

## **SWOT Analysis and Benchmarking Study**

# **ASTURIAS**

### **Part I The Macroeconomic Development of Asturias**

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## Introduction

Asturias is one of the 17 CCAA in Spain. This region is located in the northwest of Spain and has an area of some 10,564 square kilometres. The region lies between the Cantabrian Sea to the north, with 334 km of Atlantic coastline, and the clearly drawn natural boundary of the Cordillera Cantábrica mountain ranges to the south separating it from Central Spain.

The Principality of Asturias has a population of 1,075,381 inhabitants (52.02% female and 47.98% male), with an average density of 101, 42 inhabitants per square kilometre. The population is largely concentrated (80%) in the metropolitan area in the centre of the Region, which is formed by the cities of Oviedo (geographic and administrative centre), Gijón and Avilés (industrial and port locations); and Mieres and Langreo, in the industrial corridors of the rivers Caudal and Nalón. Oviedo is the capital city (207,699) and Gijón the biggest city (270,875).

*Road and Rail Traffic.* Asturias has nearly 5,000 km of main roads and motorways, and 720 km of railways. The “Auto via de la Plata” motorway links the region to Central Spain, while the “Autovía del Cantábrico” runs east to the French border with the western section to Galicia due for completion in the next few years.

The *railway network* also runs along two geographical axes: a conventional wide gauge railway (RENFE) links Asturias to Central Spain, and a narrow gauge network (FEVE) runs the length of the north coast of Spain.

*Maritime traffic.* Asturias has industrial ports at Gijón and Aviles. The port of Gijón offers a wide range of facilities, including terminals for solid and liquid bulk shipments and containers with weekly lines running to Algeciras, the Canary Islands and North Africa. The port of Avilés is equipped for direct unloading and storage of a wide range of products. Regular container lines run to the Canary Islands.

*Air traffic.* Asturias is connected to the main cities of Spain through daily domestic flights (ten To Madrid, four to Barcelona), and there are also three weekly direct flights to London Gatwick, and four to Paris Charles de Gaulle. Regular direct flights to other European capitals are currently being considered.

The peripheral areas of Western and Eastern Asturias, each of which has its own specific historical, cultural and economic characteristics, area basically rural and the main economic activities are farming and tourism.



Hispalink forecasts, after a two-year period, 2001-2002, with an economic standby for most of the Spanish regions, the year 2003 means the beginning of a growing period. These prospects of regional growth are much better in comparison to 2004. For this year is expected a general increment of the regional economic dynamism, with a rate of growth by 2,7% for Spain.

Currently Asturias has overcome the reindustrialization experimented during the 80's and nowadays the economic stage is the most regular regarding the last century. The Asturian economy has gradually improved its growth rate, not only because of the push of the construction industry that has grown by 2.9% in 2001-2002, but also because of the industrial sector where the growth was up to 1.9%. We must also point out the increasing relevance of services sector. This sector accounts for 60% of GVA.

Sector	GVA (basic prices)			Prices	
	2001	2002	% Incr. 02/01	% Incr. 02/01	%
Primary sector	335,783	329,357	-4.3	2.4	2.2
Industry	3,695,866	3,783,433	1.9	0.5	25.6
Construction	1,301,776	1,401,950	2.9	4.7	9.5
Services	8,725,721	9,273,578	2.2	3.9	62.7
<b>GVA</b>	<b>13,424,013</b>	<b>14,116,117</b>	<b>2.0</b>	<b>3.1</b>	<b>100.0</b>

Source: Regional Statistical Information. SADEI.

## I. The macroeconomic development of Asturias

### I.1) Demography.

Asturias has a population of 1,075,081. During the 20th century big demographic changes took place in Asturias.

The population drop suffered in Asturias in 2002 (-0,13%) isn't something new. It falls within the downward trend kept since 1995. There are two exceptions in this period, 1999 and 2003, where the population increased by 0,23% and 0,13% respectively.

The fall of the Asturian population affects to a significant number of asturian municipalities. The biggest drops are generally located in the most outlying rural municipalities. On the contrary, the most urban ones located in the central area are the municipalities that support the regional demography growth.

As we can see in different demography sources, the Asturian population fall is, specially, because of the significant birth rate drop since middle 80's. This situation pushed the vegetative growth to a negative balance that cancel out the positive effects of the migration flows, which are expected to be decisive in the regional demography development

Year	Born children	Deceases	Birth Rate Deficit	Migration balance (3)
1990(1)	7.775	11.416	-3.641	
1991	7.728	11.505	-3.777	
1992	7.494	11.378	-3.884	
1993	6.978	11.718	-4.740	
1994	6.653	11.271	-4.618	
1995	6.588	11.989	-5.401	-261
1996	6.530	12.156	-5.626	187
1997	6.516	11.788	-5.272	180
1998	6.344	12.259	-5.915	-737
1999	6.547	12.649	-6.102	-303
2000	6.731	12.393	-5.662	1,977
2001	6.849	11.926	-5.077	2,324
2002	6.807(2)	12.386(2)	-5.579(2)	3,502
2003	7.186	12.530	-5.344	4,570

(1) From 1990 until 2001, final data INE

(2) From 2002, not final data Sadei

(3) Source: Statistical Spanish Institute (INE)

The population density in Asturias in 2003 is 101.42 inh./km<sup>2</sup>, which is lightly higher than the 2002 data, which was 101.28 inh./km<sup>2</sup>. T

The population distribution in Asturias reflects the differences between two distinct areas: the central area, which keeps its consolidation as the most density area, and the eastern and western areas, that show obvious depopulation signs.

	<b>Population</b>	<b>Population Growth</b>	<b>Balance</b>	<b>Population density (inh./km<sup>2</sup>) 2003</b>
<b>1991</b>	1,093,937			103.17
<b>1992</b>	1,099,296	0.49	5,359	103.67
<b>1993</b>	1,112,415	1.19	13,119	104.91
<b>1994</b>	1,117,762	0.48	5,347	105.41
<b>1995</b>	1,117,370	-0.04	-392	105.38
<b>1996</b>	1,087,885	-2.64	-29,485	102.60
<b>1998</b>	1,081,834	-0.56	-6,051	102.03
<b>1999</b>	1,084,314	0.23	2,480	102.26
<b>2000</b>	1,076,567	-0.71	-7,747	101.53
<b>2001</b>	1,075,329	-0.11	-1,238	101.41
<b>2002</b>	1,073,971	-0.13	-1,358	101.28
<b>2003</b>	1,075,381	0.13	1,410	<b>101.42</b>

Source: Population census (INE).

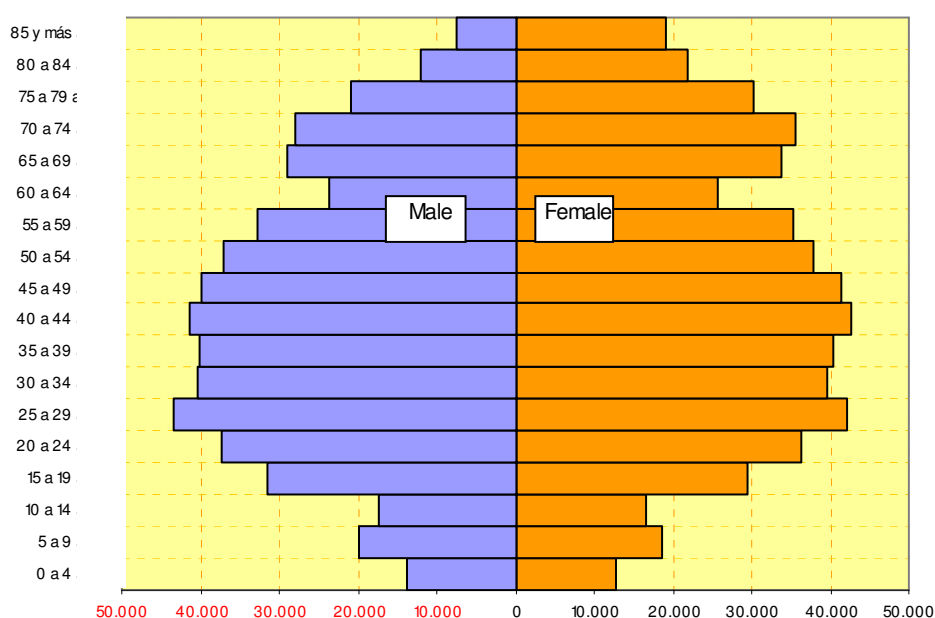
## 2. Estimated population development until 2020

Data not available

### 3. Comparison between estimated population pyramid 2020 and 2002

A significant factor is the evidence about the ageing that suffers the Spanish population, specially the Asturian. In Asturias, the age profile is moving away from the classic one, being accentuated the narrowness in the base of the age pyramid. This reduction in the bottom of the pyramid is caused by the drop of the birth rate. The pyramidal structure highlights the soar between the ages of 60-64 to 65-69, that reveals the weight of older population in the asturian demographic structure.

**Asturias Population Pyramid**



### 4. Part of selected age groups in relation to total population

The following data shows that Asturias has had an important increase of above 65 years-inhabitants. It makes us predict a highest share of inhabitants above 60 years in the future.

	1991	2002	2020
<b>Below 20 years</b>	23.98%	14.83%	Data not available
<b>20 until 65 years</b>	59.24%	63.03%	available
<b>Above 65 years</b>	16.76%	22.13%	

Source: INE

Another relevant demographic factor in Asturias is migration. The official data of the Statistical Spanish Institute (INE) shows that in 1999 the negative trend has changed (as stated below). Between 2000 and 2001 positive migration balance has raised up to 17.5%. From 2001 to 2002 it has also gone up by 51% and during the period 2003-2002 there has been an increase of 30.5%.

Year	Migration balance inside Spain (A)	Asturian abroad coming back (B)	Foreign immigrant (C)	Migration balance (A+B+C)
1995	-1,040	586	193	-261
1996	-430	509	108	187
1997	-923	798	305	180
1998	-2,305	860	708	-737
1999	-2,094	852	939	-303
2000	-2,185	977	3,185	1,977
2001	-2,127	603	3,848	2,324
2002	-2,337	1,327	4,512	3,502
2003	-839	1,260	4,149	4,570

Source: Statistical Spanish Institute (INE)

## I.2) Employment.

Since 1997 the asturian economy has been undergoing a net job creation process, which represents a radical change from the course followed by the employment trend in the region since the seventies. Even though the unemployment decreasing rate was lower than the national average.

The latest figure (data of 2003) shows that Asturias has a total workforce of 432,500, where 384,000 of them are employed. The unemployment rate in the region is therefore 11.2%. The service sector is the largest one (64.55%), whereas there has been a gradual decline in employment in the primary sector (8.30%). The industrial sector accounts for 16.35% of jobs and construction comprises the remaining 10.80%

## 5. Development of employment in Asturias from 1998 to 2003

The following table shows the development of the number of employees in Asturias.

Annual Average	Employees (1.000)		
	Total	Male	Female
1998	315.2	205.3	115.6
1999	320.3	204.7	115.6
2000	331.6	212.6	119.0
2001	364.2	232.0	132.2
2002	372.1	232.9	139.3
2003	384.1	235.5	148.7

Source: Statistical Spanish Institute (INE)



The table below shows that the number of employees has constantly increased from 315,200 in 1998 to 384,100 in 2003. Nowadays, approximately the 41% are working population.

	Annual Average	changes %	Employment rate %
1998	315,2	0	34.3
1999	320,3	1.62	34.9
2000	331,6	3.51	36.2
2001	364,2	9.83	39.4
2002	372,1	2.19	40.3
2003	384,1	3.21	41.6

Source: Statistical Spanish Institute (INE)

## 6. Development of unemployment in Asturias from 1998 to 2002

The table below shows the development of unemployment and employment in Asturias in comparison to Spain during the period 1991 to 2003.

Taking into account this data, we observe a steady decrease of unemployment in Asturias, reaching a rate of 10% in 2002, even lower than the rate of 11.2% in 2003.

Annual Average	Asturias			Spain		
	Activity rate %	Employment rate %	Unemployment rate %	Activity rate %	Employment rate %	Unemployment rate %
1991	45,3	38,1	15,9	49,1	41,1	16,3
1992	44,6	36,9	17,2	48,9	39,9	18,4
1993	43,7	34,7	20,6	49,0	37,9	22,7
1994	42,8	33,1	22,5	49,0	37,2	24,2
1995	42,3	33,8	20,2	49,0	37,8	22,9
1996	43,6	34,4	20,9	49,6	38,6	22,2
1997	43,3	34,0	21,3	49,8	39,4	20,8
1998	42,4	34,3	19,1	50,0	40,6	18,8
1999	42,6	34,9	17,9	50,2	42,3	15,9
2000	43,6	36,2	17,0	51,3	44,1	14,1
2001	42,8	39,4	7,8	52,9	47,3	10,5
2002	44,7	40,3	9,8	54,0	47,9	11,4
2003	46,9	41,6	11,2	55,0	48,8	11,3

Source: Statistical Spanish Institute (INE)

Women unemployment rate has fallen from 27.13% in 1998 to 12.50% in 2001. Men unemployment rate has also decreased from 14.02% in 1998 to 4.95% in 2001.

In 2003 both rates have increased up to 15.96% (women) and 7.90% (men). These data are not comparable to previous existing statistics due to a recent Regulation established in the 1897/2000 of EC which sets up a new concept of unemployment.

Year	Unemployment total (thousands)	Unemployment men (thousands)	Unemployment women (thousands)	Unemployment rate %	Unemployment rate Men %	Unemployment rate Women %
1998	74.3	33.8	40.6	19.1	14.02	27.13
1999	69.9	29.3	40.6	18.1	12.41	26.74
2000	68.0	27.1	40.9	17.0	11.50	25.74
2001	31.0	12.1	18.9	7.8	4.95	12.50
2002	40.4	18.0	22.4	9.8	7.16	13.85
2003	48.5	20.2	28.2	11.2	7.90	15.96

Source: Statistical Spanish Institute (INE)

## 7. Composition of labour force in the economic sectors in 2002 in Asturias

The division of the labour force regarding the economic sectors confirms a clear dominance of the services followed by the industrial sector.

The labour force in the industrial sector has declined throughout the last years. The labour force decreased -4% from 1998 to 2002. On the other hand, the services sector has risen up to 28% in this period.

Sector	1997	1998	1999	2000	2001	2002
<b>Primary sector</b>	45.515	43.106	41.485	37.293	34.970	31.763
<b>Industry</b>	65.002	62.112	62.427	61.709	62.824	62.409
<b>Construction</b>	36.047	38.918	42.093	43.290	43.354	41.293
<b>Services</b>	192.151	201.899	213.127	223.897	235.175	246.521
<b>TOTAL</b>	<b>338.715</b>	<b>346.035</b>	<b>359.132</b>	<b>366.189</b>	<b>376.323</b>	<b>381.986</b>

Source: Regional statistics. Sadei

## 8. Education level in Asturias

The capacity of the labour force, as well as business, to adapt to changing market circumstances is a key factor in regional competitiveness. This requires access to training in order to update and extend skills. Continuing vocational training is, therefore, of as much importance both to an individual's career prospects and to the competitiveness of economies as initial education.

According to the latest data (2002) of the “Third report on economic and social cohesion” nearly the 43% of the population aged between 25 to 64 have, at least, upper secondary and tertiary level education and approximately the 56% of this population have low education.

Education level (2002)	Education level of age group 25-64 years in %
<b>Low</b>	56.6
<b>Medium</b>	20.2
<b>High</b>	23.1

Source: Eurostat

In order to include additional information based on national statistics, the following table contains similar data to the previous one but it focuses on population over 16 years old.

Education level (2002)	Education level of population from 16 years in %
<b>Low</b> (including Illiterate plus primary education)	43.2
<b>Medium</b> (including secondary education)	39.0
<b>High</b> (including tertiary education and PhD student)	17.8

Source: Statistical Spanish Institute (INE)

% Population of 16 years and over, by sex, and reached training level							
	Illiterate	Primary Education	Secondary Education. First stage and Vocational Training	Secondary Education. Second stages and Vocational Training	Secondary Education.	Tertiary Education (except PhD Student)	PhD Student
<b>Both sexes</b>	0.7	42.5	20.2	18.5	0.3	<b>17.7</b>	0.1
<b>Men</b>	0.4	38.2	21.9	19.3	0.4	19.6	0.2
<b>Women</b>	0.9	46.4	18.7	17.8	0.1	16.0	0.0

Source: Statistical Spanish Institute (INE)

(\*) *Pre-primary education* last up to the age of 6. At this age, children enrol the obligatory education. *Primary education* last from 6 up to 12 years old and covers the first six courses of the obligatory education. *Secondary Education* has in Spain different forms. Educación Secundaria Obligatoria (ESO) completes the basic education and covers four courses, from 12 up to 16 years old. In addition to this, there are other forms of higher secondary-education courses and qualifications (BUP y COU, bachillerato LOGSE y bachillerato experimental). It includes the vocational training, too.

Education levels play a major role in determining economic performance and the competitiveness of the economic. In theory, those with tertiary level education – with university degrees or equivalent qualifications- are more likely to be employed than those with upper secondary level. However, the following data show that in Asturias there is a high rate of unemployment with a tertiary level education (32%).

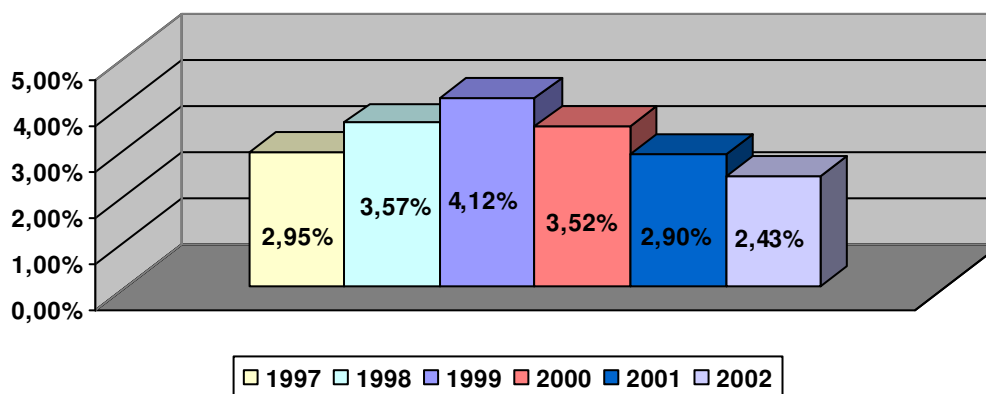
Unemployment by sex, and reached training level								
	Illiterate	Primary Education	Secondary Education. First stage and Vocational Training	Secondary Education. Second stages and Vocational Training	Secondary Education.	Tertiary Education (except PhD Student)	PhD Student	
<b>Both sexes</b>	0.1	11.4	33.4	22.1	0.8	<b>32</b>	0.1	
<b>Men</b>	--	13.6	36.4	20.2	--	29.8	--	
<b>Women</b>	0.2	9.9	31.3	23.4	1.4	33.6	0.2	

Source: Statistical Spanish Institute (INE)

### I.3) Economic development.

#### 9. Yearly GDP Growth rate in Asturias (1995 prices)

In 1999 the growth rate reached the highest value with a 4,12%. Since then, the rate has fallen to 2.43% in 2002.



Source: FUNCAS

## 10. Development of GDP in Asturias 1995-2002

The evolution of the GDP in nominal terms shows a growth, but in comparison to the Spanish average is still slighter.

Year	nominal	In 1995 prices
	1.000.000 €	
1995	10,826.3	10,826.3
1996	11,356.7	11,052.8
1997	11,987.8	11,379.0
1998	12,759.2	11,785.7
1999	13,666.2	12,271.0
2000	14,689.7	12,703.0
2001	15,615.1	13,071.4
2002	16,548.0	13,389.4

Source: FUNCAS

## 11. GDP per capita Asturias from 1998 to 2002

The GDP per capita in Asturias represents the 72 of the EU figure in 1998. Currently, this figure has risen up to 72.4.

Year	GDP/head PPS	EU-15=100
1998	14,638	72
1999	15,087	71
2000	16,019	71
2001	16,900	72.4

Source: Eurostat

## 12. International Trade Asturias from 1991 to 2002

The International trade in Asturias has become stronger thanks to the significant increase in terms of total trade. It has grown by 5,484 million € which means a rise of 172% from 1995 to 2002.

Year	Import (1000 €)	Export (1000 €)	Total trade (1000 €)
1995	1,009,184	1,004,225	2,013,409
1996	1,105,028	1,106,846	2,211,874
1997	1,389,419	1,333,658	2,723,077
1998	1,493,267	1,337,243	2,830,510
1999	1,524,770	1,305,860	2,830,630
2000	1,943,357	1,671,159	3,614,516
2001	2,053,021	1,567,295	3,620,316
2002	2,129,207	1,788,401	5,484,903

Source: External Trade Institute (ICEX)  
 Milan, 22nd and 23rd of June 2004

### 13. Patent Registration in Asturias

During the year 2001 the Spanish Patent Registration registered 49 patent applications from Asturias; it means 1,94% in relation to the total applications in Spain.

There have been 46 patent applications per million inhabitants in 2001 in Asturias, whereas the value in Spain reached 61 (applic. / million inh.).

Year	Number	Applications		Rate (Applications/Million inhabitants)
		% yearly variation	% up total	
Asturias				
2000	28	-30.00	1.03	26
2001	49	75.00	1.94	46
Spain				
2000	2,709	11.12	100	68
2001	2,523	-6.87	100	61

Source: Spanish Patent Registration

### 14. EPO Patent Registration in Asturias

The patent registration at the European Patent Office confirms the comparably low regional level of innovation activities.

Year	EPA Patent Registration per Mio. Inhabitants. Average
1999-2000-2001	9.3

Source: Eurostat

### 15. Share of employees in the high-tech sector in Asturias

The SME have problems to use innovation as a mean to develop processes or products for the market. The high-tech business employed in 2001 1,295,200 persons in Spain that represented 8.1% of total employment, the 25.7% women.

Focusing on Asturias, this sector employed 18.3 thousand persons that mean a percentage of 5.0% of total regional employment (364.2 thousand persons).

Year	Asturias	Spain
2000	--	7.9%
2001	5.0%	8.1%

Source: INE. R&D Statistics