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An analysis of the performance and the determinants of the current account in Spain[1]

- **In the period 1950-2012, the Spanish economy recorded, on average, an annual deficit of 1.9% of GDP on its external accounts**
  To begin with, the external deficit could be attributed to a process of convergence with the per capita income levels of advanced European nations. However, even factoring in the convergence process, a current account deficit may become problematic when its sustainability is questioned.

- **After registering the largest deficit of its recent history, the Spanish current account began an adjustment process in 2008**
  The current account deterioration that started in 1995 and culminated in 2007, when the deficit reached a staggering 10% of GDP, was followed by a reversal that eliminated 89% of the deficit in five years. The deficit reduction was accompanied by lower private investment and imports, a real depreciation of unit labour costs, and increased exports, the latter in the absence of currency devaluation as a correction mechanism.

- **For the first time in 26 years, the Spanish economy is expected to show a moderate current account surplus in 2013**
  Once this milestone has been reached, the key is to assess the extent to which the adjustment process in Spain will give way to surpluses in the structural or long term component of the current account.

- **The current account deterioration of the 1995-2007 period had a strong structural component**
  Likewise, the process of reversal seen since 2008 has been supported, in an initial phase, by the gradual reduction of the structural deficit and the generation of cyclical surpluses and, in a second phase, by the pronounced reduction of the structural component of the deficit. Investment, the NIIP and demographic factors are the largest contributors to the structural deficit.

- **In the 2013-2020 horizon, estimates suggest that Spain will achieve and sustain structural current account surpluses**
  Generating structural surpluses would alleviate the financial pressure that high external debt exerts on the decisions of economic agents. Also, the generation of structural surpluses in the current account would mark a change in the growth pattern of the Spanish economy, achieved by the reorientation of productive resources towards exporting and energy saving.

1: The authors would like to thank Rodolfo Méndez for assistance and Miguel Cardoso, David Martínez Turégano and Álvaro Ortíz for comments on an earlier draft.

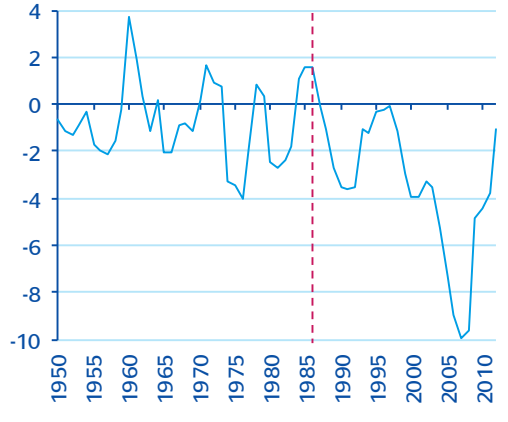
1. The recent performance of Spain's current account balance

Since the beginning of the post-war period until the first decade of this century, the Spanish economy displayed, on average, an external deficit on its annual accounts with the rest of the world. Specifically, the average deficit stood at 1.9% of GDP in the period 1950-2012. Until the mid-1980s, Spain alternated between brief episodes of current account surpluses and episodes of more pronounced and persistent deficits (see Chart 1). After joining the European Economic Community (EEC) in 1986, the Spanish economy reported 26 consecutive years of current account deficits. Out of that record, it stands out the deterioration that began in 1995 and culminated in 2007 with the largest deficit in Spain´s recent history (10% of GDP).

In principle, the historical deficit of the current account balance in Spain could be attributed to a process of convergence in per capita income with Europe. As an economy opens up to the outside world and modernises, it accumulates factors of production (capital and labour) and adopts more efficient technology and practices with the expectation that the future income flow derived from greater competitiveness will pay the foreign debt accumulated during the convergence period. However, even in the presence of convergence factors, the current account deficit can become problematic when it surpasses the so-called sustainability level, that is, when it is questionable whether a country's future savings will be able to address the debt built up in previous years.

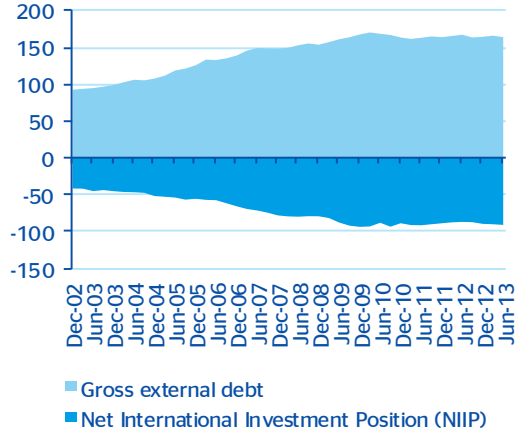
The exact sustainability threshold is open to debate: from the 5% of GDP benchmark to the value at which the net international investment position[2] (NIIP) to GDP[3] ratio stabilises. The current account deficit traditionally considered as problematic in the literature -and thus precursor to a balance of payments crisis- is 5%, more so if the deficit was the result of high consumption financed by short term debt and reserves. On the other hand, the stabilisation of the NIIP to GDP ratio would reflect, among other factors, the availability of foreign capital to finance the current account deficit and the ability of the debtor country to repay its foreign debt.

Chart 1
Spain: current account balance 1950-2012 (% of GDP)



Note: Vertical line located in 1986, year of Spain´s entry in the EEC.
Source: Correa-López and de Blas (2012)

Chart 2
Spain: gross external debt and NIIP (% of GDP)



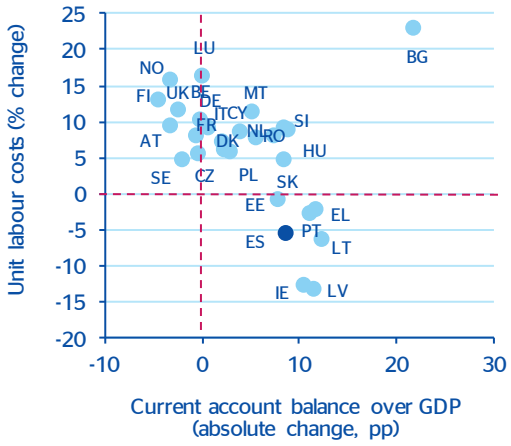
Source: BBVA Research based on Banco de España

2: The NIIP excludes from gross foreign debt the foreign assets owned by Spanish residents.
3: See, e.g., Summers (1996) and Milesi-Ferretti and Razin (1996).

Under both of these criteria, the Spanish economy largely surpassed what could be considered a sustainable level during the period prior to the crisis. The external deficit exceeded 5% of GDP for five consecutive years and the economy accumulated a NIIP in the range of 90% of GDP, both magnitudes difficult to mantain in the medium term (see Chart 2). During those years, the perception that the level of external debt was unsustainable dissipated by the apparently unlimited availability of foreign savings prepared to invest in Spanish private assets[4].

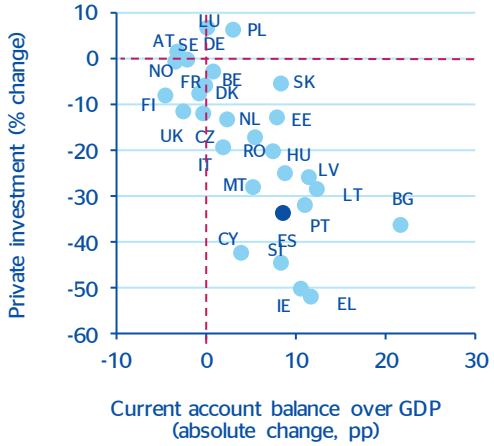
Episodes of significant deterioration of the current account deficit tend to precede periods of "reversal" or abrupt correction of the deficit. In a sample of 25 industrialized countries analysed during the 1980-1997 period, Freund (2005) found that the typical reversal begins when the current account deficit reaches 5% of GDP, albeit there are differences among countries. According to Freund (2005), a current account reversal is highly correlated with the economic cycle or, to be more precise, the weight of the cyclical component is high during both the current account deterioration and the subsequent reversal. Also, reversals are usually accompanied by low income growth, a significant depreciation of the real exchange rate, rising exports and lower investment. Further, the budget deficit contributes little to the deterioration of the current account balance and some fiscal consolidation is observed once the current account deficit adjusts. Finally, Freund (2005) finds that 80% of the deficit is usually eliminated in three years, after which the current account balance reaches equilibrium.

Chart 3
Nominal unit labour costs and current account balance, variation 2008-2012



Note: Positive values on the horizontal axis correspond to an improvement in the current account balance, and vice versa.
Source: BBVA Research based on Eurostat

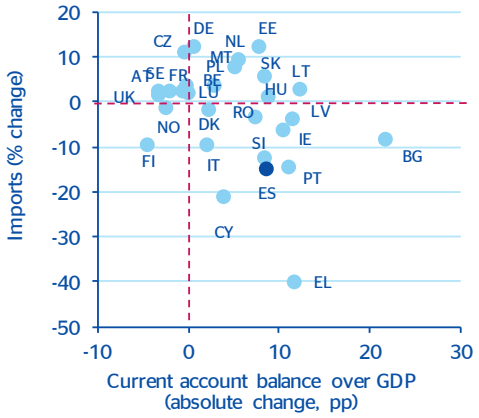
Chart 4
Gross fixed capital formation and current account balance, variation 2008-2012



See the note to Chart 3.
Source: BBVA Research based on Eurostat

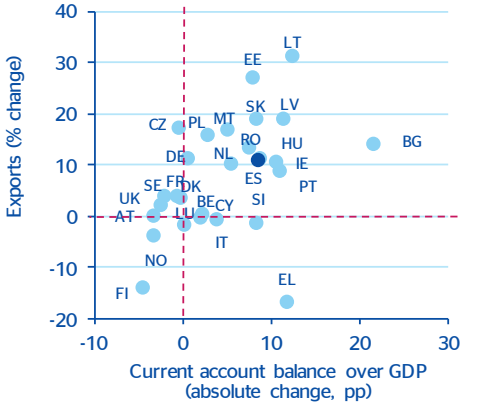
4: For a detailed analysis on the capital movements experienced by the Spanish economy since joining the Euro, see Box 3 of Spain´s Economic Watch corresponding to the third quarter of 2012, available at: http://www.bbvaresearch.com/KETD/fbin/mult/1208_Situacion_Espana_tcm348-351334.pdf.

Chart 5
Real imports and current account balance, variation 2008-2012



See the note to Chart 3.
Source: BBVA Research based on Eurostat

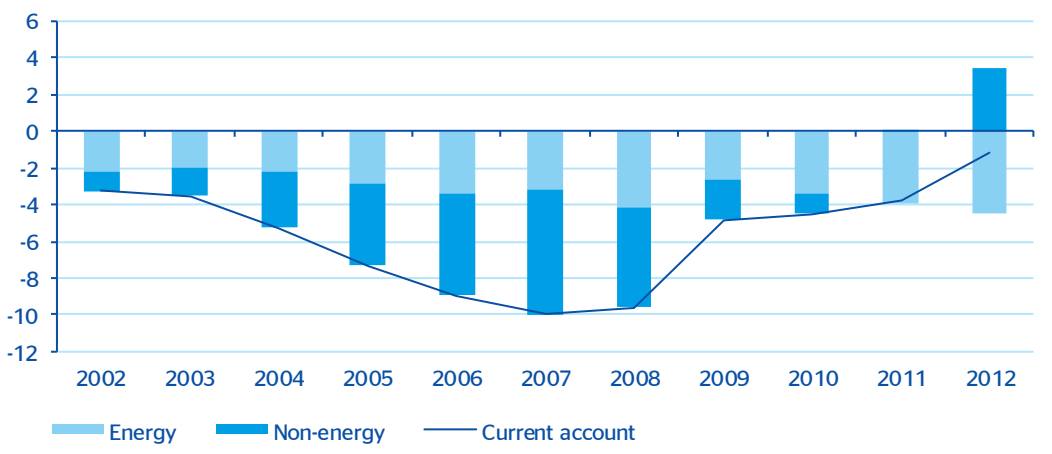
Chart 6
Real exports and current account balance, variation 2008-2012



See the note to Chart 3.
Source: BBVA Research based on Eurostat

The Spanish economy began its last current account reversal in 2008 and, in five years, the accumulated adjustment has reached 89%, with 2009 and 2012 being the years that registered the largest absolute change (4.8 pp vs. 2.7 pp of GDP, respectively). In line with the pattern of correction identified in Freund (2005), the adjustment of the current account in Spain has been accompanied by declines in private investment (34%) and imports (15%), a real unit labour costs depreciation of more than 5% and export growth of 11%, the latter in the absence of the nominal exchange rate devaluation as an adjustment mechanism (see Charts 3-6). Furthermore, balance of payments data available for 2013 indicate that the Spanish economy is likely to close the year with a moderate surplus.

Chart 7
Spain: energy and non-energy deficits and current account balance (% of GDP)



Source: BBVA Research based on Banco de España and Ministerio de Industria, Energía y Turismo.

The key question is to discern to what extent the current adjustment will lead to a situation in which Spain generates structural current account surpluses. Generating structural surpluses could signal a change in the pattern of Spanish economic growth. This new growth pattern could be driven by a dynamic export sector and, ideally, by a progressive reduction in the energy deficit due to efficiency gains (see Chart 7). A rapid and efficient reallocation of

productive resources towards export sectors would facilitate the deleveraging of the Spanish economy vis-à-vis the rest of the world and the correction of one of the largest imbalances built up during the expansion period prior to 2008[5].

2. The determinants of the current account: an estimation for the Spanish economy

In this section, we study the performance of the current account balance within an analytical framework that studies the variability of the current account in its structural and cyclical components. The analysis is based on the macroeconomic identity between net domestic savings (private and public) and net foreign savings which includes earnings, positive or negative, from the NIIP. Among other variables, it addresses the role of the fiscal balance, relative per capita income, the initial NIIP, investment, the demographic dependency ratio and trade liberalisation as factors shaping the current account balance[6]. Further, all variables are broken down into three frequencies of oscillation – short, medium and long term – which allows the effect of each component of the current account to be assessed individually.

According to theoretical models of overlapping generations (for example, Obstfeld and Rogoff (1998)), the expected correlation between the fiscal balance and the current account is positive and gives rise to a reallocation of income among different generations, specifically from the future generation to the present. Therefore, an increase in the fiscal deficit due to higher public spending or lower taxes is usually accompanied by a rise in consumption and a drop in consumer savings. If the higher fiscal deficit and reduced savings are not offset by a decrease in private investment, the result is a deterioration of the current account balance. However, Ricardian equivalence models indicate that consumers may react to a higher fiscal deficit by increasing savings as a precautionary measure in anticipation of a process of fiscal consolidation that would involve cutbacks in public spending and higher taxes in the future. In this case, the expected correlation between the fiscal balance and the current account would be negative.

Factors that capture a country's level of development, such as the relative per capita income, would show a positive correlation with the current account balance. Capital goods imports, necessary to modernize the productive process, would give rise to negative current account balances which would be reduced as the process of convergence with more developed countries is completed. In the same way, a more negative initial NIIP is usually associated with a weaker current account, particularly in countries with high levels of external debt, due to negative income balances. Further, the demographic dependency ratio could affect savings patterns among the working age population. A higher dependency rate among young people and economically inactive older people is associated with lower savings levels and therefore a deterioration in the current account balance.

Given the variety of determinants, Table 1 shows a summary of the factors that could influence the current account specifying the expected direction of correlation on the basis of results established in the economic literature. The relative role played by each of these factors in shaping the current account balance between 1980 and 2012 is subsequently assessed, paying particular attention to the structural and cyclical decomposition of the current account.

5: For an assessment of the competitiveness of the Spanish economy and the role of exporting firms in the internationalisation process see the Economic Outlook "The internationalisation of Spanish firms" available at:
http://www.bbvaresearch.com/KETD/fbin/mult/121207_Spain_Economid_Watch_tcm348-371889.pdf
6: For a description of the methodology used see, e.g., Ca' Zorzi et al. (2012).

Table 1
Determinants of the current account balance

Variable	Expected correlation	Theoretical Mechanism
Old dependency ratio (% of total population)	(-)	A greater proportion of economically-dependent inactive individuals is associated with lower national savings.
Young dependency ratio (% of total population)	(-)	
Population growth	(-)	Variable that approximates the future working-age population.
Spending on public health care (% GDP)	(-)	Variable that approximates structural gaps in economic policy.
Investment (% GDP)	(-)	The current account deficit correlates with future productivity gains derived from higher current investment as a result of, for example, a convergence or "catching-up" process (-). If the rate of long-term investment is high, the return on this investment -through gains in productivity - will improve the current account balance (+). The (-) correlation tends to dominate the literature.
GDP per capita (PPA adjusted, U.S. dollars, in logs)	(+)	Countries with lower income and, as a result, a lower degree of development, tend to have high current account deficits, due to the combination of investments they make in order to foster economic convergence.
Fiscal balance (% GDP)	(+)	Budget deficits are associated with a worse performance of the current account balance, as the income of future generations is distributed to the current generation.
Credit to the private sector (% GDP)	(+)/(-)	A more developed financial system can give rise to greater savings (+); in contrast, it can also signal excessive ease of indebtedness, which would give rise to less savings (-).
NIIP (% GDP)	(+)	A better initial NIIP tends to be associated with a better performance in the current account balance, due to a better performance of the income balance (+). On the other hand, the better initial NIIP could facilitate the accumulation of trade deficits over a long period of time (-). The (+) correlation tends to dominate in the literature.
Trade liberalization (% GDP)	(+)	Variable that approximates the existence of barriers to international trade -or, in a broader sense, the costs of international trade. This variable can include other attributes, such as the degree of attractiveness for foreign direct investment.
Oil trade balance (% GDP)	(+)	High oil prices erode the energy balance of importing countries, which is associated with a worsening of the current account deficit.
Output gap (% GDP)	(-)	Variable that approximates demand shocks.
Terms of trade (% change)	(+)	An improvement in the terms of trade is associated with an increase in real disposable income and, as a result, of savings.
Real effective exchange rate	(+)	Gains in exports price-competitiveness improves the current account balance.
U.S. short-term interest rate (%)	(-)	Adverse movements in the capital markets are associated with a worsening of the current account balance.
VIX (% change)	(+)	An increase in risk aversion is associated with greater savings.

Source: BBVA Research based on Chinn and Prasad (2003), Chinn and Ito (2007), Cheung *et al*. (2010) and Ca' Zorzi *et al*. (2012)

The traditional methodology for estimating the structural current account is based on measuring the impact of various structural factors on the current account such as demographic trends**,** investment, convergence factors, the fiscal balance, the NIIP, the oil trade balance, openness to trade and healthcare spending, among others.

In the most commonly-used approach (for example, Ca'Zorzi et al. (2012)), the structural current account estimation for country i is obtained through the use of non-overlapping moving averages observations of a specified length (4-5 years), in order to remove the impact of cyclical factors:

$$CC_{it}^{MA5y} = X_{it}^{MA5y\prime}\beta_{STR} + u_{it}, \quad (1)$$

where CC_{it}^{MA5y} is the 5-year average current account to GDP ratio, X_{it}^{MA5y} is a matrix containing the 5-year averages of the explanatory variables, and β_{STR} is a coefficient vector defining the structural relationship between the explanatory variables and the current account.

One of the main problems with this approach is that the estimated coefficients are sensitive to the sample used, among other factors. For instance, if estimations based on 5-year averages for the periods 1980-1984, 1985-1989, 1990-1994, etc., are used instead of estimations based on 5-year averages for the periods 1981-1985, 1986-1990, 1991-1995, etc., the estimated coefficients obtained for each sample may vary significantly. A similar pattern emerges when the window for calculating the moving average is changed (3, 4, 5 or 10 years, chosen arbitrarily).

A second approach adopted by the IMF to estimate the structural current account[7] clearly differentiates between types of variables, which are *a priori* classified as structural or cyclical. In this approach, the structural current account would be determined solely on the basis of structural variables, as follows:

$$CC_{it} = X_{it}'\beta_{STR} + Z_{it}'\varphi_{CYC} + \delta_i + u_{it}, \quad (2)$$

where CC_{it} is the actual current account to GDP ratio, X_{it} is a matrix of structural explanatory variables, β_{STR} is a structural coefficient vector, Z_{it} is a matrix of cyclical explanatory variables, φ_{CYC} is a cyclical coefficient vector, and δ_i is a vector of unobserved idiosyncratic factors for each country.

The main problem with this methodology relates to the classification of the variables. Specifically, just as the current account can be decomposed into structural and cyclical components, other variables such as investment, the fiscal balance and level of financial development, may also be decomposed and correlated with the current account in both frequencies. Further, it is very likely that the effect of the structural component of each variable will differ from the effect of the cyclical component.

Taking these considerations into account, the empirical exercise below aims to combine and extend the different traditional approaches. First, each explanatory variable is decomposed into three frequencies of oscillation: long, medium and short-term, and we assume that the long- and medium-term components represent the structural component and the short-term component collects the cyclical component. Further, we allow each of these components to exert a differential effect on the actual current account. The estimated model is, thus, as follows:

$$CC_{it} = X_i'\beta_{LT} + (X_{it}^{MA5y} - X_i)'\beta_{MT} + (X_{it} - X_{it}^{MA5y})'\beta_{ST} + Z_{it}'\varphi_{CYC} + \delta_i + u_{it}, \quad (3)$$

where CC_{it} is the actual current account to GDP ratio; X_i includes the long-term average of each explanatory variable (measured according to the historical average of each country) and β_{LT} is

7: This approach is used the in the IMF projects "External Balance Assessment (EBA) and Exchange Rate Assessments: CGER Methodologies".

the long-term coefficient vector associated with these averages; $X_{it}^{MA5y} - X_i$ represents the medium-term deviation of the explanatory variables vs their long-term values (5Y moving average vs. average over time by country) and β_{MT} is the medium-term coefficient vector; $X_{it} - X_{it}^{MA5y}$ represents the deviation of the explanatory variables observed vs their medium-term values (actual value vs 5Y moving average) and β_{ST} is the short-term coefficient vector; Z_{it} is a vector of purely cyclical explanatory variables and φ_{CYC} is the corresponding coefficient vector[8]. According to this methodology, the fitted value of the structural current account is obtained using the long- and medium-term components of the explanatory variables and their corresponding estimated effect.

First, the model is estimated in a panel data of 72 countries for the period 1980-2012 containing 1,303 observations. The database is constructed using IMF-WEO, World Bank, UN, OECD, Darvas (2012) and BBVA Research data. All the variables are expressed in terms of deviations from its respective global average, except for the dependent variable, the initial NIIP[9], the oil trade balance and variations in the exchange rate, as in these cases the global average would be zero. The estimation is made using feasible generalised least squares (FGLS) and the variance-covariance matrix is adjusted to correct for heteroskedasticity and autocorrelation of residuals.

Subsequently, the estimation of the short- and medium-term coefficients resulting from the panel data approach is adapted to the case of Spain. Specifically, these coefficients are re-estimated using a Bayesian time-series model designed for Spain. In particular, the Bayesian model uses the short- and medium-term coefficients obtained from the panel data model, as well as their distribution, as priors for the Bayesian estimation. The long-term coefficients estimated through the panel data model remain unchanged.

8: For some variables, e.g. the output gap, the estimate only includes the short term or cyclical component. δ_i is a group of dummy variables which are included for a subset of 26 countries (for further information, see BBVA Research (2012), available at: http://www.bbvaresearch.com/KETD/fbin/mult/111216_Economic_Watch_Twin_Deficits_in_G7_final_tcm348-287802.pdf?ts=762012).
9: The initial NIIP refers to NIIP lagged two periods.

Table 2
Current account models: estimation results

	Panel Data Model Estimation			Bayesian Estimation for Spain	
Explanatory variables	**Long-term**	**Medium-term**	**Short-term**	**Medium-term**	**Short-term**
Old dependency ratio (population older than 65 years old as % of population between 15- 64 years old)	-0,059*	-0,313***		-0,391*	
Population Growth (%)	-0,660**	-0,472***		-0,426	
Public Health Expenditure (% GDP)		-0,355**	-0,778***	-0,549	-0,799*
Investment (% GDP)	0,221***	-0,598***	-0,672***	-0,606***	-0,667***
GDP per capita (log USD PPP-adjusted)		3,177***		2,831**	
Fiscal Balance (% GDP)	0,255***	0,225***	0,071***	0,145**	0,078
Private Credit (% GDP)	0,004	-0,034***	-0,015***	-0,018**	-0,029*
Initial NIIP (% GDP)	0,0393***	0,003	0,012***	-0,001	0,009
Short-term interest rate		-0,050**	0,024**	-0,048	0,033
Trade openness (exports and imports as % of GDP)	0,009***	0,037***	-0,011	0,058*	0,001
Oil balance (%GDP)	0,241***	0,588***	0,778***	0,475**	0,850***
Output gap (difference between observed and potential GDP as % of potential GDP)			-0,132***		-0,140**
Terms of trade (% change)			0,009***		0,006
Terms of trade (% change in t-1)			0,004		0,006
Real effective exchange rate			-0,029***		-0,038**
Interest rate in USA (%)			0,062***		
VIX (% change)			0,012**		0,012
Pro-memoria:		Observations: 1303		Observations: 31	
		R-squared = 0,89		R-squared = 0,97	

Notes: ***, **, * denote statistical significance at 1%, 5% and 10% levels, respectively. The estimations include only a cyclical effect of the last six explanatory variables. The panel data model is estimated through FGLS. In the Bayesian estimation it is assumed that the long-term coefficients estimated in the panel data model remain unchanged.
Source: BBVA Research

Table 2 shows that most of the results obtained from the panel data model are in line with the economic literature, albeit the methodology used in this report allows a different response of each variable in the long and medium-term (structural effect) and the short-term (cyclical effect). Therefore, the effect of the fiscal balance is positive and of considerable scale in the long-term, but is lower in the short-term. Demographic variables show the expected negative sign, with a high medium-term coefficient for old-age dependency and population growth. Variables related to the foreign sector have a positive impact on the current account, more pronounced and significant for the oil trade balance. The effect of the cyclical component of this variable is much greater than the effect of the medium-term component, and the latter more than doubles the long-term coefficient. Openness to trade also has a positive effect on the current account, especially in the medium-term. The investment ratio shows a significantly high negative coefficient in the short- and medium-term, which helps explain the current account

reversals observed in the wake of the Asian crisis and the corrections seen in peripheral Eurozone countries. However, the long-term impact is significantly positive, suggesting that those countries which are able to maintain higher investment ratios in the long-term, are ultimately benefited thanks to a higher competitiveness.

In Spain, the variables showing the largest correlation with the current account are investment and the oil trade balance. With respect to the medium-term component, private sector lending and the old-age dependency ratio are significant and negatively correlated with the current account. Trade openness, the fiscal balance and per capita GDP are positive and significantly correlated with the current account. From a cyclical standpoint, the effect of healthcare expenditure, the output gap, lending to the private sector and variations in the real effective exchange rate are also significant.

The following section uses the results of the estimates presented in Table 2 to assess the relative role played by each of the underlying factors in shaping the dynamics of the current account in Spain. Specifically, the analysis focuses on the reversal process currently being experienced by the Spanish economy and the outlook for the next few years.

3. Structural and cyclical components of Spain's current account

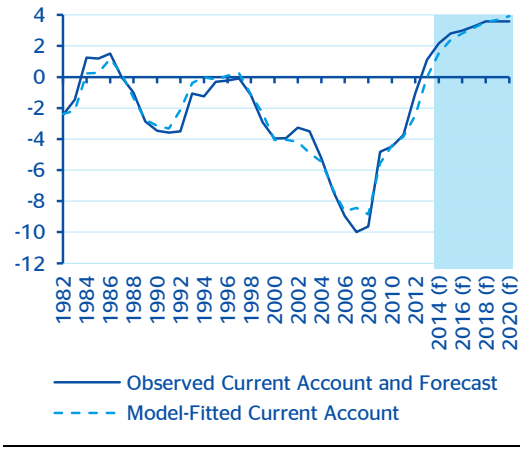
Which current account component has had the greatest relative weight in Spain? Has the pattern changed during the current reversal period? What are the underlying factors behind the performance of the current account? In this section, we attempt to answer these questions by providing a set of simulations based on the Bayesian estimation of the model presented in the previous section.

Chart 8 shows the observed evolution of the current account and its forecasts for the 2013-2020 period. Forecasts are based on the World Economic Outlook (WEO, April 2013) published by the IMF. The chart also shows the path of the current account fitted by the model and its forecast, where each explanatory variable is taken mostly from the WEO[10]. The chart shows how well the model fits the data in the sample period. The forecast adjusted by the model is largely similar to that considered by the IMF and both reflect a clear current account surplus through to 2020. If confirmed, **this pattern would result in a significant progress in the deleveraging process** of the Spanish economy with the rest of the world.

Chart 9 shows the results of the cyclical and structural decomposition of the model. **Spain shows structural current account deficits over the whole sample period.** To illustrate, whereas in the decade before the 2008 crisis the structural component showed an average weight of 68%, in the last four years of the economic boom the cyclical component had a larger share. There has been only three periods during which the behaviour of the cyclical component helped to reduce the size of the current account deficit: the mid-1980s, the first half of the 1990s and the current reversal. **In this last episode, cyclical surpluses, coupled with the ongoing structural adjustment, have triggered a significant correction of the deficit.** Whereas the cyclical component had a greater influence than the structural component on the variation of the current account between 2007 and 2012 -accounting for 76% compared to 24%- this situation has been reversed over the past two years as the structural component has carried a greater weight of the adjustment (85%). The IMF (2013) finds that cyclical factors played a large role in the adjustment processes of several countries of the euro area periphery, including Spain. That said, other estimates show a more even balance between cyclical and structural components (see, e.g., La Caixa (2013) and Bank of Spain (2013)). Finally, Chart 9 illustrates that the model-adjusted forecast would leave Spain's NIIP at around 70% of GDP by 2020.

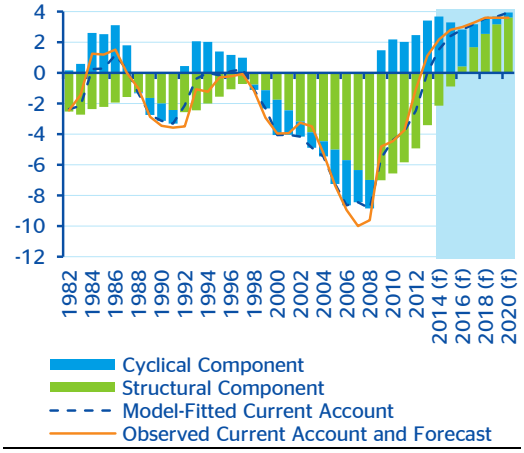
10: Whenever possible, we have opted to use a single source for the forecasts of all variables.

Chart 8
Spain: current account paths (% of GDP)



(f) denotes forecast. Forecast values for the explanatory variables are from IMF-WEO. Read text for further detail.
Source: BBVA Research

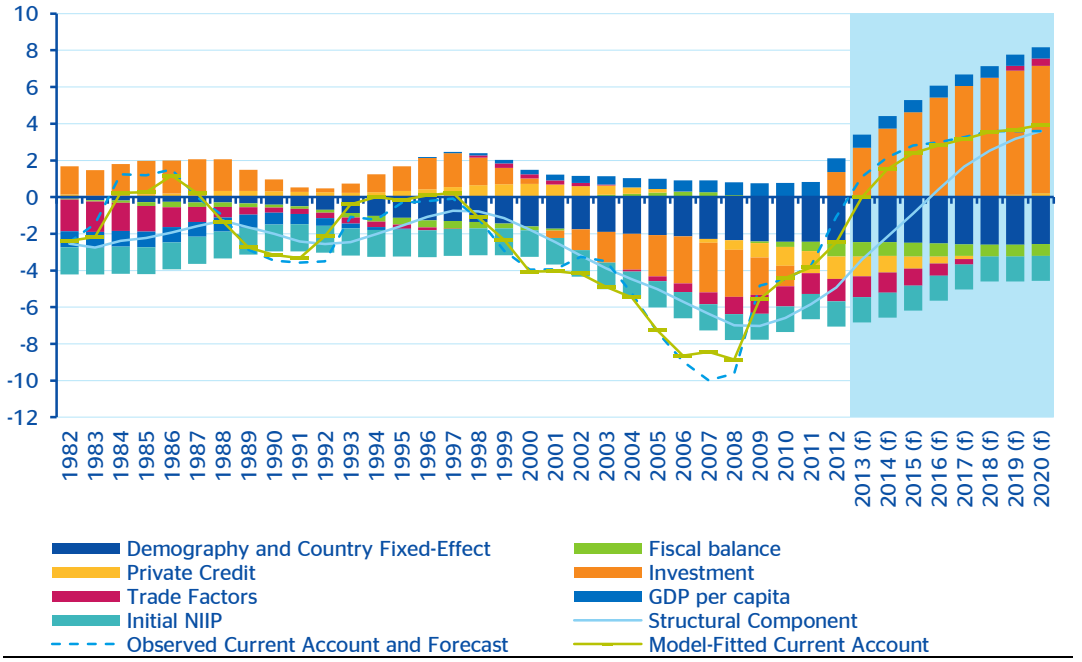
Chart 9
Spain: cyclical and structural components of the current account (% of GDP)



(f) denotes forecast. Forecast values for the explanatory variables are from IMF-WEO. Read text for further detail.
Source: BBVA Research

To a large extent, the results obtained in our estimation indicate that the path followed by Spain's current account has been shaped by the structural evolution of its different determinans. One of the main factors underlying the current account balance is the persistent negative contribution of Spain's initial NIIP (see Chart 10). The country's net debt position has clearly fed back through to the structural current account deficit. Not surprisingly, the evolution of the structural investment component has had a significant influence on the path of the structural current account balance. Specifically, it explains the structural adjustments seen in the mid 1980s and early 1990s, as well as the acceleration in the deterioration of the current account at the turn of the century. Demographic variables have an increasing impact on the negative structural balance, but slightly less than would be extracted from Chart 10 as this variable includes the negative fixed-effect of Spain, considered here as structural. Meanwhile, the structural fiscal balance, as well as the rest of the variables, have a more marginal impact on the determination of the structural deficit.

Chart 10
Spain: structural current account decomposition on its determinants (% of GDP)

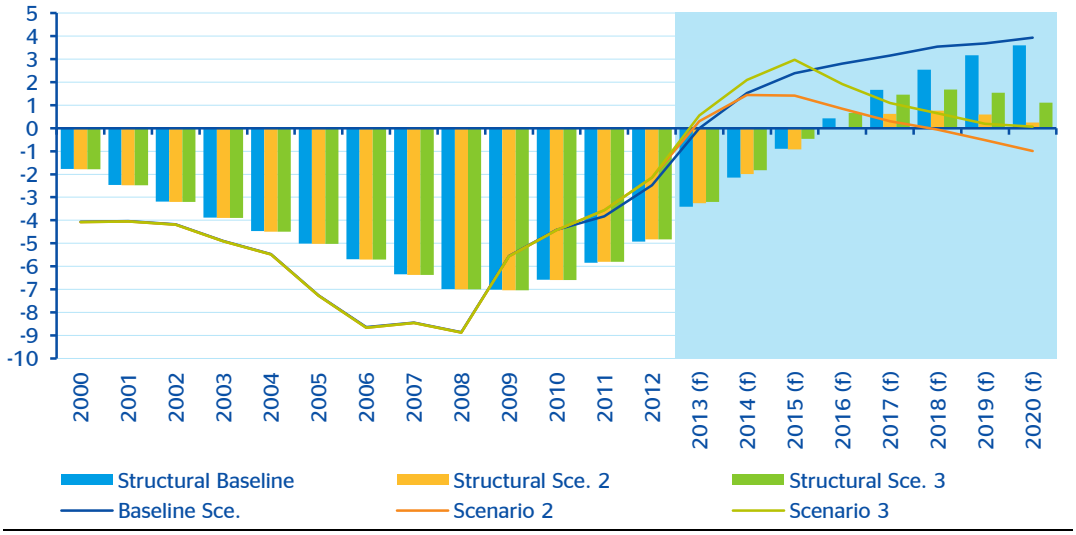


(f) denotes forecast. Forecast values for the explanatory variables come from IMF-WEO. Read text for further detail.
Source: BBVA Research

Taking into account the large weight that structural investment has in the forecast of the structural current account –this component contributes nearly 7pp of GDP by 2020- we conclude that the evolution of this variable is crucial when estimating the future performance of Spain's current account. Next, we summarize **the results of a simulation exercise that uses three scenarios for the evolution of the investment-to-GDP ratio.** Note that according to IMF projections, the investment-to-GDP ratio will continue to correct towards levels of around 16% in 2018. This implies that Spain's investment-to-GDP ratio will go from 7pp above the global average in 2007 to 10pp below the global average in 2018.

Our baseline scenario takes into consideration the IMF investment projections described above. The first alternative scenario (scenario 2) uses BBVA Research forecasts for the investment-to-GDP ratio. These forecasts suggest that investment will decline until 2014, before recovering its long-run average level of 24% by around 2020. The second alternative scenario (scenario 3) is based on the OECD forecasts, which indicate a similar path to that of BBVA Research's forecasts until 2014, but a slightly smaller recovery, i.e. to 22% in 2020. As can be noted in Chart 11, a scenario of a stronger recovery in investment would *ceteris paribus* produce a less optimistic path in the current account. Nevertheless, we would point out that **in any of the three scenarios, Spain would achieve a structural current account surplus by around 2016** and maintain this throughout the forecast period.

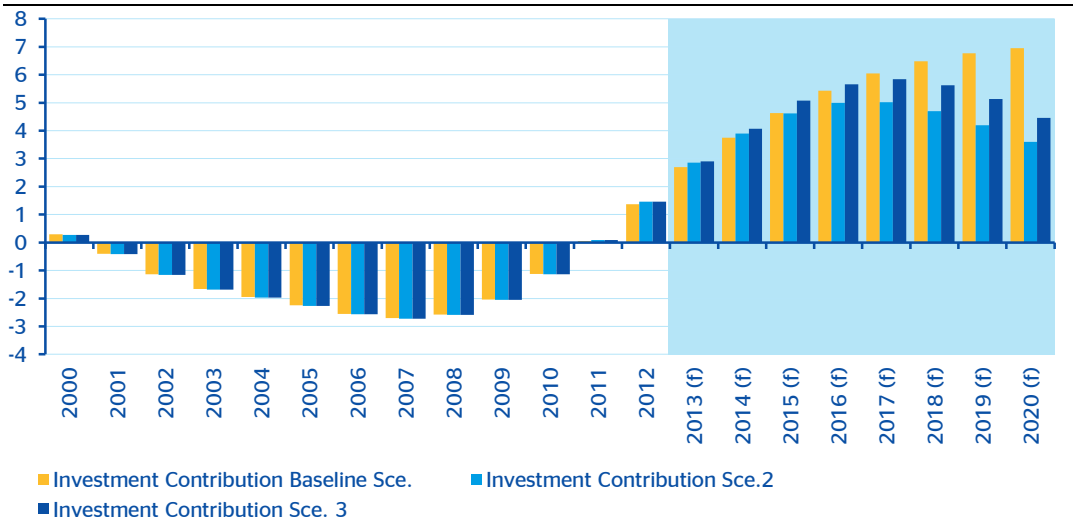
Chart 11
Spain: evolution of the fitted current account and of its structural component
(% of GDP; alternative investment scenarios)



(f) denotes forecast. Baseline Scenario: forecast using IMF Investment/GDP ratio forecast; Scenario 2: forecast using BBVA Research Investment/GDP ratio forecast; Scenario 3: forecast using OECD Investment/GDP ratio forecast.
Source: BBVA Research

Finally, Chart 12 shows the contribution of the structural component of the investment-to-GDP ratio to the structural current account. Under all three scenarios, the structural contribution of investment is expected to move from a negative 3pp of GDP in 2007 to a positive 5-6pp of GDP in 2016. However, from then on the forecasts differ more widely. Specifically, the structural contribution of investment would fall within a 3.5-7pp range under the alternative scenarios to 2020.

Chart 12
Spain: evolution of the investment contribution to the structural current account
(% of GDP; alternative investment scenarios)



(f) denotes forecast. Baseline Scenario: forecast using IMF Investment/GDP ratio forecast; Scenario 2: forecast using BBVA Research Investment/GDP ratio forecast; Scenario 3: forecast using OECD Investment/GDP ratio forecast.
Source: BBVA Research

4. Conclusions

In summary, from a methodological perspective based on the macroeconomic identity of savings and investment, this Economic Outlook has shown that **the deterioration of the current account balance that the Spanish economy experienced from the mid-1990s had a substantial structural component.** Likewise, the empirical exercise indicates that the process of reversal seen since 2008 has been supported, in an initial phase, by the gradual reduction of the structural deficit and the generation of cyclical surpluses and, in a second phase, by the pronounced reduction of the structural component of the deficit. The most important contributions to the structural deficit can be found in the performance of investment, the initial NIIP and demographics.

In the medium term, the forecasts indicate that the Spanish economy could generate structural surpluses, thus alleviating the financial pressure exerted by high external debt on the decisions of economic agents. The generation of structural surpluses in the current account balance would mark a change in the growth pattern of the Spanish economy that would be achieved by the reorientation of productive resources towards exporting and energy saving. The rapid and efficient reallocation of these factors would facilitate the reduction of Spain´s foreign debt and the correction of one of the largest imbalances accumulated before the 2008 crisis.

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