

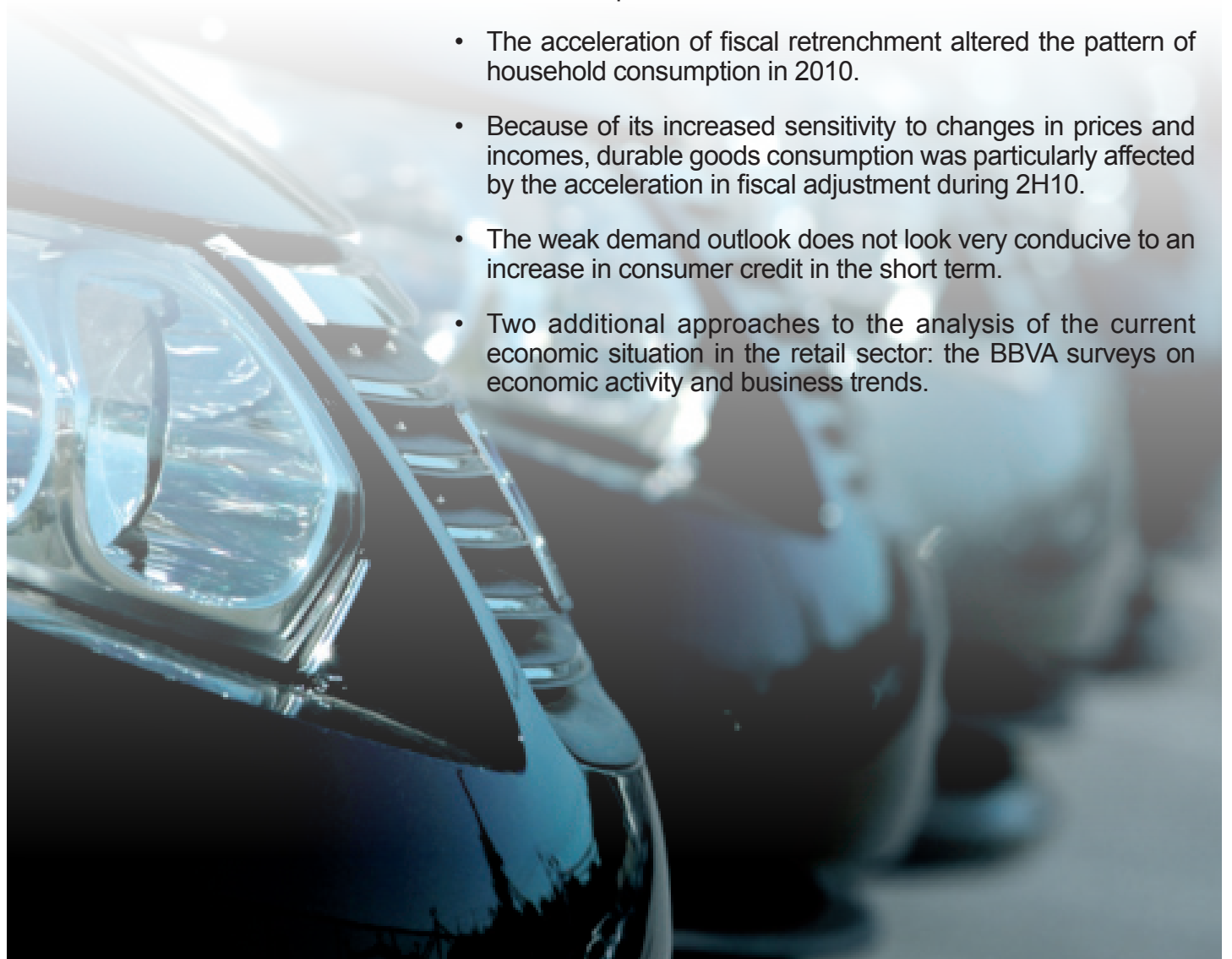
Spain

# Consumption Outlook

Second half 2010

## Economic Analysis

- The divergences in global growth rates are likely to condition economic policies.
- The main characteristics of Spain's economic growth will continue to be weak internal demand and a positive contribution from net exports.
- The acceleration of fiscal retrenchment altered the pattern of household consumption in 2010.
- Because of its increased sensitivity to changes in prices and incomes, durable goods consumption was particularly affected by the acceleration in fiscal adjustment during 2H10.
- The weak demand outlook does not look very conducive to an increase in consumer credit in the short term.
- Two additional approaches to the analysis of the current economic situation in the retail sector: the BBVA surveys on economic activity and business trends.



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**Closing date: February 28, 2011**

# 1. Summary

Global growth remains strong. After closing 2010 with GDP growth of 4.8%, the world economy is expected to slow slightly, towards a growth rate of 4.4% in both 2011 and 2012: certainly a better performance than expected 12 months ago. This is explained by a better outlook for the advanced economies, due to stronger growth expectations in the U.S. (on the back of the fiscal stimulus measures) and the solid performance of the core economies in Europe, which have decoupled from the peripheral economies that continue to be dragged by financial market tensions. In fact, even though stress levels in European financial markets increased during the final quarter of 2010, economic activity in the region actually remained upbeat, showing also (at least for a least temporarily) a decoupling between real economic activity and financial activity. Overall, the pattern of global economic growth remains broadly unchanged as the real engine of dynamism continues to be the emerging world (led by Asia) and with the developed economies (mainly those in Europe) continuing to lose ground.

In Europe, the market uncertainty caused by doubts over the capacity of institutions to tackle the sovereign debt crisis, and growing uncertainty about the credibility of the stress tests, failed to hamper real economy growth, which was led by Germany (+3.5% in 2010). As a whole, the EMU grew by 1.7%, mainly due to the positive contribution of net exports. In 2011, an increased contribution from private consumption should offset the expected slowdown in exports, leading to a GDP growth around 1.7%. Overall, the driving forces should continue to be sustained external demand and a general climate of confidence as the systemic risk in the financial sector gradually disappears. Fiscal policy is likely to play a contractive role (albeit moderate) across the whole region. Growth in the peripheral economies is likely to be below the EMU average due to their bigger fiscal adjustments, higher financing costs, and (in Ireland and Spain) a continuation of the resizing process in the real estate sector.

Against this background of divergences and financial stress, the Spanish economy finished 2010 with a GDP decline of 0.1%. A breakdown of this growth over the full year, and also more recently shows the weakness of domestic demand and the support provided by external demand, both very clearly conditioned by the changes introduced in fiscal policy and the underlying strength of the exports' fundamentals.

Following the extensive use of expansive fiscal policies during 2008 and 2009, the Spanish economy then embarked on an ambitious process of fiscal consolidation in 2010. During the second half of that year, and partly as a result of the increased financial stress during the spring, this process was accelerated, with the introduction of new discretionary measures and the endorsement of a calendar for the structural reforms needed to correct the macroeconomic imbalances accumulated before and during the crisis. As a result, domestic demand in 2010 was strongly conditioned by fiscal policy: firstly (and directly) as a result of the gradual adjustment in public sector demand; and secondly (and indirectly), because of its influence on agents' consumption and investment decisions. There was, in particular, a strong bringing forward of private domestic demand to the first half of the year, due to the announced rise in VAT, the cut in civil servants' pay in 2H10, and the removal of certain economic stimulus packages, like the Plan 2000E. Demand then slowed in 3Q10 as the new tax and public sector spending policies entered in force. And then finally, once the change in fiscal policy stance had been accounted for, there was a return to the positive trend at the end of the year, albeit at a slow pace due to the weak fundamentals. Household consumption rose 1.3% in 2010, making a positive contribution to GDP growth (0.7pp), although this was not enough to prevent a negative contribution from internal demand as a whole (-1.1pp).

While consumption as a whole suffered during the second half of the year, domestic demand for durable goods was particularly damaged because of its greater sensitivity to changes in prices and household income. Between June and December, the availability of consumer durables dropped by 32.3%, with the sharpest fall in 3Q10 (-18.2%). The coinciding increase in VAT with the end of the Plan 2000E drove demand for new cars (NCs) to be one of the most affected by the acceleration in the fiscal consolidation process, with the particular channel being the main source of the slump in NCs registrations in 2H10. Used-car (UC) sales, on the other hand, remained robust, increasing the UC/NC ratio to 1.6, its highest level in a decade. The decoupling in sales performances is explained by changes of home buyers' typology and, more importantly, by the changes in preferences of certain household groups, which have spurred an increase in the relative demand for UCs. More specifically, when the impact of each variable on the decision to choose a UC is isolated, the negative impact of household's income level (effective or permanent) was found to be higher during the crisis, which helps to explain the shift towards cheaper items (i.e. the €1,000 "banger"). Moreover, evidence is strengthened on the complementarity between car demand and residential investment: homeowner households buying NCs; and tenants buying UCs. And finally, immigrant households are shown to resemble native households in their preference for UCs: the effect that nationality has on the conditional probability of buying a UC has been diluted during the crisis (more details in Box 2).

Demand for motorbikes and mopeds also failed to make a positive contribution to household consumption during the second half of the year. In contrast, the demand for white line durable goods, and to a lesser extent furniture, showed a less adverse performance, due the temporary respite in the real estate market ongoing adjustment. Meanwhile, foreign demand for durable goods, evolved favourably, driven by the positive momentum of the European economy (particularly Germany) and solid demand in emerging economies. As a result, exports of durable goods rose 13.9% between June and December, almost 5pp more than the growth in goods exports as a whole.

Due to the demand weakness, the outstanding balance of consumption credit to Spanish households dropped 7.5% during the second half of 2010, leading to a reduction in their borrowing up to €11.5 billion over the full year. This reduction took place against a backdrop of falling financing costs, showing that this was a demand-driven trend: the average interest rate paid by households dropped 3.3pp to 6.9% between January and December. Neither, corporate financing conditions seems to have had much influence on companies' behaviour during the second half of the year: data from the BBVA surveys on economic activity and business trends (presented in this edition of Consumption Outlook), for example, suggest that the credit performance has been more conditioned by a lack of demand than by an restriction in supply (see Section 5).

Looking ahead, there are no strong changes expected in the growth pattern of the Spanish economy, which looks likely to remain export-driven. Owing the need to keep up the pace of fiscal consolidation, the public sector will continue to contribute negatively to GDP growth during the next two years. The pace of the recovery in private domestic demand will be conditioned by its weak fundamentals and by the final phase of the adjustments in which the private sector is currently immersed. To these factors, we then have to add continued stress in financial markets, which, given the Spanish economy's dependence on external financing, could pose an additional risk to activity. Even though the economy is expected to grow by around 0.9% in 2011, we will not see a sustained job-creating recovery until the second half of the year, and it will not be until 2012 that growth gets back towards the 2.0% level. As for private consumption, the bringing forward of expenditure to the first half last year will induce to a negative base effect on private consumption during the first half of 2011, although this effect will be gradually diluted over the course of the year. Meanwhile, the lessening job destruction foreseen for the current year will not be sufficient to offset the contractive impact of the deterioration in the non-wage component of households' gross disposable income, among other reasons, due to the lack of cost-of-living adjustment to contributory pensions and the removal of contributory unemployment benefit. In 2012, the small growth in jobs will lead to the first rise in disposable income since 2009. But wealth (mainly real-estate related) won't be making a positive contribution to consumption over the 2011-2012 period, given the forecast drop in housing prices over the coming quarters. On the other hand, private spending will remain supported by relatively low interest rates that will keep the financial burden of Spanish households at around 13% of disposable income, a similar level to that in 2010. And finally, even though the level of uncertainty looks set to remain relatively high, consumer confidence movements are not likely to trigger significant changes in the savings rate. As a result, the growth in household consumer spending is expected to slow to 0.2% in 2011, then standing at around 1.2% in 2012.

## 2. Growth outlook for the Spanish economy: weak domestic demand and a positive contribution from exports

Global growth remains robust. After finishing 2010 with a growth rate of 4.8%, the global economy is now foreseen to perform better than expected 12 months ago, with the rate of growth slowing only marginally in 2011 and 2012 (to 4.4%). The main reason for this is the improved outlook for the advanced economies, due to better short-term growth expectations in the U.S. following the temporary postponement of fiscal consolidation, and the solid performance of the main core economies in Europe, which have decoupled from the peripherals.

EMU growth in 2010 was stronger than expected (preliminary figure: 1.7% versus the 0.7% forecast a year ago), particularly in Germany, which continued to benefit from strong demand in emerging markets. Europe's largest economy grew 3.5% last year, well above the forecasted figures at the beginning of the year, but still without any clear signs of foreign demand growth spreading to its own household's consumption. The EMU's other main economies, France and Italy, have performed well but not so spectacularly. This growth trend is expected to continue through 2011, but at a slower pace than that seen in mid-2010, thereby, leading again to an average GDP growth of 1.7% in 2011 for the EMU as a whole. There is likely to be a more significant contribution from private consumption and investment, and slower growth in foreign trade and public consumption, which will be affected by fiscal consolidation plans not only in the peripheral countries but also in France, Italy, and Germany.

The decoupling of growth in advanced economies has two important consequences for the outlook of the European and Spanish economies: firstly, the growth divergences between the US and the EMU (together with financial stress) are likely to exert downward pressure on the euro; and secondly, the increasing growth divergences within the EMU will start to play an important role in the region's monetary policy decisions. In this respect, while we have seen a positive performance from the real economy in the core countries, there has also been a pick up in stress levels in Europe's financial markets, particularly in the peripheral countries.

This time, the resurgence in financial market stress was triggered by two factors: on the one hand, doubts about European institutions' capacity to tackle the sovereign debt crisis; and on the other, doubts about the credibility of the financial-system stress tests (after Ireland's banks had to be supported after "passing" their capital adequacy assessment). These triggers appeared at a time of concern about the failure of certain peripheral countries (such as Ireland and Spain) to meet their budget deficit target, and against a backdrop of uncertainty concerning the capacity of certain European economies to generate enough growth to service their debt on a sustainable basis. As discussed in some detail in the last edition of our "Spain Economic Outlook" report<sup>1</sup>, this highlights the need to introduce an integrated solution, and not just for resolving the current crisis but also to put in place a solid mechanism for preventing and resolving future crises.

Against this background of decoupling and stress in Europe's financial markets, the Spanish economy finished 2010 with a GDP decline of around 0.1%, which implies a virtual stagnation of economic activity. The breakdown of this growth over the full year, together with its short term performance, show the weakness of domestic demand and the support provided by external demand, both very clearly conditioned by the changes introduced in fiscal policy and the continued underlying strength of the fundamentals on exports.

Following the extensive and efficient use of expansive fiscal policies during the most critical period of the current economic crisis, the Spanish economy then entered an ambitious process of fiscal consolidation in 2010. During the second half of last year, and partly as a result of the increase in international financial stress during the spring, this process was accelerated, with the introduction of new discretionary measures and the endorsement of a calendar for the structural reforms needed to at least partially correct the macroeconomic imbalances accumulated before and during the crisis. The domestic demand in 2010 was heavily influenced by fiscal policy: firstly (and directly) as a result of the gradual adjustment in public sector demand; and secondly (and indirectly), because of its influence on private agents' consumption and investment decisions. This was particularly noticeable during the first half of the year when, in the knowledge that a large part of the fiscal stimulus packages were about to end, private demand was brought forward, to the extent where the quarterly growth rates in private consumption were positive for the first time since the start of the crisis. Demand then slowed in 3Q10 as the new tax plans and public sector spending policies entered into force (e.g. the VAT increase, the

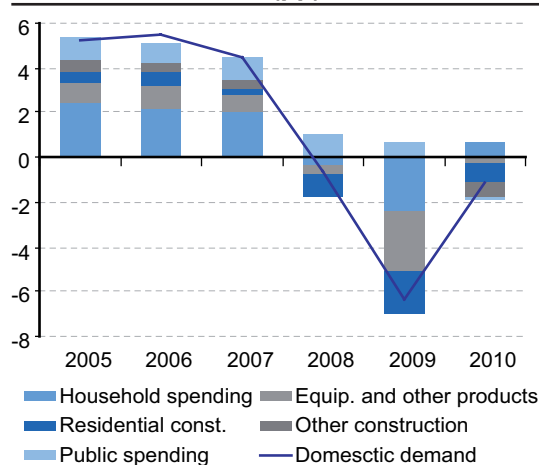
<sup>1</sup>: For details of our analysis of the upside and downside risks to our macroeconomic outlook, please see our [Spain Economic Outlook report for the first quarter of 2011](#).

end to the Plan200E, and the civil servant pay cuts). And then finally, once the change in tone of fiscal policy had been accounted for, there was a return to the positive trend at the end of the year, albeit at a slow pace due to the weak fundamentals. Household consumption rose 1.3% in 2010, making a positive contribution to GDP growth (0.7pp), although this was not enough to prevent a negative contribution from domestic demand as a whole, which registered -1.1pp (see Chart 1).

Meanwhile, the country's exports have continued growing since the third quarter of 2009, firmly establishing themselves as a permanent support for the economic recovery. Coinciding with the adjustment in public finances, the drying up of stimulus measures in Europe play its role on the recent performance of Spanish exports, and while it was only marginal, there was a temporary slowdown during 3Q10. Then, with the fiscal changes in Spain and the rest of Europe accounted for, there was a return to the robust growth in exports during the final quarter, backed by the strong fundamentals. As a result, over the full year net external demand made a positive contribution to GDP of 1.0pp, due to a large extent to the favourable performance of the country's exports, which rose 10.3% over the 12-month period (see Chart 2).

Chart 1

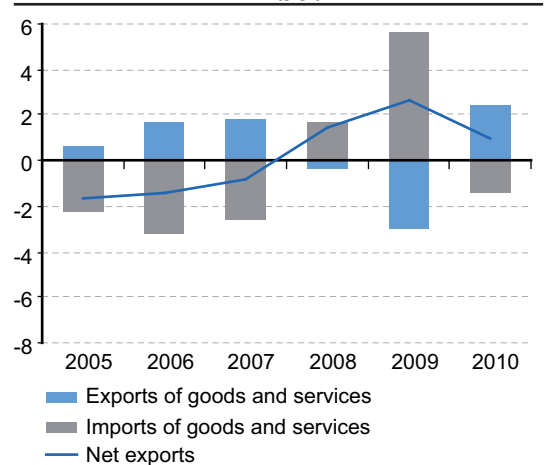
**Spain: domestic demand's contribution to GDP (pp)**



Source: BBVA Research based on INE data

Chart 2

**Spain: External demand's contribution to GDP (pp)**



Source: BBVA Research based on INE data

Looking ahead, no significant changes are expected in the growth pattern of the Spanish economy. Given the need for continued fiscal consolidation, the public sector looks set to remain a negative contributor to GDP growth over the forecast period (2011-2012). The pace of the recovery in private domestic demand in the short and medium term will still be held back by weak fundamentals and by the final phase of several private sector adjustments (deleveraging and the real estate sector). To these factors, we then have to add continued financial market stress, which, given the Spanish economy's dependence on external financing, could pose an additional risk to activity. And finally, growth in net external demand will continue to be driven by the improving outlook in Europe, the less appreciated euro than forecasted three months ago, geographical diversification, and further gains in the competitiveness of Spanish exporters. In short, we expect the expansion of the Spanish economy to remain weak over the coming months, with full-year growth likely to be around 0.9%. The sustained and job-creating recovery could start during the second half of 2011, with 2012 being the year that the economy would then return to growth rates of around 2.0%, enough to create employment for a year as whole, since the beginning of the crisis, but not enough to significantly reduce the unemployment rate.



Table 1

**Spain: macroeconomic forecasts**

(% y-o-y change unless otherwise indicated)	2008	2009	2010	2011	2012
Household consumption	-0.6	-4.3	1.3	0.2	1.2
Public consumption	5.8	3.2	-0.7	-0.6	-0.3
GFCF	-4.8	-16.0	-7.5	-2.9	3.4
Capital goods and other products	-3.0	-21.2	-2.1	0.6	5.0
Capital goods	-2.5	-24.5	1.9	0.7	5.5
Construction	-5.9	-11.9	-11.1	-5.3	2.3
Housing	-10.7	-24.5	-16.5	-7.1	4.1
Other goods	-0.8	-0.1	-7.2	-4.1	1.0
Chg in inventories (*)	0.1	0.0	0.1	0.0	0.0
<b>Domestic demand (*)</b>		<b>-6.4</b>	<b>-1.1</b>	<b>-0.7</b>	<b>1.4</b>
Exports	-1.1	-11.6	10.3	9.1	7.0
Imports	-5.3	-17.8	5.5	2.0	4.6
<b>Net exports (*)</b>	<b>1.5</b>	<b>2.7</b>	<b>1.0</b>	<b>1.6</b>	<b>0.5</b>
<b>Real GDP at market price</b>	<b>0.9</b>	<b>-3.7</b>	<b>-0.1</b>	<b>0.9</b>	<b>1.9</b>
<b>Pro-memoria</b>					
GDP w/out housing investment	2.0	-1.9	0.9	1.4	1.7
GDP w/out construction	2.3	-2.1	1.7	1.9	1.8
Employment (LFS)	-0.5	-6.8	-2.3	-0.2	1.1
Unemployment rate (% active pop.)	11.3	18.0	20.1	20.6	20.1
Employment (FTE)	-0.5	-6.6	-2.4	-0.3	0.9
CPI (annual average)	4.1	-0.3	1.8	1.9	1.3

(\*) contribution to growth

Source: INE and BBVA Research forecasts

As for private consumption, the bringing forward of the purchases of goods and services to the first half of last year will induce to a negative base effect on private consumption during the first half of 2011, although this effect will be diluted over the forecast period<sup>2</sup>. Meanwhile, the slowdown in job destruction foreseen for the current year will not be sufficient to offset the contractive impact of the worsening in the non-wage component of households' gross disposable income, among other reasons, due to the lack of cost-of-living adjustment to contributory pensions and to the removal of contributory unemployment benefit. In 2012, the moderate employment growth will lead to the first rise in disposable income since 2009. But wealth (mainly real-estate related) won't be making a positive contribution to consumption over the 2011-2012 period, given the expected drop in housing prices over the coming quarters. On the other hand, private spending will remain supported by relatively low interest rates that will keep the financial burden of Spanish households at around 13% of disposable income, a similar level to that in 2010. And finally, even though the level of uncertainty looks set to remain relatively high, consumer confidence movements are not likely to trigger significant changes in the savings rate although the unfinished process of household deleveraging does not allow us to advance a substantial early reduction in the savings rate. As a result, the growth in household consumer spending is expected to slow to 0.2% in 2011, then standing at around 1.2% in 2012.

However, while the macroeconomic forecasts in this report imply weak consumption growth and negative domestic demand for this year, there are also factors that could lead to an improved scenario for the Spanish economy. Following the recent rise in financial stress in Europe, the Spanish Government continues to make progress not only with the increased transparency of the country's public finances but also with the consolidation of the structural reform process. A speedy and ambitious adoption of the announced reforms is going to be crucial for improving market confidence, for accelerating the pace of the recovery in activity and employment, and for reducing the pressure on private domestic demand.

2: Partial data on the outlook for the first quarter of 2011 is in line with this scenario for household consumption. See Box 1: Real time forecast of Spanish households' consumption expenditure: the BBVA Model of Indicators Coincident with Consumption (MICC-BBVA).

In the same way, there are also downside risks that may hamper the rate of progress in both domestic and external demand. On the one hand, incipient inflationary risks both in Spain and the euro zone as a whole. Despite the latest oil price rally appearing to be more temporary than permanent, and the fact that (thanks to the weak state of domestic demand) it has had no significant knock-on effect on non-energy prices, it is too early to rule out any second-round effects in the short term. On the other hand, the recent increase in the levels of capital required of Spanish financial institutions (with a positive effect long term) must be accompanied by an opening-up of financial markets so as not to condition the lending decisions of these entities, making it even more important that they continue the process of orderly restructuring. And finally, any broadening of the solution to Europe's governance problems could cause unnecessary delays in the reduction of financial stress levels, thereby hindering the pace of Spain's economic recovery even further.



### Box 1. Real time forecast of Spanish households' consumption expenditure: the BBVA Model of Indicators Coincident with Consumption (MICC-BBVA).

Over the last three years, the short and medium-term consumption decisions of Spanish households have undergone some remarkable changes. Firstly, the imbalances accumulated before and during the current economic crisis (e.g. excessive gearing and high structural unemployment), together with the progressive weakening of their fundamentals (income and wealth), have exerted persistent downward pressure on household spending. Secondly, during the first two years of the crisis, increased uncertainty led to a significant rebound in savings for precautionary reasons, which, in detriment to consumption, lifted household savings to 18.1% of disposable income in 2009. And finally, and most recently, the shift in fiscal policy has increased the downward pressure in the short and medium term, at the same time encouraging the substitution of future for current consumption.

Given Spain's private consumption to GDP share (accounting for 57% in 2010), real-time estimates of its performance become especially important. However, delays in the publication of the Quarterly National Accounting data (QNA) make this a difficult task. For example, at the time of writing this report we only have the consumption data for the fourth quarter of 2010, while the figures that refer to the current situation will not be published until May 18. To cover this deficit, BBVA Research propose a real-time estimation method for consumption based on the monthly information gleaned from the partial indicators linked to this figure. From these estimates, we obtain our predictions for the previous quarter, for which there is still no official data (backcast), for the current quarter (nowcast), or for the forthcoming quarter (forecast). This Box summarises the model's methodology along with the preliminary results for these estimates.

#### Methodology

Following the methodology described by Camacho and Pérez Quirós (2009), and later by Camacho and Doménech (2010), a dynamic linear factor model is used, based on evidence that the economic indicators used are highly correlated. In our case, the variables used include, in addition to the previous quarter's household consumption figure as published by the QNA, monthly indicators on the supply and demand of goods and services, on the labour market, and on consumer confidence (see Table 2). In addition to this, we assume there will be short-term shocks that may affect current spending decisions but not necessarily the long-term fundamentals (e.g. a withdrawal of consumption-related tax incentives or the rise in precautionary saving). As a result, the monthly growth rate of a specific consumer spending indicator in  $t$ ,  $g_t^i$ , is the result of the sum of three unobservable factors: a common factor that reflects the jointly cyclical performance of the indicators included in the model,  $f_t^c$ , a specific factor relating to household consumer spending, in  $t$ ,  $f_t^g$ ; and finally, an idiosyncratic factor that reflects the dynamics of each individual indicator,  $f_t^i$ .

$$(1) g_t^i = \beta_i^c f_t^c + \beta_i^g f_t^g + f_t^i$$

At the same time, the monthly growth rate in the specific non-consumer-spending-related indicator in  $t$ , (e.g. registered unemployment),  $x_t^i$ , is decomposed as the sum of the unobservable factors,  $f_t^c$  and  $f_t^i$ .

$$(2) x_t^i = \beta_i^c f_t^c + f_t^i$$

Additionally, we assume that the factor trends follow autoregressive processes ( $p$ ,  $q$ , and  $r$  respectively).

$$(3) f_t^c = \Phi_p^c f_{t-p}^c + v_t^c$$

$$f_t^g = \Phi_q^g f_{t-q}^g + v_t^g$$

$$f_t^i = \Phi_r^i f_{t-r}^i + v_t^i$$

Where  $v_t^c$ ,  $v_t^g$  and  $v_t^i$  are unobservable, independent, and non-serial correlated noise terms.

As proposed by Mariano and Murasawa (2003), if the quarterly growth rates are approximated via the weighted sum of their monthly frequency expressions, the previous model can be rewritten in state-space form and be estimated by maximum likelihood using the Kalman filter, which enables us to solve the problem of the unobservable data stemming from the combination of frequencies, the delay in data publication, and the non-existence of part of the sample. In particular, let  $c_t$  and  $\bar{c}_t$  denote consumption growth in month  $t$ , and quarterly growth up until month  $t$ , respectively. Then it can be shown that:

$$(4) \bar{c}_t \approx \frac{1}{3} c_t + \frac{2}{3} c_{t-1} + c_{t-2} + \frac{2}{3} c_{t-3} + \frac{1}{3} c_{t-4}$$

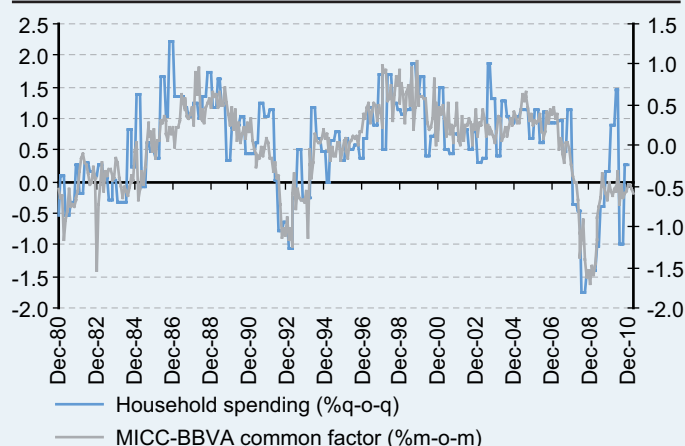
The estimate for the unobserved factors in the model described in equations (1) and (3) enables us to make real-time forecasts for the monthly growth rates in the indicators included in the model.

#### Preliminary results

Applying this model to the data on the Spanish economy, Chart 3 shows how the performance of the common factor to all the indicators,  $f_t^c$ , reflects reasonably accurately the changes in the rate of growth of household consumption. Up until 1985, the indicator was below zero, coinciding with the period in which weak activity and the worsening in the labour market resulted in consumption growth of virtually zero (an average 0.0% q-o-q). The indicator then returns to negative as of 1991, when the economic slowdown and job losses, which gave way to the recession in 1993, triggered a return to weak consumer spending growth (around 0.2% q-o-q between March '91 and March '95). And finally, coinciding with the recession that got underway in 2008, the indicator recorded the lowest levels of the whole sample, showing a strong deterioration that begins to ease as of mid 2009.

Chart 3

**Spain: household consumption and the MICC-BBVA common factor**

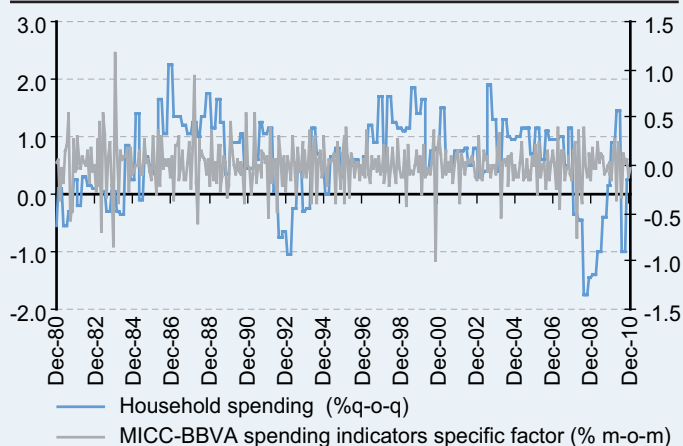


Source: BBVA Research

It is worth pointing out that, in line with the model's predictions, the common factor in all the chosen indicators fails to reflect the bring-forward of household consumption and the following drop in 3Q10 (driven by the change in fiscal policy). As we pointed out earlier, the MICC-BBVA also assumes that there will be short-term shocks that may alter current spending decisions but not necessarily the long-term fundamentals (e.g. a withdrawal of consumption-related tax incentives or the rise in precautionary saving). Chart 4 shows the performance of the specific factor common to all the consumer spending indicators in  $t, f_t^g$ . Coinciding with the bringing-forward of

Chart 4

**Spain: household consumption and the specific factor of the MICC-BBVA spending indicators**



Source: BBVA Research

spending to 1H10, this factor registered monthly growth rates of around 0.05%. Then in 3Q10, average growth was -0.1%.

Whenever the two factors together replicate reasonably accurately the performance of Spanish household consumption<sup>3</sup>, the model can be used to deduce its quarterly growth rates on a monthly basis. So, with 28% of the information for 1Q11 available, the MICC-BBVA's current forecast puts 1Q11 consumption growth between -0.1% and 0.3%, which implies virtual stagnation, in line with the weak fundamentals.

Table 2

**Indicators used in the MICC-BBVA model**

Indicator	Sample	Source	Units (*)
Household consumption	2Q80-4Q10	INE	%q-o-q, SWDA
Retail Sales	Feb90-Dec10	BBVA Research based on INE	%m-o-m, SWDA
Large companies' domestic sales (goods and services)	Feb95-Dec10	BBVA Research based on Inland Revenue	%m-o-m, SWDA
Car registrations (private use)	May92-Jan11	BBVA Research based on ANFAC	%m-o-m, SWDA
Real consumption of fuels	Feb80-Jan11	BBVA Research based on MITC	%m-o-m, SWDA
Spending and cash withdrawals with Servired cards (CPI deflected)	Feb01-Feb11	BBVA Research based on Servired and INE	%m-o-m, SWDA
Real imports of consumer goods	Feb81-Dec10	BBVA Research based on Customs and MEH	%m-o-m, SWDA
Industrial production (consumer goods)	Feb80-Dec10	BBVA Research based on INE	%m-o-m, SWDA
Major-purchase for the next 12 months	Jun86-Feb11	EC	Level, SWDA
Financial position of households over the coming 12 months	Jun86-Feb11	EC	Level, SWDA
Social security affiliation	Feb82-Jan11	BBVA Research based on INE	%m-o-m, SWDA
Registered unemployment	Feb80-Jan11	BBVA Research based on INE	%m-o-m, SWDA
Consumption credit (CPI deflected, includes securitisations)	Jan93-Dec10	BBVA Research based on Bank of Spain and INE	%m-o-m, SWDA
Real wage income	Feb80-Jan11	BBVA Research based on MEH	%m-o-m, SWDA

Source: BBVA Research

3: The variance in household consumption explained by both factors is 74%.

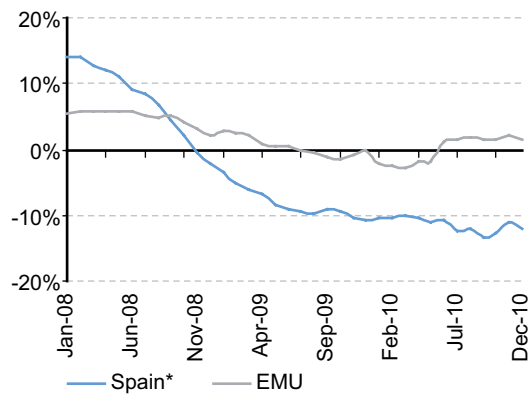
### 3. Consumer lending

The uncertainties on the Spanish economy over the last year have had a negative impact on consumer confidence and, as a result, on household consumption, meaning that households' funding needs have also diminished. On the supply side, the stress to which financial institutions were submitted intensified during the second half of the year, due to the rise in sovereign risk and the slow restructuring process of the financial system. Due to the supply-side uncertainty and the weak state of demand, outstanding consumer loans to Spanish households diminished 7.5% during the second half of 2010, to €83.8 billion in December (see Chart 5). The drop in consumer lending led to a reduction in household borrowing of more than €11.5 billion during the course of 2010; reduction that took place against a backdrop of increasingly favourable lending conditions, which proves that the main problem has been lack of demand: the average interest rate paid by households dropped 3.3pp between January and December, finishing the year at 6.9%.

The performance of consumer lending has been different however in the EU. For example, the improvement in domestic demand in core EU countries meant that consumer lending in these countries fell by no more than 1.0% during the second half of the year, having risen 2.4% over the first six months. The result of this bigger relative deterioration in consumer lending in Spain was a reduction (1.1pp) in its contribution to GDP in 2010; while in the EU its contribution was unchanged, which meant a virtual closing of the gap that had existed since the beginning of the decade (see Chart 6).

Chart 5

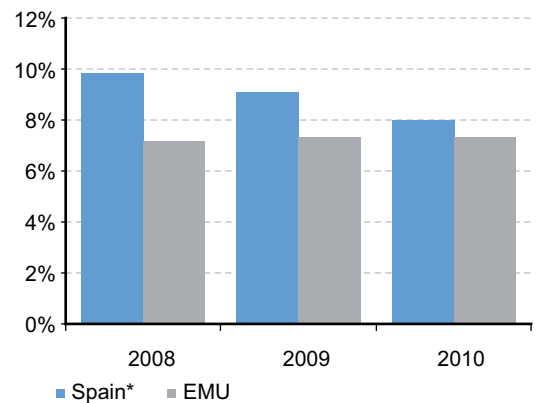
**Performance of consumer lending (% y-o-y)**



\* Consumer loans include securitisations  
Source: BBVA Research based on ECB, Bank of Spain, and INE data

Chart 6

**Consumer lending as % of GDP**



\* Consumer loans include securitisations  
Source: BBVA Research based on Bank of Spain and INE data

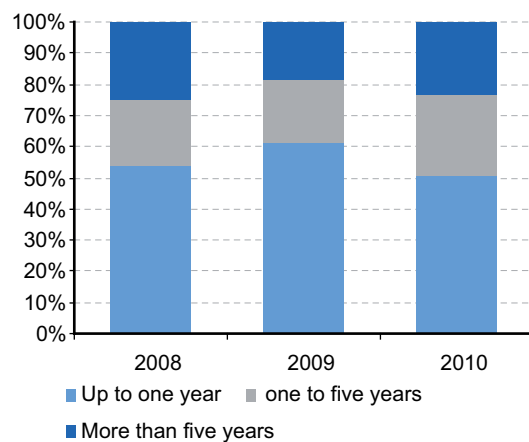
There are both demand-side and supply-side reasons for the difference between the consumer lending performance in Spain and that in the EU. On the demand side, the acceleration of the fiscal consolidation process led to a contraction in households' income and consumer spending during 2H10 and, as a result, in the need to finance the latter. In addition, the rise in the savings ratio in 2009 enabled families to purchase goods and services during 2010 without having to ask for a credit. BBVA's estimates, for example, show that households have gone from allocating 9% of their monthly income to repaying consumer loans in mid 2008 to close to 7% currently. On the supply side, the restructuring process may have conditioned the recent performance of consumer lending. Savings banks have traditionally been the most active players in this segment of the market, and the current adjustment to their size has not only meant a reduction in their installed capacity but also the adaptation of the size of their loan portfolios to the market<sup>4</sup>. In addition, the sovereign debt crisis has led to the penalisation of Spanish banks in international markets, resulting in rising prices due to the difficulty obtaining funding. And finally, because of the higher default rate of consumer lending, the reduction in exposure to this type of credit forms part of the natural risk-reduction path for financial institutions. Finally, as consumer lending tends to be shorter-term, the deleveraging process is more accelerated, with only a portion of the loans expiring being renewed, and the NPLs quickly becoming write-offs.

4: N.B. the savings banks are currently reducing their consumer financing more than any other financial institution, reduction that is focused on the shortest terms. For example, in December 2010 new consumer loans by savings banks dropped 62% versus the same month in 2009, while the figure for the system as a whole was -48%.

The main difference between Spain and the rest of Europe in terms of the expiry profile on new lending is the bias in Spain towards short-term operations. This is partially explained by the important role of credit cards as a payment method. However, data gather by the Bank of Spain (BoE) shows a reduction in the relative importance of operations of less than one year in favour of medium-term operations, which accounted for 26% of the total at the end of 2010. Meanwhile, the relative weight of 5-year + operations accounted for 23% of the total, marking a return to its 10-year average (see Chart 7).

Chart 7

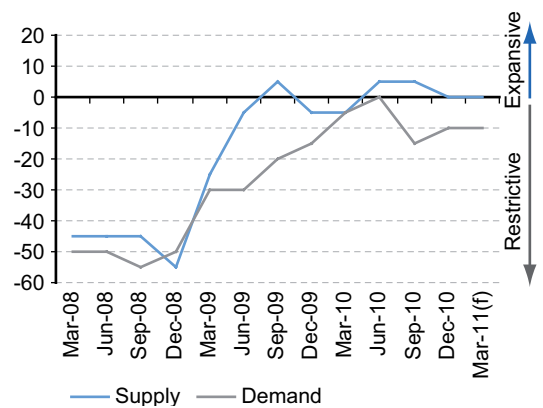
**Spain: new business, consumer lending (%)**



Source: BBVA Research, based on Bank of Spain data

Chart 8

**Spain: bank lending survey (% responses)**



Source: BBVA Research, based on Bank of Spain data

## Breakdown of consumer loans

Given that there is no available breakdown of consumer loans for the Spanish financial system as a whole, our analysis has been carried out based on data from ASNEF (National Association of Financial Institutions), which is based on information from Credit Financial Entities (EFCs). For example, consumer lending by EFCs slipped around 2% during the first three quarters of last year, a much smaller contraction than that seen during the same period in 2009 (-20%). Revolving credit (both loans and cards) accounted for the lion's share (some 74% of the total volume financed by EFCs). While the volume of revolving loans appears to have stagnated, rising by just 0.7% through to September 2010, revolving credit via cards continues to diminish, but at a slower pace than that registered between January and September 2009.

Meanwhile, car financing rose almost 6% during the first nine months of 2010, reaching €4.9 million in September. 82% of the new financing for vehicles was used for buying new cars, and mainly by retail customers. With the expiry of the Plan 2000E in July last year, there was a significant deterioration in this segment of the lending market. Other forms of lending show moderate quarterly growth rates, the exception being credits for the acquisition of commercial vehicles, which almost doubled between January and September.

As for the average loan amount, there was a stabilisation at around €12,700 during the first three quarters of 2010. The biggest loans were for new car purchases by companies, the average size of which exceeded the total car loan average by nearly €4,000. And finally, loans for the purchase of used cars remained at a similar level to the previous year, at around €11,100. Sales of top-of-the-range used cars and sales via renting explain the level of this figure.

To summarise, it is still too early to say that the fall in consumer lending in Spain has bottomed out. Demand is unlikely to increase much given weak fundamentals and the repercussions of the acceleration in the fiscal consolidation process, while supply will remain heterogeneous, with its performance dependant on the efficient management of the restructuring process in the financial system. In this respect, the latest Bank Lending Survey (EPB) indicates that credit access will not be restrictive during the first few months of 2011, while demand is expected to remain weak, in line with the trend seen during the final quarter of 2010 (see Chart 8). All said, the outlook points towards a continuation of negative growth rates, at least during the first half of the year.

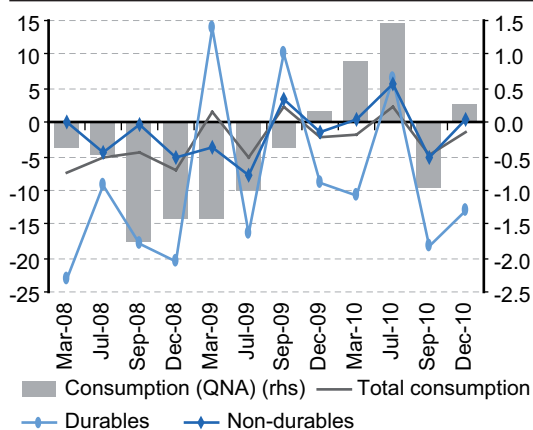
## 4. Durable goods

Household consumer spending rose temporarily during the first half of 2010 due to the bringing forward of purchases as a result of the Government's decision to accelerate the fiscal consolidation process during the second half of the year. The decision to raise VAT in July<sup>5</sup> (general rate +2pp and reduced rate +1pp) and to cut civil servants' pay in 2010 by an average 5% caused a shift in the seasonal pattern of household spending, which resulted in a recovery in consumption during the 1H10 (0.9% q-o-q in 1Q10 and 1.5% q-o-q in 2Q10). This shift in the consumption trend, together with the passing-on of the VAT increase to final prices, the reduction in the wage component of households' disposable income, and the end to other stimulus packages (e.g. the Plan 200E), all contributed to the contraction in spending in 3Q10 (-1.0% q-o-q). But this setback proved to be temporary: in 4Q10, there was a small recovery to 0.3% q-o-q (see Chart 9).

While consumption as a whole suffered during the second half of the year, domestic demand for durable goods was particularly hit because of its greater sensitivity to changes in prices and household income. Between June and December, consumer durable inventories dropped 32.3%, with the sharpest fall coming in 3Q10 (-18.2%). Meanwhile, foreign demand for consumer durables was upbeat, driven by the positive momentum of the European economy (particularly Germany) and solid demand in emerging economies. As a result, exports of durable goods rose 13.9% between June and December, almost 5pp more than the growth in the exports of goods as a whole (see Chart 10).

Chart 9

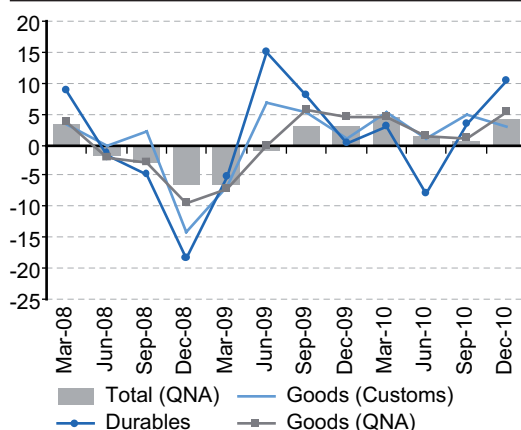
**Spain: Households' final consumer spending, and availability of consumer goods (SWDA data, % q-o-q)**



Source: BBVA Research based on MEH and INE

Chart 10

**Spain: real exports (SWDA data, % q-o-q)**



(\*) Household appliances, consumer electronic goods, IT equipment, furniture, motorcycles and cars  
Source: BBVA Research based on MEH

## Cars

The coinciding of the VAT increase with the end of the Plan 2000E meant that the demand for cars was one of the most heavily hit by the acceleration of the fiscal consolidation process. Chart 11 shows how following a first half of gradually weaker growth, car registrations then collapsed in July (-33.1% m-o-m SWDA), with the consequent negative impact on consumer spending growth in 3Q10. Since then, the number of registrations -adjusted by seasonal factors- has hardly changed.

The breakdown of car purchases by distribution channel shows some interesting divergences: for example, the retail channel was the main contributor to the deterioration in new registrations; while the renewal of rental companies fleets (not just for seasonal reasons) and the increase in corporate investment in cars, continued to make a positive contribution (see Chart 12).

In addition to the positive performances of corporate and rental companies sales, there was an upbeat of the external demand, which partially offset the contraction in domestic demand since July. Despite the

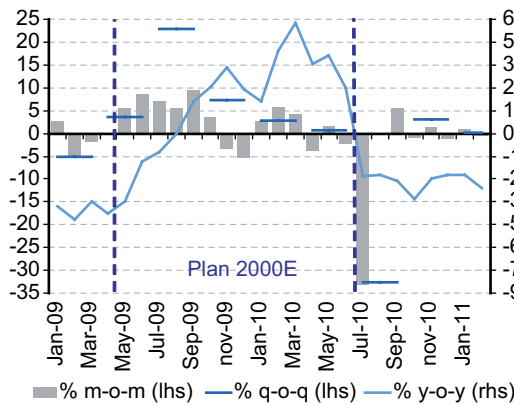
5: A simulation of the impact of VAT increase on household spending can be found in the November 2009 edition of [Spain Economic Outlook](#) (Table 2: Changes in Fiscal Policy and their Impact on the Spanish Economy).



expiration of the scrap programmes in Spain's neighbouring economies, real exports of cars rose by 13.1% in 2H10, setting the pace for the positive performance of consumer durable exports (see Chart 13).

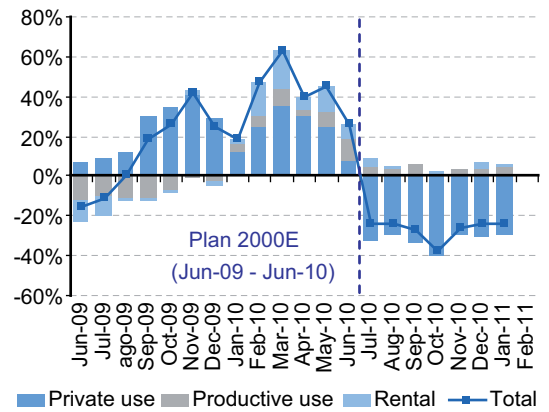
Price performance, for both internal consumption and exports, was conditioned by demand: in the case of the domestic market, the weak backdrop meant that the increase in consumer prices (resulting from the increase in VAT and the expiration of the Plan 2000E) was partly absorbed by the distributors (finally, car prices only rose 2.3% in 2H10); while for the export market, prices reacted positively, rising 13.1% in the second half (see Chart 14)<sup>6</sup>.

Chart 11  
**Spain: car registrations (SWDA data)**



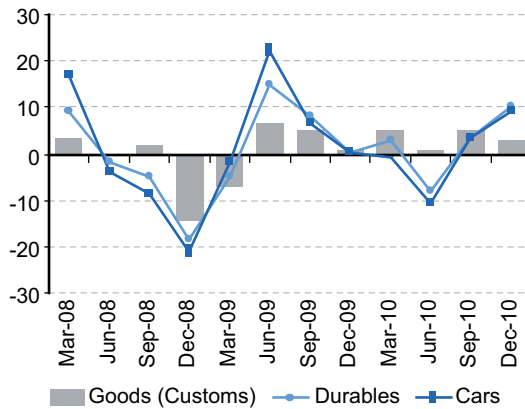
SWDA: seasonal and working day adjusted data  
Source: BBVA Research based on ANFAC and Ganvam data

Chart 12  
**Spain: Contributions to y-o-y growth of car registrations**



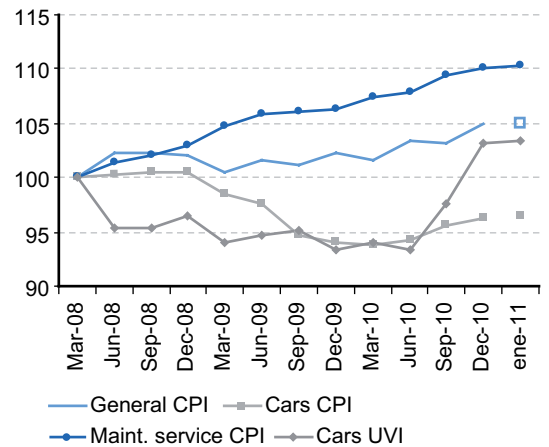
Source: BBVA Research based on ANFAC and Ganvam data

Chart 13  
**Spain: Real exports of cars (SWDA data, % q-o-q)**



(\*) Household appliances, consumer electronic goods, IT equipment, furniture, motorcycles and cars  
Source: BBVA Research based on Customs data

Chart 14  
**Spain: consumer and export prices for cars (1Q08 = 100)**



Source: BBVA Research based on INE and Customs data

6: Part of the increase in export prices may be explained by exporters' attempts to offset the euro's depreciation between May and September (price-to-market behaviour).



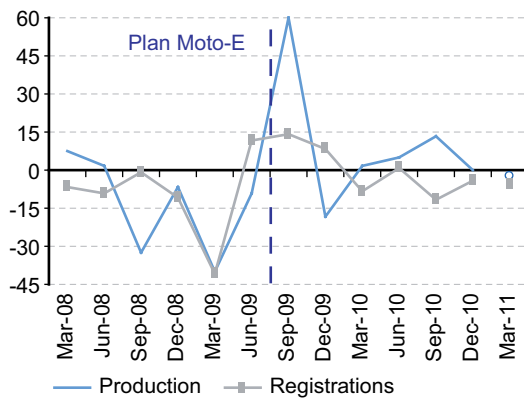
## Mopeds and motorcycles

The Plan Moto-E, approved by the Government in July 2009, has continued to have no real effect. The exclusion of motorcycles with higher cylinder capacity and the reduced number of regional governments that have adopted the programme are the reasons behind the limited success of the Plan<sup>7</sup>. After seasonal and working day effects have been adjusted, we see that motorcycles registrations dropped by 15.7% between June and December last year (see Chart 15). Nevertheless, the total number of registered motorcycles was unchanged at 2.7 million units at the end of 2010.

While production anticipates domestic demand by a quarter, it is external demand that really determines production decisions in the motorcycle sector. For example, the increase in production seen in 3Q09 was not so much a reaction to the expectation of stronger internal consumption following the introduction of Plan Moto-E but more a result of the pick up in external demand (see Chart 16). Then in 2H10, both production and, mainly exports deteriorated, leading to price moderation and actually reductions in real terms (see Chart 17)<sup>8</sup>.

Chart 15

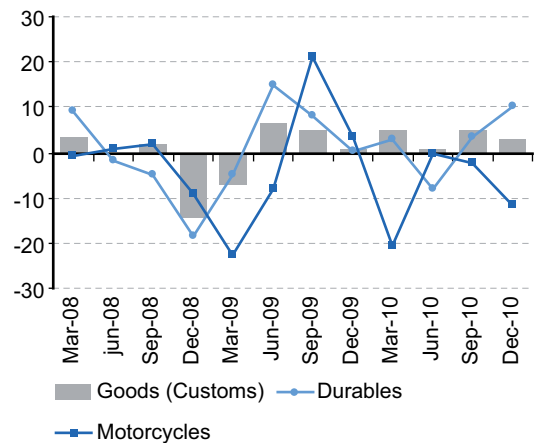
**Spain: motorcycle production and registrations (SWDA data, % q-o-q)**



Source: BBVA Research based on BoE data

Chart 16

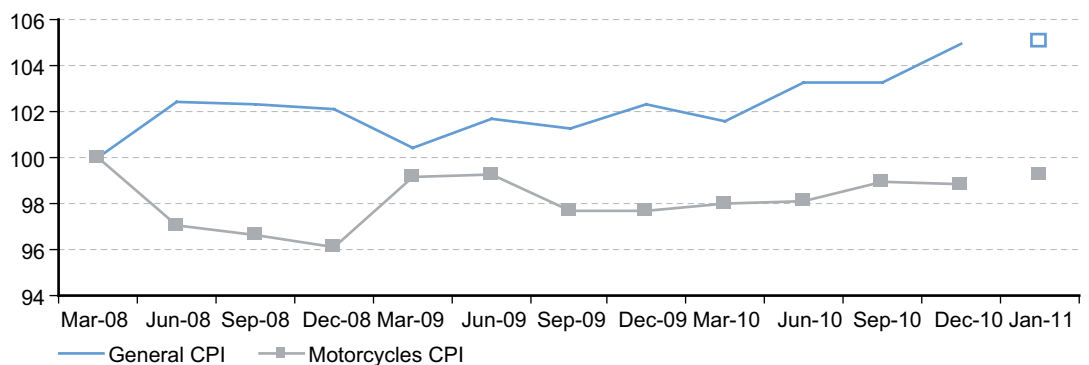
**Spain: real exports of motorcycles (SWDA data, % q-o-q)**



(\*) Household appliances, consumer electronic goods, IT equipment, furniture, motorcycles and cars.  
Source: BBVA Research based on Customs data

Chart 17

**Spain: consumer and export prices for motorcycles (1Q08 =100)**



Source: BBVA Research based on INE and Customs data

7: The Plan Moto-E was extended until the end of 2010 or until the allocated budget was used up. The fact that one year after the Plan's approval only 22% of the budget had been used is proof enough of its limited success.

8: Part of the increase in export prices may be explained by exporters' attempts to offset the euro's depreciation between May and September (price-to-market behaviour).

## Furniture

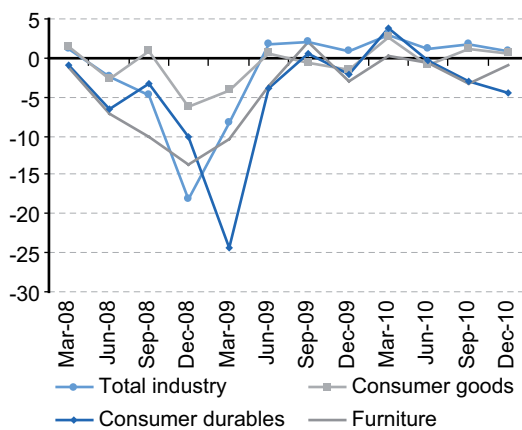
After two years in double digits fall, contraction in the furniture sector slowed to 6.1% in 2010<sup>9</sup>. Undoubtedly, the temporary moderation in the deterioration of the real estate market (aided by the end of tax allowances on home purchases in 2010) helped to slowdown the contraction in sector sales<sup>10</sup>. Sector growth would probably have been more robust if domestic demand had not contracted in 3Q10 (in line with other consumer durables), following the rise in VAT in July (see Chart 18). External demand also softened between June and September, finishing the year with real growth of around 13.2% q-o-q SWDA (see Chart 19), insufficient to improve coverage, which dropped to 47% for the year as a whole.

Despite weak consumption, prices of furniture and other goods continued to increase during 2H10. But, given that they have risen in line with headline inflation, the relative price of furniture didn't change during the second half of 2010 (see Chart 20).

A common characteristic to all durable goods is their lack of liquidity. This means that during periods of uncertainly the replacement rate falls, and the relative demand for maintenance and repair services rises. Chart 21 shows that the only furniture-related activity that enjoyed rising demand during the current crisis has been repairs and the purchase of accessories.

Chart 18

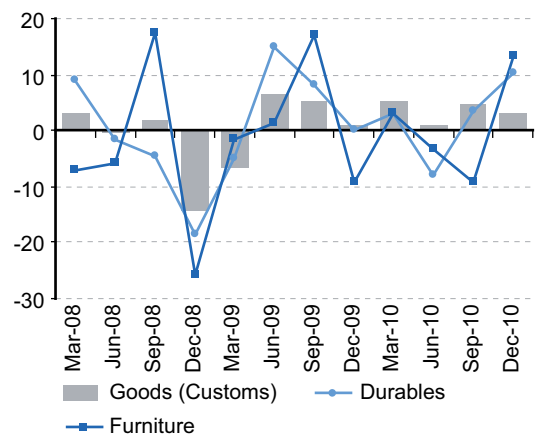
### Spain: new orders (SWDA data, % q-o-q)



Source: BBVA Research based on BoS data

Chart 19

### Spain: real exports of furniture (SWDA data, % q-o-q)



(\*) Household appliances, consumer electronic goods, IT equipment, furniture, motorcycles and cars.

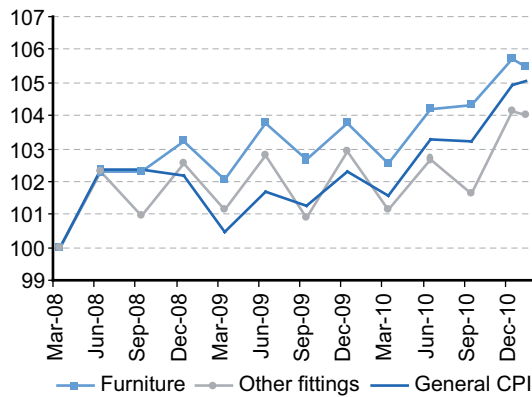
Source: BBVA Research based on Customs data

9: According to data collected by AIDIMA for the Spanish Furniture Market Watch.

10: The performance of both furniture production and sales run parallel with housing demand. For example, there is a close relationship over time between the performance of sector turnover and the number of mortgages: BBVA Research's estimates suggest that 1% reduction in the number of mortgages would have a negative impact on sector sales of 0.2% to 0.4%.

Chart 20

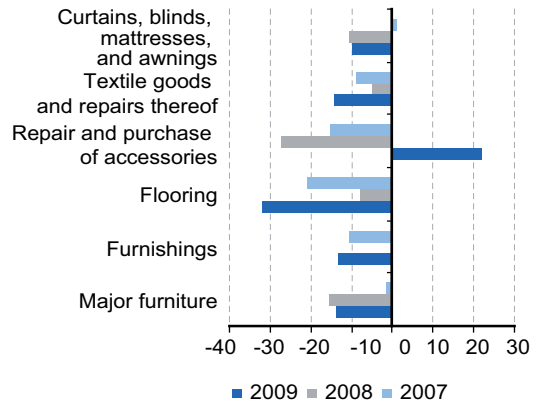
**Spain:**  
**Furniture consumer prices (1Q08 =100)**



Source: BBVA Research based on INE data

Chart 21

**Spain: real spending on furniture (% y-o-y)**



Source: BBVA Research based on INE data

## Major household appliances

According to data published by Spain's National Association of Major Household Appliances (ANFEL), the number of units sold dropped by 4.4% in 2010 after rising 1.9% y-o-y during the first six months of the year. Sales were down for every type of household appliances, but sales of washing machines, dishwashers, ovens and stove tops decreased below the average. Turnover fell slightly below the number of units sold (4.0%), but the relative deterioration was greater due to the fact that there was an increase of 3.2% y-o-y in the first half (see Chart 22). Given that prices<sup>11</sup> failed to rise in 3Q10 and then rose less than consumer goods as a whole in 4Q10 (see Chart 23), last year's sector performance reflects more the consequences of the bringing forward to 1H10 the purchases of household appliances that would normally have been made in 2H10, and not so much the direct impact of the increased price of the goods caused by the passing on of the VAT rise.

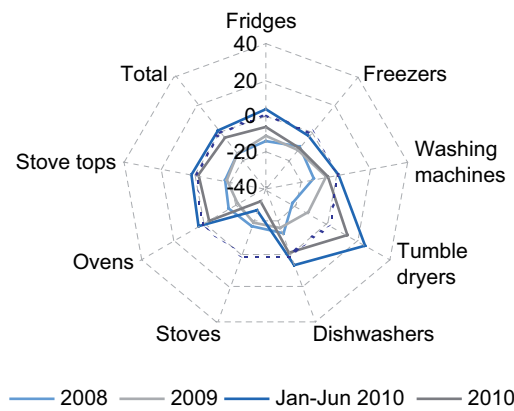
The impact of the VAT increase on demand was mitigated by the relationship that exists between the acquisition of homes (temporarily boosted by the expiration in 2010 of tax allowances) and purchases of household appliances. As we demonstrated in the 2H08 edition of Consumption Outlook<sup>12</sup>, household appliances sales are a leading indicator for economic activity. For example, as of 1991 (since comparable figures for household appliance sales are available) we can see how sector growth anticipates Spanish economic cycle. However, the sheer intensity of the adjustment in residential investment has meant that during the current crisis the recovery in demand for major household appliances is actually running in line with the wider economy's emergence from recession.

As with the other durable goods, but unlike the performance of domestic demand, external demand for these appliances strengthened during the second half of the year. As Chart 24 shows, exports of household appliances rose significantly during 2H10; not on seasonal factors, but due to more robust demand from Spain's main trading partners, particularly Germany, where imports of Spanish household appliances were multiplied by 4,6 between June and December.

11: Same as motor vehicles and furniture, it is worth highlighting the increased demand for repair services, and their consequent price rise (see Chart 23).

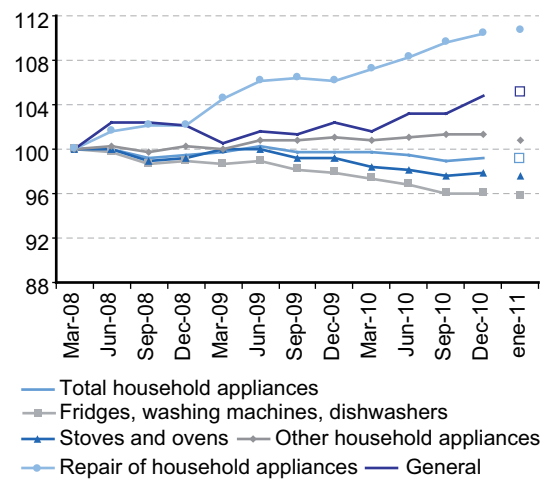
12: See: [http://www.bbvaresearch.com/KETD/fbin/mult/ESCES\\_0811\\_Situacionconsumo\\_12\\_tcm346-182317.pdf?ts=772010](http://www.bbvaresearch.com/KETD/fbin/mult/ESCES_0811_Situacionconsumo_12_tcm346-182317.pdf?ts=772010).

Chart 22  
**Spain: household appliances sales per family (y-o-y % of number of units)**



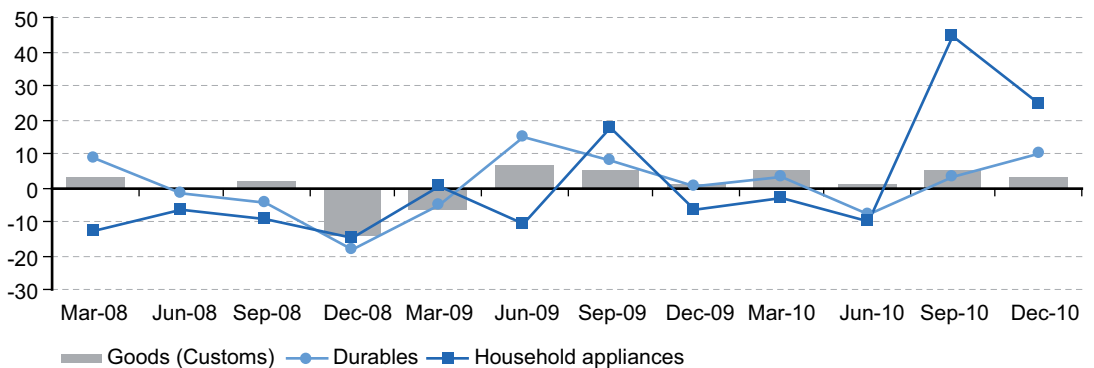
Source: BBVA Research based on ANFEL data

Chart 23  
**Spain: household appliances consumer prices (1Q08 =100)**



Source: BBVA Research based on INE data

Chart 24  
**Spain: real exports of household appliances (SWDA data, % q-o-q)**



(\*) Household appliances, consumer electronic goods, IT equipment, furniture, motorcycles and cars  
Source: BBVA Research based on Customs data

## Consumer electronics and ICT equipment

While demand for ICT equipment performed pretty much in line with that for non-food products as a whole during 2H10, retail sales of consumer electronics suffered a major setback in 3Q10 because of the bringing forward of purchases to 2Q10, recovering again in 4Q10 (see Chart 25). As during the second half of 2009 and first half of 2010, sector expansion in 2H10 was reliant on external demand: export growth was in line with that for the durables sector as a whole, mainly thanks to external sales of consumer electronics (see Chart 26).

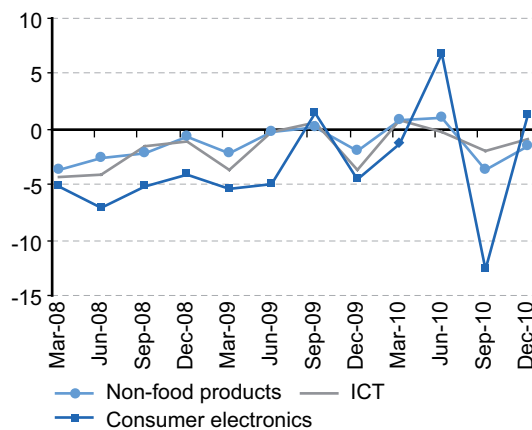
As for the domestic market, the brown goods sector continues to suffer price deflation. As Chart 27 shows, prices fell on all consumer electronic goods and ICT equipment during 2H10, even following the VAT increase in 3Q10 (ranging from -3.2% in the case of IT equipment to -6.2% for photographic and film equipment).

The widespread drop in prices has continued to stimulate the increased penetration of ICT equipment in Spanish homes. Surveys carried out by the INE on ICT equipment and its use show that the most popular product among Spanish households over the last year was the TDTV<sup>13</sup>, followed by the computer and the mobile phone (see Chart 28). Note that, despite the rapid expansion over the

13: The widespread use of TDTV is explained by the 7pp increase in the amount of households receiving the TDTV signal via a TV with integrated decoder, and not so much by those household that bought an external decoder (62.0% in 2009 vs. 63.6% in 2010).

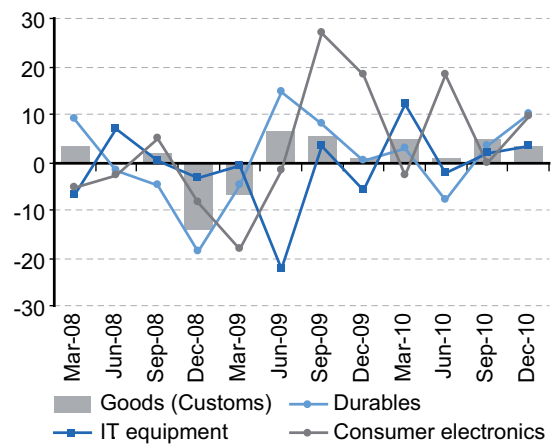
last decade, the computer penetration in Spanish homes is still relatively low (the growth in 2010 is explained by the surge in laptop popularity: their penetration rose 8pp y-o-y to 42.5%). Penetration in companies reaches almost 100%, except in those below 10 employees where the penetration rate was 66.2%. That is to say, the technology gap between big and small companies has still to be filled.

Chart 25  
**Spain: real retail sales of consumer electronics and ICT equipment (SWDA data, % q-o-q)**



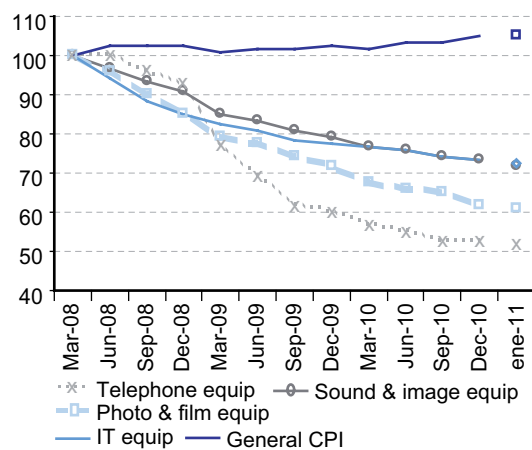
Source: BBVA Research based on Eurostat data

Chart 26  
**Spain: real exports of consumer electronics and ICT equipment (SWDA data, % q-o-q)**



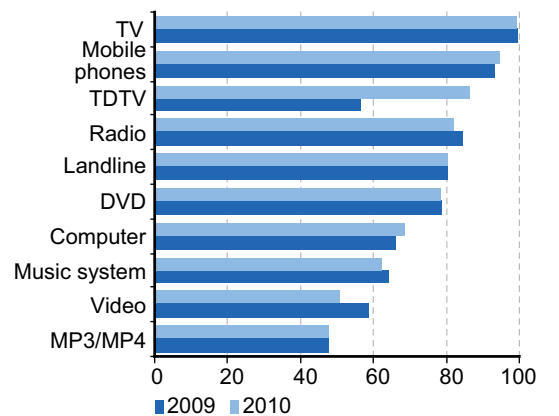
(\*) Household appliances, consumer electronics, IT equipment, furniture, motorcycles and cars.  
Source: BBVA Research based on Customs data

Chart 27  
**Spain: consumer prices for consumer electronics and ICT equipment (1Q08 =100)**



Source: BBVA Research based on INE data

Chart 28  
**Spain: penetration of ICT equipment in Spanish households (% of households)**



Source: BBVA Research based on INE data

## Box 2: Who buys UC?<sup>14</sup>

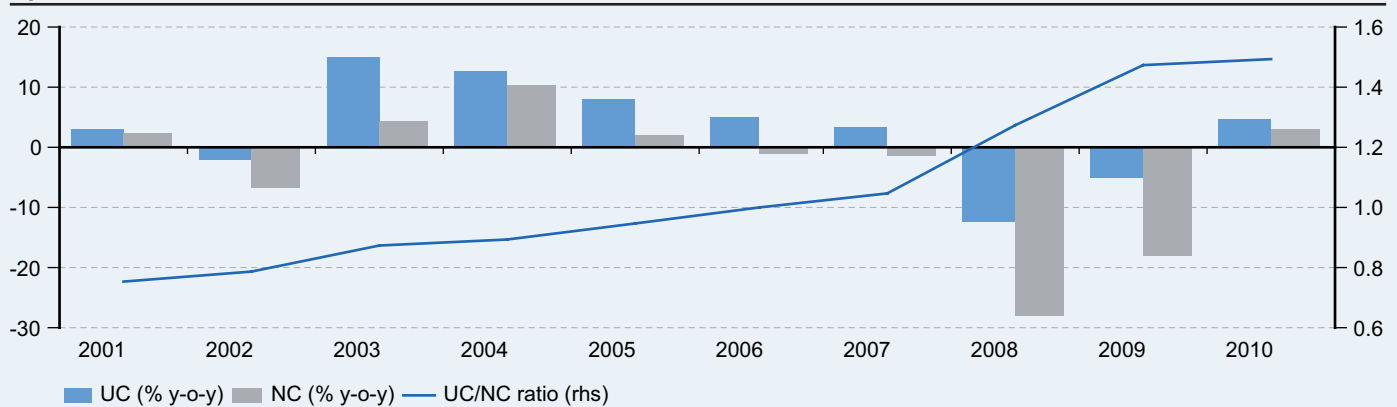
### Factors determining the choice of vehicle during the crisis

Since the end of 2006, and despite the small recovery derived from the Plan 2000E in 2010, car sales have dropped significantly. However, a breakdown shows a heterogeneous deterioration, depending on the type of vehicle: while used car (UC) sales were down around 10% in accumulated terms,

new car (NC) sales decreased by 40%. As a result, the UC/NC sales ratio stood between 1.5 and 1.6 in 2010, which means the highest level in the last decade, but still way below the levels seen in neighbouring countries, such as Germany (1.9), Italy (2.1), France (2.7), or the UK (3.2) (see Chart 29).

Chart 29

### Spain: evolution of car sales



Source: BBVA Research based on ANFAC and Ganvam data

Part of this divergence between the two types of sales could be explained by a potential substitution effect: the drop in households' disposable income, increased uncertainty, and tightening of financing conditions may all have contributed to the relative improvement in UC demand. Part of the divergence may also be attributable to an increase in the propensity to buy UCs resulting from changes in the buyers profile and/or their preferences. For this reason, the aims of this article are to analyse the changes in the profiles of NC and UC buyers, and to see whether, once the decision to buy has been taken, the factors that determine the probability of purchasing one kind of vehicle or the other have actually changed during the crisis.

In order to analyse the determining factors in the choice of vehicle, we have used micro data from Spain's Household Budget Survey (HBS) for the 2006-2009 period<sup>15</sup>. The HBS contains data on the nature of consumer spending (monetary and non-monetary) of households, by geographical location (autonomous regions, type of municipality, etc...), their characteristics (size, composition, income level, etc...), the defining features of main breadwinner and the other members of the household (sex, age, nationality, employment status, etc...), and the relative characteristics of the dwelling, both main and secondary (ownership, facilities, etc...).

The last part of the article comprises the following items: firstly, an explanation of the changes in the distribution of the number of households buying cars and their spending during the 2006-2009 period, highlighting the differences between NCs and UCs; secondly, an analysis of the changes in the profile of car-purchasing households by segment. Nevertheless, this descriptive analysis does not enable us to isolate the impact of each individual variable on the propensity to choose a UC versus a NC. In order to distinguish which household characteristics affect the probability of selecting one kind of vehicle or the other (and not so much the decision to buy) and to quantify their impact, we need to formulate a regression analysis. This is included in the third section of the article.

### Purchasing households and expenditure on car purchases: change in distribution by type of vehicle

HBS data shows that the number of households buying cars has dropped 24.4% since 2006, meaning that just 9.1% of Spanish households bought a car in 2009, compared with 13.2% in 2006 (see Chart 3). The drop is largely explained by the reduction in the number of households buying NC (around -36%), while those buying UCs dropped just 8%.

14: Blanca R. Corral's (INE) comments on the BHS are very much appreciated.

15: See more details at: [http://www.ine.es/prodyser/micro\\_epf2006.htm](http://www.ine.es/prodyser/micro_epf2006.htm)



Table 1  
**BHS 2006-2009 (1)**

	2006	2007	2008	2009
Number of households in the sample ('000)	13.9	15.8	16.5	16.5
Number of households in the population ('000)	11,285.8	11,755.6	12,229.0	12,409.4
% of households buying a car (2)	13.2	13.0	11.7	9.1
% of households buying a NC	7.8	7.5	6.2	4.6
% of households buying a UC	5.4	5.5	5.5	4.5
Average expenditure per household ('000 of euros in 2006)	31.0	31.3	30.1	28.3
Average expenditure per car-purchasing household ('000 of euros in 2006) (2)	51.7	50.9	48.3	45.3
Average expenditure per household on car purchases ('000 of euros in 2006) (only purchasing households) (2)	15.6	15.3	14.7	13.5
NCs	20.9	21.1	20.5	20.2
UCs	7.7	7.0	7.3	6.6

(1) Households with charged expenditure above 10% are excluded

(2) Households with charged expenditure on car purchases above 10% and those declaring a payment below €5000 for a NC or less than €500 for a UC are excluded.

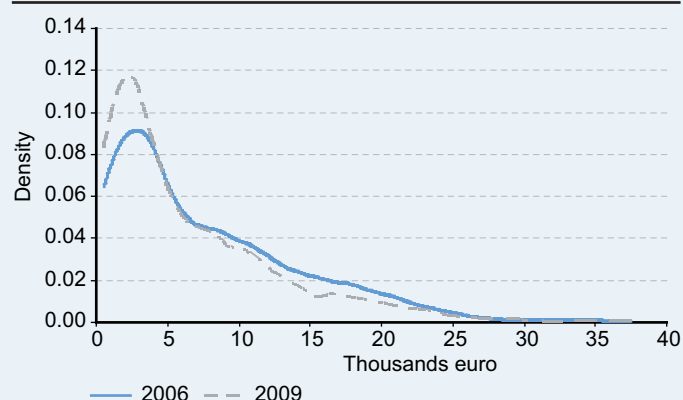
Source: BBVA Research based on INE (BHS) data

In addition to a lower number of purchasing households, there has also been a drop in real expenditure per household: between 2006 and 2009, average household expenditure on car purchases fell by 13.7% (compared with a drop in total spending per household of 8.9%). However, unlike the trend in the number of households, the real expenditure per household fell more in the case of UC purchases (-13.6%) than on NC purchases (-3.4%). The larger relative deterioration in expenditure per household on UCs is not explained so much by any divergence in the price of the cars<sup>16</sup>, but rather by a greater concentration of the real spending per household on UCs on low figures. If we compare the estimated distribution of the real expenditure per household on UCs in 2006 with that in 2009 (see Chart 30), we

see that there is a lower dispersion and a significantly increased concentration on the €2,500 price bracket<sup>17</sup>. For example, the proportion of households buying UCs for less than €3,000 rose from 30.4% in 2006 (6.6% of real total spending on UCs) to 38.6% in 2009 (9.3% of real total spending on UCs). While on the other hand, the distribution of real expenditure per household on NCs has hardly changed during the crisis (see Chart 31). All in all, the share of car purchases as a percentage of total car-purchasing households' expenditure has not changed since 2006, remaining at around the 30% level. This percentage rises to 35%-37% in the case of those households buying NCs, and it drops to 18% for those buying UCs.

Chart 30

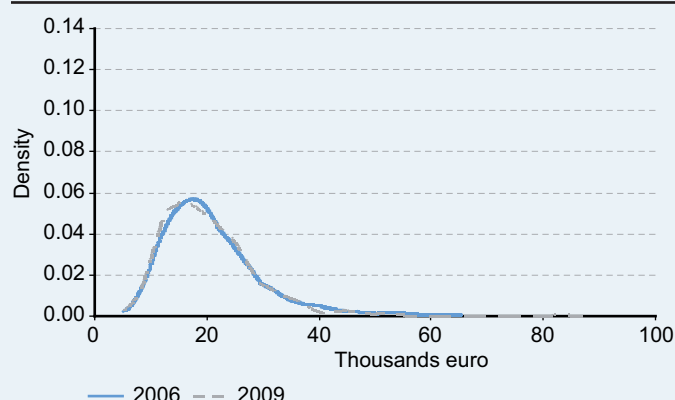
**Distribution of real expenditure on UC per household**



Source: BBVA Research based on INE (BHS) data

Chart 31

**Distribution of real expenditure on NC per household**



Source: BBVA Research based on INE (BHS) data

16: Nominal expenditure per household on NC between 2006 and 2009 fell 6.3%, compared with a drop of 15.8% in the case of UC.

17: This phenomenon is known in Spain as "mileurista" (something like "1,000-euro earner's car").

## Change in the profile of car-purchasing households: NC vs. UC

The performance of overall car demand and its breakdown by segments could be explained by the changes in the type of purchasing household. Table 4 shows the characteristics of those households most likely to buy above-average vehicles during the 2006-2009 period.

The **Autonomous Regions** in the North, the East, Madrid, and Ceuta and Melilla registered a larger proportion of households buying NC in 2006. While the highest proportions were registered in Murcia and Navarra (12.8% and 9.8% respectively), almost half the real spending on NC was concentrated in Andalusia (19.6% of total), Cataluña (16.4%) and the Comunidad Valenciana (11.6%). Although the propensity to purchase an NC dropped across the board during the crisis, the regions with the highest number of purchasing households remained the same (except for Galicia and the incorporation of Asturias and La Rioja), with real spending still concentrated in Andalusia (16.4%), Cataluña (19.8%), and the Comunidad Valenciana (12.3%)<sup>18</sup>.

Broadly speaking, those Autonomous Regions contributing most to Spain's tourist activity, where the supply of UC was higher due to the increased relative availability of cars coming from rental companies, showed an above-average propensity to purchase UC in 2006. However by 2009, the failure of rental companies to renew their fleets (due to lower tourist numbers) meant that the proportion of UC buyers in the Balearics and the Canaries, for example, dropped to less than 4.5% (4.4% and 4.3% respectively). It is worth drawing attention to the rising proportion of UC buyers in Madrid (from 3.9% in 2006 to 4.6% in 2009) and, above all, in Extremadura (from 5.3% in 2006 to 7.0% 2009).

In addition to the autonomous region, another variable that can affect the decision to buy a car (but perhaps not as much as the decision to buy a UC) is the **population density** where the household is situated. However, the figures in Table 4 show that households in semi-urban areas had a higher propensity to buy a NC, both in 2006 (9.1%) and 2009 (4.8%). While at the same time the proportion of households buying UC drops as population density increases. That is to say, the proportion of UC was higher in households located in sparsely populated areas (6.1% in 2006 and 5.9% in 2009).

One of the household characteristics with greater impact on the probability of purchasing a car is the number of members (and particularly the number of employed members) and the income level. The BHS data shows that the propensity to buy a NC rose in line with the **size of the household** in 2006. However, the percentage of households buying NC in 2009 reached its highest level (6.5%) in those households made up of 4 members, before dropping again in larger households. The propensity to buy a UC also rises with the size of the household (both in 2006 and 2009). The difference between the two market segments

depends on the composition of the household: households with four or more members accounted for less than 40% of the total number of purchasers of NC, but almost half of those of UC.

The greater propensity to buy a vehicle as the size of the household rises could be reflecting a positive impact from the level of income resulting from an increased **number of wage earners in the household**<sup>19</sup>. In fact, the more wage earners there are in a household the more likely the household is to buy vehicles, whatever the type and in whichever period. In the same way, when **the households' net monthly revenues** rise, so do the number of NC purchases (more in 2006 than in 2009). However, the impact of the income level is less clear in the case of UC: the percentage of households buying UC rises with the income level up to €3000 net /month (reaching 9.4% in 2006 and 6.4% in 2009), but then diminishes above this level.

Among all dwelling related variables, **home ownership** becomes the most relevant to explain the performance of car demand. For example, the propensity to buy a new car changes in line with home ownership. Among homeowner households, the percentage of NC buyers is significantly higher when the house is mortgaged (12.3% in 2006 and 5.9% in 2009) than when it is not (6.7% in 2006 and 4.6% in 2009). This could be indicating that either housing and cars are complementary goods or that there is a self-selection problem: a third variable, the income level, for example, could be the cause of the positive correlation between the (financed) acquisition of housing and NC purchases. Meanwhile, liquidity restrictions do appear to play a role in the decision process for buying a UC. Figure 4 shows that the proportion of households buying UC is higher among those in rented dwelling (9.2% in 2006 and 6.6% in 2009).

Finally, there are at least four characteristics of the household's main breadwinner that can condition both the decision to buy a car and the type of car to be bought: age, gender, nationality, and education level.

While in 2009 the greatest propensity to buy NC was concentrated on people under 54 years old, in 2009 this changed to households where the main breadwinner was aged 45-64 (a segment that is significantly less affected by the drop in income associated with job destruction). In the case of UC, the type of buyer based on the age of the main breadwinner was similar to that for NC in 2006; whereas in 2009 it was different, showing a gradually lower propensity with increasing age.

The percentage of households buying a NC is greater when the main breadwinner is a male (9.0% in 2006 and 5.0% in 2009). And those households where the main breadwinner is a male account for more than 86% of total real spending on NC. Given that there is a similar pattern when it comes to UC (but with a lower incidence), it is clear that the **gender of the main breadwinner** is a determining factor to decide whether or not to buy a car; but it does not affect the choice of NC or UC.

18: Neither approval of the Plan 2000E at the end of May, nor the existence of complementary regional incentives appears to have caused any significant change in the relative weightings of NC and UC. Firstly, because the additional demand resulting from the Plan 2000E represented no more than 13.4% of total car registrations in 2009 (around 132,000 units) (see details of the estimate in the 2H09 edition of Consumption Outlook). And secondly, because UC also benefited from the incentive programmes, both directly (Plan 2000E subsidised purchases of UC that were 5 years old or less) and indirectly (via the purchase of cars for scrap).

19: An increase in the number of wage earners in the household could lead to an increased demand for cars not so much due to the income effect but because of a change on transport preferences.

Unlike gender, the **nationality of the household's main breadwinner** does seem to play an important role in the decision to buy a NC or a UC. For example, in 2006 NC-purchasing households where the main breadwinner was Spanish represented 8.2% of the total, compared to 3.8% when the main breadwinner was foreign. The difference because of nationality then diminishes halfway through 2009 (to 4.7% and 3.9% respectively). In the case of UC, however, the propensity to buy a UC when the main breadwinner was foreign touched 15.2% in 2006, 3.4 times the incidence at those households where the main breadwinner was Spanish. As with the NC market, the difference due to nationality narrowed in 2009, but the bias towards foreigners remained (7.3% versus 4.2%).

Finally, the **education level of the main breadwinner** is also a relevant factor when it comes to determining the probability of purchasing a NC (and eventually also a UC), given that it enables to get a rough idea of the household's permanent income level, and thereby the expenditure on durable goods. BHS data indicates that the propensity to buy a NC rose with the education level of the head of the household, mainly in 2006. However, the proportion of UC buyers based on qualification follows an inverted-U shape (greater propensity with average qualifications and lower propensity in those households where the main breadwinner had not studies at all and also where they had a university degree).

Table 2

**Spain: change in the profile of car buyer (% of households buying NC (UC) in each category) (1)**

	NC		UC	
	2006	2009	2006	2009
Average	7.8	4.6	5.4	4.5
<b>Auton. Regions.</b>				
Andalusia	8.4	5.0	6.7	4.7
Cantabria	8.0	4.7	5.6	6.5
Catalonia	7.9	6.6	5.6	4.6
Com. Valenciana	8.3	4.8	6.3	5.8
Galicia	7.9	5.1	5.8	7.0
Madrid	8.3	4.8	6.3	4.6
Murcia	12.8	5.3	5.7	6.0
Navarra	9.8	5.0	6.3	5.7
Basque country	7.9	4.7	6.5	5.9
Ceuta and Melilla	8.0	5.4	7.1	5.7
		5.7		
<b>Population density</b>				
Semi-urban or intermediate	9.1	4.8	6.1	4.6
		4.8	6.1	5.9
<b>Size of household</b>				
3	9.7	3	3	5.3
4	11.7	4	3	5.9
5 or more	12.0	5 or more	5 or more	7.4
<b>Wage earners in the household</b>				
1	7.9		1	5.2
2	11.9	2	2	6.3
3 or more	17.2	3 or more	3 or more	7.3

Continues on the following page

Table 4 (cont)

**Spain: change in the profile of car buyer (% of households buying NC (UC) in each category) (1)**

		NC		UC	
		2006	2009	2006	2009
<b>Household net monthly income</b>					
From €1,500 up to €2,000	9.1			From €1,500 up to €2,000	6.9
From €2,000 up to €2,500	11.9	From €2,000 up to €2,500	5.7	From €2,000 up to €2,500	7.0
From €2,500 up to €3,000	11.7	From €2,500 up to €3,000	8.3	From €2,500 up to €3,000	9.4
From €3,000 up to €5,000	15.2	From €3,000 up to €5,000	9.6	From €3,000 up to €5,000	8.3
€5,000 plus	21.9	€5,000 plus	8.8	€5,000 plus	8.1
<b>Home ownership</b>					
		Property without current mortgage	4.6	Property with current mortgage	6.3
Property with current mortgage	12.3	Property with current mortgage	5.9	Rented	9.2
				Property with current mortgage	5.9
				Rented	6.6
<b>Age of main provider</b>					
16-34	11.0			16-34	9.6
35-44	9.4	35-44	5.4	35-44	6.6
45-54	10.3	45-54	5.9	45-54	6.9
55-64	8.5	55-64	6.2	45-54	5.0
<b>Gender of main breadwinner</b>					
Man	9.0	Man	5.0	Man	6.2
				Man	5.1
<b>Nationality of main breadwinner</b>					
Spanish	8.2	Spanish	4.7	Foreign	15.2
				Foreign	7.3
<b>Education level of main provider</b>					
Primary	9.0	Secondary	6.7	Primary	6.9
Vocational training	11.2	Vocational training	5.5	Secondary	6.9
University	10.9	University	7.3	Vocational training	6.7
				Vocational training	6.0

(1) The table only includes those categories in which the share of purchasing households is above the average

It excludes those households with a total charged expenditure above 10%, those with charged expenditure on car purchases above 10%, and those declaring to have paid less than €5,000 for a NC or less than €500 for a UC.

Source: BBVA Research based on INE (BHS) data

### Have the factors determining the probability of choice of vehicle changed during the crisis?

The results in Table 4 give us a detailed breakdown of the changing profile of households buying cars but it does not provide detailed information on the characteristics that affect the probability of choice of each kind of vehicle. This descriptive analysis does not allow to isolate the impact that each individual variable on the propensity to choose a UC versus a NC. For example, the BHS data suggests that the nationality of the main breadwinner may affect the probability of choosing a certain type of vehicle though this effect might have been significantly diluted during the crisis. However, this findings could be explained not so much by a change in preferences of households driven by their nationality but by a different trend in their income levels.

In order to identify the household characteristics that affect the probability of choosing a UC over and NC and quantify their impact, we need to undertake a regression analysis. In this specific case we find an additional problem: the group of households choosing a UC is a restricted sample of the population, not a random one. If this lack of randomness is not corrected, the estimation of the factors determining the probability of choice may be distorted (and inconsistent). Distortions occur when unobserved factors that affect the probability of choosing a certain type of vehicle (i.e. UC or NC) are correlated with others that condition the decision to buy a vehicle. For example, the need to travel to the workplace could provide an incentive to buy a car for a household whose main breadwinner is employed. In addition, the longer the journey to work is, the smaller the incentive to choose a UC over a NC. However, in this case there

is no variable that quantifies the distance between these two points and its omission could imply a negative distortion of the income-level effect on the probability of choosing a UC. In order to avoid such distortions, each factor's effect on the probability of choosing a UC has to be corrected for the different propensity of each household to buy a car<sup>20</sup>.

The results of the regression analysis<sup>21</sup> confirm some of the ideas suggested from the descriptive analysis but refute others. Firstly, it is noteworthy how relatively few variables are directly affecting the probability of choosing a certain type of vehicle, bearing in mind the differences between households when it comes to the propensity to buy a car. Variables such as population density of the town, type of residential area (rural or urban), the existence of other houses at the households disposal, the size of the family unit, the number of wage earners, the age of the main breadwinner, their gender, their marital status, and their work situation all determine the probability of buying a vehicle but not directly the decision to buy a UC.

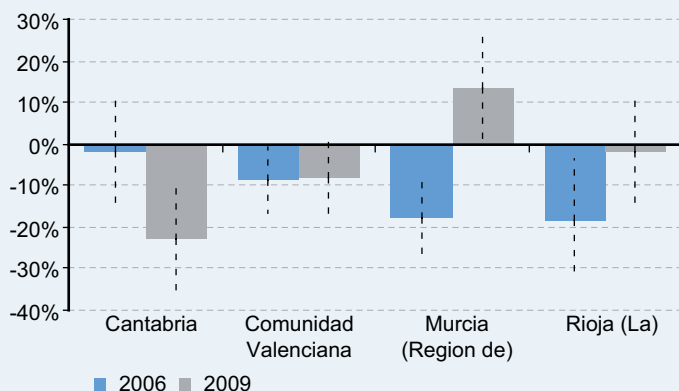
And secondly, while the characteristics affecting the conditional probability of choosing a UC have changed very little during the current crisis the extent of their impact has changed. Only three Autonomous Regions in 2006 (Comunidad Valenciana, Murcia, and La Rioja) and two in 2009 (Cantabria and Murcia) showed a conditional probability of choosing a UC that was significantly different to the others. Chart 32 shows the effect that living in one of these regions has on the probability of choosing a UC conditional on having bought a vehicle. Murcia was the only

region where the marginal effect changed direction: leaving unchanged all the other variables determining the probability of choice, living in Murcia rather than in Andalusia reduced the conditional probability of purchasing a UC by 18.0% in 2006. In 2009, the effect of living in Murcia reversed (+13.3%), result that is not explained by changes in the determining factors observed (already included in the model) but by the shift in household preferences towards UC (among other reasons, because of increased uncertainty).

Among the different household characteristics, income level and type of primary residence ownership are the only variables that affect the conditional probability of purchasing a UC instead of a NC. The income effect is negative, both before and during the current crisis (see Chart 33). And overall, this negative impact is more pronounced in 2009 than in 2006: compared with households where the net monthly income is below €1,000, households receiving €3,000 or more saw their propensity to buy a UC fall by 26.1% in 2006 and by 39.4% in 2009. These results contrast with those obtained when looking at the factors determining whether or not to buy a vehicle: an increase in the household's net revenues produces a parallel increase (and similar in both years) on the probability of buying a vehicle (see Chart 34). Thus, the results explain, at least partly, the growing popularity of "€1000 cars": the average expenditure on UC decreases due to the fact that higher-income households increasingly prefer to buy a NC.

Chart 32

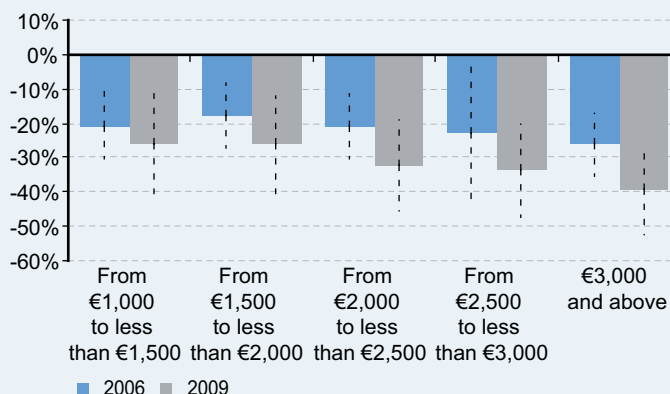
**Impact of residence in certain Autonomous Regions on the conditional probability of purchasing a UC (%). Reference category: Andalusia**



The dotted line represents the confidence interval at 95%  
Source: BBVA Research

Chart 33

**Impact of household's income level on the conditional probability of purchasing a UC (%). Reference category: below €1,000**



Source: BBVA Research

20: The factors determining the choice of a UC over a NC are estimated with a probit model, which considers the possibility of choice distortion. It is assumed that each household's latent propensity to choose a UC ( $\gamma^*$ ) is determined by the equation  $\gamma^* = X_1\beta + u_1$ , where  $X_1$  denotes the combination of the factors determining the propensity to choose a UC.  $\gamma^*$  is unobserved; the only binary observed variable is  $\gamma$ , which is 1 when the household buys a UC and 0 when it buys a NC:  $\gamma = (\gamma^* > 0)$ . However,  $\gamma$  only has a value (0, 1) when the household buys a vehicle ( $\gamma_c$ ), which will be the case when  $\gamma_c = (X_2\gamma + u_2 > 0)$ , where  $X_1 \subset X_2$ . Given that the correlation between  $u_1$  and  $u_2$  is other than zero, the failure to consider the propensity to buy a vehicle when estimating the probability of choosing a certain type of vehicle can lead to distorted results. The estimate is based on maximum likelihood. More details on the probit model of choice can be found at Van de Ven and Van Praag (1981) and in Woolbridge (2002), chapter 17.

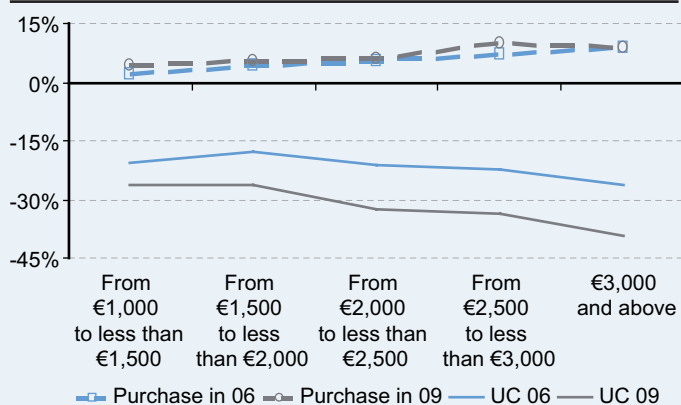
21: Detailed results of the estimates are available on request.



The extent of the impact that housing ownership has on the conditional probability of choosing a UC has changed during the crisis (see Chart 35). In 2006, no significant differences are detected among homeowner households, irrespective of whether the house was full-paid or not; only the fact of living in rented accommodation or in free housing increased the

conditional probability of choosing a UC. In 2009, the effect of living in rented accommodation versus an un-mortgaged owned property increased the probability to 39.5%. This result indicates the existence of a dichotomy among households driven by the different preferences based on complementarities: homeowner households buying NC and non-homeowners buying UC<sup>22</sup>.

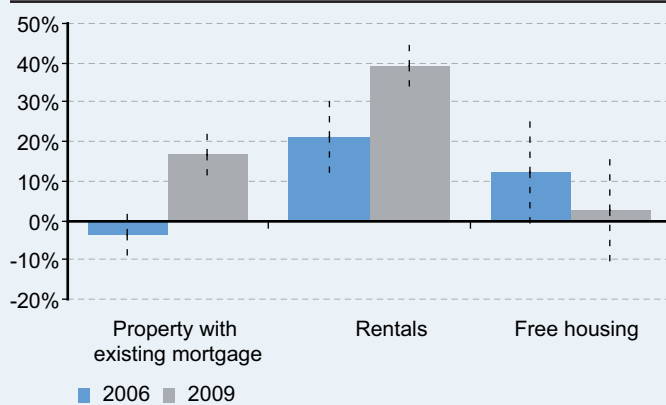
Chart 34  
**Probability of buying vs. probability of choosing a UC. Effect of household income level (%).**  
Reference category: below €1,000



Source: BBVA Research

Among the characteristics of the main breadwinner, only nationality and education level have a direct impact on the conditional probability of choosing a UC. Ceteris paribus, being foreign increased the conditional probability of buying a UC in 2006 by 34.9%. In 2009 this effect was diluted, as suggested by the descriptive analysis (see Chart 36). As for the education

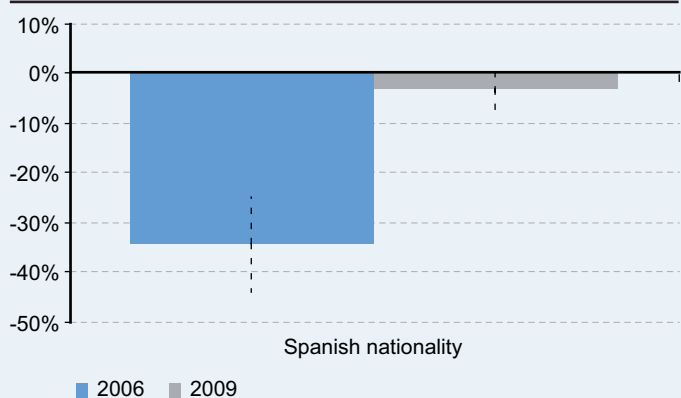
Chart 35  
**Impact of home ownership on conditional probability of purchasing a UC (%).**  
Reference category: Non-mortgaged property



Source: BBVA Research

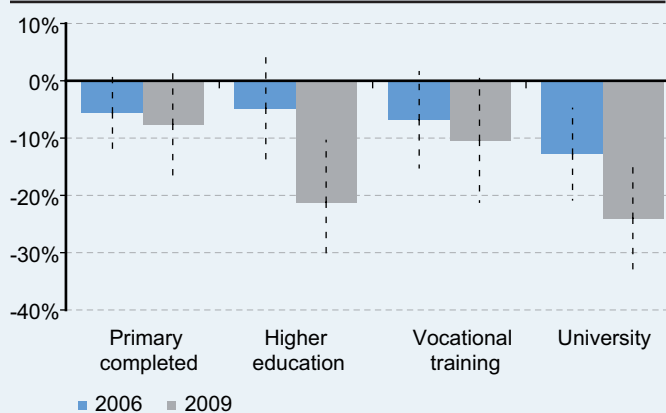
level, the conditional probability of opting for UC diminishes when the main breadwinner has university education, both in 2006 and above all in 2009 (see Chart 37). As a result, while there is no clear pattern involving academic qualifications we can conclude that those households most likely to enjoy a stable level of income are more likely to purchase a NC than a UC.

Chart 36  
**Impact of the nationality of the main breadwinner on the conditional probability of purchasing a UC (%).**  
Reference category: foreigner



Source: BBVA Research

Chart 37  
**Impact of the education level of the main breadwinner on conditional probability of purchasing a UC (%).** Reference category: uneducated or incomplete primary education



Source: BBVA Research

22: Homeowner households, particularly those without mortgages, probably have less difficulty to obtain financing, making it easier to buy NC instead of a UC.



All in all, the recent demand for UC can be explained by the changes in the type of purchasing households and, above all, by the changing preferences of certain household groups that have caused an increase in the relative demand for used vehicles. More specifically, when the impact that each variable has on the decision to choose a used vehicle is isolated, it is clear that the diminishing influence of the household's income level (effective or permanent) has intensified during the crisis, which helps to explain the shift towards cheaper items (i.e. the "€1,000 car"). In addition, there is further evidence of certain correlations between car demand and residential investment: owner households buying NCs; and tenants buying UCs. And finally, we can also see how the preferences of immigrant households are very

similar to those of native households when it comes to UC: the effect that nationality has on the conditional probability of buying a UC has been diluted with the crisis. Overall, the number of variables directly affecting the probability of choosing a certain type of vehicle is relatively low, bearing in mind the differences between households when it comes to the propensity to actually buy a car. Variables such as population density of the town, type of residential area, the existence of other houses at the household's disposal, the size of the family unit, the number of wage earners, the age of the main breadwinner, their gender, their marital status, and their work situation all determine the probability of buying a vehicle but not directly the decision to buy a UC.

## 5. Two additional approximations to the analysis of the current economic situation in the retail sector: the BBVA surveys on economic activity and business trends

In order to understand the economic position of a sector and its outlook, relevant quantitative and qualitative data on companies operating therein are required. In addition, the views of the financial institutions intermediating in the sector under analysis should be also taken into account. For the purpose of meeting both requirements, BBVA has set up two surveys that enable the analysis of the current situation and outlook of companies in Spain's retail goods and services sectors on a six-monthly basis: the Economic Activity Survey (EAS) and the Business Trends Survey (BTS).

The target sample in the case of the EAS are BBVA Finanzia corporate clients that operate in the retail goods (mainly durable) and services sectors. The main activities analysed are the following: sales and repairs of motor vehicles and motorcycles (groups 451, 452, 453, and 454 of Spain's 2009 National Economic Activity Classification –CNAE 2009); retail sales of information technology and communications equipment (group 474); ironmonger, paint, and glass products (classes 4752 and 4753); household appliances (class 4754); furniture (class 4759); medicinal and orthopaedic products (class 4774); cosmetic and personal hygiene products (class 4775); and other products sold in non-specialised establishments (group 479). Also included are other credit activities related to lending by institutions that do not specialise in monetary intermediation (consumer lending in particular) (class 6492).

The EAS is broken down into three sections. In the first part, companies are asked about the changes during 2H10 in the variables that make up their economic situation (order-book, inventory levels, prices, turnover and employment), and their expectations for 1H11. In the second part, companies are asked about their assessment of the current and expected situation of the Spanish economy, their particular sector, and their company. The third section addresses the issue of external financing and its conditions (volume, cost, collaterals, and term).

Figure 9 of the Appendix shows the breakdown of the EAS sample, collected during the final fortnight of December 2010 and the first fortnight of January. Some 757 companies took part, 73.3% of which were conducted in Madrid and in Central and Southern regions of the peninsula. 63.4% of these companies operate in the motor vehicle distribution sector and 23.1% in furniture. The breakdown according to the company's size shows that half of the participants had a turnover below 1 million euros and less than 15 employees in 2H10; the only sector with bigger companies was vehicle sales and repairs, where average turnover stood at around 2 million euros with around 20 employees, in average.

The BTS, on the other hand, is aimed at BBVA Finanzia managers and directors, who work with the sectors numbered above. The ETS questionnaire is more brief than that of the EAS, and its structure is also different, focusing on both the current and expected performance of credit demand and on any changes in lending criteria. In order to increase representativeness, the questions refer to the market as a whole and not to the specific policy of BBVA Finanzia. With the ultimate objective to compare the BTS results with those of the EAS, a final section has been introduced, asking managers and directors of BBVA Finanzia about their view on the Spanish economy and the sectors in which they specialise.

Figure 10 shows the breakdown of the BTS sample based on NUTS 1 and sector activity. Compared with the EAS, we can see how the weighting of the Eastern region increases significantly, to the detriment of the Centre of Spain. At the same time, the relative importance of motor vehicle sales and repairs drops to 43.6%, resulting into a comparatively better-balanced sample.

## Survey results

In addition to the analysis of the factors determining the economic situation in the retail sectors, BBVA's surveys on economic activity and business trends can also be used as tools for short-term forecasts, enabling us to anticipate trend changes both at the sector level and for the wider economy<sup>23</sup>. Given that this is only the first round of results, on this occasion, our analysis will focus on a description of the information obtained in each survey and on the comparison of the views on current and expected economic conditions provided by the companies on the one hand and the managers and directors of BBVA Finanzia on the other.

### BBVA Economic Activity Survey

Figure 5 shows the view that those companies participating in the EAS have on the situation and outlook of the Spanish economy. The results suggest that the companies' perception of the economy's overall health is improving. More specifically 54.3% believe that the economy will not get any worse in 1H11 as opposed to 34.4% in 2H10.

The results differ very little when the question is restricted to the company's own specific sector. For example the percentage of companies expecting the economic situation in their own sector to deteriorate in 1H11 has fallen to 42.0%. The fact that companies' vision of their own particular sectors is so similar to that of the economy as a whole is noteworthy and it may be due either to the fact that the retail cycle is very similar to that in the wider Spanish economy or to the possibility that the companies are mistaking the "wider" economy with their "specific" sector (that is to say attributing to the wider economy the same performance that they are expecting from their own sector).

A result worth highlighting in Table 5 is the different opinions that companies have on their own economic situation and that of their sector. For example, while 66.9% believed that the situation in their sector had deteriorated in 2H10 only 35.2% believed that the economic conditions in their company had worsened. And the same discrepancy appears when they are asked about the outlook for 1H11: only 20.8% believe that their company's position will weaken, figure that doubles when they are asked about the sector. While it is certainly true that the businessman's forecasts on his own company tend to be more accurate than those on the whole sector, it is also possible that there is an element of "social desirability" here: those being polled could be overestimating the outlook for their own company (i.e. above its peer group average)<sup>24</sup>.

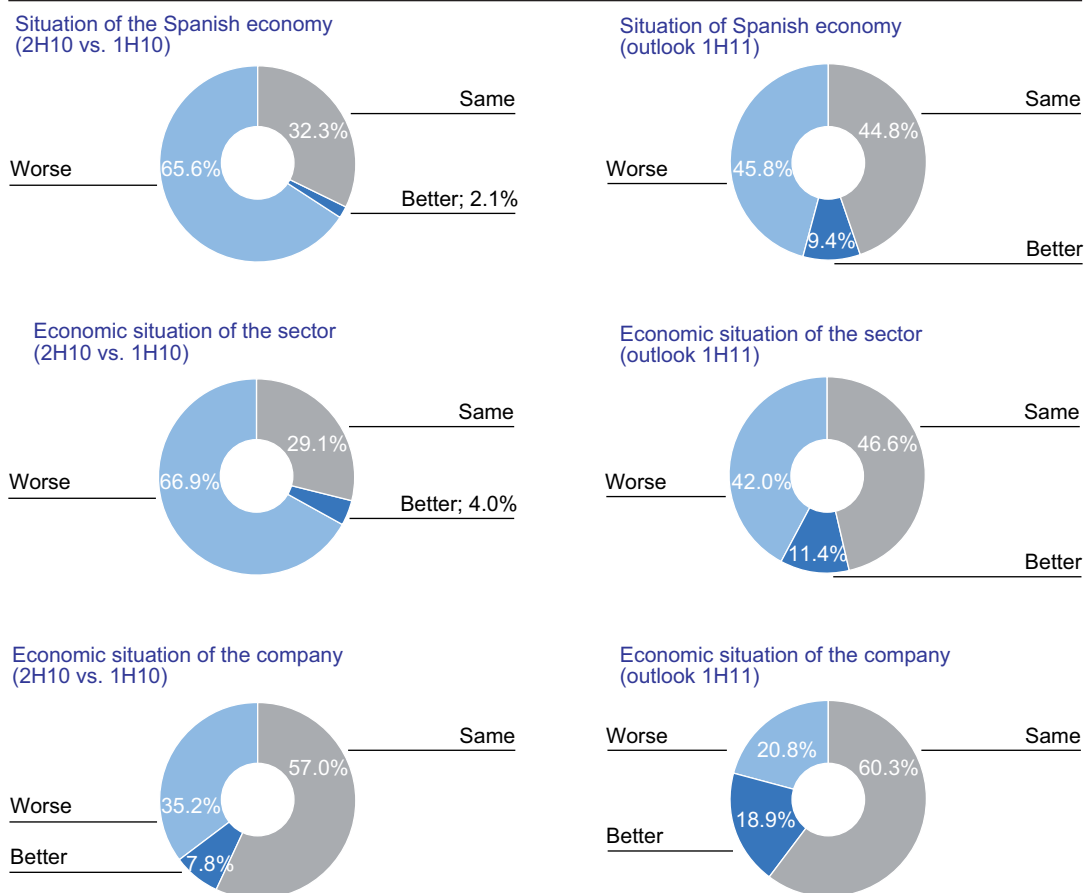
When analysing the data by type of activity, we see greater pessimism among those companies in the vehicle sales and repairs sector. While among those who consider that their economic situation did not deteriorate in 2H10, we find distributors of household appliances, consumer electronics and ICT equipment, furniture, and other retail. Despite the general improvement in the outlook for 1H11 among the surveyed companies, the view of those operating in the motor vehicle distribution sector remains less optimistic than the average.

23: The predictive use of the BBVA surveys can be consulted in BBVA Research's regional publications. Such publications periodically present the results of the two surveys, where employees are requested to assess the current and expected developments on a number of macroeconomic variables in the region as well as the main elements of the banking business. More information, [here](#)

24: See Levy (1981) and Fisher and Katz (2000) for more details on the distortion of social desirability.

Chart 38

**BBVA Economic Activity Survey 2H10. View of the economic situation**



Source: BBVA Research

The economic situation and future outlook of companies is the result of current and expected changes in the different variables that determine their P&Ls. Some of these are analysed in the EAS both from a demand perspective (order book and inventories) and from a supply perspective (turnover and employment level). Table 6 shows a summary of the companies' views on the current and future performance of each of these variables.

Even though order books contracted during the second half of last year (particularly at those companies in car and motorcycle distribution), the outlook is brighter for 1H11: the percentage of the polled companies expecting a demand reduction decreased to 41.1% compared with 65.0% in 2H10. The outlook is brighter across all the different areas of activity considered, and it is particularly noticeable in other retail.

The fact that the drop in demand in 2H10 did not surprise retail companies was reflected by the adequate inventory levels (actually too low for 11.2% of participants). Uncertainty over the performance of demand during 1H11 should support the stabilisation of stocks, although 11.7% of companies (mainly in car sales and other retail) expect them to rise given the weak consumption outlook.

Prices made a partial response to the drop-off in demand during 2H10, with 36.2% of the polled companies having cut the prices of their products (particularly the distributors of motor vehicles, household appliances, and consumer electronics and ITC equipment). 84.7% of the companies said their prices would stabilise in 1H11, while some of those companies that had previously cut their prices, expect them to rise during the first six months of this year.

More than half of the surveyed companies registered a reduction in turnover during 2H10, particularly among those selling and repairing cars and (above all) motorcycles. The outlook is brighter for 1H11 across all sectors, but particularly in other retail, furniture, major appliances and consumer electronics and ITC equipment sales. Meanwhile, employment levels are expected to move in line with activity, stabilising at 55.3% of companies and falling at 40.4% (10pp less than during 2H10). Based on the

data for the activity and employment outlook, it appears that companies will be aiming productivity gains (given that just 4.4% are thinking of increasing their staff in 1H11). The only sectors likely to see employment levels to rise above the average are major appliances and consumer electronics and ITC equipment and other retail, and this partly due to seasonal factors.

Table 3

**BBVA Economic Activity Survey:  
situation in 2H10 and outlook for 1H11 (% of companies in each category)**

	2H10 vs. 1H10			Outlook for 1H11				
	Increase	Stable	Decrease	Total	Increase	Stable	Decrease	Total
Order book	7.8	27.2	65.0	100.0	11.7	47.2	41.1	100.0
Inventories (1)	16.9	71.9	11.2	100.0	11.7	71.9	16.4	100.0
Sale prices	11.6	52.1	36.2	100.0	19.8	64.9	15.3	100.0
Turnover	8.8	33.3	57.9	100.0	13.5	50.1	36.3	100.0
Employment	5.3	43.8	50.9	100.0	4.4	55.3	40.4	100.0

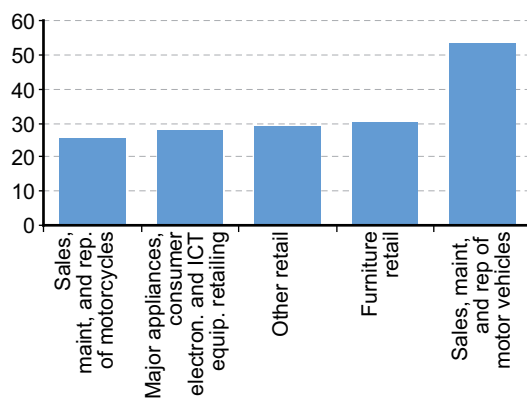
(1) The reply categories for the question on inventories in 2H10 are "excessive", "sufficient", and insufficient" BBVA Research

What role has credit performance played in companies' economic situation? Changes in financing conditions do not appear to have had much influence on the behaviour of polled companies during 2H10. Firstly, less than half the participants in the EAS tried to access external financing in 2H10; and, of these, 88.5% were successful. As we can see in Charts 38 and 39, a breakdown by sector shows that credit access was heterogeneous. Credit supply constraints are only perceived among a reduced group of companies in the motor vehicle sales and furniture sectors (11.9% and 16.0% respectively).

While no credit supply problems are actually detected at the polled companies, there is a noticeable tightening of financing conditions as a result of increased financial stress during 2H10. In this respect, Chart 40 shows that 59.5% of the companies experienced a drop in financing volume, 56.1% suffered higher interest rates, and 51.2% were requested additional guarantees. The percentage of companies experiencing an increase in commissions or a reduction in their repayment period was significantly lower.

Chart 39

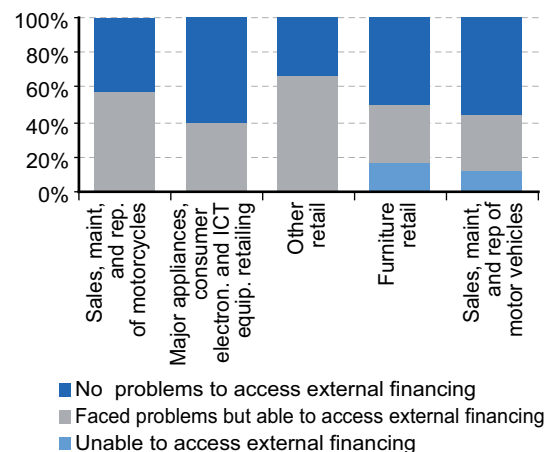
**Companies that tried to access external financing during 2H10 (%)**



Source: BBVA Research

Chart 40

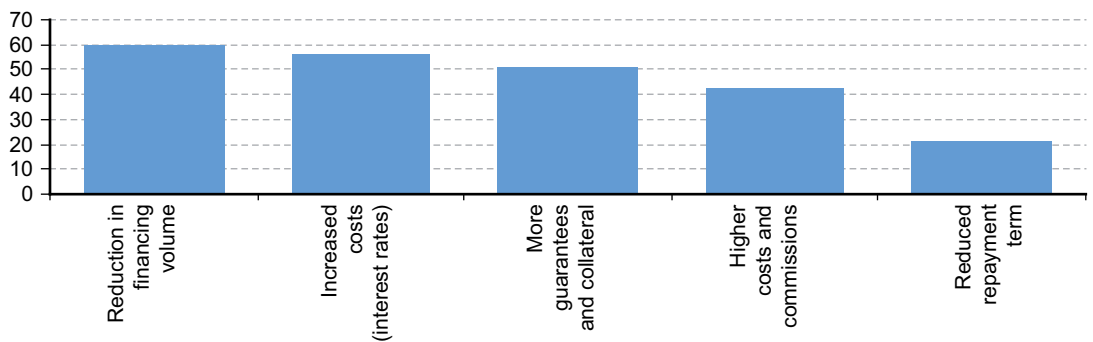
**Problems when accessing external financing during 2H10**



Source: BBVA Research

Chart 41

**Changes in the conditions to obtain external financing (%)**



Source: BBVA Research

## BBVA Business Trends Survey

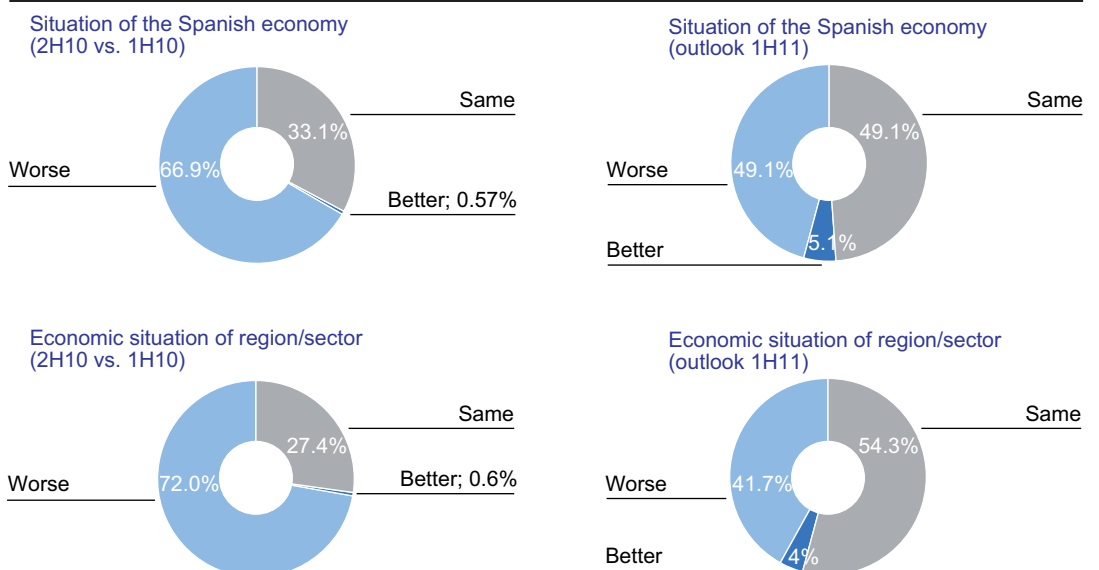
In line with the view provided by the companies surveyed by EAS, Table 7 shows that BBVA Finanzia's managers and directors have also improved their views on the Spanish economy. Only 45.7% think the economy will lose traction in 1H11 compared to 66.9% who believed that the economic situation had deteriorated during the second half of last year. The brighter view of economic prospects is explained not so much by a change in stance of those who believed the situation got worse during 2H10, but also by a more positive outlook from those who thought the economy had not deteriorated in 2H10.

The results barely differ when the question is limited to the participant's particular sphere of activity (i.e. sector/region). For example, 41.7% believe the economic situation will deteriorate during the first half of this year (almost the same figure resulting from the EAS), compared with the 72.0% saying that economic conditions in his/her own particular sector had got worse in 2H10. Expectations for the economic situation during 1H11 improve above average amongst those managers and directors working with the car distribution sector, result that diverges from that obtained from the EAS data. The vision is less favourable among the other analysed retails activities, although none of them look particularly bad.

When the view of the economic situation for 1H11 is analysed using NUTS1, we see that perception in Eastern and Northwest regions is significantly more optimistic than in the rest of the country. The economic outlook looks comparatively worse in the South and Centre of the country, the two areas where the outlook for credit supply is expected to be less favourable in 1H11.

Chart 42

**BBVA Business Trends Survey 2H10. View of the economic situation**



Source: BBVA Research



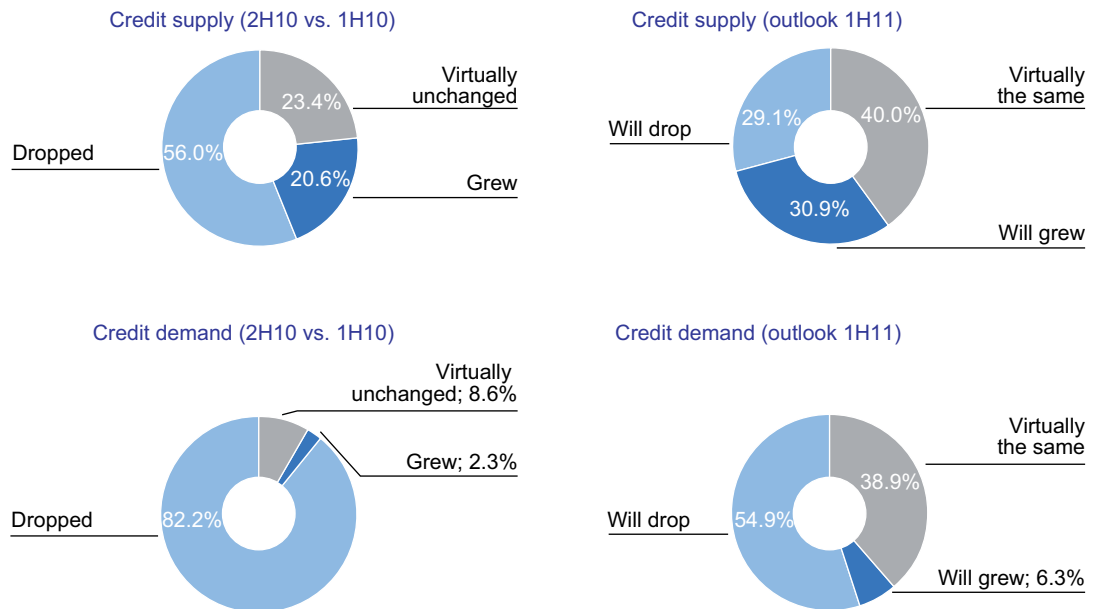
The similarities between the EAS and the BTS in terms of the view of the economic situation are repeated to a certain extent when it comes to the performance of lending. According to BBVA Finanzia managers and directors, the deterioration in lending during 2H10 was due to both diminished supply and also (and above all) weaker demand: 89.2% alleged credit demand constraints during 2H10 and 56.0% blamed credit supply restrictions. The outlook for 1H11 remains downbeat in terms of demand (54.9% believe it will continue to fall), but not for supply: 70.9% expect new loans and credit lines to remain stable or to increase during the first six months of the year (see Table 8).

All the sectors analysed show an improved outlook in terms of credit supply, but motor vehicle sales and repairs stands out in particular: 74.1% of participants expect no deterioration of credit supply in the sector in 1H11. As for credit demand, motor vehicle sales and repairs sector as well as other retail is expected to perform better than the average in 1H11. This more optimistic outlook on credit supply and demand from those managers specialising in vehicle distributors could explain the difference of views between the two players mentioned above.

The results based on NUTS1 show that the regions with strongest credit supply expectations during 1H11 are Madrid, followed by the Northeast, and the East; while supply in the Centre and South is expected to perform below average. Credit demand based on NUTS1 will move in line with supply, except the Canary Islands, where the ETS results show a relatively significant loss of dynamism.

Chart 43

**BBVA Business Trends Survey 2H10. Credit supply and demand**



Source: BBVA Research

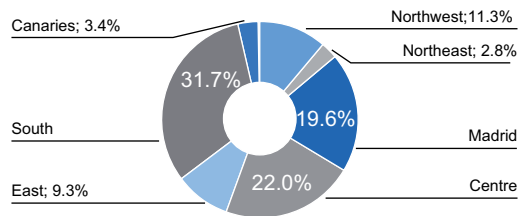
To summarise, BBVA's economic activity and business trends survey provides a complementary vision of the present and future economic situation in Spain's retail sector. Both surveys indicate that the second half of 2010 was characterised by an extremely weak domestic demand that took a major toll on company results. However, the changes in financing conditions do not appear to have limited to any great extent the behaviour of polled companies during 2H10. In fact, the data from the two surveys suggest that credit performance is more conditioned by a lack of demand than by any restriction on supply. As for 1H11, the upbeat outlook from companies and managers coincides, except in the motor vehicle distribution sector. Here the divergence is explained by the relatively more optimistic view of managers and directors on *via-à-vis* the supply and demand of credit. All in all, the overall coherence of the results proves the soundness of the conclusions obtained from the EAS and the ETS.

# Appendix

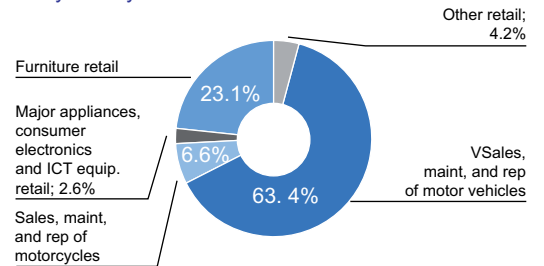
Chart 44

## BBVA Economic Activity Survey 2H10. Sample composition

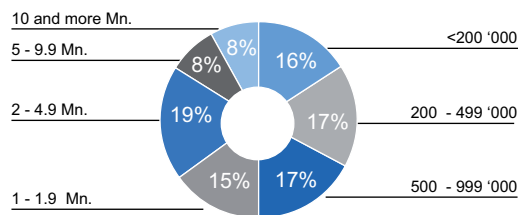
By NUTS1 (1)



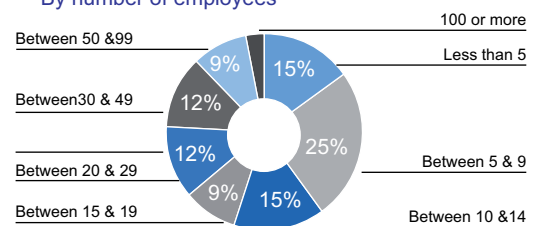
By activity



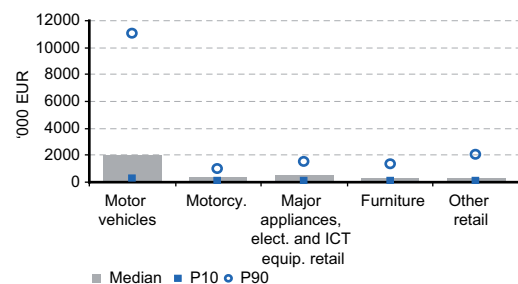
By turnover size



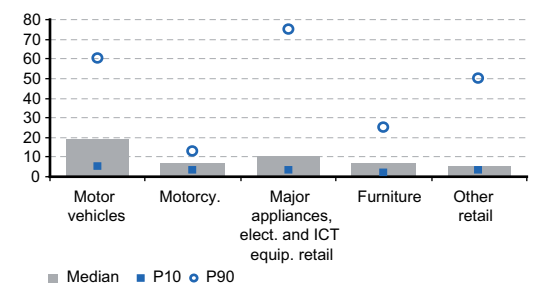
By number of employees



Six-monthly turnover by sector: median, percentiles 10 and 90



Number of employees by sector: median, percentiles 10 and 90

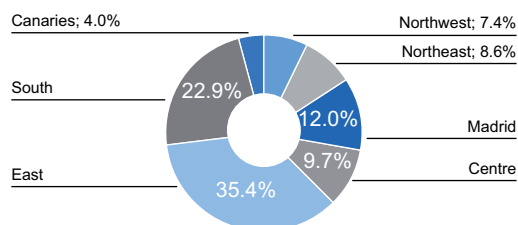


(1) NUTS1: Nomenclature of the level-1 Territorial Statistics Units: Northwest: Galicia, Asturias and Cantabria; Northeast: Basque country, Navarra, Rioja and Aragón; Madrid: Com. de Madrid; Centre: Castilla y León, Castilla-La Mancha y Extremadura; East: Catalonia, Com. Valencia and the Balearics; South: Andalusia, Murcia, Ceuta y Melilla; Canaries: Canary Islands.  
Source: BBVA Research

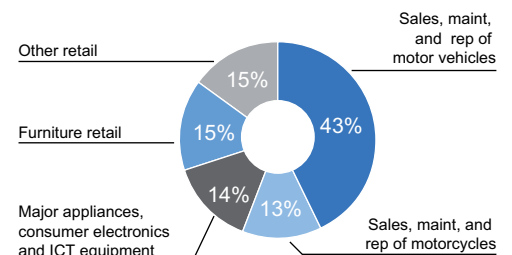
Chart 45

## BBVA Business Trends Survey 2H10. Sample composition

By NUTS1 (1)



By activity



(1) NUTS1: Nomenclature of the level-1 Territorial Statistics Units: Northwest: Galicia, Asturias and Cantabria; Northeast: Basque country, Navarra, Rioja and Aragón; Madrid: Com. de Madrid; Centre: Castilla y León, Castilla-La Mancha y Extremadura; East: Catalonia, Com. Valencia and the Balearics; South: Andalusia, Murcia, Ceuta y Melilla; Canaries: Canary Islands.  
Source: BBVA Research

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*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

**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.pou@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

Financial Systems  
**Ana Rubio**  
+34 91 374 33 42  
arubiog@grupobbva.com

**Macarena Ruesta**  
+34 91 3743321  
esperanza.ruesta@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

oswaldo\_lopez@provincial.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**

*Spain and Europe:*

**Rafael Doménech**  
r.domenech@grupobbva.com

Spain  
**Miguel Cardoso**  
miguel.cardoso@grupobbva.com

Europe  
**Miguel Jiménez**  
mjimenezg@grupobbva.com

henrik.lumholdt@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**

**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