Spain

Economic Watch

Madrid, 19 January 2011

Economic Analysis
Spain Unit

Sectors of future growth in the Spanish economy

- **The last economic expansion in Spain was underpinned by a growth model characterised by job creation and shaped by the sharp increase in domestic demand and the production of non-tradable goods**
  However, the cyclical expansion generated major imbalances which were reflected by the high inflation differential vis á vis the EMU, as well as substantial external funding needs.

- **The 2008 crisis caused a pronounced adjustment of major macroeconomic imbalances,**
  reflected in the sharp contraction of domestic demand - mainly investment, a large increase in the unemployment rate and a reduction in external funding needs.

- **One of the Spanish economy's main goals is to diversify its growth model**
  The reduction in the importance of residential construction could indicate that productive forces are being reoriented towards activities that can be developed by depending more on companies' own resources (i.e. less leverage), feature high profitability rates (i.e. attract investment), depend on external demand, and are well positioned to benefit from predicted demographic changes.

- **The evidence suggests that Spanish companies in a wide array of sectors - that in turn represent a sizeable share of the overall economy - are more profitable than their counterpart companies in other large European economies and attract foreign investment**
  Furthermore, these are sectors with a high degree of internationalisation, whose exports are opening up new markets in dynamic developing economies.

- **The reorientation of the growth model will require the implementation of structural reforms in order to promote the expansion of new sectors and increase the potential growth rate**
  Of particular importance will be the labour market reform, the measures that facilitate an orderly deleveraging process of the private sector, that ensure the soundness of the public finances in the medium term and that diminish the economy's financing needs and improve the quality of human capital.

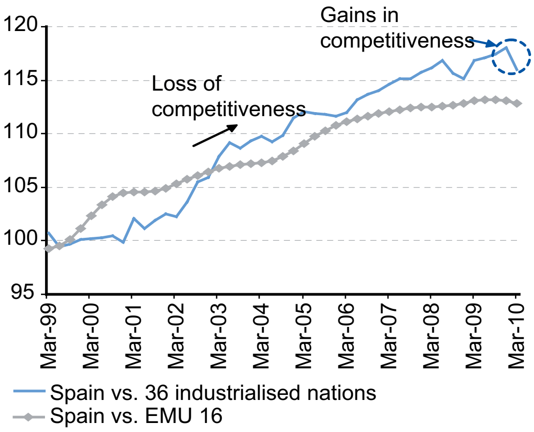
A growth model shaped by the increase in domestic demand and the production of non-tradable goods

Between 1994 and 2007 the Spanish economy enjoyed one of the longest lasting and most robust economic growth periods of recent decades, during which employment increased at an average annual rate of 3.2%, significantly higher than what was registered by the EU15 (0.8%) and in the US (1.3%). However, this growth (an average of 3.5% per annum) driven by strong domestic demand in a context of historically low interest rates and a significant increase in the immigrant population, also created certain interdependent imbalances.

In particular, the poor apparent productivity performance highlights that labour factors lay behind the Spanish economy's loss of competitiveness, which is evidenced by the positive inflation differential the EMU, as well as the high and persistent foreign trade deficit driven by the rapid growth in imports. Within the EMU, which has a fixed nominal exchange rate, a positive inflation differential indicates an appreciation in the real exchange rate (See Chart 1). BBVA Research (2009a) has shown that growth in profit margins (accounting for 55% of the effect) and the imbalance between salaries and the productivity performance of the workforce (the remaining 45%) are the main reasons behind the inflation differential between Spain and the EMU. Since the beginning of 2009, falling oil prices and domestic demand, as well as the increase in productivity due to the massive job destruction, has alleviated the pressure on profit margins and salaries (See Figure 2).

Chart 1

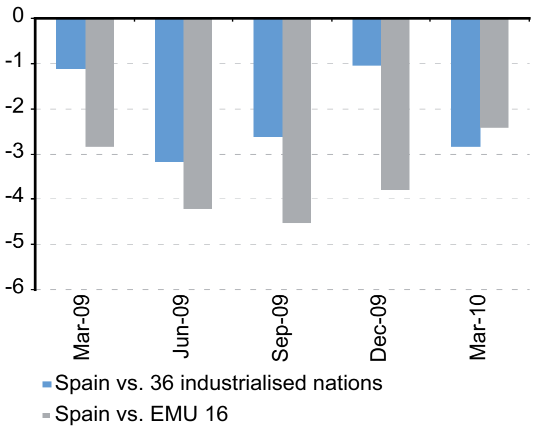
Real effective exchange rate based on exports of goods and services deflator (1999=100)



Source: BBVA Research based on European Commission data

Chart 2

Gains in competitiveness: depreciation of the real effective exchange rate based on unit wage costs (% y-o-y)



Source: BBVA Research based on European Commission data

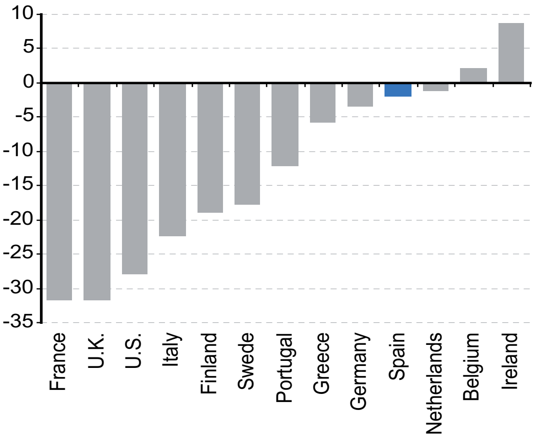
The second manifestation of the apparent lack of competitiveness in the Spanish economy is the relatively high current account deficit that has been sustained over time, and which, in the middle of 2008, surpassed 10% of the GDP. The standard approach for analysing the degree of consistency of an economy's foreign trade deficit with its fundamentals, is to focus on the current account balance over time (see Obstfeld and Rogoff (1996) and Campa and Gavilán (2006)). Using this methodology, BBVA Research (2008a) found that, during the expansion period, about 60% of the current account balance was due to the expectation of future income growth, while the remaining 40% was due to the performance of real interest rates.

In our view, the most correct interpretation of the aforementioned evidence is the following: as a result of the low interest rates and rapid population growth, the Spanish economy reoriented a major part of its productive capacities towards non-tradable goods (mainly investment in residential housing), which drove domestic demand to levels far higher than aggregate supply, a dynamic which, in the case of tradable goods, was resolved through increased imports. In fact the evidence indicates that the loss in competitiveness was not generalised, given that Spanish exports did not loose ground in global trade, but that in the Spanish economy domestic tradable goods lost market share to imports from the rest of the world. Data from the World Trade Organisation (WTO) indicate that the share of Spanish service exports grew in the last decade, while that of goods exports remained virtually unchanged. Chart 3 shows that, among the economies with greater weight in the Eurozone, only Germany and Spain did not significantly loose export market share to emerging countries (mainly China).

The strong expansion of domestic demand is reflected in the notable investment levels over the decade, when gross fixed capital formation surpassed 30% of GDP (See Chart 4). However, once the crisis hit in 2008, investment levels underwent a dramatic contraction, led mainly by the drop in construction investment. The cyclical contraction in domestic demand occurred simultaneously with a sharp reduction in funding needs, which went from about 10% of GDP in 2008 to 5% of GDP in just one year.

Chart 3

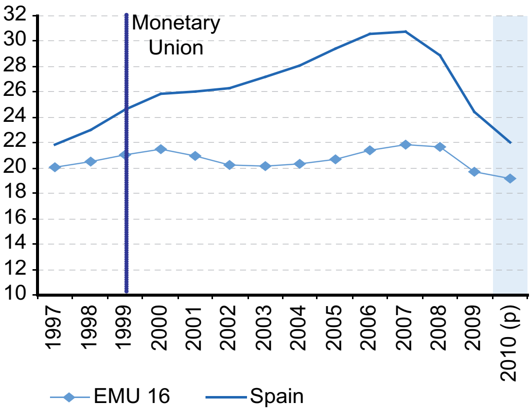
Share of global goods and services exports % Chg. 1999-2009



Source: BBVA Research based on WTO data

Chart 4

Domestic investment rate (GFCF as % of GDP)



GFCF: Gross fixed capital formation
Source: BBVA Research based on INE and AMECO data

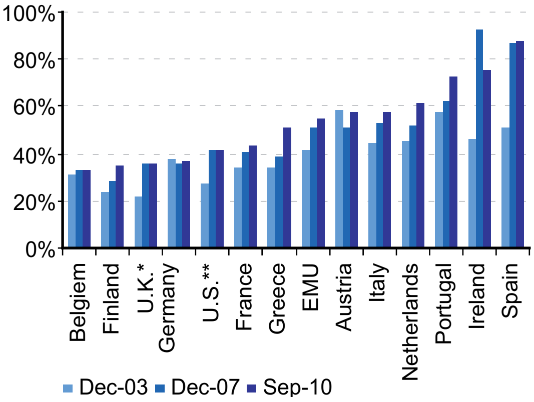
The duration of the crisis and, above all, the medium and long term growth outlook following the end of this crisis, will depend on two factors. The first is the need to reduce the weight of the construction sector, diversifying growth drivers and encouraging business sectors that require a low levels of leverage, are oriented towards external demand and have high profitability. The second, which complements the first, has to do with the implementation of necessary reforms, mainly in the products and labour markets, which would pave the way towards a more balanced growth model.

The necessity of diversifying Spain's growth drivers: encouraging business activities that are less dependent on leverage, highly profitable oriented towards external demand and well-positioned to benefit from demographic changes

One of the main features of the Spanish economy in recent years has been the high debt levels assumed by both businesses and households. An analysis of Spanish companies shows that their debt levels increased substantially, and that their gearing was far higher than the rest of the EMU (See Chart 5). In 2000, the economy's total debt amounted to 90% of GDP, while in September this figure was practically doubled, and had jumped to 176%. Since then, the Spanish economy has started a deleveraging process. There was a substantial increase in Spanish companies' debt levels and their leverage levels were higher than the rest of the EMU countries (See Chart 5).

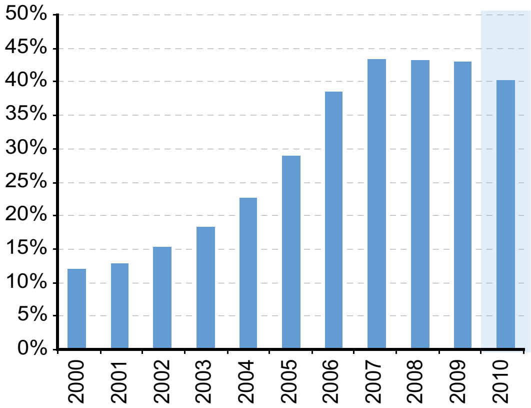
The jump in debt levels in Spain was closely linked to the residential construction sector. Furthermore, almost half of the loans to companies were granted to firms involved in the construction sector (See Chart 6), and the main driver of household debt was home purchases.

Chart 5
Corporate credit (% GDP)



Last data: September 2010.
* United Kingdom: August 2010
**USA: June 2010
Source: BBVA Research based on ECB data

Chart 6
Indebtedness of real estate and construction companies (loans/GDP, %)



Source: BBVA Research based on INE and BdE data

In 2006, construction represented 9.6% of GVA in real terms and was responsible for 12.6% of the country's economic growth. The surge in this sector was accompanied by higher demand for credit from construction companies and promoters. Despite the contraction it has undergone since mid 2007[1], the sector is still overly leveraged. Leverage in the construction and real estate sectors is far greater than in the rest of the economy, a trend that has intensified considerably in recent years. Based on data up to 2010, the ratio of loans to businesses over the sector's GVA for construction and real estate companies increased to 239%. Meanwhile, in the rest of Spain's companies, the ratio stood at 62%, only 21pp more than in 2000. As will be seen later, this heterogeneity in gearing levels across sectors implies that there is a large number of companies with lower debt levels that have a significant weighting in the economy, and are prepared to face the challenge of the new international context. This high aggregate debt level (and the need to reduce it in the coming years), is further complicated by the fact that the economy was impacted by other imbalances in recent years that resulted in a major oversupply of residential housing stock. For example, according to BBVA Research (2009b), unsold new housing stock surpassed the million mark at the end of 2009. In the short term these imbalances will have a significant negative impact on the sector, but once this stock has been absorbed, and given the potential demand of about 350 thousand homes per annum (see BBVA 2009b), construction will continue to be an important sector in the Spanish economy.

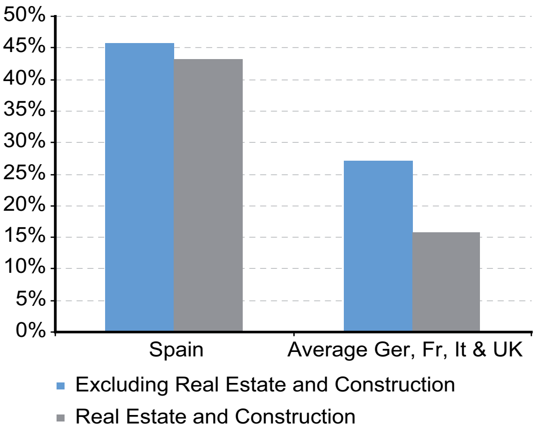
Going forward, the new global economic environment will require projects to be financed with more capital from companies' own resources

Despite the complex financial situation in the construction sector, the Spanish economy presents a highly heterogeneous picture. Breaking down the debt by sector shows that not all businesses have the same degree of indebtedness. Compared to international peers, Spanish companies are more indebted than the average in the main European countries, especially in the construction sector. The debt to GDP ratio for Spanish real estate and construction companies is 30pp higher than the average for the main European economies (See Chart 7). The rest of the sectors in the economy have a more solid financial situation since their debt levels, despite being high and having increased in the last ten years, remain within acceptable limits and are, on average, equivalent to 50% of the GVA produced, a level that is far lower than what is seen in the real estate and construction sectors (See Chart 8). In fact, the Spanish economy boasts sectors in which companies have debt levels that are equivalent or even better than their European competitors, and which are capable of participating in the financing of their own projects.

1: At the time of this report, the weighting of the construction sector in the economy had fallen to 8.6%, and was responsible for over 16% of the decline in GVA in 2009.

Chart 7

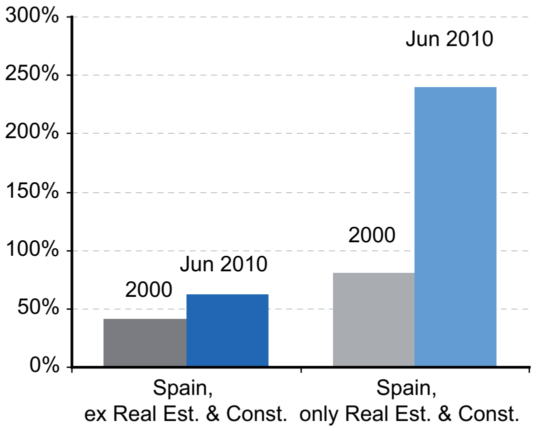
Corporate credit/ 2009 GDP



Source: BBVA Research based on ECB and BdE data

Chart 8

Spain: corporate credit/sector GVA



Source: BBVA Research based on ECB and BdE data

For a detailed analysis, the BACH database was used[2], which gathers statistics from the harmonised balance sheets of a sample group of companies from different countries[3]. The analysis of this database generated Figure 1, which shows a chosen array of sectors in which Spanish companies are compared at the European level (Germany, France and Italy) in certain aspects that will be key for the economic model in the coming years, such as debt levels, profitability, internationalisation, and weight in the Spanish economy. As can be seen, a significant number of sectors in the Spanish economy have debt levels which are similar to those seen in the rest of the Eurozone, for which reason the deleveraging process will not have a major impact on them. After learning from the excesses of the past, Spain now faces a more demanding international context, and financing decisions will be shaped by the degree to which companies participate in projects, i.e., higher weight of own resources.

2: See : http://www.bachesd.banque-france.fr

3: Companies can be classified by, among other variables, their turnover and the sector and business segments in which they operate. In this analysis, the size of the company was not taken into account, for which reason all the companies in the sample were considered independent of their turnover levels.

Figure 1

International comparison of sector indicators

	Indebtedness		Profitability		Real GVA	Exports
	Spain	Average (GE-FR-IT)	Spain	Average (GE-FR-IT)	Share in Spanish GVA	Share in Spanish exports
Hotels and restaurants	56.2	58.8	8.9	4.0	7.3	14.5
Computer programming, consultancy and related activities	57.5	49.5	6.0	5.4	7.1	9.2
Retail trade, except motor vehicles	57.3	62.7	4.5	2.0	6.4	
Transport	42.2	51.9	7.4	2.4	5.6	5.7
Wholesale trade and commission trade, except of motor vehicles	61.5	62.8	3.2	2.4	4.1	
Post and telecommunications*	62.6	61.4	19.7	0.2	4.0	0.5
Electricity, gas and water supply	51.2	42.7	14.7	8.7	3.7	0.6
Manufacture of food products, beverages and tobacco	54.1	54.4	7.3	3.5	2.7	9.4
Basic metals and manufacture of fabricated metal products	43.3	55.0	6.4	4.6	2.6	4.7
Automobiles and transport equipment	63.6	53.1	0.7	0.2	2.2	14.7
Manufacture of chemicals and chemical products	54.3	47.2	5.5	5.9	1.7	8.9
Manufacture of machinery and electrical apparatus	61.4	49.9	6.1	4.3	0.8	4.4
Textile industry	51.8	54.6	4.0	4.2	0.7	2.9
Manufacture of office, accounting and IT machinery	56.9	33.5	1.7	0.7	0.1	0.9
TOTAL					**49.0**	**76.4**

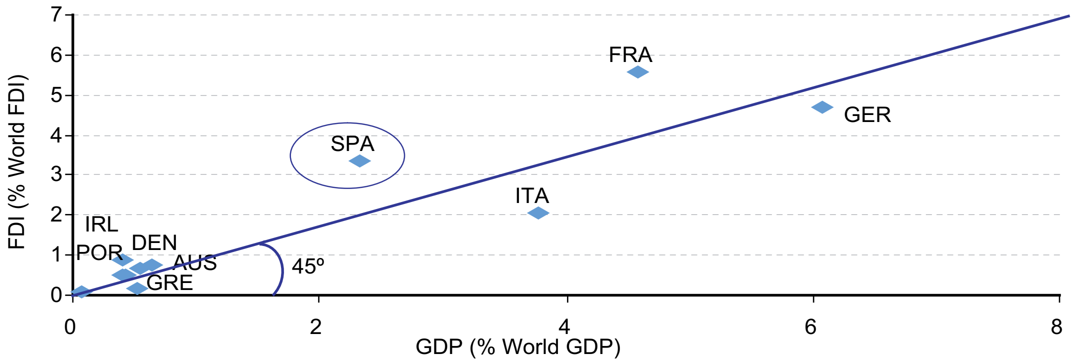
Indebtedness: Borrowings/total assets, annual average (2000-2007). Based on Bach database
Profitability:net operating income in % of turnover, annual average (2000-2007). Based on Bach database
* Average (GE-IT)
Real GVA: based on INE data (sector GVA as % of GVA in 2008)
Exports: based on OECD and DATACOMEX data, 2008. Services account for 33.8% of total exports
Source: BBVA Research based on BACH, INE and DATACOMEX data

In a wide array of sectors, Spanish companies are more profitable than their peers in the large European economies, and attract foreign investment

The Spanish economy has several sectors in which companies are more profitable than the European average (See Figure 1), well regulated and able to attract foreign investment. As underscored by the IMF report (2010), the reduction of entry barriers in network services (gas, electricity, telecommunications) and in retail distribution services has been an important factor in attracting investment. In fact, Spain has been one of the main recipients of FDI in the world, attracting 3.4% of investment flows in recent years, despite its small size in relation to global GDP (See Chart 9).

Chart 9

EMU -16: Contribution to global FDI vs. contribution to global GDP (average 2000-2009)



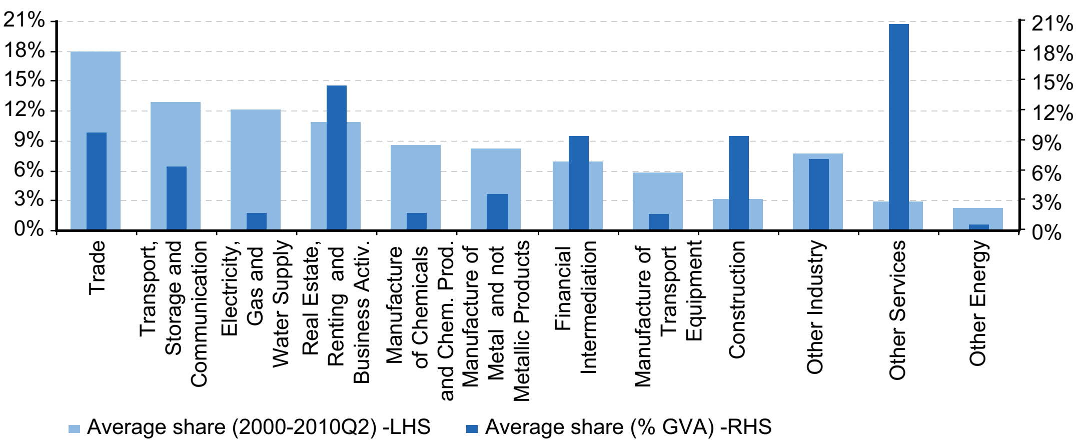
* EMU16: Excluding The Netherlands, Luxembourg, Belgium, Cyprus and Malta
Source: BBVA based on UNCTAD data

The regulatory improvement carried out in the Spanish energy sector is one example of successful regulatory reform. Furthermore, it has one of the largest positive differentials in terms of profitability vis á vis the European average and offers compelling opportunities for investment, especially in renewables. Despite the rate cuts that have been carried out since 2007 and China and India's entry into the sector, Spain remains one of the most attractive countries for investment in renewables, and holds the eighth position in the general ranking and the second in the solar energy ranking[4]. Another success story is trade sector, which, without being a sector that typically receives FDI on the global level, holds a strategic position in Spain. While trade barely receives 6% of inward FDI in countries such as Greece and Portugal, the sector accounts for 18% of inward FDI in Spain and, is especially significant in the wholesale segment (15.1%).

The chemical industry also receives a higher than average percentage of FDI flows (8.6%), despite its scant contribution to added value in Spain (2%). Pharmaceutical companies receive over 50% of the FDI that enters the chemical sector. In addition to being the fourth ranked country in terms of pharmaceutical product sales in the EU-15, Spain has highly qualified human capital in the fields of life and health sciences[5]. The country also has a highly specialisation in life, pharmaceutical and biotechnology sciences, with a modern and innovative infrastructure (European Cell Therapy Network (Seville) and the European Biotechnology Observatory (Barcelona)), among others.

Chart 10

Share of each sector in FDI in Spain



Source: BBVA Research based on DATAINVEST data

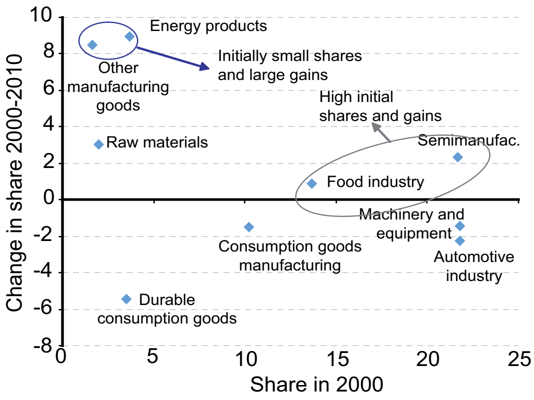
4: See Ernst and Young (2010).
5: According to "Report on the Relevance of Biotechnology in Spain" (2009), in 2008 Spain produced 3.2% of world biotechnology-related scientific production, and 8.5% of the production in the EU-15, and was the fifth ranked country in scientific production in Europe. Since 2000, the contribution of Spain to global scientific production grew 33%.

An array of exporting sectors, of growing importance in Spain's productive structure, are penetrating new markets in dynamic developing economies

During the last decade, the goods-exporting sector, which accounts for over 65% of total exports, has undergone a notable change in its internal composition. By large sectors, we would highlight the increase in the weight of energy products, other merchandise and raw materials, which had previously been of relatively low importance. In addition, semi-manufactured goods and food exports, which at the beginning of the decade were already among the main export sectors, also grew (See Chart 11). In contrast, the durable goods sector's weight in total exports fell significantly, and there were also drops in consumer manufacturing, the automobile sector and capital goods. A more detailed sectoral breakdown shows the noticeable improvement of chemicals, iron and steel and non-ferrous metals, vs. the more moderate gains in manufactures of other capital goods, textiles, and raw materials, among others (See Chart 12). Furthermore, over the last decade, the services sector increased its share to 35% of total exports in 2009.

Chart 11

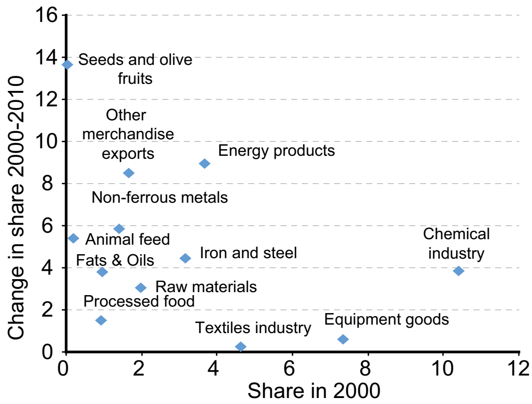
Exports of goods in Spain by large sectors: Weight in 2000 and change in average weight 2000-2010 (in percentage points)



Source:BBVA Research based on Datacomex

Chart 12

Goods exports in Spain: Weight in 2000 and change in average weight 2000-2010 (in percentage points)

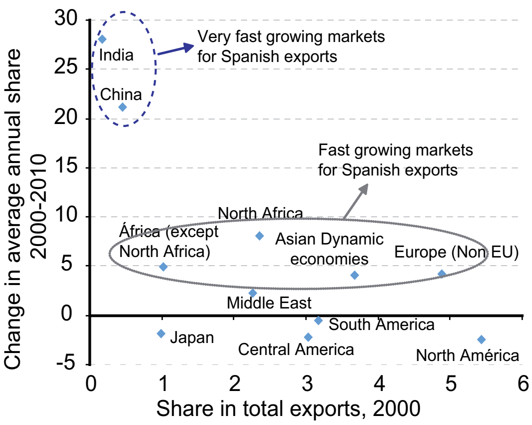


Source: BBVA Research based on Datacomex

Another positive underlying element in the recent performance of Spain's export sector is the increasing diversity of export destinations for Spanish goods. In this regard, we would note the sustained increase in the weight of Spanish goods exports to non-EU countries, which has risen from 28% to 34% in the past decade. This dynamic has been driven mainly by the expansion to Asian destinations, European economies outside the European Union, and African countries (See Chart 13). Given that the degree of openness of economies plays a determining role in their expansion, the internal demand growth that has been forecast for countries that are importing Spanish goods is especially relevant. A wide array of international economic bodies and institutions agree that emerging economies will become the new economic growth drivers in the coming years, for which reason the profitability expected from economic activities oriented towards developing countries will be significantly greater. In particular, BBVA Research's current forecasts indicate that the average growth rate in emerging countries will triple that of developed countries for the next five years (6% vs. 2%). Given that a large part of the growth in developing economies will be driven by internal demand, the sectors in the Spanish economy that seek to meet the consumption and investment requirements of emerging countries should undergo a comparatively robust expansion. The export sector in Spain is aware of this changing landscape, as is shown in Chart 14, which details the notable increase in the weighting of exports to EAGLEs (Emerging and Growth-Leading Economies, a new BBVA Research acronym (2010a)) countries.

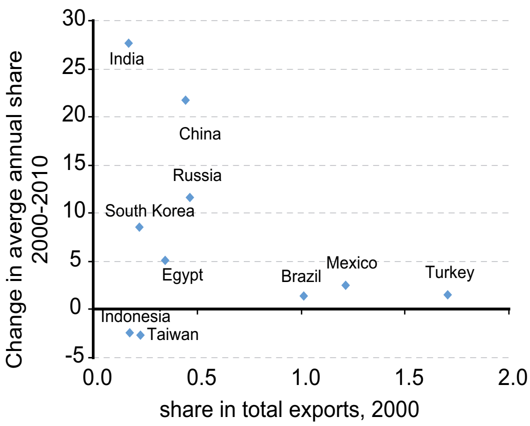
Lastly, the sectors in the Spanish economy that stand out for their low debt levels and high profitability with respect to their peers abroad represent an important part of Spain's productive matrix, over 45% of GVA in 2008, and show a noteworthy degree of internationalisation, representing 76% of total goods and services exports (See Figure 1).

Chart 13
Spain: Exports outside the EU, weight in 2000 and change in average weight 2000-2010 (in percentage points)



Source: BBVA Research based on Datacomex

Chart 14
Spain: Exports to EAGLE countries, weight in 2000 and change in average weight 2000-2010 (in percentage points)



Source: BBVA Research based on Datacomex

The leading sectors of the future will be characterised by the intensive use of technology and an orientation towards meeting demand derived from demographic changes

Using the EU KLEMS database[6], BBVA Research (2008b) has selected two categories of sectors (non-exclusive), which are expected to take the lead in future economic growth. The first group is characterised by relatively high productivity stemming from the more intensive use of technology and includes mainly, the manufacturing of machinery, electrical materials, aeronautical and space construction, IT activities, R&D and sector branches related to business consulting and advisory activities.

The second category is characterised by its strong focus on meeting the demand originated from the structural demographic changes Spain is undergoing. Activities related to healthcare and social services will be shaped by the Spanish population's higher life expectancy[7], which, combined with low birth-rates, will accelerate the increase in the elderly population, as well as in their specialized needs. Furthermore the relevance of social, recreational, cultural, athletic and service-oriented activities related to trade and tourism will depend on the growth of per capita income of the population, which will allow the proportion of resources directed towards leisure to continue rising.

Lastly, it should also be noted that consumption habits in developed economies tend to converge over time. Therefore, the consumption of goods and services whose weighting in Spanish household's consumption basket is smaller than in the rest of the developed economies, should register relative increases in their weighting. In particular, a study by Alloza and García (2010) showed significant homogenisation in consumption patterns for durable goods.

Stepping up the pace of structural reforms is crucial for increasing the potential growth rate of the future sectors

Establishing a more diversified, balanced and productive growth pattern which is also capable of reducing unemployment requires the roll-out of specific economic policy measures, some of which may have immediate effects if implemented correctly (i.e. labour market reform) but others whose effects will be felt only in the very long term (improvement of the educational system). As Andrés and Doménech (2010) stated, the adoption of structural reforms does not obviate the need to change the productive model, but rather, is a necessary condition for meeting the targets that have been set in the swiftest manner possible. Furthermore, it is necessary to positively and definitively differentiate Spain from other peripheral countries in the sovereign debt market. Specifically, BBVA Research (2010b) with its "Structural Capacity Indicator" (SCI) shows that financial markets pay close attention to reform processes

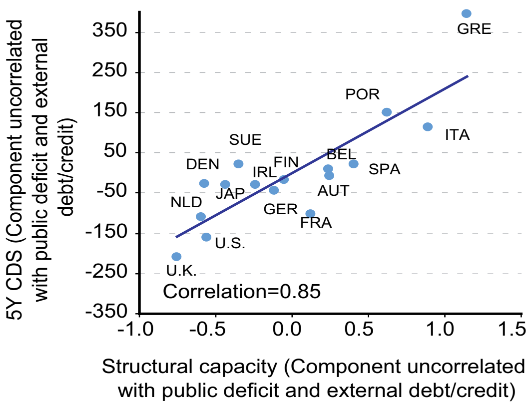
6: For a detailed description of the EU Klems Bach database, please consult: http://www.euklems.net.
7: According to the latest long term demographic forecasts (available on: http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t20/p251&file=inebase&L=) the life expectancy at birth for women will increase 5.5 years to 89.9 years by 2048, while that of men will increase to 84.3 by 2048, 6.3 years more than the current figure.

and countries' productive capacity, since this is what determines whether the deleveraging underway in the public and private sector will occur in a context of high or low growth (See Charts 15 and 16).

In this regard, the reform process underway in the Spanish economy has recently picked up speed, and the fiscal consolidation process, labour market reform, and consolidation in the financial sector are moving forward ahead of schedule. However, it should be noted that even though the labour market reform was a step in the right direction, uncertainty regarding its development and implementation remains high, making it difficult to assess its potential impact on unemployment rates and economic growth. In particular, the restructuring of part of the Spanish financial system needs fine-tuning and consolidating. It needs to be transformed and adjusted much quicker and the authorities need to ensure that the new capital requirements are in line with new global banking regulation. The public authorities must continue guaranteeing that the fiscal deficit targets remain a priority.

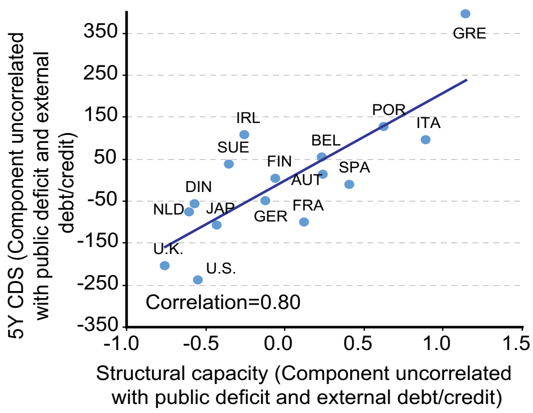
In general, these measures should be complemented with others. BBVA Research (2010b), has found that the greatest weaknesses in the Structural Capacity Indicator are related to the need for additional improvements to the functioning of the labour market, the reduction of obstacles for companies, and most importantly, the deficit in the country's human capital and its innovation capacity (See Charts 17 and 18). Given the importance of these factors, and the amount of time it will take the potential reforms to affect them, it is of critical importance that they be prioritised so that the process can move forward as quickly as possible.

Chart 15
Structural capacity and country risk



Source: BBVA Research

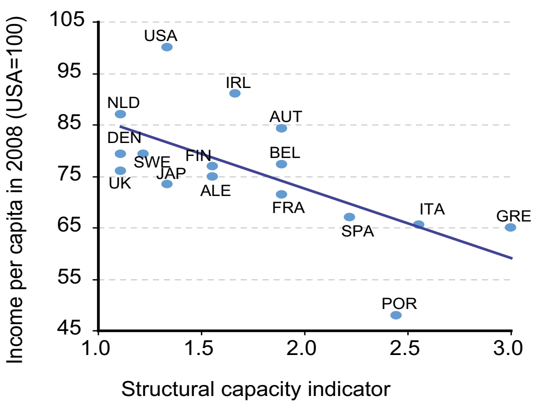
Chart 16
Structural capacity and country risk



Source: BBVA Research

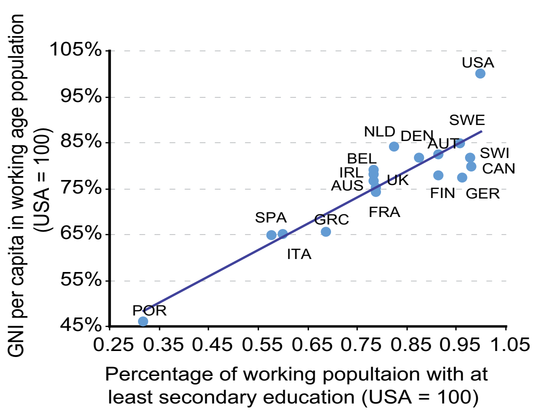
In closing, we believe that these reforms should aid an ordered deleveraging process among households and firms while also guaranteeing the sustainability of public finances in the medium term. They must also improve regulation in the goods and services markets, encourage a more efficient tax system, reduce the economy's financings needs and create a better qualified active population. These structural measures need to be fine-tuned and consolidated to create more favourable conditions for private sector investment and attract foreign financing and create jobs, helping the Spanish economy emerge from the crisis primed for further growth.

Chart 17
Income per capita and structural capacity



Source: BBVA Research based on OECD and IMF data

Chart 18
Income per capita and human capital



Source: BBVA Research based on OECD and IMF data

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This report has been produced by the Spain Unit:

Chief Economist
Rafael Doménech
+34 91 537 36 72
r.domenech@grupobbva.com

Spain
Miguel Cardoso
+34 91 374 39 61
miguel.cardoso@grupobbva.com

Mónica Correa
+34 91 374 64 01
monica.correa@grupobbva.com

Juan Ramón García
+34 91 374 33 39
juanramon.gl@grupobbva.com

Félix Lores
+34 91 374 01 82
felix.lores@grupobbva.com

Isabel Mohedano
+34 91 374 62 66
isabel.mohedano@grupobbva.com

Virginia Pou
+34 91 537 77 23
virginia-puo@grupobbva.com

Pep Ruiz
+34 91 537 55 67
ruiz.aguirre@grupobbva.com

Camilo Andrés Ulloa
+34 91 537 84 73
camiloandres.ulloa@grupobbva.com

BBVA Research

Group Chief Economist
Jorge Sicilia

Chief Economists & Chief Strategists:

Regulatory Affairs, Financial and Economic Scenarios:

Financial Scenarios
Sonsoles Castillo
s.castillo@grupobbva.com

Financial Systems
Ana Rubio
arubiog@grupobbva.com

Economic Scenarios
Juan Ruiz
juan.ruiz@grupobbva.com

Regulatory Affairs
María Abascal
maria.abascal@grupobbva.com

Market & Client Strategy:
Antonio Pulido
ant.pulido@grupobbva.com

Equity and Credit
Ana Munera
ana.munera@grupobbva.com

Interest Rates, Currencies and Commodities
Luis Enrique Rodríguez
luisen.rodriguez@grupobbva.com

Asset Management
Henrik Lumholdt
henrik.lumholdt@grupobbva.com

Spain and Europe:
Rafael Doménech
r.domenech@grupobbva.com

Spain
Miguel Cardoso
miguel.cardoso@grupobbva.com

Europe
Miguel Jiménez
mjimenezg@grupobbva.com

United States and Mexico:

United States
Nathaniel Karp
nathaniel.karp@bbvacompass.com

Mexico
Adolfo Albo
a.albo@bbva.bancomer.com

Macro Analysis Mexico
Julián Cubero
juan.cubero@bbva.bancomer.com

Emerging Markets:
Alicia García-Herrero
alicia.garcia-herrero@bbva.com.hk

Cross-Country *Emerging Markets* Analysis
Daniel Navia
daniel.navia@grupobbva.com

Pensions
David Tuesta
david.tuesta@grupobbva.com

Asia
Stephen Schwartz
stephen.schwartz@bbva.com.hk

South America
Joaquín Vial
jvial@bbvaprovida.cl

Argentina
Gloria Sorensen
gsorensen@bancofrances.com.ar

Chile
Alejandro Puente
apuente@grupobbva.cl

Colombia
Juana Téllez
juana.tellez@bbva.com.co

Peru
Hugo Perea
hperea@grupobbva.com.pe

Venezuela
Oswaldo López
oswaldo_lopez@provincial.com

Contact details

BBVA Research
Paseo Castellana, 81 - 7th floor
28046 Madrid (Spain)
Tel.: +34 91 374 60 00 and +34 91 537 70 00
Fax: +34 91 374 30 25
bbvaresearch@grupobbva.com
www.bbvaresearch.com
Legal Deposit: M-31256-2000