction of these new technologies has increased the speed and efficiency of procedures and improved internal work organisation and management.

The information available to analyse ICT use in government is very limited. The *Report on information technology in public administration*, published every two years by the Higher Information Technology Council of the Public Administration Ministry, is the main source of information in this area. The most recent report was published in 2002, providing data for 2001.

Table 93. **INFORMATION AND COMMUNICATION TECHNOLOGY IN BUSINESS. YEAR 2002**

	TOTAL ENTERPRISES		INDUSTRY		CONSTRUCTION		SERVICES	
	Spain	Andalusia	Spain	Andalusia	Spain	Andalusia	Spain	Andalusia
Enterprises with computers	95.01	92.50	93.02	89.59	93.04	86.87	97.49	98.21
Enterprises with e-mail address	76.00	67.50	76.36	66.59	65.52	50.83	81.32	80.31
Enterprises with internet connection	81.73	74.84	80.68	69.82	74.20	62.96	86.49	86.30
Enterprises with internet connection and website <sup>(1)</sup>	40.94	30.77	44.92	44.98	21.14	15.64	47.31	32.76
Enterprises using the internet in their relations with the Government <sup>(1)</sup>	53.73	52.02	51.68	53.57	46.35	47.11	58.47	53.99
Enterprises with a website to sell their products <sup>(2)</sup>	74.40	78.07	68.48	74.43	78.79	74.40	77.26	81.18
Enterprises with a local area network	55.26	50.50	52.06	46.22	41.88	34.51	64.67	64.60
Enterprises with an intranet	29.47	24.24	26.90	18.98	19.68	14.75	36.52	34.08
Enterprises with an extranet	12.23	8.17	9.49	6.55	6.80	3.17	17.09	12.72
Personnel using computers at least once a week	47.82	33.96	38.67	28.82	25.45	17.61	59.40	47.11
Personnel using internet-connected computers at least once a week	29.11	20.19	22.59	16.99	16.87	10.42	36.28	28.12
Personnel developing software for internal use	1.00	0.99	0.86	0.76	0.76	0.71	1.15	1.28

**NOTES:**

As a percentage of total.

(1) As a percentage of total internet-connected enterprises.

(2) As a percentage of total internet-connected with a website.

Source: INE Survey on ICT usage and e-commerce 2002.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

According to the figures provided in the 2002 report, in 2001 IT expenditure<sup>15</sup> was 103,837 thousand euro in Andalusia's public administration, accounting for 22.1% of total IT expenditure in Spain as a whole and putting Andalusia at the top of the national ranking, followed by the Basque Country (15.5%) and Catalonia (14.5%).

The allocation of IT expenditure to different items varies from one region to another. A look at average expenditure by the regions reveals that the biggest expenditure item was computer services<sup>16</sup>, followed by hardware<sup>17</sup>, personnel, acquisition of system and application software and, lastly, consumables and miscellaneous.

The expenditure pattern was similar in Andalusia. The biggest expenditure item was computer services

(38.7%), as in Catalonia and the Basque Country, while IT personnel expenses, which in Andalusia accounted for 30.7% of the total (national average 25.2%), was the biggest item in Madrid, Castilla-La Mancha, Murcia and Extremadura. Expenditure on hardware was the biggest item in Valencia, Galicia and Castilla-León.

IT expenditure per capita in public administration was 14.2 euro in Andalusia in 2001, exceeding the 12.6 euro national average and putting it in fourth place in the regional ranking behind the Basque Country, Valencia and Murcia.

IT expenditure as a percentage of the budget<sup>18</sup> in Andalusia exceeded the national average. Specifically, the region's IT expenditure accounted for 1.21% of the budget in 2001, compared with 1.17% averaged

by the Autonomous Communities, making it one of the top five spenders on this budgetary item.

The report also provides information on capital expenditure on hardware<sup>19</sup> in the Autonomous Communities, specifically on personal computers, computer systems and local area networks. More than half of capital expenditure was on personal computers (55.1%), while 37.4% was invested in computer systems and the remaining 7.5% in local area networks.

The Andalusian regional authorities, ranking second behind Valencia, spent 21,900 thousand euro on hardware in 2001, accounting for 17.8% of the total amount spent on this item by regional authorities in Spain as a whole. The largest proportion was spent on computer systems (55.3% of the total), as in other Autonomous Communities, such as Galicia, the Basque Country, Asturias and Murcia. Capital expenditure on personal computers accounted for 38.8% of total spending on hardware, compared with the 55.1% averaged nationally. The proportion invested in local area networks in Andalusia was lower (5.9%) than the national average (7.5%).

In addition to this information on financial resources allocated to ICT, the report also provides information

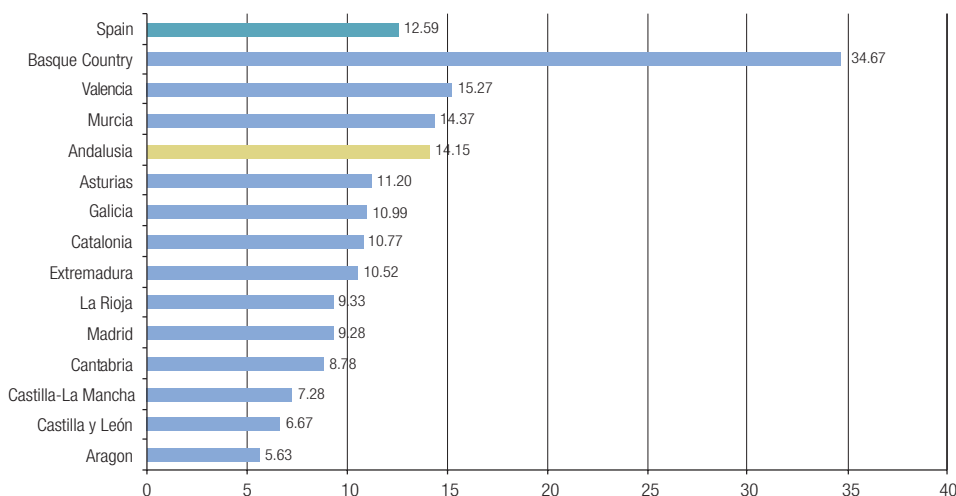
on the equipment installed, permitting an analysis of the availability of ICT infrastructure. According to figures for 1 January 2002, personal computers accounted for 97.3% of hardware installed nationwide, and computer systems for the remaining 2.7%.

Andalusia was the Autonomous Community with the largest proportion of hardware (17.3%), followed by Catalonia, with 14% of the total. At the other end of the scale, Cantabria and La Rioja had the smallest percentage shares.

In the Autonomous Communities, personal computers accounted, on average, for over 96% of all hardware (97.2% in the case of Andalusia). The number of computer terminals per 100 regional government employees varied significantly from one region to another<sup>20</sup>, ranging between 8.9 per 100 employees in Cantabria and 38.5 in the Basque Country on 1 January 2002. In Andalusia, 15.3% of people employed in the public administration used a computer in their normal work routine, showing that the level of computerisation in the region was lower than average (18 computer terminals per 100 employees).

An analysis of computer systems is more revealing; although they account for only 2.8% of the total, they incorporate a higher level of innovation. Catalonia and

Chart 155. **IT EXPENDITURE BY REGIONAL GOVERNMENTS PER INHABITANT. YEAR 2001**



**NOTES:**

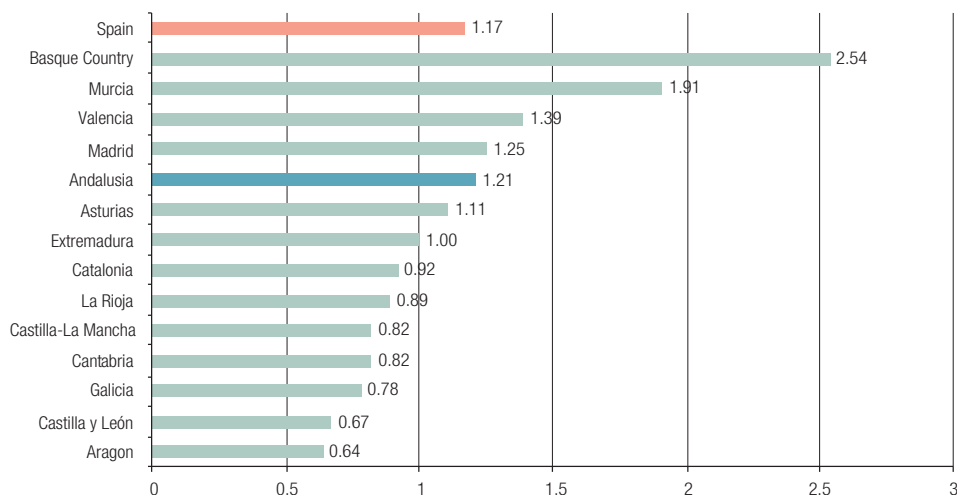
In euro per inhabitant. No information is available for Canary Islands, Navarre and Balearic Islands.

**Source:** Ministry of Public Administration, Report on Information Technology in Public Administration.

**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.



Chart 156. IT EXPENDITURE BY REGIONAL GOVERNMENTS IN BUDGET TERMS. YEAR 2001

**NOTES:**

Data as percentages. Budget chapters I, II and VI. No information is available for Canary Islands, Navarre and Balearic Islands.

**Source:** Ministry of Public Administration, Report on Information Technology in Public Administration.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Andalusia were the regions with the largest numbers of computer systems. Small computer systems were predominant in all the Autonomous Communities, with large computer systems concentrated in the Basque Country, which had 12, and in Andalusia, which had 7. Castilla-León and Catalonia had the most medium-sized systems.<sup>21</sup>

### ICT use in the home

One of the main sources of information on the penetration of the new economy and information technology in the home is the Survey on household ICT usage and equipment, conducted by the INE. It provides figures on information and communication technology equipment in Spanish homes for 2002 and 2003, with special reference to computer equipment, and the use of the internet and e-commerce by members of the household.<sup>22</sup>

The findings of the survey show that ICT equipment is widely available in Andalusian homes. According to data for the second quarter of 2003,<sup>23</sup> basic ICT equipment, including television, telephone, etc., is very widespread, with figures close to national averages. Specifically, 99.6% of Andalusian homes had television, 95.1% had a telephone of some kind and 87.6% had radio.

The most common form of television reception is via a conventional aerial, and the proportion of Andalusian homes with digital terrestrial television and cable television is higher than nationally. While in Andalusia 3.1% of homes had digital television and 9.7% had cable television, nationally these percentages are 2.4% and 8.8% respectively.

The telephone, including both fixed-line and mobile telephones, is also widely used in Andalusian homes. In the region 95.1% of homes had a telephone of some kind (96.9% in Spain), and just 21.8% of homes had only a fixed-line telephone. The use of mobile phones was very similar to the national average (73.3% in Andalusia and 73.7% in Spain as a whole). It is worth noting that the percentages for both Andalusia and Spain were considerably higher than the previous year. The proportion of homes with mobile phones in Andalusia was up sharply from 64.3% in 2002, an increase of nine percentage points, while in Spain as a whole it was 8.7 points higher in 2003 than it was in 2002 (65%).

However, Andalusia lags behind national averages in certain areas, such as computer equipment and access to and use of certain services, including the internet and e-commerce.

According to the Survey on household ICT usage and equipment, in the second quarter of 2003, 38%

of Andalusian homes had a computer of some kind (31.1% in 2002), while nationally, this percentage was 43.3% (36.1% in 2002). The most popular type was the desk-top computer ahead of laptops and other types of computer, such as personal digital assistants (PDA) and pocket PCs.

The proportion of homes with internet access has risen dramatically in Andalusia from 12.9% in 2002 to 20.8% in 2003, and in Spain from 17.4% to 25.2%. Catalonia, the Basque Country and Madrid were the regions with the highest proportion of homes connected to the internet, while Andalusia ranked higher than four other regions, namely Castilla-La Mancha, Extremadura, Galicia and La Rioja.

The majority of households had dial-up internet access, the percentages being practically the same in Andalusia and nationally (74.8% and 74.6% respectively), and the most common form of connection was using a desk-top computer.

Data published by the *Asociación para la investigación de medios de comunicación* (AIMC - Association for Communication Media Research) on the findings of its Survey on internet users, carried out by Estudio General de Medios (General Media Study), provides a fuller picture, allowing an analysis to be made of advances in internet use since 1997.

The most recent figures published, which are for October-November 2003, reveal that the proportion of the population with internet access has increased at a faster rate in Andalusia than in Spain as a whole over the period from 1997 to 2003. The proportion of people aged over ten with access to the internet has risen in Andalusia from 1.5% in 1997 to 25.6% in 2003, while in Spain as a whole it has risen from 2.6% to 25.3% in the same period.

The Survey on household ICT usage and equipment provides information on the percentage of people who use information and communication technologies. According to its findings, 37.8% of the Andalusian population aged over 10 had used a computer in the three months before the survey (second quarter of 2003).

Nationally, the proportion was higher (42.7%) for this indicator and for the frequency of computer use; in Spain as a whole 55.5% of people used a computer at least five days a week, while in Andalusia, this proportion was 50.6%.

The majority of people who use computers do so at home, specifically, 73.7% of the Spanish population, compared with 68.8% of the region's inhabitants, in line with the figures that show that a smaller proportion of homes had computers in Andalusia than they did nationally.

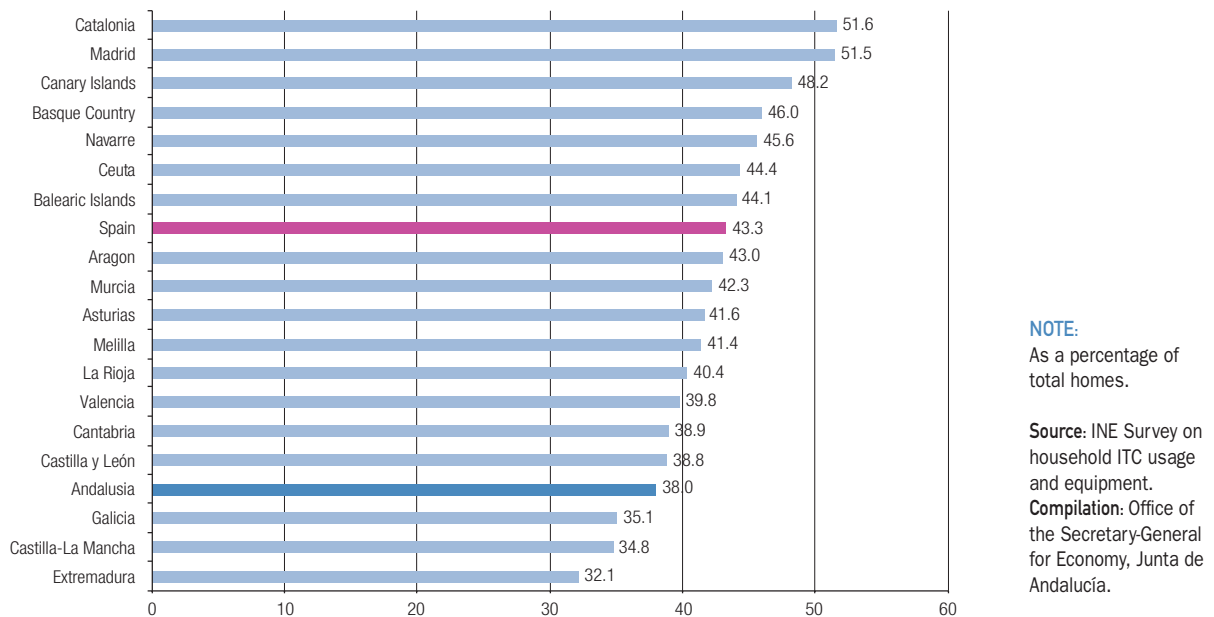
Table 94. **INFORMATION AND COMMUNICATION TECHNOLOGY IN HOUSEHOLDS. YEAR 2003**

	Andalusia	Spain	
Homes with a TV set	99.6	99.5	
Homes with a DVD player	25.1	27.3	
Homes with a radio set	87.6	90.0	
Homes with a VCR	73.3	72.6	
Homes with telephone service	95.1	96.9	
Homes with mobile phone service	73.3	73.7	
Homes with a computer	38.0	43.3	
Homes with internet access	20.8	25.3	
Number of people who have used a computer in the last 3 months	37.8	42.7	
Number of people who have used the internet in the last 3 months	28.8	34.2	
Number of people who have made purchases over the internet in the last 3 months	3.1	4.6	

**NOTE:** Family homes and people aged 10 years and over living in family homes, as percentages.

**Source:** INE Survey on household ICT usage and equipment.  
**Compilation:** Office of the Secretary-General for Economy, Junta de Andalucía.

Chart 157. HOMES WITH A COMPUTER. YEAR 2003



In Andalusia 28.8% of people aged over 10 used the internet in the first few months of 2003, which meant that 7.6 out of every 10 computer users used the internet, compared with 8 out of ten nationally. Madrid was the region with the highest proportion of internet users (43.9% of the population aged over ten), while Extremadura had the smallest proportion (24.4%).

The most common place to use the internet was the home (52% of Andalusian users and 59.7% of Spanish users), followed by the work place. As with computer use, internet use was less frequent in Andalusia than nationally. In Andalusia 38.7% of users connected at least five days a week, whereas the national figure was 43.2%, with Madrid ranking first and Extremadura last. The most widely used internet services were searches for information on goods and services and e-mail.

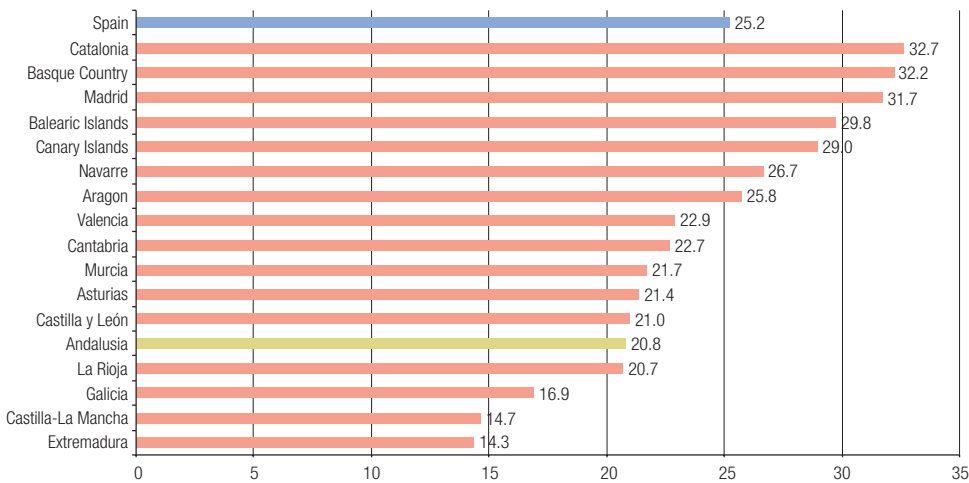
The Survey on household ICT usage and equipment also provides information on e-commerce. In the first few months of 2003, 3.1% of the Andalusian population aged over ten shopped online, compared with 4.6% nationally. Average personal spending by people in Andalusia who had shopped online in

the three months prior to the survey was 452.53 euro, 5% less than average spending in Spain as a whole. The biggest spending regions were the Canary Islands (1,071.12 euro) and the Balearic Islands (765.04 euro). Half of online shoppers paid with a credit card, and cash on delivery was also a popular method of payment. The most popular items bought online were books, journals and electronic learning material, followed by computer material and household items.

The survey also provides information referring specifically to children between the ages of ten and fourteen. Analysis of these figures shows that children use ICT more than adults, a trend echoed throughout Spain. In Andalusia, 33.6% of children in this age group had a mobile phone, more than half used a computer in the first part of 2003 (52.1%) and 42.9% used the internet. The percentages in the latter two exceeded those recorded for the general population (people aged over ten), specifically 37.8% and 28.8% respectively.

The i@andalus Barometer, which was compiled in 2003 for the second consecutive year by the *Instituto de Estudios Superiores de Administración*

Chart 158. HOUSEHOLD ACCESS TO THE INTERNET. YEAR 2003



**NOTE:**

As a percentage of total households.

Source: INE Survey on household ICT usage and equipment.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

(IESA - Institute for Advanced Business Studies) of the Higher Scientific Research Council, under an agreement with the Andalusian regional government, can also contribute to the analysis of ICT use and equipment in the home.

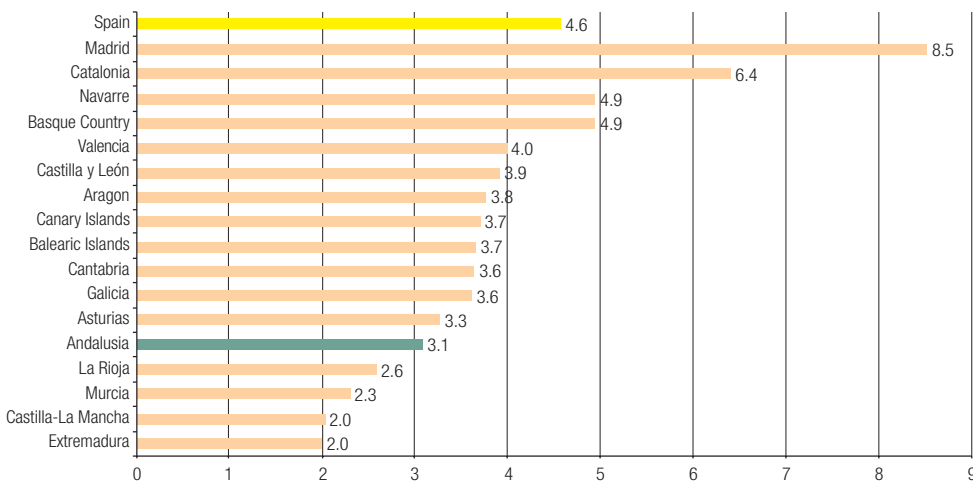
The study is based on a survey of citizens living in Andalusia aged fourteen and over, with a sample size of 3,200 households. The field work was conducted from 22 April to 14 May 2003.

Indicators for ICT equipment in homes show that in Andalusia 97.8% of households had television and

8.4% cable television, with figures varying greatly from one province to another. The proportion of homes with cable television ranged from 23.4% in Huelva to just 2.5% in Jaén.

In Andalusia 74.2% of homes had a fixed-line telephone, and in 74.2% of them at least one member of the household had a mobile phone. The disparity among the different provinces was not as great for these indicators. The proportion of homes with fixed-line telephones ranged between 64.6% in Huelva and 79.3% in Jaén, and the proportion of homes with mobile phones ranged between 67.7% in Jaén and 78.4% in Cadiz.

Chart 159. ONLINE PURCHASES. YEAR 2003



**NOTE:**

Population aged 10 years and over who have made purchases over the internet, as percentages.

Source: INE Survey on household ICT usage and equipment.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

With regard to computer equipment, according to the study carried out by IESA in 2003, 39.8% of Andalusian homes had a computer of some kind and 22.3% had internet connections, mostly dial-up access.

A provincial breakdown reveals that Cadiz, Malaga and Seville exceeded the Andalusian average in terms of the proportion of homes with computers, and Cadiz, Granada and Malaga exceeded the average in terms of internet access. Jaén ranked bottom in both cases.

The i@andalus Barometer provides information on ICT equipment penetration in the home by town or city size. At the time data was collected for the Barometer, almost half of homes in Andalusian towns or cities with over 100,000 inhabitants had a computer and 30% had internet access. In other population centres, the proportion of homes with computers was also fairly high, even in rural villages, with less than 5,000 inhabitants, where 31.2% of homes had a computer. The proportion with internet access is somewhat lower, however, ranging between 14.7% in rural villages and 30% in big towns and cities.

The Barometer reveals that 75.8% of Andalusians had a fixed-line telephone in their homes in 2003, and mobile telephones were used in an even higher proportion of homes (77.5%). In both cases, the highest proportion was in the province of Cadiz, and the lowest in Huelva.

In 2003 half of all Andalusians used a computer (50.1%), with Malaga, Cadiz, Almería and Granada registering above-average percentages. In a multiple-response questionnaire, computer users responded that the place where they used the computer was their own home (67.9%), their place of work (35.1%), a public place (25.1%) and learning centres (24.2%).

The proportion of computer users who had used the internet in the month prior to the survey in any place and using any type of computer was 32.6%, and 37.2% in the year prior to the survey. In both cases, the highest percentages were observed in Malaga, Cadiz and Almería, while Huelva and Jaén had the smallest

proportions of internet users. The places in which people most commonly used the internet were their own home (51.3%) and their place of work (40.5%).

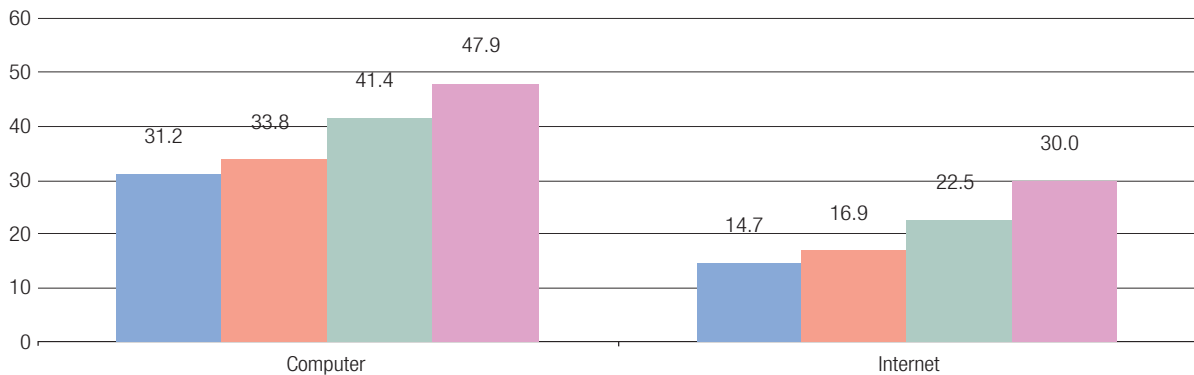
The Barometer also provides information on e-commerce in Andalusia, revealing that 15.7% of Andalusians who use the internet for personal purposes, had at some time made an online purchase. A provincial breakdown shows that the proportion of online shoppers ranges from 19.1% of internet users in Granada to 8.8% in Jaén. The figures for the frequency of online shopping show that half of e-commerce users bought online occasionally, 22% always bought certain products or services on the internet, and the remaining 28% hardly ever shopped online. The items most commonly bought online, according to the multiple-response questionnaire, were tickets for events (36.8%), travel (35.4%), video tapes (28.8%) and books (26%).

The i@andalus Barometer also reveals that the IT-literate are predominantly young people living in urban centres and that more men than women use these new technologies. Over a third of Andalusian computer users (35.3%) and internet users (39.8%) are aged between 14 and 24, around half of computer users (58.4%) and internet users (45.6%) live in cities with over 100,000 inhabitants, and 53.4% of computer users and 56.3% of internet users are men.

A comparison of the 2002 figures with the findings of this second Barometer confirm that Andalusia has advanced considerably in the implementation and use of new technologies.

The figures for basic ICT equipment show that the proportion of Andalusian homes with mobile telephones jumped from 66.5% in 2002 to 74.2% in 2003, and the proportion with pay television rose from 19.7% to 22.6%.

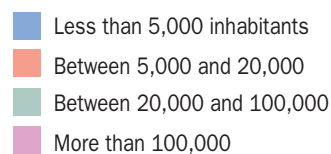
The proportion of Andalusian homes with a computer rose from 32.9% in 2002 to 39.8% in 2003, and the proportion of Andalusians who were PC users increased from 40% according to the 2002 Barometer to 50%. A provincial breakdown shows

Chart 160. **ANDALUSIAN HOUSEHOLDS WITH COMPUTER AND INTERNET ACCESS BY SIZE OF MUNICIPALITY. YEAR 2003****NOTE:**

Andalusian households with a computer and internet access as a percentage of total Andalusian households by municipality size.

Source: IESA, i@landalus barometer.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.



the fastest advances in Cadiz, where the proportion rose from 33.6% in 2002 to 48.5% in 2003 and in Jaén, where it rose from 23.1% to 32.4%.

Lastly, the proportion of Andalusians who had used the internet in the month prior to the survey rose from 22.8% to 32.6% between 2002 and 2003.

## Conclusions

The rapid development and spread of information and communication technologies are transforming wide-ranging aspects of economic and social life, from the everyday life of ordinary citizens to the most sophisticated production techniques. These changes, integrated in concepts such as the “new economy”, the “information society” and the “knowledge society”, are extending rapidly throughout all economic areas, including Andalusia.

According to CEPREDE, the new economy penetration indicator was 77 for Andalusia in 2002, against a value of 100 for Spain as a whole, putting it in eleventh position in the ranking of Autonomous Communities ahead of Extremadura, the Canary Islands, the Balearic Islands, Galicia, Castilla-León and Castilla-La Mancha.

According to the index produced by the AUNA Foundation, 2002 saw a narrowing of the gap between the Spanish regions in terms of information society development. Andalusia, scoring 88.3 on the composite index against a value of 100 for the region of Madrid, was ahead of Galicia, Murcia, Extremadura and Castilla-La Mancha.

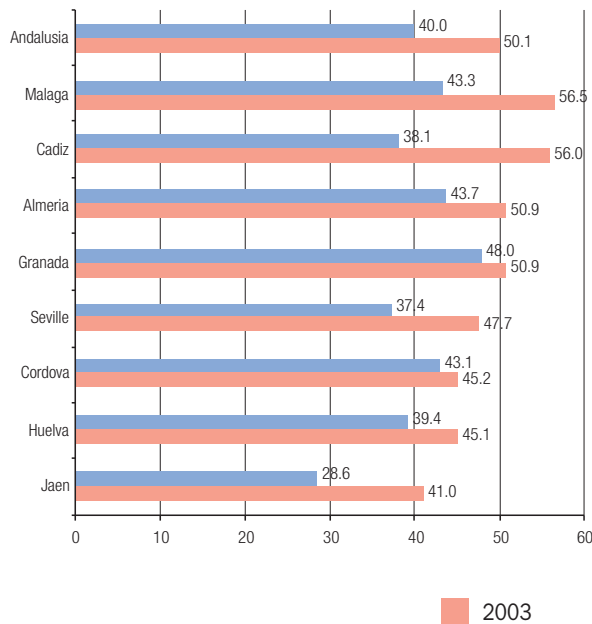
The large majority of indicators used to measure the development of the new economy reveal upward trends and more rapid growth in Andalusia than in Spain as a whole.

A look at scientific research and technological development shows that Andalusia ranked third in 2002 in terms of R&D expenditure, which grew at a faster rate in Andalusia than nationally between 1987 and 2002.

R&D intensity, measured by R&D expenditure as a percentage of GDP, showed a significant improvement in Andalusia, while both in the European Union and the OECD it remained practically unchanged.

There has also been an upward trend in the number of people engaged in R&D activities in recent years, with Andalusia increasing its percentage share in the national total. R&D intensity in terms

Chart 161. **COMPUTERS USERS**



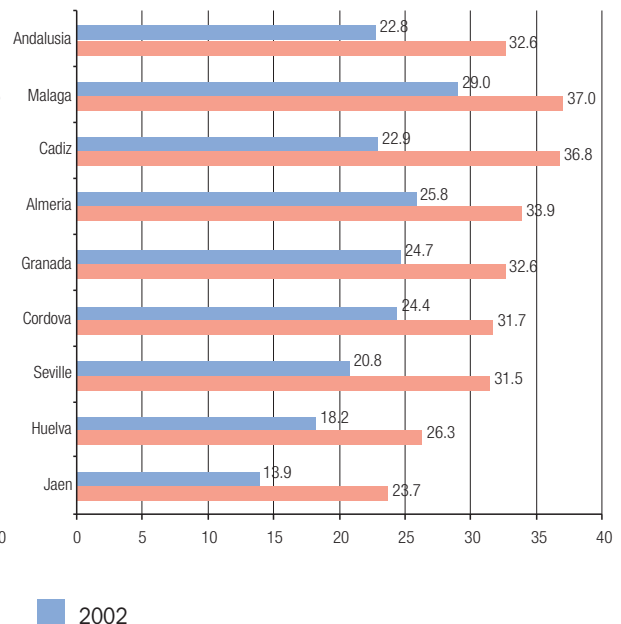
**NOTE:**

Andalusian computer users as a percentage of total Andalusian population aged 14 and over.

Source: IESA, i@landalus barometer.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

**USERS WHO HAVE RECENTLY CONNECTED TO THE INTERNET**



**NOTE:**

Andalusian residents who have connected to the internet in the last month as a percentage of total Andalusian population aged 14 and over.

Source: IESA, i@landalus barometer.

Compilation: Office of the Secretary-General for Economy, Junta de Andalucía.

of human resources, measured by R&D employees as a percentage of the total labour force, has also increased in recent years.

The public sector plays a greater role in R&D activities than the private sector in Andalusia, while nationally the reverse is true. R&D expenditure by the public sector in Andalusia accounts for almost two thirds of the total, while in Spain as a whole business accounts for a larger proportion than the public sector, specifically 54.8% of the total.

Nevertheless, it should be taken into account that businesses also invest in other activities that, together with R&D, contribute to technological innovation, such as the acquisition of intangible technology and machinery and equipment related to technologically new or improved products and processes, industrial design and engineering,

tool development, production startup and training associated with technologically new or improved products. R&D accounts for 28% of total expenditure on research, development and innovation (RDI) in Andalusia, and for a slightly higher percentage nationally (30.2%). Both in Andalusia and Spain as a whole, since the mid-nineties the proportion of R&D expenditure in total innovation expenditure by businesses has been steadily shrinking, while investment in strictly innovative activities has been increasing its percentage share.

In any event, average RDI expenditure per business in Andalusia is almost half the national average, and expenditure by businesses on innovation as a percentage of GDP is also considerably lower in Andalusia than nationally (0.8% and 1.7% respectively in 2000). However, there are certain activities in Andalusia with a particularly high level of technological

intensity (innovation expenditure as a percentage of turnover), such as transport equipment, which has a much higher ratio in Andalusia than nationally, electrical, electronic and optical equipment, and paper, publishing and printing.

Almost half of innovation expenditure is made by businesses in high-technology sectors, which have increased at a faster rate in Andalusia than in Spain since the mid-nineties.

However, high-technology sectors are less important in Andalusia than nationally, both in terms of the proportion of high-technology businesses and the number of people working in them. In Andalusia and in Spain as a whole, the majority of such businesses are in the manufacturing sector, particularly the manufacture of machinery and equipment, followed by the manufacture of medical, precision and optical instruments, watches and clocks, chemicals and other transport equipment. The high-technology service sector with the largest number of businesses is computer and related activities.

The proportion of high-technology enterprises that belong to the ICT sector has grown significantly in Andalusia since the mid-nineties to over a third (33.9%), a slightly smaller proportion than the national average of 37.6%. Most ICT enterprises operate in the service sector, particularly in the wholesale of machinery, equipment and supplies, followed by the renting of office machinery and equipment and the maintenance and repair of office, accounting and computing machinery. The most significant industrial ICT activities in Andalusia are the manufacture of office, accounting and computing machinery and the manufacture of electronic valves and tubes and other electronic components.

A characteristic feature of these high-technology sectors is their high level of foreign trade activity. In Andalusia, 22.7% of foreign trade can be attributed to these sectors, which have a high export propensity, with the enterprises belonging to these sectors exporting 12.2 times more than the average Andalusian business.

Trade exchanges are concentrated in the manufacturing industries, particularly the chemical industry, which accounts for the largest proportion of both imports and exports. The next biggest importer is the machinery and equipment industry, while the next biggest exporter is the motor vehicle industry.

The ICT sector accounts for 17.1% of foreign trade carried out by high-technology enterprises. The biggest exporter is the sector producing instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment, while the biggest importer is the sector producing electronic valves and tubes and other electronic components. With regard to services classified as ICT sectors, the highest level of foreign trade is registered in the software consultancy and supply sector, where exports are well in excess of imports.

Disaggregated data is provided for the use of information and communication technologies in business, public administration and the home. In the case of Andalusian businesses, ICT usage is very widespread, as 95% of enterprises have computers and almost three-quarters have internet access, of which 67.5% have e-mail and almost a third have a web site or home page. It is significant that more enterprises with web sites use them to market their products in Andalusia than they do nationally.

Figures on the use of new technologies in public administration in Andalusia show that ICT equipment and services are used extensively. Andalusia registered above-average results both in terms of IT expenditure per capita and IT expenditure as a percentage of the region's budget, evidencing the efforts of the public administration in Andalusia to rise to the challenges of the information society.

With regard to the use of ICT in Andalusian homes, the Survey on household ICT usage and equipment conducted by the INE reveals a high proportion of homes, similar to national levels, with basic ICT equipment, such as televisions and telephones, while the proportions vary to a greater extent between Andalusia and Spain with regard to computer



equipment and access to and use of certain services, such as internet and e-mail. However, Andalusia has seen significant advances in this regard. In 2003, according to the INE, the number of homes with a computer of some kind grew year on year by 22.2%, a faster rate than observed nationally (19.9%), and the number of Andalusian homes with internet access rose by 61.2%, which was also a bigger increase than registered in Spain as a whole (44.8%).

The i@andalus Barometer, which is produced by IESA and provides information on ICT penetration, confirmed that in 2003 Andalusia had made significant progress compared with the previous year in terms of the implementation and use of new information society technologies, a trend observed in all the Andalusian provinces. It also revealed that the IT-literate are predominantly young people living in urban centres and that more men than women use these new technologies.

## NOTES

1. The scores on the overall index are calculated against a value of 100 for the Autonomous Community of Madrid.
2. In the case of the five subindexes, the scores are calculated against a value of 1 for the highest-ranking region.
3. It also includes managers and administrators engaged in the planning and management of scientific and technical aspects of the work of researchers, who normally have the same or a higher status and who are often former researchers or part-time researchers.
4. These initials refer to the integration of research, development and innovation in a single system, which links science, technology and business and encompasses everything from the acquisition of new expertise to the marketing of new or improved products and services.
5. The survey covers all industrial, construction and service enterprises with ten or more employees, whose main activity corresponds to the branches included in the Spanish national classification of economic activities CNAE-93, with the exception of public administration, defence and compulsory Social Security (75) and education (80).
6. In the Survey on technological innovation in business, the concept of innovation expenditure includes the amount spent by businesses on innovative activities, such as R&D, the acquisition of intangible technology, machinery and equipment associated with technologically new or improved products and processes, design and industrial engineering, tool development and production startup, in addition to training associated with technologically new or improved products and processes and the marketing of such products and processes.
7. The OECD has two lists of high R&D intensity sectors, one for the period 1970-80 and another for the period 1980-95. See table 86.
8. Survey on technological innovation in business; Statistics on scientific research and technological development activity; Survey on industrial enterprises, Labour force survey, etc.
9. This includes high-technology and medium-high-technology manufacturing sectors and high-technology service sectors.
10. Excluding enterprises with no employees, these percentages are 2% for Andalusia and 2.9% for Spain.
11. This corresponds to division 35 of the CNAE-93, excluding the manufacture of aircraft and spacecraft. It therefore includes the building and repairing of ships, the manufacture of railway equipment, the manufacture of motorcycles and bicycles and the manufacture of other transport equipment.
12. Gross IT sales on the domestic market are calculated as aggregate transactions carried out by enterprises operating in this sector in Spain. Net IT sales on the domestic market are calculated by subtracting transactions between enterprises belonging to the IT sector from the gross IT sales figure.
13. The survey sample consists of enterprises registered in the the Central Business Directory (DIRCE) with ten or more employees and engaged in activities classified under the following CNAE sections: D (manufacturing industry), E (production and distribution of electricity, gas and water), F (construction), G (wholesale and retail trade), H (hotels and restaurants), I (transport, storage and communication), J (financial intermediation), K (real estate activities) and groups 92.1 and 92.2 of section O (motion picture and video activities and radio and television activities).
14. The survey sample consisted of 15,174 enterprises, of which 1,387 were in Andalusia.
15. No information is available for the Canary Islands, the Balearic Islands or Navarre.
16. Spending on computer services includes hardware and software maintenance, application development and maintenance, training, technical and management consultancy, data preparation and input, computer centre services, telecommunication services, etc.
17. Capital expenditure on computer systems, installation of local area networks and equipment rental.
18. Includes sections I, II and VI of the budget.
19. No information is available for the Canary Islands or Navarre.
20. No information is available for the Canary Islands or Navarre.
21. A computer system consists of a CPU, peripherals, terminals and communications equipment, whose CPU is worth between 10 and 100 million current pesetas.
22. Conducted among people aged 10 and over living in the family home.
23. The data collection and reference period is the second quarter of 2003, except where otherwise specified.



# List of Tables

## 1. World Economy

Table 1. Aggregate demand and output in the EU and the euro area. Year 2003	15
Table 2. Economic estimates and forecasts for developing countries	20
Table 3. World economy. Economic estimates and forecasts. Years 2003-2005	24
Table 4. European Union and euro area economic forecasts	26
Table 5. Development indicators	27

## 2. Spanish Economy

Table 6. Gross domestic product and aggregate supply. Spain	36
Table 7. Gross domestic product and aggregate demand. Spain	38
Table 8. Spanish economy. Macroeconomic forecasts	46

## 3. Overview of the Andalusian Economy

Table 9. Basic indicators of the Andalusian economy. Year 2003	52
Table 10. Growth of GDP and GDP components. Year 2003	54
Table 11. Economic growth and employment. Andalusia	59
Table 12. Economic estimates and forecasts. Andalusia	66

## 4. Population

Table 13. Resident population of Andalusia. Breakdown by province. Year 2003	71
Table 14. Population breakdown by age group. Year 2003	73
Table 15. Distribution of population within provinces. Andalusia. Year 2003	76
Table 16. Resident population by nationality. Years 1998-2003	80
Table 17. Foreign population in Andalusia by country of origin	81

## 5. Productive Sectors

Table 18. Basic indicators of the primary sector. Andalusia. Year 2003	86
Table 19. Final agricultural output	88
Table 20. Foreign trade in the primary sector. Andalusia. Year 2003	94
Table 21. Primary sector labour market	95
Table 22. Basic indicators of the industrial sector. Andalusia. Year 2003	98
Table 23. Industrial Production Index. Economic branches. Andalusia	102
Table 24. Industry labour market	105
Table 25. Foreign trade in the industrial sector. Andalusia. Year 2003	109
Table 26. Basic indicators of the construction industry. Andalusia. Year 2003	112
Table 27. Housing subsector. Years 2002-2003	114
Table 28. Construction industry labour market. Years 2002-2003	119
Table 29. Government tenders by type of works and government tier. Andalusia. Years 2002-2003	121
Table 30. Basic indicators of the service industries. Andalusia. Year 2003	124
Table 31. Tourists visiting Andalusia	126
Table 32. Travellers staying at hotels. Andalusia	128
Table 33. Tourist accommodation in Andalusia	131
Table 34. Transport subsector indicators. Andalusia	132
Table 35. Service industries labour market	133

## 6. Aggregate Demand

Table 36. Demand indicators. Andalusia. Years 2002-2003	138
Table 37. Projects approved under regional economic incentive schemes. Andalusia. Year 2003	146

## 7. Foreign Trade and Investment in Andalusia

Table 38. Unit value indexes of exports and imports Year 2003	151
Table 39. Andalusian foreign trade. Geographic distribution. Year 2003	152
Table 40. Andalusian trade with EU countries. Year 2003	153
Table 41. Foreign trade. Breakdown by province. Year 2003	157
Table 42. Andalusian foreign trade by economic sector. Year 2003	158
Table 43. Andalusian foreign trade. Tariff sections. Year 2003	159

Table 44. Andalusian imports by product. Year 2003	161
Table 45. Andalusian exports by product. Year 2003	162
Table 46. Real gross inward investment by sector. Year 2003	167
Table 47. Real gross inward investment. Geographic distribution. Year 2003	167
Table 48. Real gross outward investment by sector. Year 2003	169
Table 49. Real gross investment abroad. Geographic distribution. Year 2003	170

## 8. Structure of the Business Sector

Table 50. Number of enterprises	173
Table 51. Enterprises by employment size band	175
Table 52. Number of enterprises by economic activity. Andalusia	177

## 9. Labour Market

Table 53. Andalusian and Spanish labour markets. Year 2003	186
Table 54. Characteristics of employment. Andalusia. Year 2003	189
Table 55. Employment by occupation and gender. Andalusia	191
Table 56. Characteristics of labour force. Andalusia. Year 2003	193
Table 57. Characteristics of unemployed population. Andalusia. Year 2003	196
Table 58. Characteristics of unemployment rate. Andalusia-Spain. Year 2003	197
Table 59. Employment contracts. Andalusia-Spain. Year 2003	200
Table 60. Hours actually worked per worker. Andalusia-Spain. Year 2003	202

## 10. Prices, Labour Costs and Income

Table 61. European Union CPI breakdown. Year 2003	210
Table 62. Consumer price index for special product groups. Year 2003	213
Table 63. Consumer price index. Year 2003	216
Table 64. Headlines determining CPI trends in Andalusia. Year 2003	217
Table 65. Labour costs. Year 2003	218

## 11. Banking System

Table 66. Basic indicators of the banking system. Year 2003	227
Table 67. Private sector borrowing from Andalusian savings banks	231
Table 68. Private sector borrowing and deposits in the Andalusian provinces. Year 2003	233
Table 69. Profit and loss accounts of deposit-taking institutions. Year 2002	238

## 12. Andalusia in the Context of the Spanish Regions

Table 70. Resident population. Year 2003	242
Table 71. Employment in the primary sector. Year 2003	243
Table 72. Travellers staying at hotels. Year 2003	246
Table 73. Domestic demand indicators. Year 2003	248
Table 74. Foreign trade. Year 2003	249
Table 75. Real gross outward investment. Year 2003	251
Table 76. Real gross inward investment. Year 2003	252
Table 77. Enterprises by autonomous region. Year 2003	253
Table 78. Employment. Year 2003	254
Table 79. Labour costs. Year 2003	257

## 13. Convergence between Andalusia and the European Union

Table 80. Basic macroeconomic convergence indicators for Andalusia and Spain vis-à-vis the EU-15 and the EU enlargement countries in real terms. Year 2003	262
Table 81. Macroeconomic convergence indicators for Andalusia and Spain vis-à-vis the EU-15 and the EU enlargement countries in real terms. Year 2003	263
Table 82. Convergence indicators for Andalusia, Spain and the EU enlargement countries vis-à-vis the EU-15. Years 2002-2003	267
Convergence indicators for Andalusia and Spain vis-à-vis the EU-15. Years 1986-2003	267

## 14. New Economy and Knowledge Society in Andalusia

Table 83. Information society and autonomous regions. Overall ranking	275
Table 84. R&D expenditure in terms of GDP	277
Table 85. Technological innovation by productive sector. Year 2000	281

Table 86. Sectors with high R&D intensity	284
Table 87. Enterprises in advanced technology sectors. Year 2003	286
Table 88. Advanced technology manufacturing sectors. Year 2001	287
Table 89. Employment in advanced technology sectors. Year 2001	289
Table 90. Foreign trade in advanced technology sectors. Andalusia. Year 2003	291
Table 91. Enterprises in the information and communication technology (ICT) sector. Andalusia. Year 2003	292
Table 92. Foreign trade in the information and communication technology (ICT) sector. Andalusia. Year 2003	294
Table 93. Information and communication technology in business. Year 2002	296
Table 94. Information and communication technology in households. Year 2003	299





# List of Charts

## 1. World Economy

Chart 1. Gross domestic product	11
Chart 2. Gross domestic product	12
Chart 3. Inflation rate	13
Chart 4. Employment	14
Chart 5. Gross domestic product. Euro area countries. Year 2003	16
Chart 6. US dollar exchange rates	21
Chart 7. Long-term interest rates	22
Chart 8. GDP and world trade	23
Chart 9. GDP per capita. Year 2001	27
Chart 10. Human development index 2001	28
Chart 11. Industrialised countries. Year 2001	29
Chart 12. Distribution of world population by human development	30

## 2. Spanish Economy

Chart 13. Gross domestic product	36
Chart 14. Gross value added by sector. Spain	37
Chart 15. Industrial Production Index. Spain	37
Chart 16. Consumption and investment. Spain	39
Chart 17. Gross fixed-capital formation. Spain	39
Chart 18. Exports and imports of goods and services. Spain	41
Chart 19. Export/import ratio. Spain	41
Chart 20. Gross domestic product and employment. Spain	42
Chart 21. Wage-earning employment by length of contract. Spain	43
Chart 22. Harmonised index of consumer prices	44
Chart 23. Budget deficit. Spain	45

### 3. Overview of the Andalusian Economy

Chart 24. Gross domestic product at market prices	49
Chart 25. Economic growth, employment and inflation. Year 2003	50
Chart 26. Gross value added by sector. Andalusia	53
Chart 27. Production structure. Year 2003	55
Chart 28. Openness to trade. Andalusia	57
Chart 29. Export share. Andalusia	58
Chart 30. Employment	60
Chart 31. Consumer price index	61
Chart 32. Inflation, wages and rates of interest. Andalusia	62
Chart 33. EU turnover forecasts. Year 2004	68

### 4. Population

Chart 34. Population pyramids. Andalusia-Spain. Year 2003	72
Chart 35. Population pyramids. Andalusia. 1991-2003	74
Chart 36. Population density. Year 2003	75
Chart 37. Map of Andalusian municipalities by population size band. Year 2003	77
Chart 38. Population breakdown by municipality size. Andalusia-Spain. Year 2003	78
Chart 39. Foreign population	81

### 5. Productive Sectors

Chart 40. Primary sector GVA	87
Chart 41. Final crop output. Andalusia. Year 2003	89
Chart 42. Andalusian crop outputs	89
Chart 43. Andalusian contribution to Spanish crop outputs. Year 2003	92
Chart 44. Final agricultural output. Year 2003	92
Chart 45. Fresh catches unloaded at Andalusian ports	93
Chart 46. Foreign trade in the primary sector	94
Chart 47. Employment in the primary sector	96
Chart 48. Industrial sector GVA	97
Chart 49. Industrial sector. Year 2001	99

Chart 50. Industrial Production Index. Year 2003	100
Chart 51. Industrial Production Index	101
Chart 52. Industrial activities with fastest output growth. Andalusia. Year 2003	101
Chart 53. Capacity utilisation in industry	103
Chart 54. Employment in industry sector. Andalusia	104
Chart 55. Foreign trade in the industrial sector. Andalusia	106
Chart 56. Construction industry GVA	113
Chart 57. Housing starts by type of housing. Andalusia	113
Chart 58. Housing starts in Andalusia vis-à-vis Spain	114
Chart 59. Housing starts and rates of interest. Andalusia	115
Chart 60. Price of housing and wages in Andalusia	115
Chart 61. Average price of housing per square metre	116
Chart 62. Affordability of homes	116
Chart 63. Labour force in the construction industry. Andalusia	117
Chart 64. Public tendering. Andalusia. Year 2003	120
Chart 65. Service industries GVA	123
Chart 66. Structure of the service industries. Year 2001	125
Chart 67. Tourists by place of origin. Andalusia. Year 2003	127
Chart 68. Types of accommodation preferred by tourists. Andalusia	127
Chart 69. Main countries originating tourism flows to Andalusia. Year 2003	129
Chart 70. Tertiariation of employment. Andalusia	132

## 6. Aggregate Demand

Chart 71. Domestic demand breakdown	139
Chart 72. Average expenditure per capita	140
Chart 73. Index of sales in large-scale retail outlets. Andalusia	140
Chart 74. VAT collections as a percentage of GDP. Andalusia	141
Chart 75. Household expenditure breakdown	141
Chart 76. Purchase intentions for big-ticket items. Andalusia	142
Chart 77. Gross capital formation	143
Chart 78. Gross capital formation as a percentage of GDP	143
Chart 79. Imports. Andalusia	145

## 7. Foreign Trade and Investment in Andalusia

Chart 80. Andalusian foreign trade	150
Chart 81. GDP and foreign trade. Andalusia	150
Chart 82. Main countries of origin of Andalusian imports. Year 2003	154
Chart 83. Real effective exchange rate for Andalusia vis-à-vis the EU and the OECD	155
Chart 84. Export/import ratio for Andalusian trade with the European Union. Year 2003	155
Chart 85. Main destinations of Andalusian exports. Year 2003	156
Chart 86. Andalusian trade balance with the EU	157
Chart 87. Foreign investment and investment abroad. Andalusia	165
Chart 88. Foreign investment and sector GVA. Year 2003	166

## 8. Structure of the Business Sector

Chart 89. Density of enterprises in Andalusia by province. Year 2003	174
Chart 90. Entrepreneurial activity by business size. Andalusia	175
Chart 91. Business sector growth. Andalusia	176
Chart 92. Size of enterprises. Andalusia and Spain. Year 2003	176
Chart 93. Enterprises by economic sector. Year 2003	177
Chart 94. Breakdown of enterprises by legal form. Andalusia	180
Chart 95. Company closure ratio	181
Chart 96. Temporary receiverships. Andalusia	181
Chart 97. Business climate index. Andalusia	182

## 9. Labour Market

Chart 98. Employment in Andalusia	185
Chart 99. Workers registered with Social Security by section. Year 2003	187
Chart 100. Employment	188
Chart 101. Trends in employment by gender. Andalusia	190
Chart 102. Public-sector employment by government tier. Andalusia	192
Chart 103. Labour force. Andalusia	194
Chart 104. Participation rates by gender. Andalusia	194
Chart 105. Participation rates by age. Andalusia	195

Chart 106. Breakdown of labour force by educational level	195
Chart 107. Unemployment rate. Andalusia-Spain	199
Chart 108. Hours actually worked per worker	201

#### 10. Prices, Labour Costs and Income

Chart 109. Gross domestic product deflator	207
Chart 110. Output deflators. Year 2003	208
Chart 111. Gross value added deflator. Andalusia	209
Chart 112. Food component of CPI. Andalusia	211
Chart 113. Fuels CPI and crude oil prices	211
Chart 114. Consumer price index. Andalusia	212
Chart 115. Industrial goods and services CPI. Andalusia	215
Chart 116. Labour costs per worker per month. Year 2003	219
Chart 117. Real wages. Andalusia	220
Chart 118. Primary distribution of income. Andalusia	221

#### 11. Banking System

Chart 119. Intervention rates	226
Chart 120. Deposit/credit ratios in the banking system	228
Chart 121. Credit and deposits over GDP. Andalusia	229
Chart 122. Private sector borrowing by type of bank. Andalusia	230
Chart 123. Savings bank lending trends in Andalusia	230
Chart 124. Private sector resident borrowing by destination. Andalusian savings banks. Year 2003	232
Chart 125. Credit, deposits and GDP trends. Andalusia	233
Chart 126. Private sector deposit structure. Andalusia	235
Chart 127. Private sector deposits by financial institution. Andalusia	236
Chart 128. Market share of private sector bank deposits. Year 2003	237

#### 12. Andalusia in the Context of the Spanish Regions

Chart 129. Trends in industrial production. Year 2003	243
Chart 130. Employment in industry. Year 2003	244

Chart 131. Employment and cement consumption in the construction industry. Year 2003	245
Chart 132. Housing price trends. Year 2003	245
Chart 133. Consumption expenditure and private sector borrowing. Year 2003	247
Chart 134. Export/import ratio. Year 2003	250
Chart 135. Company closure ratio. Year 2003	253
Chart 136. Job growth. Year 2003	255
Chart 137. Employment and unemployment. Year 2003	255
Chart 138. Registered unemployment. Year 2003	256
Chart 139. Inflation rate. Year 2003	256
Chart 140. Inflation and wages. Year 2003	258

### 13. Convergence between Andalusia and the European Union

Chart 141. Trends in GDP per capita (PPS) of Andalusia vis-à-vis the EU-15. Years 1985-2003	269
---	-----

### 14. New Economy and Knowledge Society in Andalusia

Chart 142. Composite indicator for regional penetration of the new economy. Year 2002	274
Chart 143. R&D expenditure	276
Chart 144. R&D intensity. Year 2001	277
Chart 145. R&D expenditure. Public and private sectors. Year 2002	278
Chart 146. R&D expenditure. Public and private sectors. Andalusia	279
Chart 147. R&D personnel	279
Chart 148. R&D personnel. Year 2001	280
Chart 149. Innovation expenditure in industry. Year 2000	282
Chart 150. Technological intensity in industry. Andalusia and Spain. Year 2000	283
Chart 151. Manufacturing enterprises in advanced technology sectors	285
Chart 152. Importance of advanced technology manufacturing sectors in Andalusia and Spain. Year 2001	288
Chart 153. Employment in advanced technology sectors. Year 2001	290
Chart 154. Enterprises in the information and communication technology sector. Andalusia	293
Chart 155. IT expenditure by regional governments per inhabitant. Year 2001	297
Chart 156. IT expenditure by regional governments in budget terms. Year 2001	298

Chart 157. Homes with a computer. Year 2003	300
Chart 158. Household access to the internet. Year 2003	301
Chart 159. Online purchases. Year 2003	301
Chart 160. Andalusian households with computer and internet access by size of municipality. Year 2003	303
Chart 161. Computer users and users who have recently connected to the internet	304





# List of Boxes

## 1. World Economy

Box 1. Fifth enlargement of the European Union	18
--	----

## 2. Spanish Economy

Box 2. Productivity in the Spanish economy	40
--	----

## 3. Overview of the Andalusian Economy

Box 3. 1994-2003: Andalusia's long growth cycle	64
---	----

## 4. Population

Box 4. Spatial population dynamics in Andalusia	79
---	----

## 5. Productive Sectors

Box 5. Farming structure in Andalusia	90
---------------------------------------	----

Box 6. The food industry in Andalusia	107
---------------------------------------	-----

Box 7. Real estate market and mortgage lending in Andalusia	118
---	-----

Box 8. Wholesale and retail trade in Andalusia	130
--	-----

## 6. Aggregate Demand

Box 9. Spending patterns in Andalusia	144
---------------------------------------	-----

## 7. Foreign Trade and Investment in Andalusia

Box 10. Andalusian olive oil exports	163
--------------------------------------	-----

## 8. Structure of the Business Sector

Box 11. The social economy in Andalusia	178
---	-----

---

## 9. Labour Market

Box 12. Employment dynamics in Andalusia by municipality	198
--	-----

---

## 10. Prices, Labour Costs and Income

Box 13. Unit labour costs in Andalusia	214
--	-----

---

## 11. Banking System

Box 14. Borrowing by businesses and households from the financial sector	234
--	-----

---

## 13. Convergence between Andalusia and the European Union

Box 15. GDP per capita, employment and productivity	264
---	-----

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