BBVA

Situación

Spain

Activity, waiting for the world
Inflation, three at a time
GDP, more than changes to the base
Growth without construction
The impact of legislative changes on contributory pensions

Contents

1. The international environment

More liquid policies

After the first half of 2003, the signs of economic recovery continue to be unclear in the main economies of the world. This is a situation which has been repeated over the past two and a half years, although it is true that during this time certain factors have increased uncertainty and have, on several occasions, justified the delay in expected growth. The terrorist attacks of September 11th and successive business scandals are just two examples of these factors. Currently, another of these factors, geopolitical uncertainty, has been overcome, although others, such as the possibility that a negative demand shock might lead to a situation of recession-deflation, continue to be a concern. Furthermore, interest rates are lower than they have been since at least the sixties, with new drops in official interest rates in the US and EMU. Fiscal policies have maintained a relaxed stance in the US with the definitive approval of the President's fiscal plan, whereas European countries, with the restrictions imposed by the Stability and Growth Pact, are trying to take on reforms for reducing current and future public spending, which have been faced by a notable social opposition. Despite these support factors for activity, the recovery of the economic agents' confidence is occurring more slowly than was expected and the expectations for a significant economic recovery are being replaced by the feeling that growth will remain weak for the next quarters. In the US, the economy is expected to be borne up by fiscal expansion and the depreciation of the Dollar, the size and length of which are a matter of concern.

In the absence of signs of economic recovery, the central banks and fiscal authorities are trying to sustain the expectations of the economic agents so as to avoid a new negative demand shock which would make the situation still more complicated. However, in this process the margins of political manoeuvre are becoming smaller and smaller.

A clear example of the foregoing is the monetary policy of the US. The interest rate, having dropped by a quarter of a percentage point in June, is now at 1%, very close to the levels which would endanger the stability of the financial system[1]. Therefore, the Federal Reserve seems to be willing to take on "non-conventional" monetary policy measures. One possibility is to buy public debt, which would put downward pressure on the long-term profitability of the economy, favouring consumption and investment. In fact, a lesson learned from the Japanese experience of the nineties is that to avoid the stagnation of activity and to maintain the health of the financial system is not sufficient to lower short interest rates. It is also necessary that the debt curve is not too steep. Pressure to raise long-term interest rates comes from fiscal expansion, in the medium term, and from certain economic data which, from time to time, contribute to increase optimism with regards to a recovery. However, fear of deflation and the possibility that the Federal Reserve may start to buy public debt are acting as compensating factors for this pressure.

In this context, the prices on the stock market also increase, supported by expansionary monetary policies. If the risk of deflation is dominant in the market, the interest rates will continue to fall in all the terms of the curve for the coming months. In fact, currently the futures markets on interest rates continue to discount a significant probability for this scenario. However, if this risk is finally not so important and the signals for economic reactivation are clear, there may be a correction to increase profitability. The evolution of the stock market would have acted as a leading indicator of this recovery. In other words, the current situation

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[1] Some authors estimate that 0.75% is the limit below which monetary funds may suffer losses. See, for example, Logan and Denilson (2003) "Unconventional monetary policy on the horizon", Drescher Kleinwort Wasserstein Research.
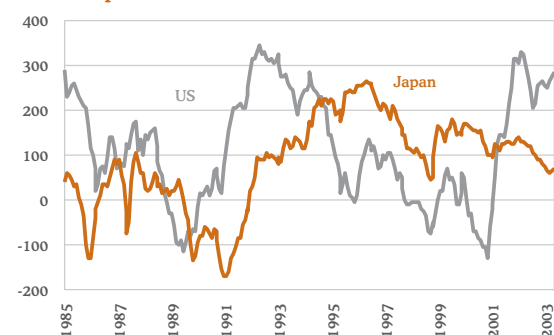
Graph 1.1.
US: GDP growth and business confidence
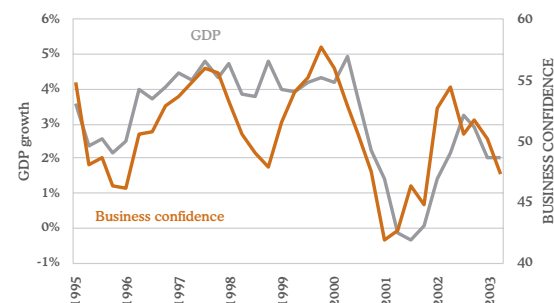
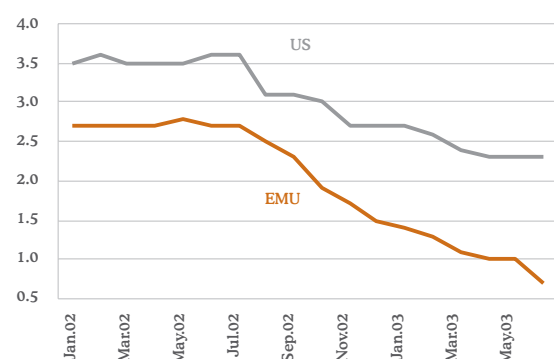Source: ISM and BEA

Graph 1.2.
Slopes of the debt curves (10 years-3 months)
In basic points

Source: Federal Reserve and Bank of Japan

Graph 1.3.
Forecasts of growth for 2003 according to the Consensus Forecast

Source: Consensus Forecast

Table 1.1. GDP growth

	2002	2003	2004
OECD	**1.8**	**1.6**	**2.3**
US	2.4	2.0	3.0
EMU	0.8	0.5	1.5
UK	1.9	1.7	2.4
Japan	0.1	1.0	1.0
Developing countries	**4.4**	**4.5**	**5.4**
Latin America	-0.6	1.4	3.4
Countries in transition	**4.0**	**4.0**	**4.1**
WORLD	**2.9**	**2.8**	**3.6**

Source: IMF and BBVA

Table 1.2. Inflation

	2002	2003	2004
OECD	**1.6**	**2.0**	**1.7**
US	1.6	2.4	1.8
EMU	2.2	2.0	1.8
UK	2.2	2.7	2.5
Japan	-0.9	-0.5	-0.4
Developing countries	**5.4**	**6.0**	**5.3**
Latin America	9.3	11.2	8.1
Countries in transition	**11.1**	**9.5**	**7.4**
WORLD	**3.5**	**3.9**	**3.3**

Source: IMF and BBVA

would mean that the value of bonds is not justified by fundamentals, but that the behaviour of the Federal Reserve is the cause of new "bubbles".

Less solid economies

What is the forecast for the macroeconomic scenario for the short term? The recovery of world activity will continue to depend crucially on the behaviour of the US. The drops in interest rates, fiscal expansion and the depreciation of the Dollar, which is more important than was expected, will serve to support the growth of the economy, which, in the coming quarters, may reach figures of around 3%. In other words, whilst waiting for a reactivation in investment, a process which is turning out to be more costly than expected, the economic authorities are making an effort to sustain consumption and to favour exports.

However, in the medium term, the economy will continue to find certain significant restrictions for a solid re-launching of its activity. The principal limitation is the scarcity of national saving, deriving from the fact that, in an environment of economic slowdown, private saving has scarcely grown from the minimum levels registered in recent years and public saving has descended significantly as a result of fiscal expansion. This means that dependence of the economy on foreign saving has increased, given the widening the deficit in its current account balance. The levels of deficit are already greater than 5% in terms of GDP, which is a factor of risk, not only for the US, but also for the rest of the world. This could be corrected in coming years, although a sudden change should be avoided. This means that moderate growth is required in the US together with an additional devaluation of the Dollar, although this latter factor is limited by the situation of the economies in Japan and Europe.

More specifically, it is difficult for the US economy to enter a period in which growth is greater than its long-term tendency. However, with the exception of new negative demand shocks, it is not foreseeable that the cyclical component of activity will be more negative, one of the factors which could lead to an increase in the probability of deflation.

The reduced growth in activity in Europe continues to be a deception. In fact, in 2003, it was placed at some 0.5%, a quarter expected growth in the US, and the falling off in activity is being even more significant than that observed in the economy of the US in recent months. What is true is that together with the negative factors, such as over-investment in technology or losses stemming from investments in the US, economic recovery is being slowed down by the appreciation of the Euro and does not receive much support from policies of demand. Growth in 2004 will be around 1.5%, provided that there is an improvement in the international economic environment and a recovery in the confidence of consumers and businessmen.

Therefore, in an environment of moderate growth, short-term interest rates will remain at a minimum level until the end of the year, with a further drop in European official interest rates after the summer. In 2004, the increase in interest rates will be moderate and will have the objective of correcting part of the high volume of current liquidity.

2. The real sector

The end of internal impulses and the deterioration of competitiveness will prevent economic acceleration in 2004
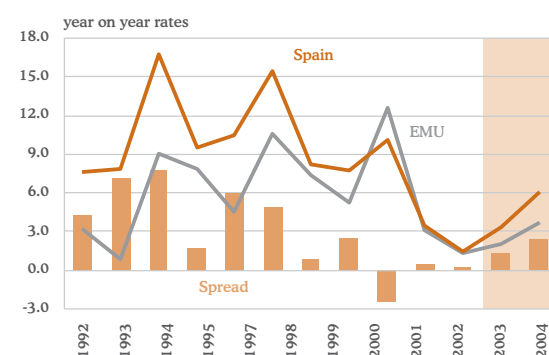
The Spanish economy will grow in 2003 and 2004 at an average rate of 2.5%, 0.5 percentage points above the rate of 2002. However, the similarity of the rate of increase for the GDP for this year and the next will be the result of different factors supporting growth. The new drop in real interest rates and the impulse of the Income Tax reform are the main drivers of the increase in expenditure of the economic agents in 2003. On the other hand, in 2004 neither of these factors will have the same accelerating effect on activity, being substituted as the year progresses by the consolidation of international recovery which will compensate, at least partially, the exhaustion of domestic impulses.

This improvement in the external economic environment will facilitate the recovery of the households confidence and their financial wealth in equity, balancing the negative effect on activity of the foreseeable increase in real interest rates and allowing the levels of expenditure on consumption to remain at about 2.5% for next year. International recovery will positively affect investment in equipment, specially if we consider the relatively high rate of capacity utilization in Spanish industry, given the cyclical position of the economy. This variable was 78.1% for the year 2002, its highest average ever.

However, the expansive effect of external demand will be limited by the economic imbalances accumulated in recent years. An inflation relatively greater than those abroad, especially with regard to those of the EMU as a whole, is giving rise to the gradual appreciation of the real effective exchange rate of the economy, a process which has become intensified in 2003 and which will be felt even more strongly in 2004. To this accumulated inflation gap with regards to the EMU, it must be added the appreciation in the exchange rate between the Euro and the Dollar for the second year running. The result of this is an increase in imports. It

Graph 2.1.
### Exports of goods and services

Source: INE, Eurostat and BBVA

Table 2.1. Macroeconomic table

sa data % a/a	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4	2001	2002	2003	2004
Household consumption (1)	1.5	1.9	2.1	2.4	2.8	2.7	2.8	2.6	2.5	2.6	2.5	1.9	2.5	2.6
Public consumption	3.9	4.2	4.3	3.5	3.7	4.0	3.9	3.0	2.8	3.0	3.1	3.8	3.9	3.2
Gross Fixed Capital Formation	1.5	2.4	2.9	3.3	3.2	2.3	2.3	1.7	1.7	1.2	3.2	1.4	2.9	1.7
Capital goods and other products	-2.4	-0.3	1.5	3.0	3.5	4.0	4.0	4.5	5.0	4.5	0.3	-2.2	3.0	4.5
Construction	4.9	4.5	4.1	3.5	3.0	1.0	1.0	-0.5	-1.0	-1.5	5.8	4.5	2.9	-0.5
Inventories (*)	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Domestic demand (*)	**1.9**	**2.8**	**3.0**	**2.9**	**3.1**	**2.9**	**2.9**	**2.5**	**2.4**	**2.4**	**2.7**	**2.3**	**3.0**	**2.5**
Exports	4.2	5.9	5.5	4.0	3.0	1.0	3.0	5.0	7.0	9.0	3.4	1.4	3.3	6.0
Imports	4.3	7.7	8.0	5.5	4.0	1.2	3.0	5.1	7.0	8.0	3.5	2.2	4.6	5.8
Net exports (*)	**-0.1**	**-0.7**	**-0.9**	**-0.6**	**-0.4**	**-0.1**	**-0.1**	**-0.2**	**-0.1**	**0.1**	**-0.1**	**-0.3**	**-0.5**	**-0.1**
GDP at market prices	**1.8**	**2.1**	**2.1**	**2.3**	**2.7**	**2.8**	**2.8**	**2.3**	**2.3**	**2.5**	**2.7**	**2.0**	**2.5**	**2.5**
Agriculture	-2.2	-6.1	-3.0	-3.6	-3.1	5.7	6.6	0.0	-0.2	-1.2	-3.1	-2.1	-1.1	1.3
Industry (2)	2.3	2.9	2.5	0.8	-1.1	0.6	2.0	2.0	1.7	1.8	1.4	1.0	0.7	1.9
Construction	5.3	4.9	4.0	3.1	3.1	2.9	1.5	0.1	0.3	-0.1	5.4	4.9	3.3	0.4
Services	1.9	2.2	2.2	2.4	3.1	3.1	3.0	2.5	2.5	3.0	3.2	2.2	2.7	2.7
Market	1.4	1.6	1.7	1.8	2.5	3.2	2.9	2.8	2.8	2.9	3.3	1.9	2.3	2.9
Non-market	3.5	4.0	4.0	4.2	4.8	2.9	3.2	1.5	1.5	3.1	2.9	3.5	4.0	2.3
Net tax on products	-0.7	0.9	1.0	7.2	12.3	4.4	3.4	4.5	4.5	4.5	2.4	2.1	6.1	4.2

(*) Contribution to GDP growth   (1) Includes the ISFLSH
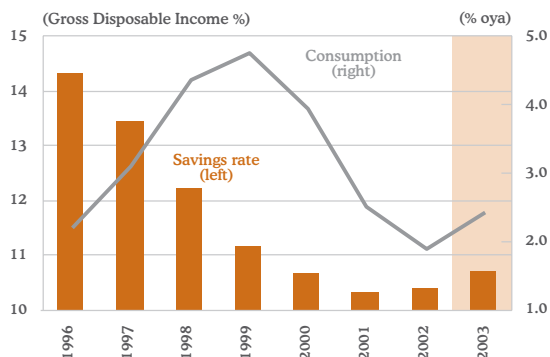(2) Energy and Industrial income

Source: INE and BBVA
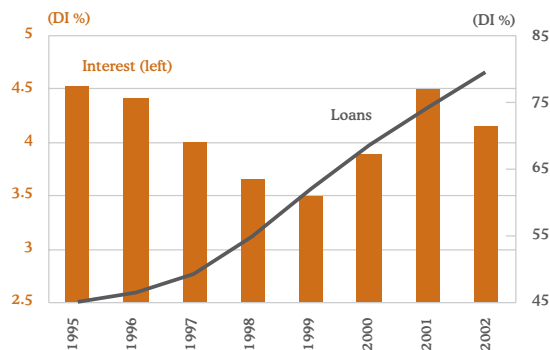
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Graph 2.2.
Real long-term interest rates
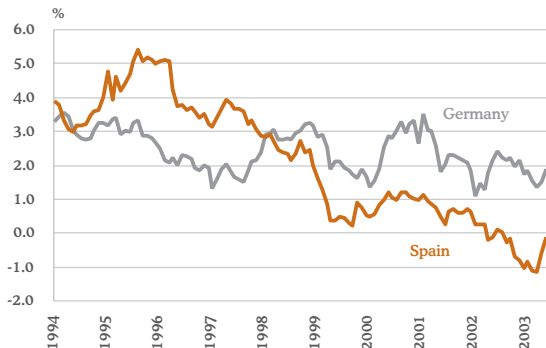
Source: BBVA

Graph 2.3.
Savings and consumption rate in families

Source: Bank of Spain, INE and BBVA

Graph 2.4.
Households and ISFLSH*
Loans and interest paid

* ISFLSH: Non-profit making institutions serving households
Source: Bank of Spain

continues the loss in the domestic market share of recent years. In this way, although the Spanish external imbalance within the EMU neither press for depreciation on the common currency nor does it press for an increase in interest rates (adjustment by prices), but it does cause a smaller increase in activity and employment within the Spanish economy (adjustment by quantities).

Finally, construction, the component of activity which has most contributed to maintaining the positive differential of the growth of the Spanish economy with regards to that of the EMU in recent years[1], will intensify the deceleration which has been present since half way through the year 2002. The exhaustion of the transitory demand shock on disposable income in households and the high level and sustained increase in prices in recent years will help to moderate the demand for housing, which will, in turn, as was the case in other changes in the cyclical phases, affect residential construction, making it less dynamic. With regard to public works, the electoral cycle, especially in the Regional Administrations, and the high volumes of public works awarded in recent years, means that we can envisage that there will be interannual decreases in the activities of this sub-sector.

In synthesis, the gradual ending of the impulses on domestic demand will make the Spanish economic scenario for 2004 relatively more dependent on the external environment. Therefore, the confirmation and consolidation of international recovery will be a determining factor for the growth expected for next year.

Consumption in 2004, a question of confidence

Household expenditure on consumption will grow by around 2.5% in the years 2003 and 2004, a little more than half a percentage point greater than the growth registered for 2002 (1.9%). Since the 4th quarter of 2002, consumption has been registering ever-increasing annual growth rates, driven on by the recovery of automobile purchases and the slight increase in retail sales. Furthermore, the evolution of indicators such as nights stayed in hotels is evidence of the growth for the first half of 2003 of expenditure in tourism by the Spanish households.

Among the determining factors of household consumption oscillations, the principal factors behind its expansion in 2003 are real disposable income, real interest rates and the component of fixed income of financial wealth, which partially compensate the negative impact of equity. The growth in employment, which has increased in the first months of 2003, according to data provided by the Quarterly National Accounts, the Labour Force Survey and the number of people registered with the Social Security is being the main support for the disposable income in Spanish households, given that the real salary increases remain relatively low due to the surprises in inflation which have been registered with regards to expectations. In the second place, the Income Tax reform, which will increase the households income in 2003 by 3,000 million Euros, and a further 600 million in 2004, has also had its effect. Assuming that approximately 50% of this additional income is dedicated to increase saving (a variable which in 2002 stopped the reduction begun in the second half of the nineties), approximately 0.3 or 0.4 percentage points in the growth of consumption will be the direct result of the drop in direct taxation.

Another support for household spending in 2003 is the drop in interest rates, which, in real terms (ex post), are negative. In this way, present consumption is not only made cheaper as opposed to future consumption (saving), but this also meant that in 2002, a period of fast increase in households indebtedness, there was a reduction in the debt service.

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[1] Approximately 75% of the growth differential between Spain and the EMU for the 2000-2002 period can be explained exclusively by the contribution made by investment in construction.

In 2004 the contributions of the different explanatory factors of consumption will quite possibly change and not only due to the lowering of taxation, to such an extent that the demand will maintain growth rates close to those of 2003. Thus, the accelerating effect of interest rates will disappear in 2004, a year in which, with the recovery of the EMU and the increase in inflationist perspectives, there will be a rise in interest rates. Furthermore, the moderation of inflationist expectations with regard to 2002 will bring about a real increase in interest rates. Next year, the additional positive impulses on consumption will have their origin in the improvement of the external environment, which will mean the consolidation of the incipient recovery of households confidence and equity markets. This element will substitute the impulse coming from increase in real estate prices.

Construction begins to adjust

Following five years in which investment in construction grew more than the GDP, in 2003 both these figures have shown a similar evolution (2.9% and 2.5%, respectively) and the latter will grow considerably less than the former in 2004. An average decrease of 0.5% is forecast.

The current situation of the activity indicators for the sector does not give us the figures of adjustment forecast for the coming quarters. Thus, the domestic consumption of cement grew between January and May 2003 by 2.4%, the same rate as in the fourth quarter of 2002, which interrupted the deceleration that had been present since half way through 2001. Furthermore, the business climate and the order book in the sector showed, for the first part of 2003, values which, although not greater than the average values for the year 2002, were greater than those for the end of the previous year, a period in which the perspectives for the sector deteriorated. What is more, if we examine the order books more closely we can see a significant improvement in public works and the stability of housing figures in the "higher" zone of the answers to the survey.

However, there are signs which allow to judge that the incipient deceleration of the sector will be intensified as a result of the lower expenditure made on public works by the General Administration.

With regard to residential building, there has been a reduction in the sales of new houses. Thus, in accordance with data supplied by the *Asociación de Promotores* (Real Estate development Association) of Madrid, the time needed to sell a dwelling increased from nine to fourteen months between in the last year. When the time to sell a residential development increases to 18 or 20 months, the estimated period to finish the building construction, the beginning of new works slows down so as to maintain the stock of new housing for sale. This behaviour will put a brake on real estate promotion for the second part of 2003, reducing the number of new dwellings being built to around 460,000, almost 10% lower than the figures for the beginning of 2002[2]. The deterioration of the housing affordability ratios in recent years will limit the growth of housing demand and will bring a moderation of housing supply, which will be practically stagnant in 2004. The costs of mortgage financing will grow for the first time since the year 2000, with the support of the reference interest rates.

As a result of the evolution in house prices, which have increased by more than 10% a year since the second half of 1999, the affordability rates continued to deteriorate in 2002, more than compensating the effect of the decreases in interest rates in the mortgage market. Thus,

[2] In the first quarter of 2003, 159,766 new dwellings were approved by the Architects' Association, with an annual increase of 14.3%. However, this does not mean an acceleration in the beginning of new dwellings. Historically, the number of projects approved is greater than the number of dwellings initiated given that the best sale of a plot of land is made by using a project for a house which has been approved by the architects' association, even though, the dwelling may not be completed in the estimated time period.

Graph 2.5.
Growth in wealth

Source: Bank of Spain and BBVA

Graph 2.6.
Consumer confidence
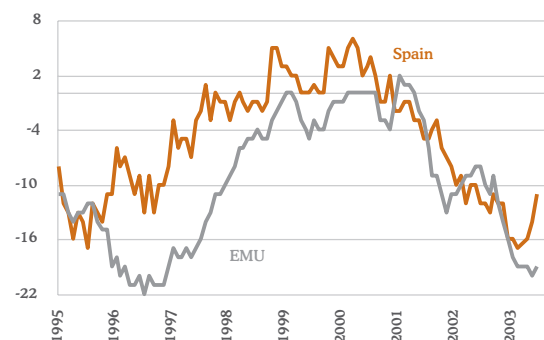
Source: European Commission

Graph 2.7.
Cement, consumption

Source: Oficemen

Table 2.2. Investment in construction
National Accounting and Construction Survey

% oya	2000	2001	2002	2003	2004
CNTR	6.1	5.8	4.5	2.9	-0.5
Construction Survey	6.9	7.8	5.6	3.5	0.7
Building	8.6	6.7	7.4	6.0	3.0
Public Works	1.1	10.4	3.1	0.0	-1.0

Source: INE, Ministry of Public Works and BBVA

Graph 2.8.
Investment in equipment and other goods

Source: INE and BBVA
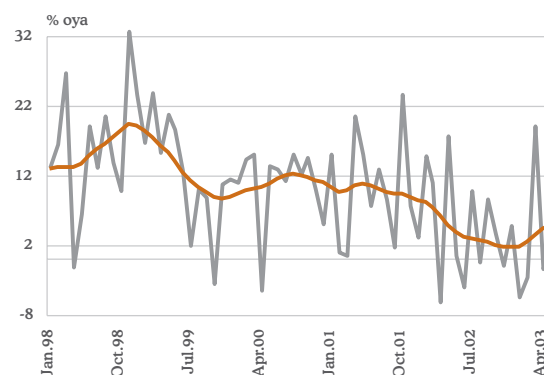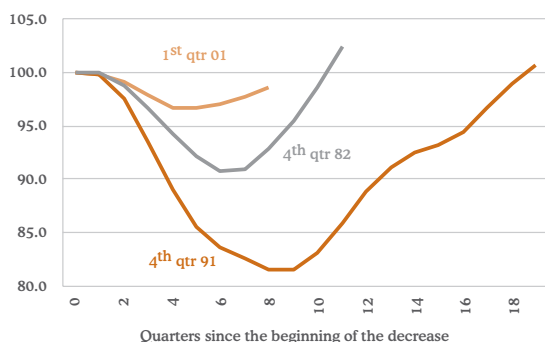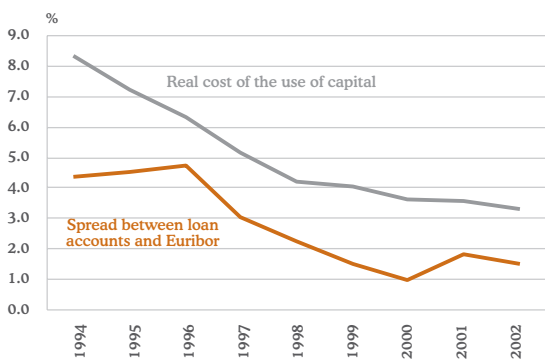
Graph 2.9.
Financial cost of investment

Source: Bank of Spain and BBVA

in the last quarter of 2002, in order to access to a medium-sized dwelling, it was required as much as 48% of an average gross salary for the monthly mortgage payments, which could be reduced to 38% after tax rebates. These ratios correspond to average housing prices which, at the end of 2002, were equivalent to six and a half times the average annual salary. This tendency will end up eroding the demand for houses, especially for families whose labour conditions are most precarious or for families in lower income brackets. Given the tendencies forecasted for prices and interest rates, this deterioration in the affordability ratio will continue in 2003 and, by the end of the year, may reach 50% of the average gross salary.

On the other hand, public works will be affected in 2003 and 2004 by the negative phase in the electoral cycle, which will be more noticeable in the local governments than in the Central Administration. However, notwithstanding the foregoing, estimations continue to point towards a decrease in the public works activities in comparison with previous stages, given the partial financing provided by EMU funds.

Investment in capital goods, consolidating recovery

Investment in capital goods and other products has experienced a recovery since 2002, following four quarters of decrease. The evolution of investment is being significantly less volatile than in previous cycles, with less abrupt increases and decreases. Thus, there were only two periods in which significant decreases in investment were registered, 10% (between the end of 1982 and 1984) and 20% (from 1991 to 1993). A period of recovery has currently been initiated following a period in which there was a decrease of a mere 3.4% in a year. The smaller decrease in investment that has been registered in this cyclical phase is due to the situation and perspectives of the real cost of the use of capital and the expectations for activity, which are very different from those which existed in 1982 and 1991. The real cost of the use of capital[3] fell in 2002 to 2.9% and it is estimated that for 2003 there will be a further drop. This minimum profitability required of investment projects together with a deterioration in activity which is relatively softer than in the EMU as a whole (as can be seen by perspectives of industrial climate, the evolution of the GDP or the consensus forecasts) means that we can expect that in the coming quarters this incipient recovery in investment will be consolidated, until it reaches an average growth in 2004 of 4.5%, 1.5 percentage points higher than 2003 (3%).

Finally, it should be emphasised the possible moderating effect on the recovery in investment of the gradual deterioration of the financial situation of companies. According to the Financial Accounts of the Spanish economy drawn up by the Spanish Central Bank, non-financial companies accumulated in the liabilities of their balance sheets corresponding to the end of 2002 long-term loans amounting to 55.6% of the GDP, 13.1% more than the previous two years. This increase, although it is justified by a structural change deriving from the nominal convergence achieved in the EMU, may be affecting the level of investment in the economy[4], given that it can be assumed that there is a certain level of restriction in the availability of funds. Thus, although the cost of the use of capital has fallen in the last two years, the differential of interest rates over the Euribor required by the banks was, in 2001 and 2002, above the minimum registered for the year 2000.

Exports are not sufficient to reduce the trade deficit

With the information available to April, external transactions of goods in the Spanish economy consolidate the recovery initiated half way through 2002, with accumulated rates for the first four months of 2003 almost

[3] An approximate figure through a long-term rate discounting inflation and weighting the price of investment in relation to the general level of prices in the economy.
[4] In this same period, investment in capital goods reduced its weight in the GDP from 11.6% to 10.4%.

the same as those registered for the end of 2002. Thus, exports grew by 6.7% in real terms in the first quarter of 2003, 0.4 percentage points more than in the 4th quarter of 2002. On the other hand, imports registered rates of 8.9% and 10.4% in these two periods.

Transactions of capital goods had the most dynamic evolution, with increases in the first four months of 2003 of 14.2% for exports and 12.2% for imports. The dynamism in the exports of these kinds of goods is certainly noticeable given the uncertainty existing in the external markets during the first few months of 2003. Notwithstanding the foregoing, this real increase in sales was produced with drops in the indices of unit value (a proxy for price) for this kind of goods (-5.5% in the first four months of 2003). On the other hand, the growth in imports of equipment is coherent with an economic scenario in which the domestic demand and the Spanish industrial climate remained relatively positive in comparison with the EMU as a whole.

However, it is probable that for 2003 as a whole the trade deficit will increase to 6.5% of the GDP, 0.5 percentage points more than the year 2002. In a National Accounts basis, the draining of the external demand on the GDP will be 0.5 percentage points in 2003, given that although the exports will increase with the recovery of international trade, imports will increase more intensely, supported both by the relative strength of the demand and by the continued appreciation of the real effective exchange rate of the Spanish economy. In 2004, the greater acceleration in exports (from 3.3% in 2003 to 6.0%) when compared with imports (from 4.6% to 5.8%) will bring about a lowering in the draining of the external demand on the GDP of up to 0.1 percentage points.

The balance of risks in the behaviour of the external demand for the Spanish economy is not compensated, but rather there is a greater probability that a deterioration greater than that forecasted will be experienced. Thus, there is a growing uncertainty concerning the expected recovery of the EMU, with delays in the initiation by the consensus of analysts and cuts in intensity. In the event that a more moderate scenario than expected is confirmed (an increase in the GDP of the EMU of 0.5% in 2003 and 1.5% in 2004) there will be a slower growth rate in Spanish exports. Furthermore, the stance of internal demand, with accelerated consumption and recovery in investment, may bring about a more rapid acceleration in imports than expected.

Greater dynamism in the labour market in 2003

The evolution of employment in the first months of 2003 has been greater than expected, with higher variations than those initially forecasted. This has brought about an interruption in the deceleration registered for the second half of 2002. In sectors, both employment by services and in construction have registered greater increases at the beginning of 2003 than at the end of 2002. This acceleration was especially intense in industry, which, between the 1st quarter of 2002 and the 1st quarter of 2003, changed from dropping by 2.5% per annum to increasing by 2.2%, in line with the recovery of industrial activity. Despite the dynamism of the labour market, this increase in the active population has meant an increase in the number of unemployed, which was 11.7% of the active population in the first quarter of 2003, 0.3 percentage points greater than the average for 2002. The dynamism in employment, with increases in National Accounts which are more than one percentage point lower than those of the GDP means that there is only a very moderate increase in productivity.

The expansive behaviour of employment in recent years is the result of a combination of three factors. In the first place, the moderate deceleration in activity (the minimum growth of the GDP was 2% in 2002). In the second place, the labour market has become more flexible in recent years, although it is true that this has been most noticeable in the mechanisms for joining or leaving the labour market (hiring modalities) than in the process of establishing salaries (collective agreements). In
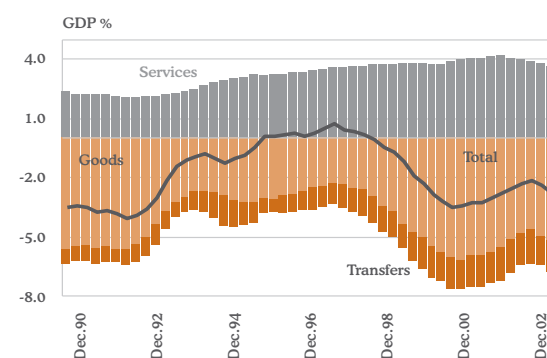
Graph 2.10.
Industrial climate
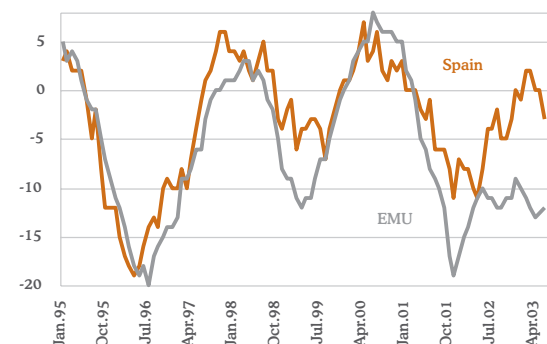
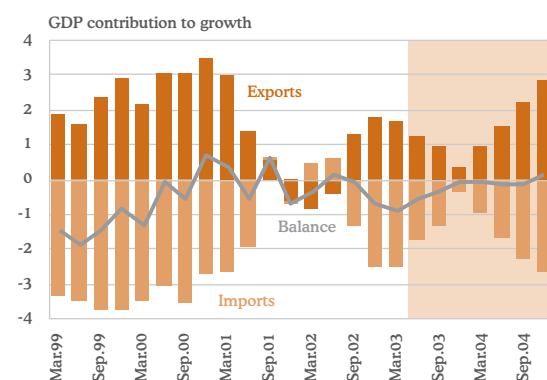Source: European Commission

Graph 2.11.
Current account balance
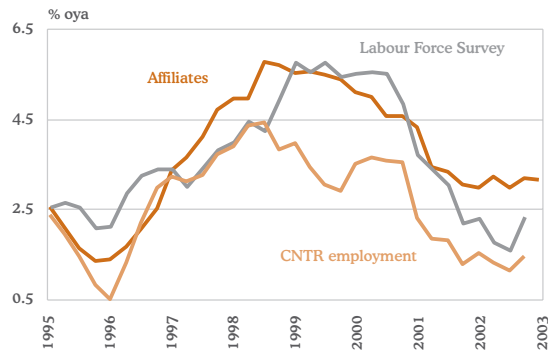

Source: Bank of Spain and BBVA

Graph 2.12.
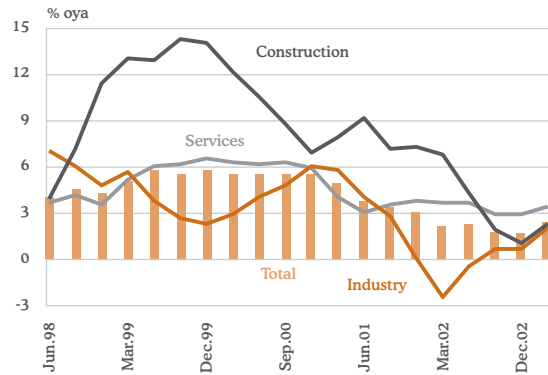### External demand

Source: INE and BBVA

Graph 2.13.
Employment

% oya

Source: INE, Ministerio de Trabajo and BBVA

Graph 2.14.
Occupation according to the Labour Force Survey

% oya

Source: INE and BBVA

the third place, in recent years, the real *ex post* salary moderation (due to surprises in inflation and not to salary moderation) has facilitated an increase in contracts. To this we must add the increase in the relative importance of the more intensive activities in labour, such as in the services and the construction sectors, and the significant increase in immigration. This factor has brought an additional flexibility into the labour market by increasing the geographical and sectorial mobility of the demand for employment in the economy, which has contributed to moderating the growth in salaries.

The perspectives for employment for the following quarters would seem to point to stable growth, with figures similar to those registered for the first quarter of 2003, which will mean an increase in the Labour Force Survey which will be slightly above the 2% registered for 2002. Despite this fact, the unemployment rate will increase by 0.3 percentage points, from the 11.4% of the active population 2002 to 11.7%, as a result of the greater increase in the active population (2.6%, 0.4 percentage points less than in 2002). However, these figures are subject to revision, depending on the changes that will be introduced by the *INE* (National Statistics Institute) in the Labour Force Survey as a result of the incorporation of the figures for the population corresponding to the Census for 2001. These new figures will have a relevant repercussion on the survey given that the active population used for the sample will be greater and will have a greater activity ratio, both as a result of the greater importance of the group between 16 to 55 years and for the greater relative weight of immigration.

These updates are part of a process which will culminate in a change in the base for the National Accounts between 1995 to 2000, which will bring about significant changes in the level and profile of the growth of the Spanish GDP.

Census, Labour Force Survey and National Accounts: new features in perspective

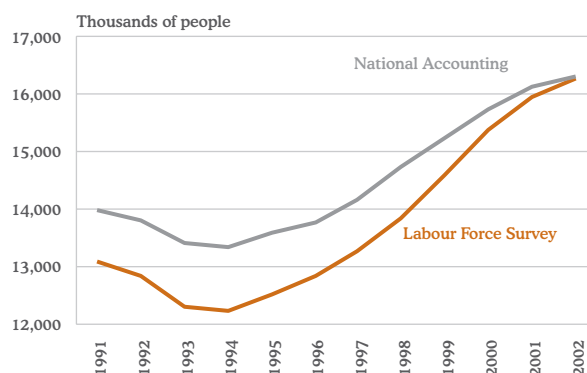## Employment in the EMU without Spain

Thousands of people

National Accounting

Labour Force Survey
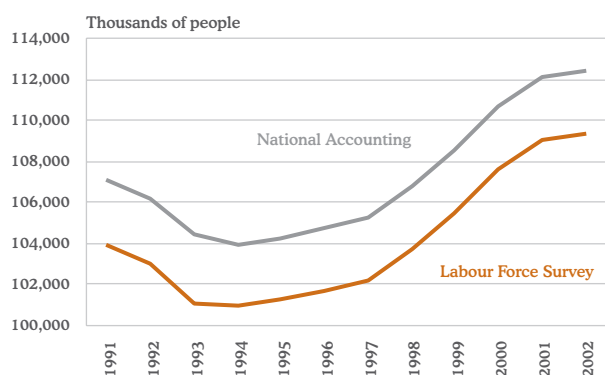
Source: Eurostat

Employment in Spain

Thousands of people

National Accounting

Labour Force Survey

Source: Eurostat

In the next few months, there will be certain relevant changes to the reference statistics elaborated by the *Instituto Nacional de Estadística* (National Statistics Institute). Thus, the Labour Force Survey will be adapted to the figures of population given by the new Census, corresponding to 2001 and the first results of which have already been distributed by the *INE*. The data of the Labour Force Survey corresponding to 2002 and the first quarter of 2003 will be published on July 25[th][1].

According to the Census for 2001, the total population of a working age is greater than that registered for 1991. With this, the Labour Force Survey, the reference for the labour market, which is still not adapted to the new Census, may be underestimating the labour force of the Spanish economy by almost 5%. Therefore, the updating of this statistic will result in an increase in the number of the active population and the number of people employed. The implications on the estimations of the GDP are immediate given that the Labour Force Survey is one of the inputs for elaborating the National Accounts (CN). Thus, and in the absence of more precise information, if we assume that the productivity of employment will not change significantly with regard to the estimations available[2], the updating of the census would bring about an increase in the level of the GDP which could be around 4% for the year 2002.

On the other hand, the partial adaptations of the Labour Force Survey to the new information available on the population have not yet been incorporated into the CN, which still uses the 1995 basis. This has led to a very different evolution in employment according to whether it is the one used by the Labour Force Survey or the CN, a phenomenon which does not occur in the other countries of the EU where, as in Spain, both statistics are drawn up with homogenous methodologies. Whilst the existence of different levels for the same variable (the number of employed people, for example) seems logical depending on the reference statistics, the profile should be similar regardless of the source. This is the case of EMU countries as a whole, with the exception of Spain, where the evolution of employment from both sources is by no means the same. Thus, if we take 100 as a base in the year 1991. The number of employed people according to the Labour Force Survey and according to the CN differs in all the countries of the EMU without Spain in only one percentage point eleven years later, in 2002. On the other hand, in Spain, the accumulated difference in this same period is eight percentage points in favour of the Labour Force Survey. Given that in 1991 employment according to the CN was 900 thousand people more than the Labour Force Survey, this difference was reduced by 2002 to such an extent that the difference in favour of the CN was 42 thousand people. Thus, the growth in employment reflected by the current Labour Force Survey, in the absence of the latest adaptation to the census, is greater than that given by the CN. Therefore, it is probable that the CN 2000 Base will not only modify the GDP but also its profile of growth, at least for recent periods. We can hazard a guess at how the profile of growth will be modified using simple hypotheses on the evolution of productivity and employment of the CN. In the first place, we can assume that productivity of employment will not be altered by the change to the 2000 Base, maintaining the evolution already given in the 1995 Base[3]. In the second place, we can assume that, as with the rest of the EMU, the profile of employment of the CN will be similar to that of the Labour Force Survey. Given these suppositions, the profile of growth of the Spanish economy would show relevant changes, with rates that are significantly greater than those estimated to date in the years 1999, 2000 and 2001 and, on the other hand, the existence of a crisis at the beginning of the nineties which was more serious than had been calculated to date.

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[1] This adaptation of the Labour Force Survey to the new population must be added to other relevant changes in the sample for 2001 as a result of the use of information provided by the municipalities, the adaptation of the hypothesis of immigration and the change in the definition of unemployment. For greater detail, see *"Mas Empleo, menos Paro y mas Actividad"*, (More Employment, Less Unemployment and more Activity) Economic Report, 2001, BBVA, page 150.
[2] The evolution of productivity can be inferred from other statistics on sectorial activity such as the Manufacturing Price Index. Furthermore, this simple supposition is equivalent to maintaining the known GDP per capita. It would seem to be unlikely that a fall in the real convergence could be caused by an improvement in the available statistics.
[3] It is probable that the level and/or growth of productivity will change with the CN 2000 Base, although the low level of growth which has occurred since 1995 means that it is unlikely that this correction will make the figures significantly lower.

GDP growth
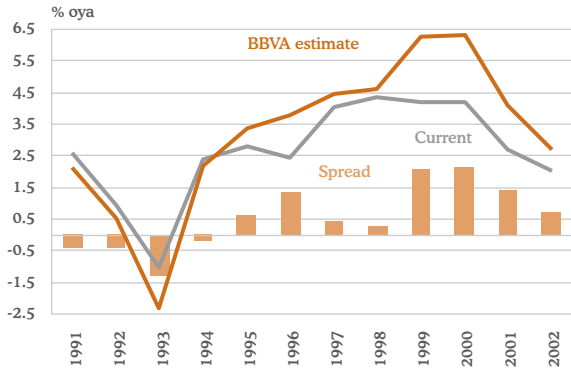
Source: INE and BBVA

GDP per capita, determining factors 1995-2002

Average annual rate	Spain	Canary Islands
Y/POB	2.8%	1.6%
Y/L_{CN}	0.7%	-0.5%
L_{CN}/L_{EPA}	-1.1%	-1.7%
L_{EPA}/L^S	2.0%	2.2%
L^S/PE	1.0%	1.3%
PE/POB	0.3%	0.4%

Source: INE and BBVA

The differences between these sources means it is not possible to make an integrated analysis of the economy, as would be possible using the following formula which breaks down the GDP per capita into the productivity of employment, the unemployment rate and the proportion of the population of an age to work:

$$Y/POB = Y/L * L/L^s * L^s/PE * PE/POB$$

Where Y: GDP; POB: population; L: employment; L^s: active population; PE: population in age to work.

Using this formula with the employment of the CN and the employment rate and activity obtained from the Labour Force Survey would require the application of a correcting factor which would have to be identical to the discrepancy between the evolution of the employment of the CN and of the Labour Force Survey. The result in the accumulative annual average for the Spanish economy can be seen in the table above. So, the correcting factor subtracted 1.1 annual percentage points from the growth in GDP per capita for the 1995-2002 period which is currently given at 2.8% (see the table above). In other words, a hypothetical total adjustment of the employment given by the CN to the current employment profile of the Labour Force Survey would increase the growth of the annual average GDP per capita for the 1995-2002 period by 1.1 percentage points provided that the other components and, especially, productivity remain at the figures we already have. As is logical, it is probable that there will be changes not only the productivity of employment but also in the employment and activity rates of the Labour Force Survey, statistics which have still to be rounded up or down to correspond to the new Census of 2001.

If these are broken down on a regional basis, the results are even more noticeable. For example, in the Canary Islands, a correcting coefficient which, in absolute terms, is even larger than the growth of the GDP is required. In other words, if the GDP had been projected using the results of the Labour Force Survey and if the productivity had remained the same, growth in the Canary Islands for the 1995-2002 period would be double the figure that is given at present.

Public works: moderation in perspective

Public works: value of works carried out
% oya and trend
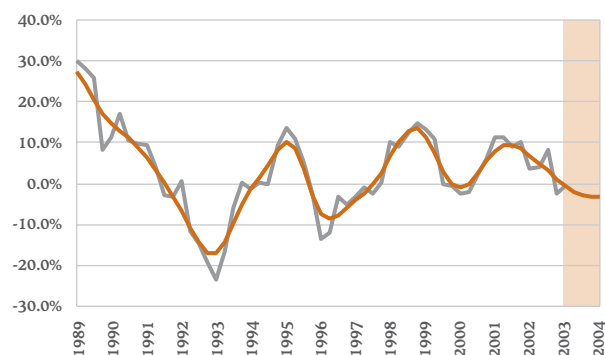
Source: Eurostat and BBVA

Infrastructures Plan: 2000-2007

Source: Ministry of Public Works

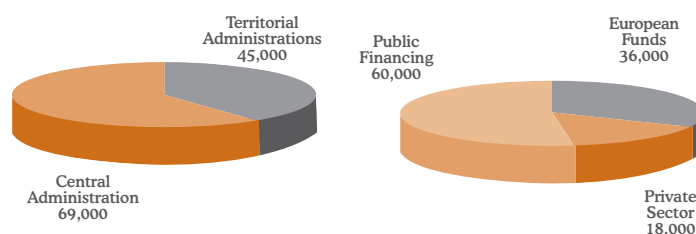In 2002, the heavy investment required by the National Infrastructures Plan and the efforts made by the territorial bodies, both regional governments and town councils, meant that activity in the public works segment continued to expand, the volume of works being greater than those corresponding to previous years. However, whilst the volume of works reached an all time high, the segment lost a certain amount of dynamism, which was seen in a slowing down of the rhythm of annual growth from 10.3% to 3.1%.

In the last months of 2002 and the first months of 2003, activity in the public works segment showed a certain tendency towards stagnation, even showing negative variation rates. This evolution can be placed within the tendency begun midway through 2001 and could mean that the volume of works for 2003 will be similar to that corresponding to 2002, with an average variation rate close to zero. There could be a slight reduction in activities giving rise to an annual average variation rate of around -1% in 2004.

The consolidated budget for Central Administration Expenditure consider for 2003 real investment of almost 10,000 million Euros, which means an increase of 2.5% over the consolidated public investment for 2002. To this we must add the heavy investment effort made by certain of the principal organisms which depend on the State, such as *AENA, GIF* and *Puertos del Estado*, which will together make investments for a total of more than 6,500 million Euros, with an increase of 20% when compared with the figures for 2002. As a whole, these investments will mean an increase of 8.7% in nominal terms on the investment in public works made by the Central Government and the most important organisms which depend on the General Government. However, the budgetary pressures of the autonomous organisms may postpone the effective execution of part of this investment, and so the real annual growth for public works will be lower than that given in the budgets.

Whilst the flow of European Funds and the investment effort made by the Public Administrations, within the framework of the development of the Plan of Infrastructures 2000-2007, guarantee a high level of activity in the segment of public works and a certain stability in its development in the short to medium term, we can expect that, following local elections of the second quarter of 2003, certain regional governments and Town Councils will decrease their investments and consequently the volume of activity will also decrease. This has occurred in the year following the local elections on the last three occasions, where there was an average decrease in total investment of 4.2%, 5.7% and 1.3% in the years 1991, 1995 and 1999 respectively.

A possible reduction in the investment made by territorial bodies of around 5% in real terms would mean the public works would stabilise in 2003. Likewise, following the general elections at the beginning of 2004, we can expect a moderation in the Central Administration investment in public works, which could bring about a drop of 1% in the activity of the segment in 2004.

Graph 3.1.
Inflation
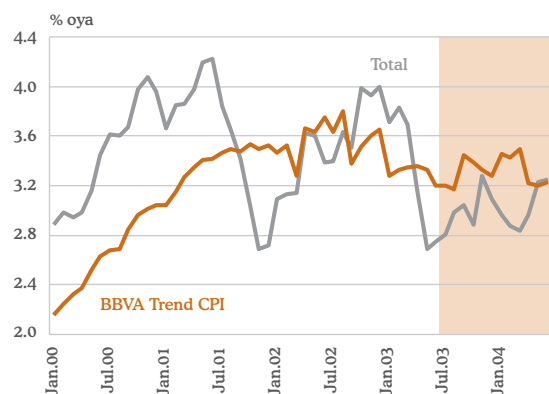

Source: INE and BBVA

3. Prices and salaries

Inflation: following the rounding up of figures, stabilised perspectives

The perspectives for inflation in the Spanish economy show a relative moderation, although inflation will remain above 3% in 2003 and 2004 (3.2% and 3.1% respectively). More stable measurements for inflation in consumer prices, such as the IPSEBENE (core inflation) or the BBVA Trend CPI also show a deceleration for 2003 (from 3.7% to 3.1% and from 3.6% to 3.3% respectively), with the figures stabilising for 2004. These figures are lower than those registered for 2002 for each one of the inflation measurements mentioned.

This moderation in the tendency towards inflation in the Spanish economy with regard to 2001 and 2002 is the result of the favourable behaviour of the determining factors in the evolution of prices, but it is also the result of the comparative effect of the exchange from Peseta to Euro in 2002, which brought about an increase in the level of prices in the Spanish economy and an increase in inflation for the year 2002. Furthermore, last year there was an increase in taxes which has not been repeated in 2003.

There are various factors which limit the expectatives of inflation. On the one hand, the growth for the years 2003 and 2004 will not be greater than its potential growth, which is around 2.7%, which means that the negative output gap will be maintained and the pressure of demand on prices will be limited. However, the maintaining of a high commercial deficit and current account deficit suggests a relative strength in internal demand in general and, more specifically, in consumption, which means that we cannot expect significant reductions in inflation. On the other hand, the evolution and perspectives of the exchange rate, with an appreciation of the Euro against the Dollar of 18% year on year in June and 14.9% in terms of a nominal effective index, facilitates the development of imported inflation. Thus, although the prices in Dollars for raw materials grew by 10% year on year by June, according to the index elaborated by The Economist, these prices fell by 9.8% over the same period when considered in Euros. In case of oil, despite the drop in prices following the uncertainty of war, the annual average for 2003 is 27 Dollars a barrel according to the Brent index, which is two Dollars more than the figures for 2002. However, this increase will be more than compensated by the expected appreciation of the Euro against

Table 3.1. Inflation

	Overall CPI			IPSEBENE			Residual CPI			Trend CPI		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Jan.	3.1	3.7	3.0	3.6	3.2	3.1	2.0	4.9	1.6	3.5	3.3	3.5
Feb.	3.1	3.8	2.9	3.6	3.3	3.1	2.0	5.3	1.3	3.5	3.3	3.4
Mar.	3.1	3.7	2.8	3.5	3.2	3.2	2.7	4.7	1.0	3.3	3.3	3.5
Apr.	3.6	3.1	3.0	3.9	3.3	3.0	3.5	2.6	2.2	3.7	3.4	3.2
May.	3.6	2.7	3.2	4.1	3.0	3.1	3.5	0.8	3.3	3.6	3.3	3.2
Jun.	3.4	2.7	3.3	4.1	2.9	3.1	2.3	1.4	3.3	3.8	3.2	3.2
Jul.	3.4	2.8	3.3	3.8	3.1	3.2	2.7	1.7	3.0	3.6	3.2	3.4
Aug.	3.6	3.0	3.3	3.8	3.2	3.2	3.1	2.4	2.9	3.8	3.2	3.4
Sep.	3.5	3.0	3.3	3.5	3.3	3.3	3.9	1.9	2.8	3.4	3.4	3.4
Oct.	4.0	2.9	3.1	3.7	3.1	3.1	5.4	1.4	2.6	3.5	3.4	3.3
Nov.	3.9	3.3	3.0	3.6	3.2	3.1	4.9	3.1	2.4	3.6	3.3	3.3
Dec.	4.0	3.1	3.0	3.6	3.2	3.1	5.0	2.6	2.2	3.7	3.3	3.3
Average	**3.5**	**3.2**	**3.1**	**3.7**	**3.1**	**3.1**	**3.4**	**2.7**	**2.4**	**3.6**	**3.3**	**3.3**

Sources: INE and BBVA forecasts

the Dollar (an annual average of 19% in 2003). In the third place, nominal salary tensions will tend to be reflected in increases in inflation, especially given the generalisation of the safeguard clauses.

With regard to the different components of the CPI basket, food prices will help towards the moderation in inflation in 2003 and 2004, continuing the tendency begun in 2000 following the health crises. On the other hand, the tendency towards inflation of industrial manufactured goods has gradually deteriorated throughout 2003, even considering the uncertainty deriving from the inclusion of sales and special offers in the CPI[1]. Last January, it was foreseeable that there would be an average increase in the prices of these products by 2.0% in 2003, 0.1 percentage points more than in 2002, a year which was affected by the rounding up of prices with the change from the Peseta to the Euro. In 2004, it is foreseeable that there will be an additional acceleration to a figure of 3.1%. This increase in inflation is consistent with the sustained increase in the demand for the consumption of non-durable goods, reflected in the slightly accelerated growth of retail sales. Furthermore, the industrial prices of textile products, which affects the corresponding CPI, are increasing ever more rapidly, which will affect the CPI. On the other hand, as can be seen in the graph on this page, the change in the base of the CPI seems to have brought about inflation in clothing and footwear. The average inflation for these kinds of goods from January 2002 to May 2003 was 4.8%, double the average for the period from 1994 to 2001[2]. Finally, the prices for services, the expenditure where the inflation caused by the exchange for the Euro by Peseta was probably most intensely felt, will stabilise at rates of around 3.7% and 3.8% in 2003 and 2004, below the 4.6% registered for 2002.

The inflation gap with the EMU as a whole will remain relatively stable in 2003 and 2004, being greater than the average of 1% registered during the period from 1996 to 2002. The reduction produced in this difference during the first half of 2003 (1.7 percentage points in January to 0.8 percentage points in May) is of a transitory character. This difference is affected by the greater increase in remuneration per wage earner in Spain, which is not compensated by more productivity or control of margins. Furthermore, the relatively greater pressure of the demand in Spain, with a growth which is closer to its potential than the rest of the EMU, also helps to maintain the gap in inflation.

Less moderation in wages and salaries reduces the margin of price deceleration

The evolution of wages and salaries in 2003 will be affected by the extension of the *Acuerdo Interconfederal para la Negociación Colectiva (AINC)*. In this agreement between businesses organisations and trade unions, it is recommended that increases in salaries to be negotiated in accordance with the objective for inflation (2%) plus a clause for salary revisions *"... within the limits deriving from the increase in productivity..."*, which, in practice, means the addition of up to one percentage point to increases in salary. Thus, the increase which was negotiated in the workers' agreements until May was 3.4%, 0.3 percentage points above that recorded for 2002 without clauses for maintaining purchasing power. Once these were included, the increases for the past year were 3.8%, 0.4 percentage points more than the accumulated rise registered until May.

Therefore, although the salaries agreed upon in the workers' agreements have managed to stop the acceleration that had existed since 2001, the generalisation of the shield against past inflation means that finally the costs for salaries and total remuneration (including costs not

[4] The volatility of the CPI has increased as it includes the oscillations in the prices caused by sales and special offers, whose intensity and duration depend on the relative strength of the demand for consumption. In other words, sales are not a regular factor in the behaviour of prices, therefore increasing uncertainty.
[2] The average in the first five months of 2003 was 4.2%, 1 percentage point lower than the figures for the same period in 2002, a period affected by the exchange rate of the Euro.

Graph 3.2.
Clothing and footwear
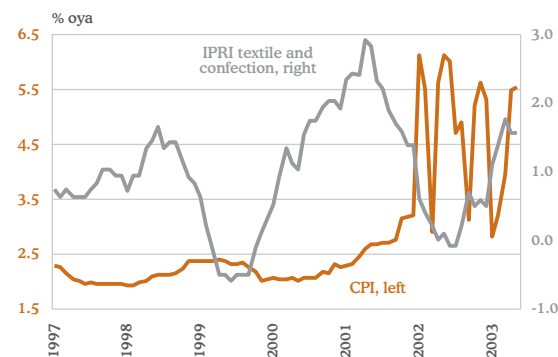
Source: INE and BBVA

Graph 3.3.
Growth in salaries and wages
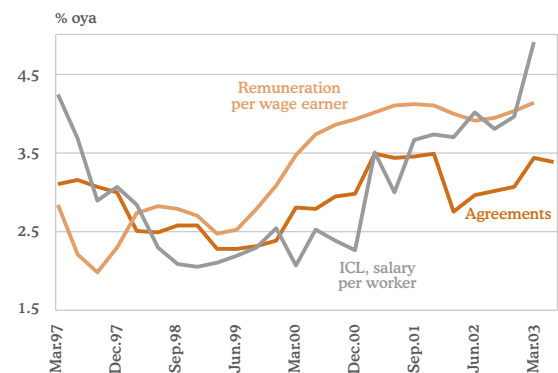
Agreements: Accumulated growth from January
Source: INE, Ministry of Labour and BBVA

Graph 3.4.
Economy
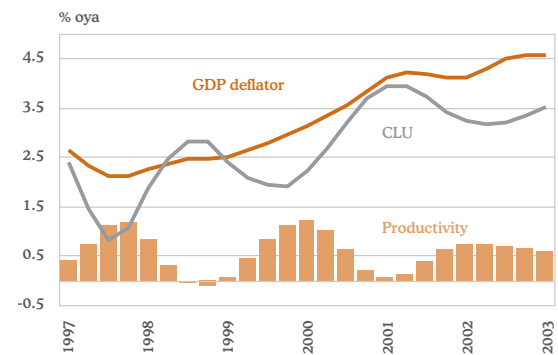
Source: INE and BBVA

included in salaries) show an ever increasing growth rate. This greater increase in the remuneration per wage earner is a risk for price increases, given the moderate increase in the productivity of employment, which is reflected in the acceleration of the Unit Labour Cost.

The perspective for 2003 and 2004 of growth of the deflator of 4.3% and 4.1% respectively, following the 4.4% registered in 2002, assume that there will be no significant increase in the current growth rate of salaries and wages, Thus, the growth in the remuneration per wage earner would be moderated by 0.1 percentage points in 2003, reaching 3.9%, and the productivity of employment would recover from the 0.7% increase of 2002. As with the growth in the prices of the CPI, there is a favourable comparison factor in 2003 as a result of the increase in indirect taxation which occurred in 2002.

More technology, greater deviation in salaries

Technological intensity in Spain, 1996-2000
(% intermediate purchases to the IT sector)

[Bar chart showing: IT sector 41.5%, IT intensive 8.5%, Average IT 3.2%, Poor IT 0.9%, with Average 5.4% line]
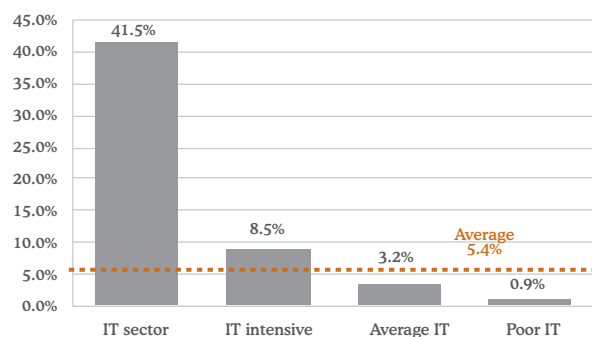
Source: INE and BBVA

Salary deviation per technological intensity in Spain, 1996-2000
(Ordinary salary-hour ratio per employee/labourer)

[Bar chart showing: IT sector 1.94, IT intensive 1.62, Average IT 1.42, Poor IT 1.42, with Average 1.52 line]

Source: INE and BBVA

For the last three decades, there has been an imbalance in the distribution of income and salaries in the majority of developed economies. This process has been especially evident in the case of wages for workers depending on their level of qualifications, where the difference between the most qualified and the least qualified workers became greater. From the beginning of the nineties, theoretical and empirical literature has defined three factors as the main drivers behind this phenomenon. In the first place, there have been a greater number of workers available with low qualifications, as a consequence of the intensification of world competition associated with the phenomenon of globalization. In the second place, the loss of influence of certain institutions in the labour mark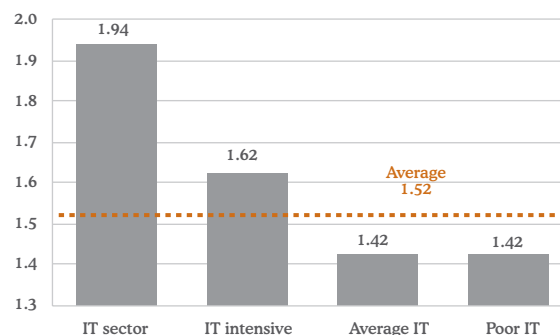et which helped to control salary distribution, especially Trade Union organisations, and minimum salary levels. Finally, in the third place, the restricting nature of qualifications connected with technical progress in the XX century.

Currently, there is a noticeable consensus in attributing a dominant role to the new technologies. In this sense, Information Technologies would have a complementary character along with human capital, in such a way that their distribution throughout the different economic sectors would increase the productivity of the most qualified workers and they would replace the most poorly qualified workers. If the relative supply of qualified workers is unable to satisfy the greater demand, the difference between the salaries of qualified and unskilled workers will become even greater[1].

Could this occur in Spain? The empirical evidence availables for the eighties and the first half of the nineties is not conclusive, although studies suggest at least the existence of a positive connection between salaries and the technological content of the productive branches[2]. In this Box, it shall make an initial and eminently descriptive examination of the effect that Information Technologies have had on salary deviation in Spain during the period from 1996 to 2000.

The series of salary deviation have been obtained from the *Encuesta en la Industria y los Servicios* (ESIS), drawn up the *Instituto Nacional de Estadística* (INE). Qualified workers are defined as those defined in the ESIS as *workers* (employees belonging to the contribution groups 1 to 7) and unskilled workers are defined as *labourers* according to the ESIS terminology (contribution groups 8 to 11). The salary deviation is defined as the quotient between the ordinary salary per hour worked comparing *workers* and *labourers*.

In order to appreciate the impact of Information Technologies, the technological intensity of the different productive branches is analysed. To do this, using the base of the *Input-Output Tables* of 1996-1998, a calculation is made of the proportion of intermediate purchases made in each branch from the sectors of Information Technologies. Following this methodology, it is possible to differentiate four large groups of productive branches: the productive sector for Information Technologies itself (which is, in turn, the most intense user of technologies, its purchases of Information Technologies being 41.5% of the total), a group of branches which are Information Technology intensive (defined as those in which the purchases of Information Technologies, 8.5%, is significantly higher than the average for the Spanish economy), a set of branches which have an average level of technological purchases) and, finally, a set of branches which are technologically backward (0.9% of technological purchases).

Finally, a series of salary deviation for these four groups is drawn up, using the average salary deviation of the branches included in each group, weighted according to employment in each branch in accordance with the series of *National Accounts* between 1996 and 2000 (number of jobs equivalent to full time employment).

The results would seem to confirm the hypothesis that the greater penetration of Information Technologies, the greater the salary deviation between skilled and unskilled workers. Thus, whereas for the Spanish economy as a whole, the ordinary wage per hour for skilled workers was, taken as an average between 1996 and 2000, 52% greater than that for unskilled workers, in those sectors which are Information Technology intensive, this difference was even greater. More specifically, the salary deviation in the Information Technology sector is as high as 94%, and 62% in technology intensive branches. On the other hand, in those branches whose level of technology is much lower, the salary deviation is 42%, which is lower than the national average.

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[1] For a list of works on this subject see *Quarterly Journal of Economics* (vol. 113, n°4, November 1998). You may also consult D. Acemoglu (2002) "Technical change, inequality and the labor market", *Journal of Economic Literature,* vol. 40, n°1, pages 7-72.
[2] See, among others, Castillo S. and J.F. Jimeno (1997). "Progreso Tecnológico, empleo y dispersión salarial". *Papeles de Economía Española* n°72, pages 214-230, and Torres V.X. (2002) "Dispersión salarial y cambio tecnológico en la industria española". *Investigaciones Económicas*, vol. XXVI(3), pages 551-571.

Graph 4.1.

Primary fiscal impulse and output gap
(%/GDP)

Source: Ministry of Finance

Table 4.1. Central Government financial balance
Jan.-May

Euro Millions	2003	2002
Deficit(-)/Cash surplus(+)	**231**	**-1,023**
(%/GDP)	0.03	-0.15
Nec(-)/Financing capacity(+)	**5,306**	**4,780**
(%/GDP)	0.73	0.66
Primary balance (National Accounts)	**12,053**	**11,718**
(%/GDP)	1.65	1.61

Source: Ministry of Finance

4. Fiscal policy

Fiscal and monetary policies guarantee an expansive policy-mix for 2003

The weakness of the economy in the Euro zone led the ECB to lower official interest rates by 50 bp in a meeting held on June 5th. After this recent drop in interest rates, the gap between the level of interest rates, which according to Taylor's rule, were required by the Spanish economy (3.0% in the 2nd quarter of 2003) and the observed interest rates (2.4% in the 2nd quarter of 2003) has widened. Therefore, the monetary policy for the Spanish economy may be considered to be expansive, given its cyclical position. Coupled with this, there is a moderately expansive fiscal policy (as a result of the Income Tax reform), which gives rise to significantly expansive policy-mix. In fact, according to the BBVA Research Department, the primary fiscal impulse in 2003 is being negative, which indicates that the structural component of the deficit is not only not being reduced, but also increasing. At a time in which the output gap is very close to zero, a more neutral fiscal policy would have made a greater contribution to stabilise the economy. The expansive stance of the fiscal policy in 2003 contrasts with the efforts made correcting the structural deficit in 2001 and 2002, years in which the fiscal policy has a restrictive stance. This means a change with regard to procyclical stance of the fiscal policy for the years 1993-1996, in which fiscal adjustment coincided with a period of moderate economic growth.
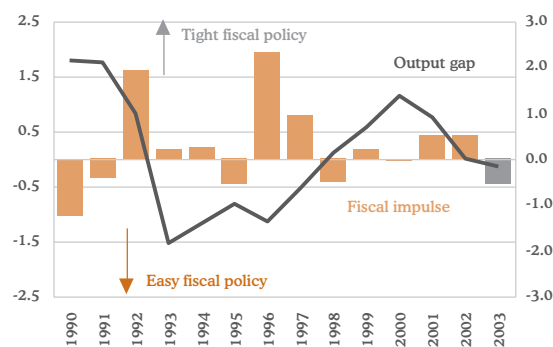
The positive revenue performance and the decrease in interest payments explains why Central Government's budget has registered, up to May, a surplus, in National Accounts basis, of 0.7% of the GDP

The figures published on the execution of the Central Government's budget up to the month of May 2003, in National Accounts basis, show a surplus of 0.7% of the GDP (5,306 million Euros), similar to that registered for the same period of the previous year (0.7% of the GDP). This result was reached with an increase in revenue of 1.2% and a stagnation in expenditure. Whilst these figures show a better behaviour than budgeted with regard to revenue (-4.7% year on year) and worse with regard to expenditure (-4.6% year on year), they should, nonetheless, be interpreted with caution. In the first place, as a result of the existence in 2002 of a transitory period which was prolonged until the month of June, due to the definitive taking on, by Regional Governments, of health care responsibilities, which had still not yet been transferred by December 2001. This not only breaks the homogeneity of the revenue and expenditure for 2003 and 2002, but it also affects the seasonality of the Central Government's budget.

In the second place, as a result of the positive effect of the different interest payment calendar, which has meant that this factor registered, up to May, a decrease of 2.8%, when an increase of 2.2% for the year had been projected. In fact, expenditure in a National Accounts basis, when interest payments are excluded, showed an increase of 0.6% up to May, which contrasts with the decrease of 5.7% which was projected for this item. However, the primary surplus up to May 2003 is a decimal point above that of the same period for the previous year, 1.7% and 1.6% respectively.

Furthermore, tax resources, which are growing at a rate of 1.6% year on year, are affected by various factors. The Income Tax reform, which has brought about a decrease in the revenue from withholds in the first months of the year, is not reflected entirely in tax collection. As the year progresses, we can expect a more moderate increase in this kind of revenue. In the second place, tax collection linked to labour income from the General Administration has change its periodicity to monthly rather than quarterly, which makes these figures appear greater than

those for 2002 (Royal Decree 594/2002). And, in the third place, a faster rhythm of tax refunds (31% more than in the previous year).

In a cash basis, the budget is practically balanced as opposed to a deficit of 0.1% up to May in 2002

For a detailed analysis of the different items for revenue and expenditure, it is necessary to examine figures in a cash basis. In the first five months of 2003, the operations of the Central Government had a slight surplus, 231 million Euros, 0.0% of the GDP, which implies a significant correction with regard to the 1,023 million Euros, -0.1% of the GDP, which was the accumulated figure for the same period in 2002. We must not forget, however, that in both years the data are affected by the beginning of the new regional financing system, and so it is difficult to determine to what extent this improvement is due to a more healthy position of the Central Government accounts or whether it is simply a reflection of a change in the seasonality of the figures. However, the balance contrasts with the deficit of 0.5% of the GDP which was projected for the year as a whole.

For the analysis of the revenue performance, we have considered the joint tax collection of the Central Government and the Regional Governments. This allows to compare the figures of 2002 and 2003 and, therefore, to evaluate the level of execution of the income budget for 2003. Thus, in aggregated terms, total income grew 4.2% year on year, more than the 1.6% projected in the General Government Budget for 2003. Tax collection has meant a fundamental contribution to this increase, as it grew by 5.9% year on year, as opposed to 3.6% increase budgeted. This dynamism can be explained by the favourable behaviour of the two main sources of taxation revenue, Income Tax and VAT.

Following the favourable evolution of the first months of the year, direct taxes will moderate its rhythm as the year goes on

With regard to Income Tax, the evolution seen up until May still does not completely reflect the impact of the new partial reform of the tax, which implies a reduction in the average withhold applied to income from employment and capital investment[1]. A similar thing happened

Table 4.2. State: Non-financial income (cash)

| January-May | 2003 | | 2002 | | % oya | |
Euro Thousands	Central Government	Total	Central Government	Total	Central Government	Total
TOTAL REVENUE	**45,999**	**60,106**	**46,182**	**57,690**	**-0.4**	**4.2**
1. Direct taxes	20,143	25,706	19,308	24,493	4.3	5.0
Income Tax	15,669	21,232	14,668	19,854	6.8	6.9
Companies	3,807	3,807	3,936	3,936	-3.3	-3.3
Others	667	667	703	703	-5.2	-5.1
2. Indirect taxes	20,191	28,735	20,691	26,936	-2.4	6.7
VAT	15,597	21,197	15,523	19,219	0.5	10.3
Special taxes	3,744	6,688	4,369	6,918	-14.3	-3.3
3. Others	2,052	2,052	1,350	1,427	52.0	43.8
4. Current transf.	1,898	1,898	1,682	1,682	12.8	12.8
5. Wealth income	1,199	1,199	2,478	2,478	-51.6	-51.6
6. Investment Sales	29	29	24	24	22.8	20.8
7. Capital transf.	472	472	639	639	-26.1	-26.1
8. Other revenue	15	15	11	11	37.4	36.4
Revenue from taxes	**40,334**	**54,441**	**39,999**	**51,429**	**0.8**	**5.9**

Source: Ministry of Finance

Graph 4.2.

Corporate profits and revenue from corporation tax

(%oya)
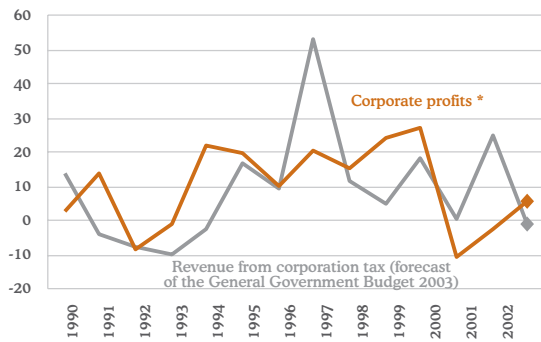
* Companies on the Madrid Stock Exchange
Source: Ministry of Finance

with the reform of 1999, in which revenue from Income Tax only began to show the impact of the reform clearly in June[2]. In fact, up until June 2002, the income from Income Tax showed an increase of 7.9% year on year, which dropped to 2% for the year as a whole. This, together with the aforementioned change in the calendar for tax collection linked to labour income from the General Administration and the positive impact of the extra payments made to pensioners and wage earners to compensate for the fact that inflation was greater than estimated in 2002 (remuneration for wage earners increased by 6.7% in the 1st quarter of 2003 as opposed to 6.0% in the 1st quarter of 2002), explains why revenue from Income Tax shows a growth of 6.9% year on year up until May, rather than the 3.1% that had been budgeted. In gross terms, in other words, correcting the effect of the advance in tax refunds, revenue is close to 9%. However, as the year goes on, the negative impact of the Income Tax reform will become more evident, which, given the lower level of dynamism in the economy, is expected to be more intense this year than in 1999. In fact, according to BBVA forecasts, remuneration for wage earners will grow by around 5.5% in 2003, which is far less than the 7.3% registered for 1999. As was the case then, neither the non inflation adjustment of the tariff nor the deductions will mitigate the impact of the reform on revenue from Income Tax[3].

With regard to Corporation Tax, revenue increased until May, which is already representative of what might happen for the rest of the year, given that the first advance payment for the year has already been made, showed a decrease of 3.3% year on year. This contrasts both with the drop of 1.5% year on year projected and with the significant growth registered for the same period of the previous year. It should be mentioned that in the previous year, revenue from this concept was favourably affected by the extraordinary revenue generated by the massive reinvestment in capital gains, as a result of the new fiscal treatment given to this reinvestment[4]. This year it is expected that this new treatment will continue to elevate the income from Corporation Tax, but to a lesser extent than in 2003. Furthermore, the volume of amounts refunded has been less intense in the period already passed in 2003, so that, in gross terms, revenue from Corporation Tax will increase by 11%. This, together with a scenario in which there is an expected improvement in the evolution of corporate profits[5], means that revenue from Corporation Tax should reach the levels estimated in the budget.

Although transitory factors explain part of the strength of VAT in the first months of the year, if consumption recovers in the second half of the year, revenue from VAT could be slightly greater than the amount projected

Revenue from indirect taxes was also greater than the amount projected for the period until May, being 6.7% and 5.9% respectively. VAT is showing levels of growth which are far greater than expected, despite the recovery of private consumption (an increase of 2.5% year on year in the first quarter of 2003 as opposed to 2.0% in the first quarter of 2002). In fact, total revenue from VAT, in other words, including the percentage assigned to the Regional Governments, grew by 10.3% year on year in the first five months of the year, as opposed to an increase of 6.2% year on year which had been forecast. There are two factors which might be having a transitory influence in this increase: i) the increase in oil prices, which is expected to be reduced in coming months and ii) the smaller

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[1] According to official estimates individual fiscal pressure will be reduced by 11% following the Income Tax reform.
[2] In January and February, the lower quantities to be withheld by the companies from their workers had still not been made effective in most cases.
[3] The Ministry of the Treasury expects that income from Income Tax will increase by 6.9% in 2003.
[4] Act 24/2001 of 27th December on Fiscal and administrative measures and measures of a social order.
[5] According to the Commercial Performance Information Bureau the gross economic results for exploitation for the companies in the sample registered, in the first quarter of 2003, an increase of 8.8% per annum, which contrasts with the decrease of 1% in the first quarter of the previous year and the 5.1% for the year 2002.

quantities which have been refunded in 2003 in comparison with the previous year. Despite the fact that the disappearance of these two factors will mean the growth in revenue from VAT will become moderated, if the expansion in consumption expected for the second half of 2003 is confirmed, the final figure for this concept may well be slightly higher than the one projected. With regard to Special Taxes, within a context of a freezing of tax rates in 2003, revenue fell by 3.3% year on year in the first five months of the year. This result is, however, distorted by the fact that the revenue from the Tax on Transports, assigned in July 2002 to the Regional Governments, is included in the revenue of 2002 and not in the revenue of 2003. When this has been corrected, revenue from Special Taxes will increase by 3.7% year on year, which is still a long way from the 5.2% which was budgeted for this concept.

Therefore, whilst it is true that in the first months of the year, receipts from Income Tax and VAT has meant that revenue from taxation has shown an increase which is far greater than the amount budgeted, it is not expected this situation to be maintained throughout the year. On the one hand, the growth in revenue from Income Tax will be moderated, as a reflection of the impact of the reform[6]. And on the other hand, revenue from VAT will be closer to the amount budgeted, although if the reactivation of private consumption is confirmed in the second half of the year, it will be greater than the official estimate. As a result, in 2003, direct fiscal pressure will be reduced, as it was in 1999, and indirect taxes will recover.

However, if the economy grows less than the 2.5% forecasted by BBVA, the improved performance of VAT will not offset the moderation in Income Tax. According to the forecast of the Ministry of Finance a growth in the GDP one percentage point lower than that estimated in the General Government Budget for 2003 (3% year on year) would increase the deficit of the General Administration as a whole by four decimal points of the GDP.
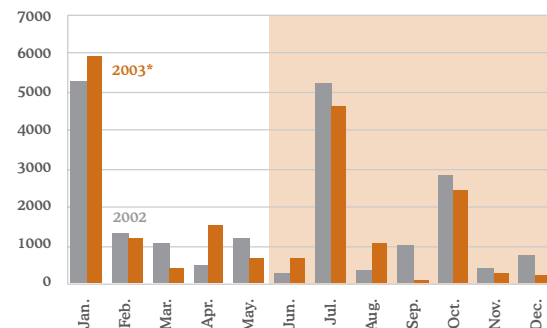
With regard to non-tax revenue, the decrease in revenue from wealth income is noticeable due to a decrease in the Bank of Spain profits (-51.6% as opposed to the 34.5% budgeted). It is expected that this concept will increase in the coming months with the receipts from the *ENA* privatisation (1,200 million Euros).

Credit Modifications approved up until April and the use of the Contingency Fund suggest that Central Government expenditure may exceed the limit fixed for 2003

With regard to expenditure, as opposed to revenue, it is not available an historical of total expenditure including Central Government and the Regional Governments, and so an homogenous comparison of the data for 2002 and 2003 is not possible. Bearing this limitation in mind, non-financial expenditure registered a drop of 3% year on year, which contrasts with the increase projected in the General Government Budget for 2003 (3.1% year on year). However, this decrease can be explained by the fall in current transfers (-7.0% year on year) which are still affected by the transference of health care responsibilities by the Regional Governments and by the lower interest payments (-4.5% year on year as opposed to the 4.3% which had been projected) due to the different calendar for the maturity of debt. As these two factors disappear, expenditure will come closer to the amount budgeted. To this it should be added the significant growth shown by some of the items of expenditure which was unaffected, or only moderately so, in 2002, due to the transferring of responsibilities (personnel and purchases of goods and services). On the other hand, real investment grew by 4.2% year on year up until May, as opposed to 5.5% up to March. This slowing down confirms the evolution of public works with the electoral cycle,

Graph 4.3.
Monthly Interest Payments
Euro Million

* as of June, BBVA forecasts
Source: BBVA and Ministry of Finance

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[6] According to the estimates of the *Spanish Central Bank* the Income Tax reform will reduce the ratio between public income and the GDP between 2003 and 2004 by approximately 4 decimal points of the GDP.

Table 4.3. Central Government: non-financial expenditure

January-May Euro Million	2003	2002	% oya
TOTAL PAYMENTS	**45768.0**	**47205.4**	**-3.0**
1. Current operations	**40334.0**	**41932.8**	**-3.8**
Personnel	6985.0	6569.5	6.3
Purchases and services	1138.0	983.9	15.7
Interests	9220.0	9652.5	-4.5
Current transfers	22991.0	24727.0	-7.0
2. Capital operations	**5434.0**	**5272.6**	**3.1**
Real investment	2959.0	2839.3	4.2
Capital transfers	2475.0	2433.3	1.7

Source: Ministry of Finance

which has a more noticeable effect on the Regional Governments than it does on the Central Government and Autonomous Organisms. The need to make the investment commitments taken on in the *Infrastructures Plan for 2000-2007* compatible with compliance with the objectives laid down in the budgets of the Stability Programme for *2002-2006* has meant that in the new Administrative Licence Law alternative formulas for financing have been included to encourage the participation of private capital. Together with the traditional systems, shadow tolls or the German model, the new Act encourages methods of crossed financing. Under this new financing formula, the public sector awards the exploiting company a toll branch in exchange for the construction of a branch in other work (mixed system). The search for new financing formulas confirms the difficulties that the General Administration have obtaining private capital for large projects and the small room for manoeuvre of the fiscal policy following the coming into force of the Act for Budgetary Stability (*Ley de Estabilidad Presupuestaria - LEP*).

The application of the LEP to the elaboration and execution of the budget for 2003 for the first time has brought about the establishing of a maximum limit for expenditure and the inclusion of the so-called Contingency Fund (2% of total expenditure, 2,290 million Euros). Bearing in mind that the Fund approved for 2003 represents approximately half of the credit modifications applied to the expenditure of the Central Government in recent years, we can affirm that compliance with the expenditure limit, in a context of less growth than that initially envisaged in the General Government Budget of 2003, requires a strict control of all expenditure items. In this sense, although the volume of the credit modifications approved up to 31st April 2003 is much lower than the previous year, an analysis per chapter does not allow to be too optimistic with regard to compliance with the expenditure limit established for 2003. This can be borne out by i) the accumulated deviation in financial expenditure, resulting from the programmes for repurchasing debt (431.5 million Euros), and the purchases of goods and services related with the holding of municipal and regional elections (202.6 million Euros) and ii) the fact that 87% of the Contingency Fund had been used when only 39% of the year had passed.

The probable non-compliance with the expenditure limit of the Central Government approved for 2003 will be the result of the accumulation of unforeseen events that have occurred since the time at which the limit was approved in the first third of 2002: i) the catastrophe of the Prestige, which, according to official estimates, will have an impact on the budget of 0.13% of the GDP, ii) the compensation to be paid to the Town Councils for the suppression of Tax on Economic Activity (IAE) (0.1% of the GDP), iii) the participation of Spanish troops in the conflict in Iraq, and iv) the EU's questioning of certain loans and subsidies awarded by the Central Government to Izar, which amounts 2,000 million Euros (0.3% of the GDP).

Efficiency and control of public spending, objectives of the new General Budget Act

The draft bill for the General Budget Act (LGP), which will come into force in 2005, considers that the budget assignation to each Ministry should be done in accordance with their compliance with their objectives, which requires the Ministry of Finance to carry out a continual evaluation and supervision. This is aimed at a more efficient assignation of expenditure and a greater level of responsibility by the Ministries and public bodies, which will adjust their budgetary demands to their real needs. The counterpoint of this increase in control is the greater flexibility and autonomy given to the people responsible in the Ministries for moving funds between their departments, avoiding the immobilisation of resources that might have helped with the development of other projects. These new responsibilities do not include the authorisation of amplifications of credit within a Ministry, as these will remain under the Ministry of Finance con-

trol so as to avoid an excessive increase in spending. Likewise, the decision to authorise multiannual investment plans will allow a more efficient management of spending. Therefore, the new LGP responds to the historical demand whereby the level of the efficiency of programmes which take up public funds will be valued. Only in this way is it possible to detect problems in economic and financial management and to guarantee that an efficient use is made of public resources.

Revenue from social security contributions, better than expected

With regard to the execution of the Social Security budget, the information available on revenue, up to April, and expenditure, up to May, suggests that in 2003 the surplus of the Social Security may be slightly higher than expected, 0.5% of the GDP. Revenue from social security contributions registered a growth of 9.2% year on year until April as opposed to the 2% which had been projected. Although this data is positively affected by the compensation to workers for the deviation of inflation in 2002, the evolution of affiliations to the Social Security (3.2% year on year up to June) and the remuneration (wages agreed upon in the Labour Agreement until may registered an increase of 3.4% year on year) guarantee that revenue from contributions, which represents around 90% of the total budget revenue for 2003, will again be greater than the amount projected. This gives the Social Security a certain margin of movement to compensate possible deviations in certain expenditure. More specifically, contributory pensions grew by 6.6% year on year until May, one percentage point above the growth forecasted. This deviation can be explained both by the compensation gave to pensioners for deviations in inflation with regard to the objective (1.9 percentage points) and by the improvement made to widow's pensions. It must be added that the expenditure for worker disability which continued to grow and reached double figures (24.7% year on year in the first quarter). However, the greater amount of revenue will compensate the deviations forecast in spending for 2003.

The surplus accumulated by the Social Security in the first five months of the year has meant that the Reserve Fund was 8,669 million Euros at 5th July as opposed to the 6,168.7 million Euros registered at the end of 2002.

Uncertainty in the budget execution of the Regional Governments

The role of Regional Governments in complying with the budgetary objectives established for the public sector as a whole has become especially relevant following their taking on of health care responsibilities in 2002. Thus, in 2003 the expenditure budgeted by the Local Government (114,000 million Euros for the Regional Governments and 40,000 million for the Town Councils) is greater than that established by the Central Government in the General Government Budget for 2003 (112,226 million Euros).

Although any recent information is not available concerning the level of execution of the budgets by most of the Regional Governments, a set of factors means that it's not possible to be too optimistic with regard to the evolution of spending in 2003. Among these factors we could mention i) an increase in pharmaceutical spending, 10.2% year on year up until May as opposed to the 7.5% budgeted, ii) the impact of the decisions adopted following the holding of the regional and local elections (the suppression of the eco-tax in the Balearics and of Inheritance Tax in the Regional Governments where there will be a government formed by the *Partido Popular*).

The CAP: a step towards renationalisation

The incorporation of 10 countries, in which agriculture is a significant sector, into the EU as of May 2004, together with the fact that the subsidies for the primary sector account for almost 50% of the EU total budget, means that there must be a significant reform made to the

Table 4.4. Execution of the Social Security Budget

% oya (Accumulated data)	2002	Jan.02-May 03
WELFARE PAYMENTS		
Contributory welfare payments*	6.3	7.8
Contributory pensions	6.5	6.9
Retirement pensions	6.0	6.2
Widow's pensions	8.5	9.3
Temporary disability*	13.5	24.7
Non-contributory welfare payments**	7.2	4.6
NON-FINANCIAL RESOURCES		
Social Contributions**	5.9	9.3
Current Transfers*	-77.9	-62.2

* Jan.-Nov. 02 - Mar. 03. ** Jan-Apr. 03
Source: Ministry of Labour and Social Affairs

Common Agricultural Policy (CAP). Especially following the Franco-German agreement for maintaining the limit for spending from 2006 to 2013, in real terms, at its current level. With this objective, on June 26th, the Ministers of Agriculture approved the measures which will condition the future CAP. The reform is centred on the modulation and dismantling of direct subsidies. Modulation implies a cut back in direct subsidies of 3% as of 2005, 4% as of 2006 and 7% as of 2007, which is a long way from the 19% which was initially proposed for all exploitations which receive more than 5,000 Euros per year. This saving will be destined to rural development. With regard to the dismantling of subsidies and production, exploitations will receive a single payment which will depend on the historic performance of the exploitation over the period 2000-2002 and its continuation will be tied to compliance with environmental and quality requirements. This disconnection between subsidies and production will not affect all productions the same (between 40% and 75%), nor will it begin to be applied at the same time for all the countries involved. The countries will individually decide when the measure should begin to be applied, within a flexible calendar over the period 2005-2007, and the countries can decide whether they are going to opt for total or partial dismantling of subsidies or whether they are going to comply certain subsidies. In this way, the road is open for a renationalisation of subsidies for agriculture.

Therefore, this reform will bring about an internal redistribution of agricultural spending, the objective of which is to make the sector more efficient and more competitive. An important step in this direction is the breaking of the ties between production and subsidies and making subsidies more dependent on guarantees of quality and environmental factors. However, as opposed to the ideas behind the new CAP, it will not be easier to manage as many decisions are to be left up to the discretion of each individual country. Whilst, following the reform, we will be moving towards a liberalisation of the sector and negotiation with the WTA will be facilitated, certain key matters, such as import duties or subsidies for exports have been left out of the reform.

According to figures provided by the Ministry of Agriculture, Spain will receive an additional 1,652 million Euros following the reform for the period from 2005 to 2013. Mainly through subsidies for rural development (1,346 million Euros), through additional advantages for certain sectors (dried fruits and rice) and through the special treatment given to ultra-peripheral regions (Canary Islands). Despite this, it is important to point out the reform is a partial reform as it does not affect to all sectors. In a second phase, the subsidies for olive oil, cotton and tobacco will be reformed, all sectors which are especially important for Spain. Furthermore, the receipt of more funds does not guarantee the survival of exploitations in sectors like cereals, where the dismantling affects 75% of production, and may affect up to 22% of the land dedicated to these crops[7].

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[7] Something similar happens with the cattle sector.

5. The financial system

More bank credit

As can be seen in the graph, despite the deceleration in economic growth which took place in 2001, credit in real terms has continued to increase, reaching similar levels as when the economy was in full expansion.

The low levels of interest rates, and the dynamism of house prices and real estate activity have been determining factors in this behaviour. In the first four months of the year, credit to the private sector increased by 13.6%, showing even an acceleration with respect to the previous year.

Banks financing to households grew by 13% in the first quarter, slightly less than in 2002. Both credits for house purchase and consumer credit decelerated somewhat. In the case of the latter, a drop of 0.3% was registered for the first quarter.

On the other hand, credit to non-financial firms showed a slight acceleration over the first quarter, reaching 12.4% year on year. In all sectors, with the exception of commerce, bank financing has reflected a more intense growth rate in this period.

The most dynamic components were credit for the service sector and, more specifically, credit for real estate activities which, in the first quarter of the year, grew by 36% year on year. In fact, credit connected with the real estate sector (construction and real estate development) made up for 64% of total growth in credit to non-financial companies.

Thus, whilst the number of credits awarded for house purchase has fallen off slightly, credits for real estate activities (real estate development) registered a strong performance in the first quarter of the year.

As a result of the growth experienced in the real estate sector, mortgages continue to be at the forefront of this credit expansion, with a growth rate of more than 20% (22% if mortgage-backed securities are included). In this way, the weight of mortgages in credit institutions balance sheet has increased by one percentage point in the first four months of the year, 53.4%.

Part of the rise in mortgage funds is due to the sustained increase in house prices which, during the first quarter of the year, rose by 17.5%. Thus, if the credit for house purchase was deflated by the price of these assets, it would fell by 6% with regard to the previous year[1].

To sum up, activities which are connected with housing have once again registered a significant strength. Credit for house purchase together with real estate promotion and credit for construction have gone from 25 percentage points of the GDP in 1995 to 50 percentage points at the present moment.

The non-performing loans ratio at a minimum level

After the rise registered in 2002, the growth in the volume of bad loans in the portfolios of banks and savings banks decelerated to 7% year on year in April as opposed to the 15% which had been registered in December of the last year. Thus, the non-performing loans ratio has reached its lowest level ever, being 0.86%.

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[1] As happened in previous periods, mortgage credit growth in savings banks has continued to be greater than those in commercial banks (an average of 21% from January to April 2003 as opposed to 18%) although a greater level of acceleration was registered in the latter. In the Box *"The evolution of mortgages: some differences between banks and savings banks"* some possible causes for this phenomenon are analysed.

Graph 5.1.
Credit and GDP real growth
(%oya)
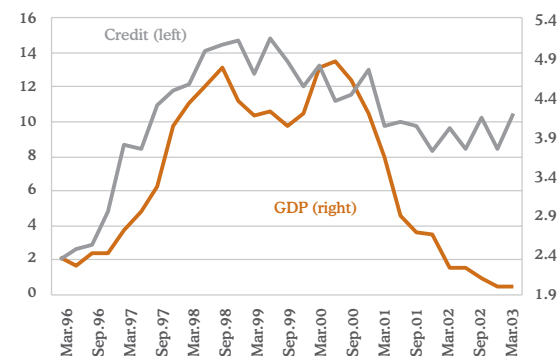
Source: Bank of Spain and INE

Graph 5.2.
Credit associated with the housing market
(%GDP)
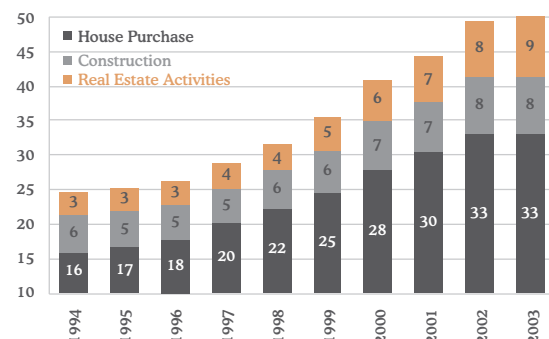
Source: Bank of Spain and INE

Graph 5.3.
Non performing loans (NPL) in Banks and Savings Banks

Source: Bank of Spain

Graph 5.4.

Household indebtedness
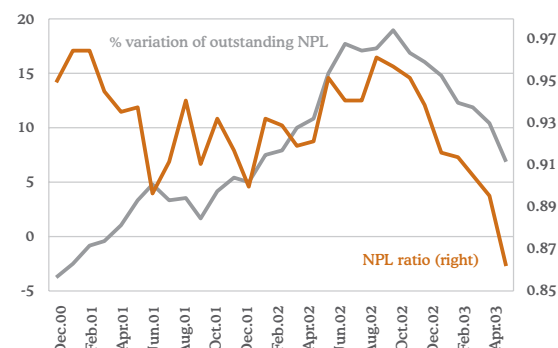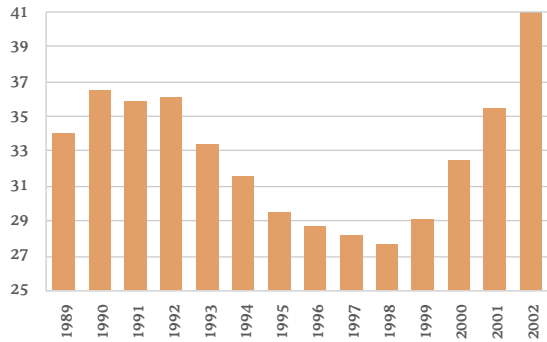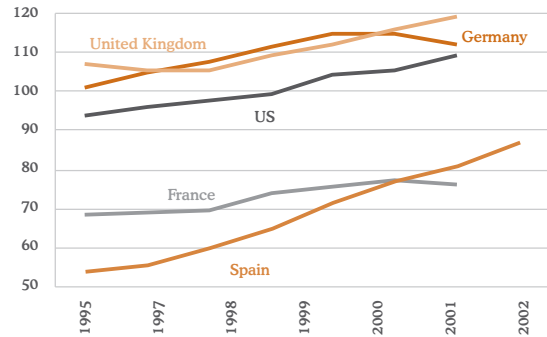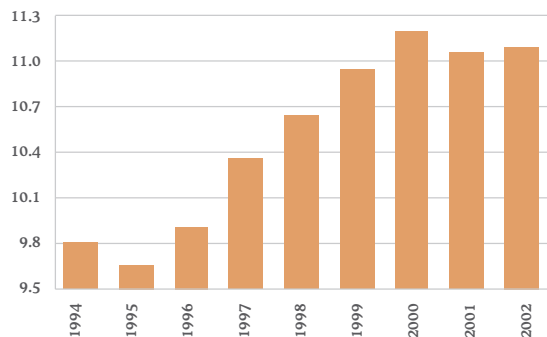(financial liabilities/financial assets)

Source: Bank of Spain

Graph 5.5.

International comparison of Household indebtedness
(liabilities/disposable income)

Source: OECD and Bank of Spain

Graph 5.6.

Household indebtedness
(including real estate wealth)

Source: Bank of Spain

The evolution of interest rates and employment, credit portfolio mix (defaults on mortgage credit also reached minimum levels in the first quarter of the year, being 0.42%) and improvements in risk management continue to be the main variables to explain this positive evolution in an economic environment which is less benign than that two years ago.

Furthermore, the perspectives for the evolution of interest rates and economic growth means that we do not expect a significant upturn of this variable in the short term[2]. However, the high level of households indebtedness and its growing exposure to the evolution of interest rates and to the real estate market could imply a medium-term risk in the event of an unfavourable economic scenario.

Indebtedness may limit future credit demand

Households indebtedness, when related to its financial assets and disposable income, recorded the highest increase of the last thirteen years. This growth is, mainly, a response to an environment of low interest rates and a level of indebtedness that had been lower than that of other European economies.

Thus, households indebtedness has gone from being 54% of disposable income in 1995 to 87% in 2002, a figure which is now higher than the EMU average. However, Spanish families indebtedness is still lower than in other developed countries like the US, Germany or the United Kingdom.

Nevertheless, it is important to bear in mind that despite the fact that the increase in households indebtedness may be associated with a convergence to EMU countries levels, the different financial structure existing in EMU countries means that Spanish families are more exposed to changes in ECB monetary policy than the other Euro zone countries, such as Germany, given that in this case mortgages are generally referenced at a fixed interest rate, whereas in Spain most of the mortgages are referenced at a floating rate.

In the first quarter of 2003, the negative evolution of financial markets associated with geopolitical and economic uncertainty, together with the aforementioned demand for financing, brought about a new upturn in households indebtedness, reaching 42% of their financial assets. However, the recovery of the stock exchange in the second quarter of the year (17%) would have brought about a positive correction in the level of indebtedness for this period.

On the other hand, including real estate wealth, which represents 82% of total assets of Spanish families, households leverage has remained stable in recent years. This is due to the fact that the principal cause of indebtedness is house purchase (68% of financing to households) and the increase in house prices has offset the rise in debt in recent years.

Corporate indebtedness has also tended to grow and has reached 45% of all financial assets in 2002. However, it is still lower than in 1997 and it continues to be lower than the European average.

Together with the fact that indebtedness is not excessively high, it must be borne in mind that most of the business indicators in Spain have behaved in a more healthy way than in previous periods of economic deceleration. Non financial firms have maintained good levels of profitability and the latest quarterly data from the *"Central Balance Sheet Data Office"* of the Bank of Spain suggested that corporate

[2] For greater detail on the perspectives and variables which explain the default rate, see *"Structural changes in the non-performing loans ratio", Situación Spain*, March 2003.

activity has continued to increase. Thus, the growth in the net operating profits obtained by companies in the first quarter of the year, 12.6%, showed an acceleration when compared with the 10.4% registered in 2002.

Furthermore, interest rates stability at low levels has meant that, despite the increase in indebtedness, debt service has remained stable. Thus, in the first quarter of the year, whereas the increase in corporate indebtedness brought about an increase of 4.5% in financial costs, there was a drop in financial costs of almost the same amount, and so, in net terms, financial expenses has remained stable.

A new survey on bank loans

The European Central Bank (ECB) and the National Central Banks have begun to publish the results of a survey carried out from the replies given by almost ninety banks of EMU, ten of which were Spanish. The survey contains information on changes in the supply and demand of credit to families and to companies, together with the credit standards, taken over the previous three months, and the perspectives for the following quarter.

The principal objective of the survey is to provide the ECB with qualitative information on the credit market in order to manage monetary policy. Furthermore, in countries where this kind of survey has already been carried out for several years, such as the United States, this indicator has proved to be very useful for predicting credit expansion or economic growth[3].

The availability of a mere two surveys limits the analysis of the results. However, many insights can be drawn from the replies given by the Spanish financial institutions[4].

As can be seen in table 5.2, credit conditions were perceived more moderate in the first quarter of this year than at the end of the previous year, for both the supply of loans for house purchase and the rest of financing for households. The main restricting factor in credit conditions was the increase in the risk premiums applied for major risk credits.

In the case of the demand, whilst there was a decrease in other credits to households, there was a slight expansion in mortgages in December and no changes were noticed for the first months of 2003. Economic expectations, the perspectives of the real estate market and consumers confidence of households were the main reasons under this evolution.

Comparing the results of the survey with the data observed, it can be seen that in fact there is a slight moderation in credit for house purchases. On the other hand, the other credits to households increased despite the fact that, in the survey, a certain moderation was expected for both the demand and the supply.

With regard to the perspectives for the next three months, a greater, although moderate, tightening up in the supply of credit other than mortgages can be seen, although in both cases a certain moderation in the demand can be noted.

A tightening up in loans standards to companies can be seen which is greater than that applied to families, particularly in credit to large companies and long-term credits. However, the perspectives for the next

Graph 5.7.
Non-financial companies indebtedness
(external financial liabilities/financial assets)
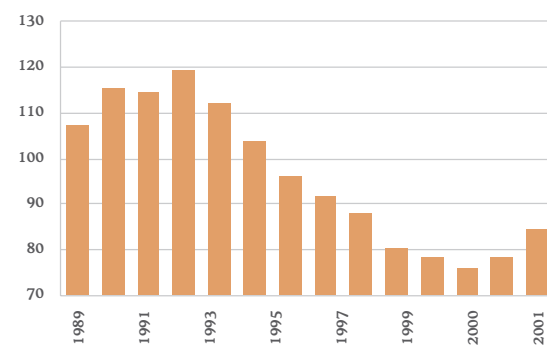
Source: Bank of Spain

Graph 5.8.
ROE and financing costs of non-financial companies
(four period Moving average)

Source: Bank of Spain

Graph 5.9.
International comparison of the indebtedness of non-financial companies over the GDP
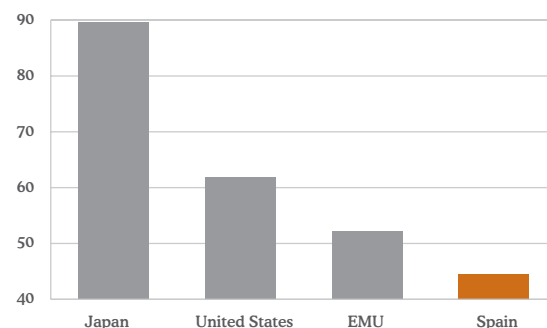
Source: ECB and Bank of Spain

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[3] For more information see Lown et al. *"Listening to Loan Officers. The impact of commercial credit standards on lending and output."* Economic Policy Review, July 2000, New York Federal Reserve.
[4] For more details on the results see Martínez J. and Maza L.A. *"Resultados de la Encuesta sobre productos bancarios en España"*, Boletín Económico, May 2000, Bank of Spain.

Table 5.2. Bank lending survey

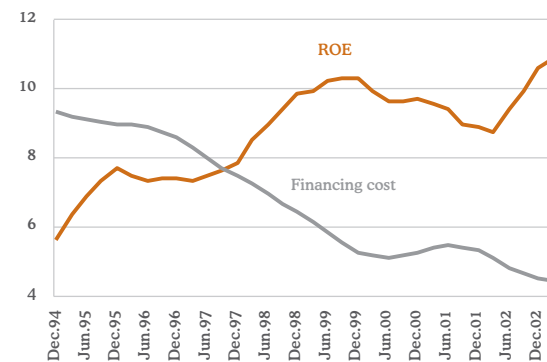|	Dec.02	Mar.03	Jun.03
Credit to Households: house purchase			
Supply	-20	-15	-10
Demand	5	0	-10
Credit to Households: other credit			
Supply	-25	-15	-30
Demand	-20	-10	-10
Credit to companies			
Supply	-25	-20	-15
Demand	-10	-20	-10

Source: Bank of Spain

quarter indicate that there will be less restrictions in both the supply and the demand.

In this case, the survey differs a great deal more from the data observed than in the case of credits to families, given that, as has been mentioned above, credit to companies from credit institutions accelerated during the first quarter of the year in most sectors. This divergence could be due to seasonal reasons given that the first quarter of the year is generally the less dynamic of the year.

With regards to the remaining of 2003, the factors which explain the evolution of credit will evolve very differently. On the one hand, the economy has begun to show signs of a moderate recovery and interest rates will remain low, which would point towards high rates of credit growth. On the other hand, the expected slowdown in house prices, indebtedness level and the low saving rate point towards a moderation in credit demand, especially in the households segment.

Table 5.1. Financial variables

(% oya, except when expressly stated otherwise)

|	2001*	2002*	Jan. 03	Feb. 03	Mar. 03	Apr. 03	Balance (Euro millions)
Private sector deposits	13.6	8.5	9.7	9.1	8.4	9.2	505
- Sight and savings	14.4	7.6	9.3	8.7	7.7	9.4	284
- Time	12.6	9.8	10.3	9.7	9.3	9.0	221
Net assets of Investment funds	-2.9	-4.0	-2.5	-1.1	-2.5	0.7	182
- Money Market Funds	32.0	22.0	21.0	20.9	14.9	15.8	57
- Mutual Funds	-11.0	-12.0	-10.5	-8.8	-8.9	-4.9	126
Net assets of Pension funds	15.8	9.8	—	—	9.4	—	48
- Individual	12.7	8.2	—	—	7.5	—	26
- Company	21.1	12.6	—	—	12.4	—	21
Credit to the private sector (Banks and Savings Banks)	11.0	12.8	14.5	14.7	13.3	14.4	659
- Mortgages	18.4	19.3	19.9	20.2	20.6	20.4	352
- Other credits	4.5	6.4	9.1	9.0	5.8	8.2	307
Non-performing loans ratio (Credit institutions)	0.90	0.92	0.91	0.91	0.90	0.86	n.d.

* year-end
Source: Bank of Spain and Inverco

The evolution of mortgages: some differences between banks and savings banks
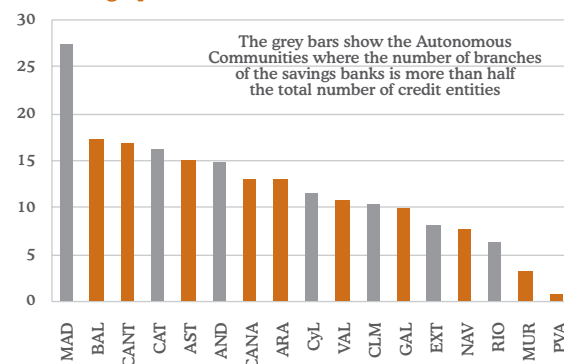
Growth in mortgages
%oya
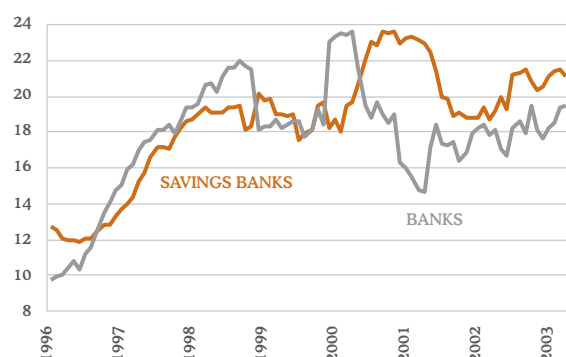
Source: Bank of Spain

Increase in savings bank branches market share per Regional Government between 1999 and 2000
Percentage points

The grey bars show the Autonomous Communities where the number of branches of the savings banks is more than half the total number of credit entities

Source: Bank of Spain

Mortgage lending is the credit segment which has grown more in Spanish financial institutions, leading the credit expansion that began in the second half of the nineties. Although banks and savings banks developed a similar financial business, the awarding of credit has been, in recent years, significantly more intense in the latter. This Box gives an analysis of the possible reasons behind this evolution.

The geographical expansion of the savings banks: Since the end of the eighties, Spanish savings banks were allowed to open branches freely in any part of the country. This has led to a process of geographical expansion which has caused, likewise, a continuous increase in the number of branches. On the other hand, the rationalisation of banks branches network, which was especially intense following the mergers of the two largest banking groups, has meant that there has been a reduction in the number of branches. Both factors have contributed to the fact that the savings banks have increased their presence in all of the regional government in Spain. In fact, in March 2003, savings banks had more branches than commercial banks in all the regional governments with the exception of the Basque Country, Galicia and Asturias. If we analyse the presence of the savings banks with regard to the total number of credit institutions (including co-operatives and financial credit establishments) it can be seen that in seven regional governments savings banks have more than 50% of the total number of branch offices. It is remarkable the case of Madrid where savings banks market share of branches of has gone from 24% at the end of the eighties to 52% at the present moment. This could be the result of a strategy oriented towards the increasing of the presence of savings banks in urban centres, an area which was traditionally dominated by banks.

Mortgage credit: In general, mortgages are more relevant for the savings banks than for banks. The greater dynamism of mortgage credit in savings banks has increased the importance of this kind of credit in recent years. Thus, in 2003 mortgage credit represented 38% of the balance sheet of savings banks, as opposed to the 19% of banks. This specialisation makes very likely that mortgage credit will be one of the products which is most offered by savings banks in the new markets where they are set up, especially in the current context in which the real estate market is particularly dynamic.

One of the differences which exists between these two kinds of institutions is the greater orientation of the savings banks towards the retail business, which can be attributed to the fact that their branches network is larger. In this sense, it can be thought that households mortgages when compared to the total mortgage credit awarded would be more important in savings banks than in commercial banks. However, the proportion of mortgage credit which, in both commercial and savings banks, is granted for house purchase by families is, in fact, very similar. On average since 1999, credit for house purchase when compared to the total mortgage credit awarded was 65% in banks and 63% in savings banks. In accordance with the Spanish Mortgage Association, mortgage credit awarded to the construction sector and real estate activities was, at the end of 2002, 16% and 15% respectively of the total mortgage credit awarded.

In fact, the latest expansion in credit has coincided with an increase in the importance of credit to productive activities related to the real estate market in savings banks balance sheet. Thus, financing of real estate activities and construction has grown by an average of 26% year on year in savings banks as opposed to 19% in commercial banks. Furthermore, the credit awarded for real estate activities in comparison with the credit awarded for the productive activities
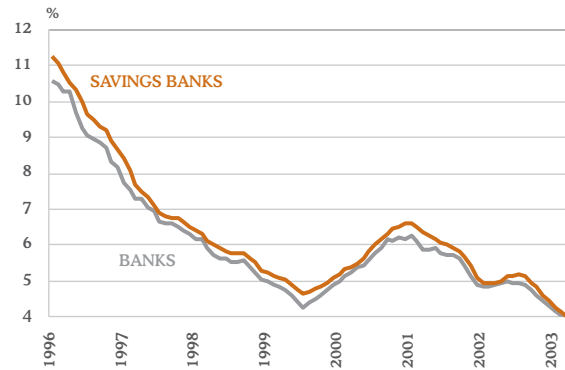
Financing of real estate and construction activities

%oya
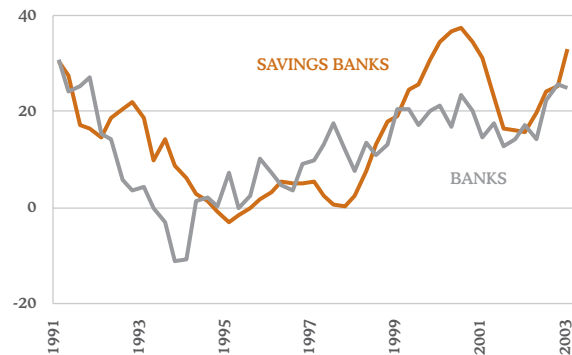
Source: Bank of Spain

Mortgage Interest Rates

Source: Bank of Spain

related to housing (real estate and construction sectors) has shown a clear upwards trend in savings banks. Thus, financing of real estate activities has gone from 30% of total financing for activities related with housing in 1995 to 50% in March 2003, a very similar percentage to that registered by commercial banks. In this way, it is possible to conclude that there has been a certain convergence here too between the business model in both banks and savings banks in the mortgage market.

The funding of mortgages: Another factor which may affect credit policies is the mechanism and cost of financing the credit investment by the financial institutions. Although in the Spanish banking system most credit is funded by deposits, the proportion of these as a percentage of savings banks assets is greater than for banks. In this sense, in April 2003, deposits would allow banks to finance only 56% of credit granted to the private sector, whereas this figure reached 86% for savings banks. Taking into account that this source of financing is cheaper than others that must be used by banks, such as interbank loans or issues in capital markets, we can conclude that savings banks have a greater leeway in this aspect. The use of techniques that eliminates mortgage credit risk from the balance sheet, such as securitization, has been similar for both financial institutions. Thus, the percentage of mortgage-backed securities is around 5.5% in both banks and saving banks. However, this figure hides the fact that banks have securitised greater amounts of other kind of credits than savings banks, which is probably due to their greater diversification of their credit investment. Thus, according to the Bank of Spain, at the end of 2002, only 44% of the asset-backed securities of the banks were mortgage-backed, as opposed to 87% for the savings banks.

Credit standards: The fact that savings banks were able to offer more favourable credit conditions than banks may also explain why they have increased their market share, in detriment to the banks. Although this is a very relevant aspect explaining the current expansion of credit, there is no aggregated information available regarding the mortgages terms (guarantees, maturities, and so on). The only analysis that can be made is based on interest rates, and it can be seen that mortgage interest rates have been slightly higher in savings banks. However, the difference is negligible and has recently almost disappeared, due to the strong competition in a sector in which divergences in interest rates are very limited by the narrowness of bank margins.

To sum up, in view of the factors analysed, the higher mortgage credit growth in savings banks could be explained by two factors: i) a gradual movement towards the business model of banks, which has been achieved through a geographical expansion and an increase in credit awarded for real estate activities, and ii) the availability of cheaper funding thanks to a broad base of deposits.

6. Article: The impact of legislative changes on contributory pensions

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1. Introduction

The ageing of the European population which will occur in the coming decades calls into question the financial sustainability of the public systems for pensions, especially those, like the Spanish pensions, which have clearly defined features: a pay as you go system with defined benefit. A good number of the reforms which have been recently proposed in certain European countries, Germany, France and Austria, are geared towards alleviating the effect of the demographic change on public spending[1]. In this context, in Spain, coinciding with the negotiation of the Pact of Toledo, the inevitable reform of the public system for pensions came to the fore of the debate once again. The Permanent Commission of the Pact of Toledo is examining a wide range of measures which go from the increase in the number of years taken into account for calculating the regulatory base to an increase in the legal age of retirement. In order to know which measure or combination of measures allows us to soften the envisaged upturn in social spending, it will be estimated the impact of the different proposals on the restricting of spending on retirement pensions in the future. Therefore, it is necessary, in the first place, to make a projection of the way in which this spending will evolve in the event that no relevant changes were to be made in current legislation[2].

This article is organised in the following way. The second section describes the methodology used and the suppositions required in order to project the spending made on retirement pensions. The third section presents the results of the projection in the framework of current legislation. In the fourth section an estimation is made of the effect on public spending on pensions of legislative changes in the determination of the amounts for the initial pension or the evolution of existing pensions. Finally, the principal conclusions made are given.

2. A model for projecting public spending on contributory retirement pensions

The calculation of the percentage of GDP which will in the coming decades be dedicated to finance public spending on pensions and his sensitivity to legislative changes requires information regarding the labour history of the contributors to the Social Security. This is not public information and is not generally given to private researchers. This makes it difficult to analyse the possible alternative measures that could be taken to confront the increasing needs for financing of the retirement pensions of the Social Security, which will begin to be significantly crucial as of the year 2015. In order to solve the problem of this lack of information, it has been designed a simple model which incorporates many of the characteristics of the Spanish Social security system so as to simulate the spending under different economic, demographic and legislative scenarios.

To minimise the effect of this lack of information, this work is centred on contributory retirement pensions. This modality, the most affected by the ageing of the population, is the one which takes up most of the spending dedicated to contributory pensions, around 68% of the total. Therefore, its evolution will determine, to a large extent, the behaviour of the total amount spent on pensions. In terms of GDP, spending on contributory retirement pensions represented in 2002 5.5%, as opposed

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[1] This article centres on the impact of ageing on the spending made on retirement pensions, leaving aside the impact on health expenditure, although this is also important.
[2] See the General Social Security Act, Legislative Royal Decree 1/1994 of 20th June, which approved the New Text of the General Social Security Act.

to 8.4% of the total spending on pensions (see Table 1). Furthermore, the evolution of spending on widow's pensions (1.5% of GDP), the second most important contributory benefit, maintains a significant positive correlation with the level of economic development, so we can expect its weight in GDP to increase as the process of real convergence between Spain and the EU advances and which, therefore, will accentuate the estimated increase in spending on retirement pensions in coming decades.

2.1. Description of the model

The first step for building the model, is to identify the principal determining factors of the spending. In general terms, the evolution of the spending on pensions depends on the increase in the number of pensions and the average pension. In turn, the behaviour of these two variables is determined by three kinds of factor: economic (evolution of salaries and labour), demographic (increase in the potential number of people requiring a retirement pension and an increase in the period in which this pension is received, ageing) and legislative (determining of the initial pension, the inflation adjustment, the complement to minimum level[3], and so on). We can express the spending on contributory retirement pensions (GPJ) as:

$$\Delta GPJ_t = \Delta PJ_t * \Delta PMT_t = \Delta P_t * \Delta E_t * \Delta TCJ_t * \Delta PMT_t \qquad (1)$$

where PJ is the number of pensioners and PMT is the average contributory retirement pension of the system as a whole. The sub-index t indicates the year of reference and Δ is the variation rate. The number of pensioners can be broken down, in turn, into the total population, P, the ageing ratio, E, measured as the proportion of people of 60 or more compared with the total population and TCJ, the coverage ratio of the system, measured as the proportion of people who receive a retirement pension compared with the total population which is over 60. This decomposition of the GPJ shows how the three types of factor (demographic, legislative and economic) affect the future evolution of spending on pensions. More specifically, the demographic factor is found principally using P and E, the legislative factor using TCJ and PMT and the economic factor using PMT.

[3] Contributory pensions are complemented to reach certain minimum levels, which are established annually and their percentage over the total has decreased. In the case of retirement pensions, the proportion of new pensions with minimum guarantees compared with total number of Social Security contributors has gone from 30.07% in 1996 to 22.81% in 2002, which reflects that pensions are generated with larger quantities principally as a result of the increase in years of contribution and the subsequent increase in the number of pensions in the system.

Table 1. Spending on pensions in 2002

Million Euros	Total	Retirement pensions	Widow's pensions	Orphan's pensions	In favor of relatives	Permanent disability
Contributory pensions	**56231**	**38062**	**10517**	**806**	**171**	**6675**
General regime	38778	26634	6942	523	110	4569
Remainder	17453	11428	3574	283	61	2106
Non contributory pensions	**1755**	**948**				**807**
Total	**57986**	**39010**	**10517**	**806**	**171**	**7482**
%GDP						
Contributory pensions	8.1	5.5	1.5	0.1	0.0	1.0
General regime	5.6	3.8	1.0	0.1	0.0	0.7
Remainder	2.5	1.6	0.5	0.0	0.0	0.3
Non contributory pensions	0.3	0.1				0.1
Total	**8.4**	**5.6**	**1.5**	**0.1**	**0.0**	**1.1**

Source: Ministry of Labour and Social Affairs

The average pension of the system, will be determined both by the number of new (A) and deceased (B) contributors and by the relationship between the average pensions of these two groups and the policies of complements and to inflation adjustment of pensions in force. More specifically, the annual PMT is a relationship between the average new pensions (PMA), the deceased ones (PMB) and common pensioners[4] (PMC).

The expression (1) is used both to project the GPJ_t until the year 2050 under the current legislative framework, the baseline scenario, and to quantify the sensitivity of spending to legislative changes that may affect both the potential receivers of pensions and the initial pensions received. In general terms, this work will centre on the analysis of the impact of the measures that will probably be discussed in the renovation of the Pact of Toledo, leaving aside for the moment the impact of changes in the demographic and economic variables.

The projection of the GPJ_t on the baseline scenario (current legislation) is made by estimating the evolution of the PJ_t and of the PMT_t. This requires, in the first place, a definition of the demographic scenario so as to permit an estimation to be made of the number of pensions. Later, the definition of the economic scenario will give the bases for the calculation of the average pension of the system.

2.2. Projection of the number of pensions

The evolution of the number of pensioners[5] fundamentally depends on the demographic scenario. Although the people who will reach the age of 65 in 2050, our projection horizon, have already been born, the final stock will depend considerably on the evolution of migratory flows. The projections for the population in this study correspond to those of the baseline scenario designed in 2001 by the *Instituto Nacional de Estadística (INE)* for the period from 2000 to 2050. These projections increase the number of immigrants to Spain significantly. Thus, if previously an annual net flow of immigrants was estimated at 35,000, there has been a substantial increase in this number and it has reached an average of some 250 thousand in recent years (1999-2002), due to extraordinary regulatory processes and the figure should remain at 160,000 until the year 2050[6]. Despite the fact that the average age of the immigrants is lower than the average population in Spain, the increase in the flows is not sufficient to prevent the ageing of the total population. Graph 1 shows that the dependency rate of the aged measured as the percentage of people over 65 compared with the potentially active population between 16 and 64, will increase significantly, reaching its maximum figure in around 2044.

In the absence of legislative changes which increase the legal retirement age or which alter the conditions for obtaining early retirement, the evolution of the population and its distribution in ages will determine the future population of pensioners. A clear example of how demography conditions the evolution of the number of people can be seen in the behaviour of this variable in recent years. The number of pensioners has grown since 2000 very moderately, clearly below 1%, as a result, fundamentally, of the access to retirement of the less numerous generations of the Civil War and, to a lesser extent, due to the decrease in the number of people who had a right to early retirement (workers who began work prior to 1st January 1967). The affect of these factors on the spending on pensions in the future will be altered, in the first case, by the access to pensions of the numerous generation of the

Graph 1.
Evolution of the rate of dependency

(65 or over/15-64)
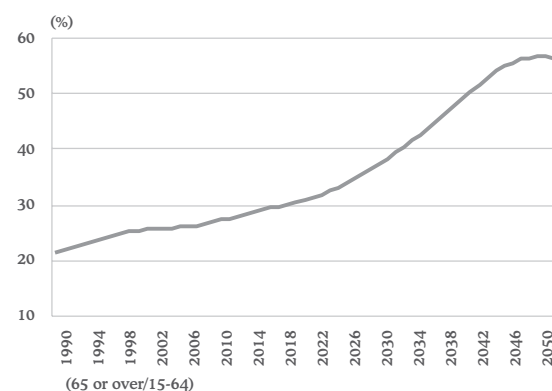
Source: INE

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[4] Common pensioners are those which receive their pensions throughout the year, from 31st December one year to 31st December the following year. Therefore, $C^e_{t+1} = PJ^e_t - B^e_{t+1}$.

[5] Although in this work we refer indistinctly to the number of pensions and the number of pensioners, we refer in all cases to the former. Given that it is possible the one person receives more than one pension, the number of pensions is greater than the number of pensioners. The total number of pensioners, not only those for retirement, in July 1002 was 6,275,470 as opposed to 7,161,670 contributory pensions, which means that 886,200 people received more than one pension.

[6] For more details see *www.ine.es*

baby-boom and, in the second case, by the entering into force of the Act 35/2002 which enlarged the number of people with a right to early retirement[7].

Using the number of pensions existing on December 31st 2001 and their distribution in ages[8], we can obtain the projections for the pensioner population considering the movement of new and finished pensions produced throughout the projected horizon under consideration[9]. The group of new pensioners is determined by the demographic scenario considered and by the probability of access to a pension at a specific age. The evolution of the group of finished pensions depends, on the other hand, exclusively on the demographic factor, in other words, on the probability of survival implicit in this scenario. Supposing that as of the age of 76 there are no new pensions, the population of pensioners in accordance with ages for the period 2002-2050 is calculated in the following way:

$$PJ^{60}_{t+1} = 0,5\ A^{60}_{t+1}\ (\ 1\text{-}0,5\ q^{60}_{t+1})$$

$$PJ^{61}_{t+1} = PJ^{60}_{t}\ (\ 1\text{-}\ q^{60}_{t+1}) + 0,5\ A^{60}_{t+1}\ (\ 1\text{-}0,5\ q^{60}_{t+1}) +$$
$$0,5\ A^{61}_{t+1}\ (\ 1\text{-}0,5\ q^{61}_{t+1})$$

$$PJ^{62}_{t+1} = PJ^{61}_{t}\ (\ 1\text{-}\ q^{61}_{t+1}) + 0,5\ A^{61}_{t+1}\ (\ 1\text{-}0,5\ q^{61}_{t+1}) +$$
$$0,5\ A^{62}_{t+1}\ (\ 1\text{-}0,5\ q^{62}_{t+1})$$

$$PJ^{77}_{t+1} = PJ^{76}_{t}\ (\ 1\text{-}\ q^{76}_{t+1})\quad t > 77,..,100$$

(2)

Where Pj^{e}_{t} is the stock of pensioners of the age e in the year t, q^{e}_{t} is the probability of death for an individual aged e in the year t and A^{e}_{t} are the new pensions for people aged e in the year t. Likewise, it is supposed that both the new pensions and the fact that these may be discontinued in the same year is distributed in a uniform way throughout the year. Therefore, the variables which determine the total stock of pensioners are i) the stock of pensioners as of December 31st 2001 and their distribution in ages, which has been defined as shown above, ii) the probability of death, implicit in the population projections drawn up by the *INE* and iii) finally, the new pensioners for each year. Given that both the stock of pensioners as of December 31st and the probabilities of death have already been estimated, it is only necessary to obtain the projection for the new pensions in order to obtain a projection of the population of pensioners for the period 2002-2050.

To project the new pensions, the groups of people who will be 60[10] between the years 2002 and 2050 is considered, making a distinction between men and women. In the first place, the probability of access to retirement of these groups is estimated and then the age of access, in other words, the distribution in ages of access to retirement of the people who retire from each group of 60 years old. The patterns of behaviour for these groups are established using patterns observed in the past[11]. With regard to the probability of access to retirement, although the Social Security does not publish data in accordance with

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[7] The Act 35/2002 lays down measures for establishing a gradual and flexible retirement system. In accordance with this Act, even when the worker did not begin to contribute to the pension scheme before 1st January 1967, early retirement is admitted as of the age of 61 for workers with more than 30 years of contributions and who have lost their employment involuntarily and who have been registered unsuccessfully for employment for a minimum of 6 months.

[8] The Social Security publishes the distribution of the stock of pensioners in groups of ages of five years, but not for every age year by year. To obtain the distribution in ages for 31st December 2001, the following was done: i) for the ages from 60 to 65, we rebuilt the stock given for 31st December, accumulating the new pensioners produced year by year from 1996 to 2001 and by applying the probabilities of deaths for each year, ii) for the ages from 66 to 69, the distribution was made considering that the weight of pensioners in this group is similar to the number of the total population who are between 66 and 69 and iii) for pensioners of 70 or more the structure of the general population is maintained according to data provided on population projections given by the *INE*.

[9] This includes the pensions from the old Obligatory Insurance against Age and Incapacity (SOV), 273.4 thousand in 2002 (6% of the total).

[10] Access to contributory retirement begins at this age.

[11] The behaviour of the groups of the population reaching the age of 60 is calculated for each of the years from 1987 to 19997 in accordance with the results presented in the Working Document 2000-2001 of the *Secretaria de Estado de Presupuestos y Gastos "Modelo para simular escenarios de gasto en pensiones contributivas de jubilación de la Seguridad Social."* April 2000.

sex nor concerning the ages of new and deceased pensioners, the people who retire at the age of 60 in any given year has been distributed between men and women taking into account both the evolution in the period 1994-2001 of the stock of pensioners as of December 31st of each year according to sex and the size of each sex group in any given year. As of 2002 and until 2050, it is supposed that the probability of access to retirement of men will remain constant with the value obtained for the period 1995-2001. With regard to women, it is logical to suppose that as more and more women join the labour market and have more and more complete careers the number of people in this group who will have the right to a contributory pension will increase. Therefore, the numbers gave for this group increase gradually until they reach almost the same level as that estimated for men.

With regard to the distribution of the population of the group of 60 years old which is retiring, the average behaviour observed in the new pensions for the period 1987-1997 is maintained for the entire horizon projected. Graph 2 shows that there are two ages in which there is a concentration in access to retirement, at the ages of 60 and 65. This would suggest that the Spanish pension system encourages early retirement, fundamentally, as a result of the policy of complementing the minimum[12]. Since 1993 the number of people in the group of people of the age of 60 who decided to retire has decreased, principally because the group of people who had a right to early retirement got smaller and smaller. However, the changes which have been recently introduced, which significantly increase the numbers of people who have the right to early retirement, together with the ever more generous of complements for minimums, would suggest that this falling off in the numbers of people opting for retirement at the age of 60 could be at an end. Therefore, the supposition that the distribution of the population which opts for retirement from the group of 60 year-old will be consistent with the average gave for the period 1987-1997 could be negatively affecting the projections made for spending on pensions presented herein.

Graph 3 shows the evolution, under the conditions presented herein, of the new pensions and the stock of pensioners up until 2050. It can be seen, in line with ageing of the population, that there is a tendency to increase and that a maximum number of new pensions is reached around the year 2038, coinciding with the baby-boom generation reaching the age of retirement.

With regard to the projection of deceased pensioners for each year, this group is obtained by applying the probabilities of death to the stock of pensioners existing on December 31st of the previous year and the new pensions that have been accessed throughout the year.

Finally, the stock of pensioners which is projected is divided into two groups, those which receive complements for minimum pensions and those who don't. To do this, it is supposed that the percentage of pensioners who receive complements for minimum levels in each of the groups of pensioners considered, new (A), deceased (B) and common (C) pensioners, will remain constant as of the year 2011. Until then, this percentage will evolve in accordance with the growth rate observed between 1995-2001.

By relating the number of pensioners with the potentially active population and, therefore, with the population which may contribute to the system, it is estimated that in 2050 there will be 2.7 active members of the population for every pensioner as opposed to the six which exist today. These figures show the difficulties that exist in financing the probable increase in spending that will be required for retirement pensions under current legislation.

Graph 2.
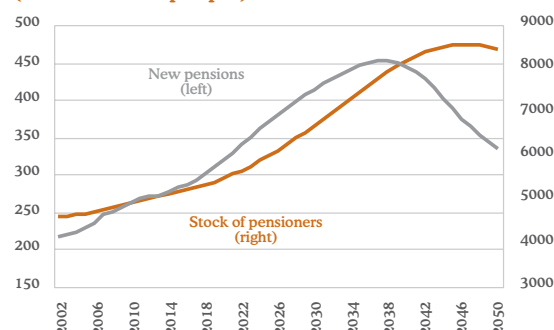**Distribution of the population retiring in the 60 year-old group**
(Average for 1987-1997)
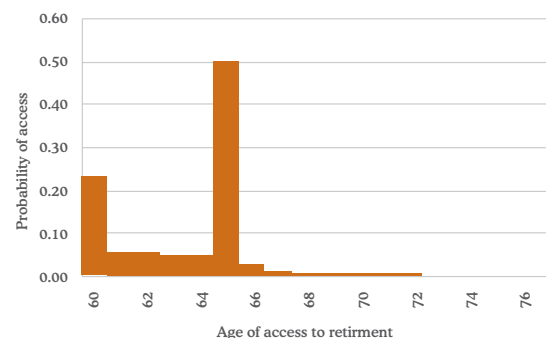
Source: BBVA and Ministry of Finance

Graph 3.
Evolution of new pensions and stock of contributory retirement pensions
(Thousands of people)

Source: BBVA

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[12] See the monograph *"Sistema de pensiones y mercado de Trabajo en España"* (2002), Boldrin, M., Jiménez Martín, S. and Peracchi, F. BBVA Foundation.

Table 2. Macroeconomic scenario

	2001-2020	2020-2050
Real GDP	2.7	2.1
CPI (Dec./Dec.)	1.8	1.7
Active population	0.2	-0.4
Participation rate	68.9	71.5
Employment	0.6	-0.3
Unemployment rate	7.8	4.8
Remuneration per wage earner	3.7	4.2
Productivity	2.0	2.4

Source: Ministry of Finance

6.3. Macroeconomic scenario

The pension received initially by pensioner upon retirement will depend on the evolution of the remuneration received in their working life, on their labour history (entering and leaving the labour market) and on the inflation during the years prior to their retirement. Later, the revaluation policy will determine the evolution of the initial pension or the entering into the system.

As we have mentioned above, this work is centred on the effect of legislative changes on pensions, ignoring, wherever possible, the impact of macroeconomic magnitudes. Therefore, we assume the macroeconomic scenario used by the Ministry of Finance in some of the projections made on the future evolution of public spending on pensions[13]. Table 2 shows the principal variables.

6.4. Projection of the average pension of the system

The average pension of the system (PMT) may be expressed as a weighted average of the average pension given to new pensioners (PMA), of the average of the common pensions (PMC) and of the average of the finished pensions (PMB). This breakdown is further enriched if we consider the weight of the complement of minimum levels in the total spending for each group. In 2001, of the total amount of spending of contributory retirement pensions, 6% corresponded to the payment of complements for minimum levels (CM), a percentage which was reduced to 3.6% for new pensions. This decrease is due to the fact that the average pension for new pensioners is higher than that for deceased pensioners, given that the labour careers of the pensioners has generally been more complete. Furthermore, the initial pension depends directly on the evolution of wages and salaries and not on the CPI, which generally has a lower growth rate, and which is the index used for revaluing pensions that are in force. The effect on spending on pensions of the gap between the PMA and the PMB is what is known as the substitution effect. As a whole, the PMT is as follows:

$$PMT = f\,(PMA, PMB, PMC, CMA, CMB, CMC) \qquad (3)$$

Where CMA, CMB and CMC are the complements for minimum levels for the new, finished and common pensions respectively. Each one of these factors is weighted by the weight that the corresponding group of pensioners (A, B or C) have on the total.

The evolution of the components of the average pension of the system depends on various factors. For example, Legislative changes which affect the formula used for calculating the initial pension or the legal age for retirement will directly affect the PMA, which is the component of the PMT which is most going to condition its evolution in the long term, although they will not affect the amounts paid in existing pensions. On the other hand, the method used for revaluing pensions (inflation, inflation less X) will determine the evolution of the pensions which already exist. Furthermore, modifications in the policy to complement minimum levels will affect the amount received by all pensioners. Thus, it can be deduced that the PMA is the most sensitive to the decisions adopted in the renovation of the Pact of Toledo, and so it shall be now examined the variables which affect its evolution in detail.

The PMA is determined by the initial pension (PIA) and the complements for minimum levels (CMA). In turn, the evolution of the PIA depends on three factors: i) the regulatory base (BR), ii) the labour history, number of years of contributions (HL) and iii) access to early retirement (JA). Thus, the PIA can be expressed as:

$$PIA = \alpha\,(HL) * \beta(JA) * BR \qquad (4)$$

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[13] See Working Document 2000-2001 of the *Secretaria de Estado de Presupuestos y Gastos. Modelo para simular escenarios de gastos en pensiones contributivas de jubilación de la Seguridad Social."* April 2000.

Where α (HL) is the coefficient of penalisation for HL and β(JA) is the coefficient of penalisation for early retirement, which equivalent to one when retirement is taken at the legal age (65 years old at present).

With regard to the BR, its evolution depends on the behaviour of the contribution bases, which are determined by the total remuneration of the worker[14] and by the variation of the CPI in the years prior to retirement. Under current legislation, the calculation of the BR takes into account the contributions of the last 15 years[15]. The increase in the number of years taken into account is part of the agenda of the revision of the Pact of Toledo. This will give rise to an important debate due to the negative impact this will have on initial pensions, which is the concept which most affects the future evolution of the average pension of the system. In fact, of the three factors which condition the evolution of the amount paid in contributory retirement pensions, the initial pension accounted for around 64% of the total spending on pensions in June 2002, revaluations 30% and complements to guarantee minimum levels 6%. Therefore, any legislative change which affects the initial pension received, will significantly affect the evolution of the average pension of new pensioners and the total spending required for pensions. Under a scenario governed by current legislation, it shall be considered that the average contribution bases for new pensions will evolve in line with the contribution bases of the general regime which evolve in accordance with the remuneration of the worker and of the self-employed workers regime which behave like the minimum wage, and, therefore, in accordance with inflation.

With regard to labour history (HL), the average number of years of contributions of new pensioners has been obtained using the data published by the Ministry of Labour and Social Affairs in the General Budget for 2003. According to this information, in 2002 the average number of years contributing to the Social Security was 30.4 in all regimes, as opposed to 32.3 for the general regime. Therefore, the reducing coefficient for HL, α (HL), applied to the BR, in accordance with Act 35/2002 of 12th July, makes the average around 0.9085. This coefficient is higher in the case of men given that, on average, they have had more complete labour careers. This fact reflects the different behaviour between men and women in the labour market of the past. However, the recent incorporation of women into the labour market means that this reducing coefficient will increase until it is virtually the same as that used for men, therefore, in the absence of any changes in the Law, the reducing coefficient for HL will be close to one. For this reason, it can be assumed that α (HL) for the system as a whole will slowly approach (HL) for the general regime (0.947) and once this has happened, by 2013, it will remain constant for the rest of the projected horizon. This is a conservative supposition and, as a result, the levels shown for spending on retirement pensions obtained using this baseline scenario may be considered as lower than the reality.

The second factor of penalisation, the average reducing coefficient for early retirement β(JA) is the relationship between the age at the moment of retirement (64 in the system as a whole as opposed to 63 in the general regime) and the number of years of contributions. Under current legislation β(JA) would be around 0.9390, greater than the 0.8642 of the general regime. Unlike the first factor, α (HL), the penalisation for early retirement is more intense in the case of men than women. This is because the majority of women in recent years who have been able to take retirement have not legally been able to opt for early retirement, having begun their working life after the year 1967. In this sense, the change introduced by Act 35/2002, regarding early retirement, has increased the numbers in this group of men and women who may opt for early retirement. This has meant that the process through which the

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[14] In recent years the average contribution bases have started to come close to real salaries. Despite this, the existence of maximum and minimum contribution bases means that the ratio is sometimes lower.

[15] Between 1986 and 1997 this is obtained taking into account the contributions of the last eight years.

Graph 4.
Evolution of the average pension
Average monthly pension, Euros
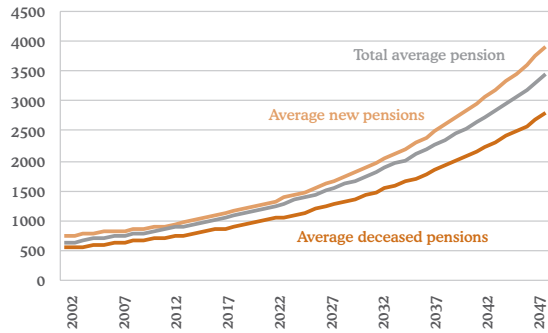
Source: BBVA

Table 3. Average pension, inflation and salary

Average annual %	PMT	PMA	PMB	PMC	Inflation	Salary
1991-2000	5.8	6.3	6.1	5.8	3.9	4.6
2001-2010	3.7	2.8	3.2	3.7	2.4	3.7
2011-2020	3.6	3.3	3.5	3.6	1.7	3.7
2021-2030	3.7	3.9	3.6	3.7	1.7	4.2
2031-2040	3.9	4.2	3.9	3.9	1.7	4.2
2041-2050	3.9	4.2	3.8	3.9	1.7	4.2

Source: BBVA and INE

actual retirement age of new pensioners was approaching the legal retirement age, which had been occurring sine 1997, has been interrupted. Therefore, in the absence of legislative changes, the increase in the numbers of people who may opt for early retirement and the maintaining of the policy for compensating minimum levels which encourage retirement at the age of 60 for individuals with incomplete labour histories will mean that the effective age for retirement will stop increasing. Despite the fact that this implies a greater penalisation, the fact the average number of years of contributions is close to figure given for the general regime (labour histories which are more complete than the system taken as a whole) might neutralise the negative effect of these options for early retirement. Consequently, we have assumed that for the projected horizon in this study the penalisation factor β(JA) will remain as it is at present[16].

The evolution of the initial pensions for new pensioners until 2050 in the baseline scenario is found using the equation (4) and given the estimated evolution of the BR and of the penalisation coefficients. We must add to the initial pension calculated in this way the corresponding complement for minimum levels. In this study we have considered that the percentage of the complementary payment for minimum levels will grow until 2010 at the same rate as that registered for the period 1995-2001 and that, after that, it will remain constant.

Once the evolution of the average initial pension for pensioners has been projected, it is necessary to estimate that of the deceased pensioners (PMB) and that of the common pensions (PC) so as to obtain the evolution of the average pension in the system (PMT). With regard to the former, the projection is made by taking into account that the PMB, without complement for minimum levels, depends, in the short term, fundamentally on the existing pensions and, in the long term, on the PMA. Therefore, the projection of the PMB, without complements for minimum levels, in the period t is obtained using the projections made for the PMA and the average pension of the stock of pensioners in the period t-1. To this end, the historical relationship between these variables is estimated and projected into the future[17] and it is assumed that this relationship will remain constant throughout the projected horizon. The projection for the complements for minimum levels is made using the same procedure as that used for new pensions.

Finally, the average pension of those pensioners who remain pensioners throughout the year, those which we have referred to as common pensions, is obtained as a weighted average of the PMB for the current year and the PMA and the PMC of the previous year. The complements for minimum levels are projected by applying the same suppositions as those used for new and deceased pensioners in the system.

When incorporating into equation (3) the projections made for average pensions and complements for minimum levels for the three groups of pensioners, A, B and C, the average pension of the system, PMT, can be obtained, and this is shown in Graph 4.

Table 3 shows that the PMT has registered, and will continue to register, a growth which is greater than inflation. This means that existing pensions increase in real terms, which shows the generosity of the Spanish public pension system. In recent years, this increase in purchasing power can be explained by the significant raises given to minimum pensions and the surprising behaviour of inflation in certain years (inflation was lower than forecast in the years 1996 and 1998) and this has meant the accumulation and consolidation of increases which were not guaranteed by the current Law. These increases have been greater than the increases in labour productivity. In fact, in the period from 1985 to 2002, the average pension of the system, in real terms, registered

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[16] In fact, if the effective age of retirement remains at its current level and the average number of years of contributions approaches the figures given for the general regime, β(JA) will be higher than the figure considered in the basic scenario.
[17] The relationship which is estimated, without complements for minimum levels, is $PMB_t = f\,(PMA_{t-1}, PM_{t-1})$.

an average growth of 2.2% per annum as opposed to 1.2% in productivity, which only goes to confirm the relative generosity of the public pension system in Spain.

3. Projection of the total public spending on contributory retirement pensions

In this section we will concentrate on the results obtained in the projections made herein. The growth of the average pension and of the number of pensioners determines the evolution of public spending on retirement pensions.

Graph 5 shows three clearly different periods. The first, which goes from 2002 to 2010, approximately, shows a reduction in the spending on pensions compared with GDP, going from 5.5% to 5.1%. This decrease can be explained by the fact that the group of people receiving pensions belongs to the lower population levels resulting from the Civil War. As of this moment, a second phase is begun in which spending returns to an growing path, reaching a maximum figure, around 2045, close to 8.2% of GDP, three percentage points greater than the figure for the present moment. This significant growth can be explained by the greater increase in the average pension and the increase in the number of pensioners over this period. Thus, the average pension will register an increase of 3.8% year on year in the years 2011-2045, as opposed to a growth of 3.5% in the period from 2002 to 2010. The number of pensioners, on the other hand, will increase by 1.6% year on year and 0.8% year on year respectively in the same periods. Finally, as of 2045, the total spending on the pension system will tend to decrease gently, although it will still be 8% of GDP in 2050, the last year considered in this study.

Therefore, in the absence of legislative changes, public spending on contributory retirement pensions will absorb a significant part of the GDP. If we add to this the fact that the ageing of the population will exert pressure on other areas of social protection (widows and widowers and health)[18] and that, in the absence of changes in the effective rate of social contributions, income for contributions will scarcely change their contribution to GDP, the sustainability of the public pension system in the future will require significant legislative changes to be made. This requirement will be accentuated by the scarcity of labour facing the Spanish society in the future (see the macroeconomic scenario) which will reduce the possibilities of growth in the economy in the absence of significant increases in productivity.

Table 4 shows the breakdown into principal groups of spending on pensions. It can be seen that the factors which most contribute to the change in the tendency of spending as of 2010 are ageing and the average pension rate. In fact, in the period where the growth in spending is greatest, between 2011 and 2045, the average pension accounts for about 69.5% of this increase, ageing around 23.5%, the coverage rate[19] of the system 4.4% and, finally, the population helps to reduce this figure by -0.3%.

The limited effect of the economic policy on demographic evolution implies that to guarantee the sustainability of the financing of the public pension system requires legislative changes. Only measures in economic policies which affect the participation rate (complement for minimum levels, the incorporation of women into the labour market, remaining at work beyond the legal age of retirement), incentives for early retirement, the revaluing of current pensions or the determining of the initial pension in the system will help to alleviate the increase in spending foreseen for contributory retirement pensions.

[18] According to estimations made by the European Commission health spending in 2050 in Spain will be greater than 1.5% of the GDP. To this we must add the increased costs involved in looking after and attending to the aged.

[19] The coverage rate is defined as the ratio between the number of pensions and people who are over 60.

Graph 5.
Spending on contributory retirement pensions
(%GDP)
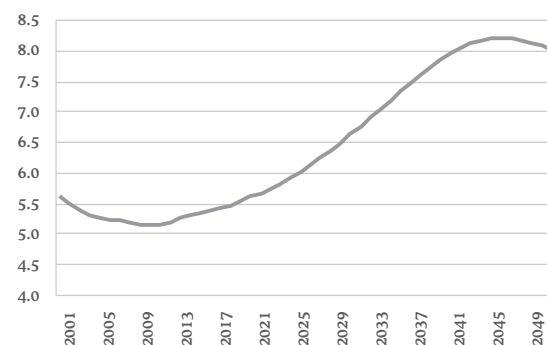
Source: BBVA

Table 4. Factors which explain the spending of retirement pensions

Average annual %	Total population	Ageing rate	Coverage rate	Total average pension	Total spending on retirement pensions
2001-2010	0.5	0.8	-0.5	3.7	4.6
2011-2020	0.2	1.2	-0.3	3.6	4.8
2021-2030	0.0	1.9	0.1	3.7	5.8
2031-2040	-0.1	1.5	0.6	3.9	6.0
2041-2050	-0.4	0.0	0.7	3.9	4.3

Source: BBVA

4. Simulation of the impact of legislative changes on public spending on base scenario pensions

As has been said above, the sustainability of the public pension system requires legislative changes. In this section we shall evaluate the quantitative impact that five changes in current legislation would have on public spending of retirement pensions.

Scenario I.   The elimination of the possibility of early retirement, which implies that the effective age of retirement be over 65.

Scenario II.   An increase in the legal retirement age to 70, in accordance with greater life expectancy.

Scenario III.   An increase in the number of years considered in calculating the regulatory base from the 15 which currently exist to 35.

Scenario IV.   The revaluing of pensions should follow the inflation rules of the CPI minus 0.5%, which would reduce the generosity of the current system, and

Scenario V.   An increase in the rate of participation of women brings with it the generation of retirement rights which are greater than those considered in the base scenario.

Table 5 shows how public spending on contributory pensions would evolve in each one of the scenarios given above. It can be seen that the measures which contribute most to restricting spending on contributory retirement pensions would be the extending of the legal retirement age to 70 (Scenario II) and the increase in the number of years considered in the calculation of the regulatory base (Scenario III). The elimination of early retirement (Scenario I) and the revaluing of pensions below the rate of inflation (Scenario IV) have a significant impact, but less than the previous two. The combination of all of these changes would help to alleviate the increase in spending foreseen for contributory retirement pensions.

The impact of these measures would not be the same for all individuals as it would depend on the specific characteristics of each person. More specifically, the effect on the retirement pension of an increase in the years of contribution which are considered for calculating the regulatory base would depend on the wage history of each individual. Thus, those workers whose salary had decreased in the years prior to retirement would find their pension increased if the years when they were earning more were included in the calculation, and the opposite would happen for individuals had grown significantly in their last years of employment[20] . With regard to early retirement, individuals with poorer qualifications and, generally, with more incomplete career histories are those who have more incentives for taking early retirement.

The simulations of the baseline scenario and the alternative scenarios given, from I to IV, consider that the rights to pensions generated by the

[20] See Jimeno, J.F. (2002): *Incentivos y desigualdad en el sistema español de pensiones de jubilación.* Working Document 2003-13. Fedea.

Table 5. Impact of the different measures on the spending on contributory retirement pensions

% GDP	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Baseline scenario	5.3	5.1	5.3	5.6	6.0	6.6	7.3	7.9	8.2	8.0
Scenario I	5.2	5.0	5.2	5.3	5.6	6.1	6.8	7.5	7.9	7.8
Scenario II	5.3	4.8	4.8	4.7	4.6	4.7	5.2	5.8	6.5	6.8
Scenario III	5.3	5.2	5.5	5.8	6.1	6.5	7.0	7.4	7.5	7.2
Scenario IV	5.2	4.9	5.1	5.3	5.7	6.2	6.8	7.4	7.6	7.4

Source: BBVA

increase in the participation of women increase more slowly than the historical relationship between these variables would suggest. Therefore, an additional simulation will be made in which these rights increase more quickly than in the base scenario. In Scenario V we consider that the rights of groups of women generated for retirement increase at the same rate as their participation rate. In this scenario, public spending on pensions would be around 0.8 percentage points of the GDP greater than that in the base scenario.

It can, therefore, be deduced that given the changes that will take place in the labour market, the ageing of the population and the generosity of the Spanish pension system will bring about an increase in public spending on retirement pensions as of 2010 which will require the adoption of measures if we do not want to drastically reduce the amount paid in pensions in the future, raise taxes, which would significantly increase fiscal pressure, or increase debt.

4. Conclusions

In coming years the Spanish pension system will have to confront the progressive impact of the ageing of the population. According to projections made by the *INE*, in 2046 the number of people age 65 or more will reach a maximum of 13.04 million, 86.7% more than the figure for the present day. This increase is so great that there is no doubt that it will lead to an increase in the future public spending on pensions.

In order to quantify the future evolution of spending on retirement pensions in the horizon 2010-2050 and given that the labour histories of the contributors to the Social Security system are not available, a model was in which spending on pensions was expressed in accordance with the following variables: the average new pensions, the average finished pensions, the average pensions for common pensioners, the number of pensioners in each one of these three groups and the complementary payments to guarantee minimum levels. The breakdown of the total spending on retirement pensions into three groups, that spent on new, finished and common pensions, meant that a more detailed analysis could be made regarding which of these three groups contributed most to the future evolution of spending and that a more accurate simulation of legislative changes could be made.

In the absence of legislative changes, the projection of the variables which determine the evolution of spending on contributory retirement pensions shows that the spending on contributory retirement pensions will increase with regard to the GDP to a maximum of 8.2% of the GDP in the year 2045, from a minimum close to 5.1% of the GDP in 2010, an increase of 60%. This increase in spending suggests that, in a scenario where there is a scarcity of labour and with no effective changes made in social contributions, in order to guarantee the financial sustainability of the public pension system the current law must be modified.

At a time like the present, when the Pact of Toledo is about to be renegotiated, the impact of various measures on public spending on pensions has been simulated. The results show that to postpone the retirement age and to increase in the number of years used to calculate the regulatory base would help to reduce spending on pensions more than the elimination of early retirement or to adjust pensions at a rate lower

Table 6. Impact of the increase in retirement rights generated by the greater participation of women in the labour market

% GDP	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Baseline scenario	5.3	5.1	5.3	5.6	6.0	6.6	7.3	7.9	8.2	8.0
Scenario V	5.3	5.1	5.4	5.7	6.2	6.9	7.7	8.5	8.9	8.8

Source: BBVA

than the inflation rate. None of these measures is sufficient by themselves if we want to reduce public spending on pensions, but a combination of them would allow us to face the future of public pensions and public spending with greater optimism.

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Summary of forecasts

(% change y/y, except for express indication)

	1999	2000	2001	2002	2003	2004
GDP at constant prices	**4.2**	**4.2**	**2.7**	**2.0**	**2.5**	**2.5**
Expenditure						
Private consumption	4.7	3.9	2.5	1.9	2.5	2.6
Public consumption	4.2	5.0	3.1	3.8	3.9	3.2
Gross Fixed Capital Formation	8.7	5.7	3.2	1.4	2.9	1.7
Capital Goods	8.4	5.1	0.3	-2.2	3.0	4.5
Construction	9.0	6.2	5.8	4.5	2.9	-0.5
Inventories (*)	0.1	-0.1	0.0	0.1	0.1	0.0
Internal Demand (*)	**5.6**	**4.5**	**2.8**	**2.3**	**3.0**	**2.5**
Exports (goods and services)	7.7	10.1	3.4	1.4	3.3	6.0
Imports (goods and services)	12.7	10.6	3.5	2.2	4.6	5.8
External Demand (*)	**-1.4**	**-0.3**	**-0.1**	**-0.3**	**-0.5**	**-0.1**
Activity						
Industry	3.7	4.0	1.4	1.0	0.7	1.9
Construction	8.6	6.4	5.4	4.9	3.3	0.4
Services	4.1	4.0	3.2	2.2	2.7	2.7
GDP at current prices	**7.1**	**7.8**	**6.9**	**6.5**	**6.9**	**6.7**
Euro, billions	565	609	652	694	742	792
Prices and costs						
GDP Deflator	2.7	3.5	4.2	4.4	4.3	4.1
Private Consumption Deflator	2.4	3.2	3.3	3.6	3.5	3.3
CPI	2.3	3.4	3.6	3.5	3.2	3.1
Inflation gap with EMU (p.p.)	1.1	1.2	1.0	1.3	1.2	1.3
Compensation of employees	2.7	3.7	4.1	4.0	3.9	3.8
Unit Labour Costs (ULC)	2.1	3.0	3.8	3.3	2.6	3.1
Competitiveness (real effective exchange rate)	-1.5	-3.1	2.1	3.1	6.0	1.7
Labour Market						
Labour force	1.8	3.3	-0.2	3.0	2.6	2.6
Employment, LFS	5.5	5.5	3.8	2.0	2.2	2.4
Increase, thousands of people	760.3	801.8	575.8	312.1	358.0	390.6
Employment, National Account	3.6	3.4	2.4	1.3	1.2	1.4
Unemployment rate (% of labour force)	15.7	13.9	10.5	11.4	11.7	11.9
Productivity	0.6	0.8	0.3	0.7	1.3	0.7
Public Sector						
Debt (% GDP)	63.1	60.5	57.1	55.2	52.7	51.0
Deficit (% GDP)	-1.2	-0.8	-0.1	-0.1	-0.6	-0.5
External Sector						
Trade Balance (% GDP)	-5.8	-7.1	-6.6	-6.0	-6.5	-5.6
Current Account Balance (% GDP)	-2.3	-3.4	-2.6	-2.6	-2.7	-2.3
International Outlook						
GDP: World	3.5	4.7	2.2	2.9	2.8	3.6
US	4.1	3.8	0.3	2.4	2.0	3.0
EMU	2.6	3.5	1.5	0.8	0.5	1.5
World Trade	6.7	12.6	-0.9	5.3	3.5	5.0
CPI: US	2.2	3.4	2.8	1.6	2.4	1.8
EMU	1.1	2.3	2.6	2.3	2.0	1.8
Exchange rate: € / $	1.07	0.92	0.90	0.94	1.12	1.12
Brent Barrel, price ($)	18.0	28.4	24.9	25.0	27.0	22.8

Exchange rate and interest rate (**)	mar-03	jun-03	sep-03	dec-03	mar-04	jun-04
Official interest rate						
US	1.25	1.00	1.00	1.00	1.00	1.50
EMU	2.50	2.00	1.75	1.75	1.75	2.00
10 year interest rate (**)						
US	3.80	3.32	3.70	4.20	4.50	4.70
Germany	4.02	3.64	3.80	4.00	4.20	4.50
Exchange rate (**)						
€/$	1.08	1.17	1.14	1.15	1.14	1.12
¥/$	119	118	121	123	125	125

Source: official institutions and BBVA

(*) Contribution to GDP growth

(**) end of period, except mar-03 and jun-03: monthly average

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