ASSESSMENT OF EXTERNAL IMBALANCES AND COUNTRY RISK PERCEPTION

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Introduction

The scale and persistence of the current account surplus or deficit positions of a large number of countries were one of the main causes for concern in terms of global economic stability during the years prior to the economic and financial crisis. While these global imbalances did not trigger the crisis, and as they have not diminished with the ensuing adjustments (see Chart 1), their nature, their causes and the consequences potentially arising from them remain to the fore of international economic debate.

Insofar as cross-country divergences in current account balances are the result of differences in levels of development, demographic factors and other characteristics relating to economic structure, they should not be a cause for concern globally. However, when they are the outcome of deep-seated macroeconomic imbalances, in many cases induced or amplified by unsuitable economic policies, they are factors of vulnerability that may pose a threat to global financial stability. Thus, persistently high deficits that are unsustainable in the long run may give rise to foreign exchange crises and capital outflows from the countries that generate them, with significant externalities for other economies; similarly, bloated surpluses, such as those of certain countries in the years running up to the crisis, may be indicative of excess saving which, naturally, has repercussions ultimately for the countries that are recipients of this investment, contributing to heightening vulnerability in the face of real and financial shocks.
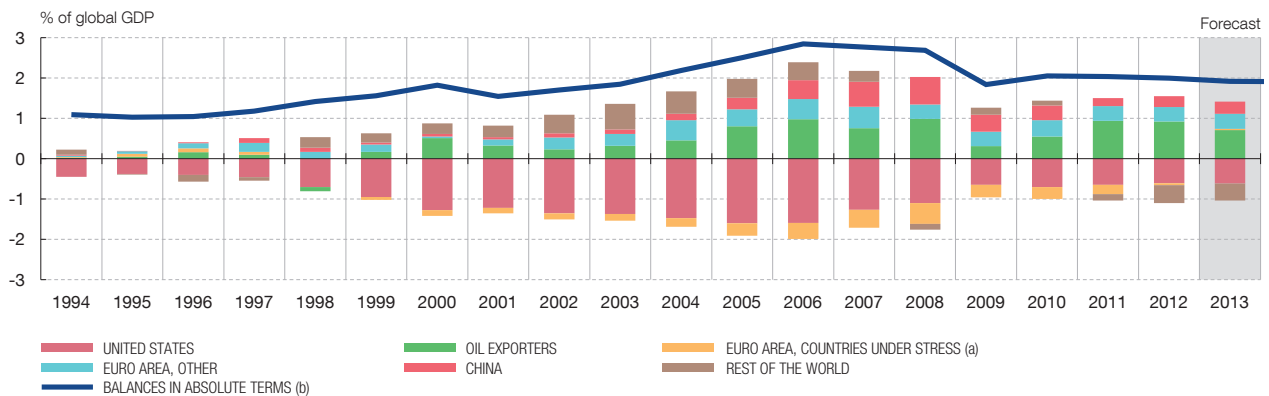
Several multilateral organisations – such as the G-20, the International Monetary Fund (IMF) and the European Union – have designed surveillance mechanisms to detect excessive imbalances in countries' external positions and redress them. The IMF took the initiative here some years back, when it conducted its analysis of current account balances and real exchange rates under the CGER[1]. In 2012, the IMF began to regularly publish a new analysis on the external sector – in its *External Sector Report*[2] – with a view to assessing the external position of a broad group of countries from a multilateral perspective. In this connection, it developed a new method called the *External Balance Assessment* (EBA), which is a reform of the CGER analysis that had been used until then. The new method incorporates an analysis of the determinants of the current account balance and the real exchange rate – using two different regression models – for a panel of countries, that include structural and cyclical factors and others relating to policy variables. Moreover, the EBA includes a normative analysis that evaluates to what extent deviations between the policies adopted and those that would be desirable – according to IMF-defined criteria – contribute to generating current account or real exchange rate imbalances, in order to formulate recommendations on such policies.

The empirical regression models for the current account balance and the real exchange rate are thus cornerstones of the IMF's analysis and assessment of external imbalances. This article posits an extension of the analysis conducted for the current account balance, incorporating the international financial markets' risk perception of each country. The

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1 The Consultative Group on Exchange Rates (CGER), which designed the analytical framework.
2 See IMF (2012).

CURRENT ACCOUNT BALANCES

% of global GDP

Forecast

Legend:
- UNITED STATES
- EURO AREA, OTHER
- BALANCES IN ABSOLUTE TERMS (b)
- OIL EXPORTERS
- CHINA
- EURO AREA, COUNTRIES UNDER STRESS (a)
- REST OF THE WORLD

SOURCES: IMF and Datastream-Thomson Reuters.

a Italy, Spain, Portugal, Greece and Ireland.
b Sum of balances, in absolute terms, divided by 2.

economic literature suggests that the dynamics of the current account balance can vary depending on the degree of safety of the country as an investment recipient. As the experience of the United States shows, countries perceived as safe destinations for investment can sustain high current account deficits over long periods, and the foreign capital flows they receive are less dependent on changes in their macroeconomic fundamentals. Conceivably, these differences in risk perception for different countries may also be more significant in crisis periods.

This article presents an extension of the IMF's framework of analysis, incorporating two additional aspects into the Fund's equation for the current account balance: the different degree of risk (or the degree of safety) with which different countries are perceived, and the distinction between periods of calm and phases of global stress. The results obtained are robust and allow an assessment other than that of the IMF to be made of the current account imbalances for the year 2012 for a broad range of countries. This analysis is a continuation of that performed in Sastre and Viani (2014), the starting point for which was the regression published by the Fund in its first pilot report on the external sector (2012). Subsequently, the IMF partly revised its methodology on publishing its second report, in June 2013. This new estimation is now taken as a benchmark to incorporate the extensions mentioned. The second section briefly describes the main elements of the analytical framework of the EBA and the proposed extension. Then, in the third section, the main findings of the new regression are discussed, while in the fourth section these results are used to determine the extent to which current account balances correspond to the fundamentals of economies and appropriate policies, or whether they incorporate genuine elements of imbalance. Finally, the closing section draws the main conclusions of the article.

Analysis of the current account balance under the IMF's methodology

The analytical framework currently used by the IMF to assess the external position of a broad group of countries (EBA) incorporates, on one hand, an empirical analysis that examines the determinants of the current account balance and of the exchange rate (drawing on regressions with a panel of countries); and, on the other, a normative analysis that sets desirable benchmark values for specific economic policies,[3] obtaining the current

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3 The way in which the Fund set these benchmarks for the normative assessment is explained in Phillips *et al.* (2013).

Dependent variable: current account balance/GDP

		Expected sign of coefficient	Significant in the EBA specification	Difference from extended specification
Structural factors	GDP per worker (lag) #	(+)		x
	GDP per worker (lag)*(capital openness) #	(+)	v	x
	Expected GDP growth	(-)	v	x
	Political and institutional stability	(-)	v	x
	Oil balance	(+)	v	
	Financial centre #	(+)	v	
	(Net external assets/GDP) (lag) #	(+)	v	x
	Dependency ratio	(-)		x
	Ageing speed	(+)	v	x
	Population growth	(-)		x
	VIX*(capital openness) #	(+)	v	
	VIX*(capital openness)*(% reserves) #	(-)	v	
	% currency shares in global reserves #	(-)	v	x
Cyclical factors	Output gap	(-)	v	x
	Cyclical gap in terms of trade #	(+)	v	
Policy variables	Cyclically adjusted fiscal balance	(+)	v	x
	Public healthcare spending/GDP	(-)	v	x
	(Change in reserves/GDP)*(capital controls)	(+)	v	
	Private-sector credit/GDP	(-)	v	

SOURCE: IMF.
NOTES: "lag" represents the first lag of the respective variable.
"x" denotes a significant difference between the EBA-estimated coefficient and those of the extended specification (see Table 2).
All the variables are in deviations from the global average, except those with the symbol #.

account balance that would be compatible with those values, and evaluates whether the deviations between the policies adopted and those benchmark values contribute to generating imbalances.

In particular, in an initial phase, the EBA estimates reduced-form models of the determinants of the current account balance and the real exchange rate, using a panel of 50 countries for the 1986-2010 period. In the case of the current account balance, it envisages three types of determinants: structural, cyclical and economic-policy determinants, which are summarised in Table 1.[4] Most of the variables described below are expressed as a deviation from the world average, with the exception of those detailed in the table.

Among the structural factors, the EBA includes the following: a) productivity per employee compared with the more advanced economies, which is interpreted as an indicator of the stage of economic development (in the initial stages, countries with low productivity relative to the more advanced economies tend to attract capital and to record current account deficits, giving rise to a positive relationship between this variable and the external balance) and interacts with an index of free capital movements, which modulates the intensity of the effect on the current account depending on the restrictions on capital movements (a higher value for the index denotes a greater degree of openness and a greater capacity to finance a current account deficit); b) growth prospects (if they are high, they tend to attract investment from abroad, which allows current account deficits to be financed, giving rise to a negative relationship with the current account balance); c) risks relating to the political and institutional environment (greater stability is associated with

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[4] These determinants are based on avenues of research such as Debelle and Faruquee (1996), Calderón *et al.* (2002), Chinn and Prasad (2003) and Bussière *et al.* (2010), among others.

bigger capital inflows and a lower balance); d) the importance of oil and commodities export revenue (with a positive sign); e) the standing as an international financial centre of certain countries, which run current account surpluses and tend to export capital (with a positive sign) and f) net assets accumulated vis-à-vis the external sector, which also positively affect the external balance by means of the net returns on such assets.

Other structural factors are demographic in nature, such as the dependency ratio[5] of the elderly (which would negatively affect saving, according to the life-cycle theory, and the current account balance), the pace of ageing (which drives greater saving in pre-retirement stages and has a positive effect on the external balance) and population growth (high growth entails a bigger population proportion for inactive youth, which acts to the detriment of saving and is associated with a lower balance); others are financial in nature, such as the status of some countries whose currency is an international reserve currency, which confers on them a special ability to finance a current account deficit (negative sign), and volatility on international markets (proxied by the VIX index), which interacts with the degree of openness of capital movements and with the international reserve currency status of some economies' currencies (high volatility is conducive to capital inflows into these countries and is associated with a negative effect on the external balance; the opposite occurs for economies whose currency does not have this status).

Secondly, among the cyclical factors, the IMF regression includes the output gap as an indicator of demand pressure (with a negative impact on the external balance, since it is associated with demand pressures) and the cyclical component of the real terms of trade of commodities, whose increase tends to reflect cheaper import prices for these products and is positively associated with an improvement in the current account balance.

The third group of factors considered by the IMF's recent methodology – economic policy variables – include the following: the nature of fiscal policy (proxied by the cyclically adjusted fiscal balance, with a positive effect on the current account, since fiscal expansions increase demand and tend to generate a current account deficit); the level of social protection (measured by the ratio of public healthcare spending to GDP, which is conducive to a reduction in household precautionary saving and negatively affects the external balance); an indicator of capital controls, which regulates the impact of other variables on the external balance (the greater the degree of openness, the greater the impact of each variable in absolute terms); the policy of interventions on the foreign exchange market, proxied through the accumulation of reserves (a rise in these external assets increases the current account balance), although their impact depends on the degree of openness of capital movements; and, ultimately, the containment of financial excesses, captured through the deviation by the private-sector credit/GDP ratio from a trend (a financial imbalance of this type negatively affects the external balance).

The results of the IMF estimation reveal that the parameters have the expected signs, although several demographic factors, such as population growth and relative productivity, among others, are not significant in this specification, as is reflected in Table 1.[6] The detailed parameters are included in Table 2, for the variables in which there are significant differences from the extended regression detailed in the following section.

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5 The dependency ratio is defined as the population over 65 divided by the population aged 30-65. The pace of ageing is the change projected in the dependency ratio over the coming decades relative to the current level.

6 Greater details of the IMF estimation can be found in Phillips *et al.* (2013).

Dependent variable: current account balance/GDP

	EBA	Extended specification
GDP per worker (lag)	0.01	**0.05**
GDP per worker (lag)*(capital openness)	**0.07**	**0.08**
GDP per worker (lag)*(capital openness)*safe		**-0.07**
Expected GDP growth	**-0.47**	**-0.56**
Expected GDP growth*crisis		**0.46**
Expected GDP growth*crisis*safe		**-0.32**
Political and institutional stability	**-0.11**	**-0.11**
(Political and institutional stability)*crisis		**0.04**
Ageing speed	-0.03	**-0.15**
Ageing speed*safe		**0.33**
Pace of ageing	**0.16**	-0.01
Pace of ageing*safe		**0.24**
% currency share in global reserves	**-0.05**	**-0.14**
(% currency in global reserves)*safe		**0.11**
Output gap	**-0.4**	**-0.34**
(Output gap)*crisis		**-0.17**
(Output gap)*crisis*safe		**0.21**
Cyclically adjusted fiscal balance	**0.32**	**0.32**
(Cyclically adjusted fiscal balance)*safe		**0.26**
(Cyclically adjusted fiscal balance)*crisis		**-0.18**
Public healthcare spending/GDP	**-0.55**	**-0.90**
(Public healthcare spending/GDP)*safe		**0.99**
Observations	1,080	1,080
Number of countries	49	49
Adjusted R2	0.51	0.57
Sample period	1986-2010	1986-2010

SOURCES: IMF and Banco de España.
NOTES: safe and crisis are dummies that identify the safe countries and the crisis periods.
"lag" represents the first lag of the respective variable.
The significant coefficients are in bold.

The methodology applied by the IMF in its 2013 report allows individual policy recommendations to be made to each country and takes into account the specific characteristics (structural and cyclical) of the countries, further adopting a multilateral perspective that provides these recommendations with overall consistency. However, despite including indicators of capital controls and market volatility, the treatment given to financial aspects appears scant. In this respect, the economic literature suggests that current account dynamics may differ in terms of the risk perception of each country as an investment destination and, moreover, that these differences may be amplified in periods of global stress. Thus, several papers indicate that the ability to offer safe destinations for investors, which is a characteristic of some economies, may be one of the main factors contributing to explaining the changes in, and global configuration of, external positions in recent years.[7] Moreover, the experience of the United States shows that countries that are perceived as safer destinations by financial market participants can sustain high current account deficits over long periods. That suggests the possibility that foreign capital flows received by these countries are somewhat less dependent on such countries' macroeconomic

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7   See Caballero et al. (2008) and Mendoza et al. (2009), among others.

fundamentals and, therefore, that they can be decoupled from the patterns characterising capital movements towards other economies, that lack this characteristic. These differences will tend to widen in periods of stress, in which risk aversion increases. To accommodate these considerations, the following section posits an extension to the analytical framework used by the IMF.

External imbalances, sovereign risk perception and episodes of financial stress

To explore the significance of the above-mentioned aspects, the regression model estimated by the IMF for the current account balance has been extended in two directions. Firstly, a distinction is drawn between countries that are perceived as safe destinations and those considered less safe, on the basis of their Standard & Poor's rating. The country is classified as safe when its rating is AA or higher for over half of the years of the sample; under this criterion, the countries considered safest match a sub-set of industrialised countries.[8] Secondly, a distinction is also drawn between phases of calm and periods of global stress, with the latter defined as years in which the volatility on financial markets – measured by the VIX index of financial market turbulence – amply exceeds the historical average. In the sample as a whole, there are eight years in which this criterion holds, including the last years of the period.[9]

The consideration of these two aspects is incorporated into the IMF model through the inclusion of dummy variables, which identify, first, the safest economies and, further, the crisis years *(safe* and *crisis,* respectively, in Table 2), and which interact in the specification with the various determinants of the current account balance. The coefficient of these interactions reflects the related differential effect. Thus the interaction of the *safe* variable captures the differential impact of each factor on the countries considered safe compared with that exerted on the less safe economies (which is reflected by the determining factor without interaction), whereas the crisis variable identifies the differential effect of each factor at times of financial stress relative to their impact in periods of calm, captured by the corresponding variable without interaction.

Table 2 summarises the results of the estimation of the extended model[10] and its comparison with the IMF model for the current account balance in terms of GDP.

In general, the coefficients estimated with the extended specification that correspond to variables without interaction – those that reflect the effects in less safe economies and in phases of calm – have the expected sign, such as those of the EBA, and are significant. The fact that the parameters of the interactions with this set of factors prove significant confirms that the external balance of the countries considered safe responds to the main determinants in a different way to how the remaining countries do, and that, in some cases, these responses change in periods of financial market stress, compared with phases of greater stability.

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8 Sastre and Viani (2014) include further details on this classification. According to this criterion, the countries considered safe are Austria, France, Germany, the Netherlands, Norway, Switzerland, the United Kingdom, the United States, Australia, Belgium, Denmark, Finland, Ireland, Italy, Japan, New Zealand, Spain, Canada and Sweden.

9 A year is considered a crisis year if the VIX index exceeds its moving average calculated over two quarters by more than three standard deviations. According to this criterion, the global crisis years are 1987-1988 (coinciding with the *Black Monday* financial markets collapse and the savings and loan associations crisis in the United States), 1990 (marked by bank crises in Italy, Norway and Brazil), 1998 (financial crises in emerging Asia and Russia), 2001-2002 (financial crises in Argentina, Uruguay and Turkey), 2008 (the Lehmans Brothers collapse), 2010 (Greek crisis) and 2011 (tensions in the euro area).

10 The total effect on safe economies is the sum of the two coefficients, with and without interaction with the *safe* dummy variable, for each determinant, and, similarly, the total impact at moments of crisis is the sum of the coefficients, with and without interaction with the *crisis* dummy variable.

Among the structural factors, an effect other than long-term growth prospects, political stability, reserve currency status or demographic factors is detected. Countries with good growth prospects, which tend to post current account deficits (as the negative coefficient of this variable indicates), have greater difficulties financing them in episodes of financial market crisis (the positive coefficient of the interaction with the *crisis* variable practically offsets the foregoing), except if they are safe destinations for investment, in which case investors appear to tolerate a greater deterioration in the current account balance (negative coefficient of the interaction with *crisis* and *safe*). Moreover, the contribution of political and institutional stability to facilitating the financing of the external balance diminishes in all economies in periods of global stress. Likewise, the fact that a country has a currency used as a reserve currency, which makes financing a current account deficit easier, has scant additional impact on the safest economies and is more significant in the case of countries that are not perceived to have that level of safety. This means that, in those euro area economies that were not perceived by the markets in the same way as those with an AA or higher rating before joining the euro area, the adoption of the single currency – which is a reserve currency – entailed a change in status which increased their credibility and enabled them to finance higher deficit levels, which is also known as the Monetary Union "halo effect".

Demographic variables also affect the two groups of countries differently. The pace of ageing, which has a positive effect on the current account balance, is only significant in the safe countries (with a coefficient higher than that estimated by the EBA), where rapid population ageing and its consequences have already affected private-sector saving patterns. The dependency ratio – which is not significant in the EBA estimate – has a considerably adverse impact on the external balance in the case of the less safe economies, and affects it positively in the case of safe countries. While according to the life-cycle theory a lower rate of household saving may be expected as the proportion of individuals of retirement age increases, the empirical evidence on this effect is very mixed. Indeed, there is abundant literature indicating that retirees continue saving a significant proportion of their income once they have retired, whether for precautionary motives[11] (to meet potential healthcare expenses), to leave an inheritance or because of the characteristics of public pension systems[12] or other aspects of the social protection system.

Differences between safe and less safe countries are also detected in the negative response of the external balance to cyclical factors such as the output gap, a variable that captures fluctuations in demand. In periods of global stress, economies perceived as less safe are subjected to fluctuations in investor sentiment that may give rise to capital outflows, meaning that their external position becomes more dependent on domestic demand (on interacting with the *crisis* variable, the total negative effect increases in absolute terms). Conversely, in safer countries, which tend to receive capital inflows in times of international market turbulence, fluctuations in the current account balance depend to a lesser extent on developments in domestic demand (the negative impact on the external balance is dampened, as indicated by the positive coefficient of the dual interaction with *crisis* and *safe*).

Regarding economic policy variables, the response of the current account balance to fiscal policy, to the degree of social protection and to capital controls differs between safe and

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11 Kenickell and Lusardi (2005) find that precautionary saving is particularly significant among older individuals.

12 Börsch-Supan and Lusardi (2002), who examine the saving rate for six advanced economies and its relationship to pension and healthcare systems, detect a pattern growing commensurately with age in Japan and the United Kingdom, and one that is practically flat in Italy's case.

less safe economies. The possibility of attracting capital to finance a fiscal expansion (a positive relationship between the fiscal balance and the external balance) is dampened in periods of financial stress (the negative sign of the interaction with *crisis* partly offsets the foregoing) and the countries perceived as safer can attract capital more readily to finance the higher deficit derived from a fiscal expansion (as the positive sign of the interaction with *safe* indicates). The effect of a social protection network on the saving and on the current account balance of less safe countries – among which the emerging economies are predominant – is far higher than that estimated by the EBA and that characterising the safe countries, which are advanced economies in the main (the sum of the coefficients of the variable and the interaction with *safe* is practically zero). Lastly, the impact of flexibility in capital controls on inflows into economies in the early stages of development, characterised by low relative productivity, is similar to that estimated by the EBA in the case of less safe economies, and it is almost zero in the case of less risky countries.

The regression, extended with differential effects between safe and unsafe economies and between periods of global crisis and calmer periods, notably improves the fit (the adjusted R2 exceeds that of the EBA by 12%) and allows the significance of certain key variables, such as GDP per employee, to be salvaged, which reinforces the relevance of these additional factors.

Results and comparison of external imbalances

On the basis of these estimations, the current account balance for each country can be derived, which would be consistent with its structural and cyclical factors, and with the economic policy variables in terms of their benchmark values, defined by the IMF; that would give the "equilibrium" or "desirable" balance. The difference between the values observed for the current account balance and the equilibrium values is, under this methodology, what is known as "external imbalances"[13]. These deviations are a combination of the residual of the regression, i.e. the portion of the fluctuations in the current account balance that the model considered is unable to explain, and of the impact of inadequate economic policies (policy gaps). These policy gaps are evaluated as deviations between the policies adopted and the benchmarks defined by the IMF for the five economic policy variables considered, namely the adjusted fiscal balance, public healthcare spending, capital controls, the change in reserves and the credit/GDP ratio. In the case of the extension proposed by Sastre and Viani (2014), with differential elements based on the risk perception of the economies and market volatility, the deviations are derived from the residuals of the new regression and from the impact of the policy gaps on the external balance, where the policy variable benchmarks are the same as those used in the IMF's analysis.
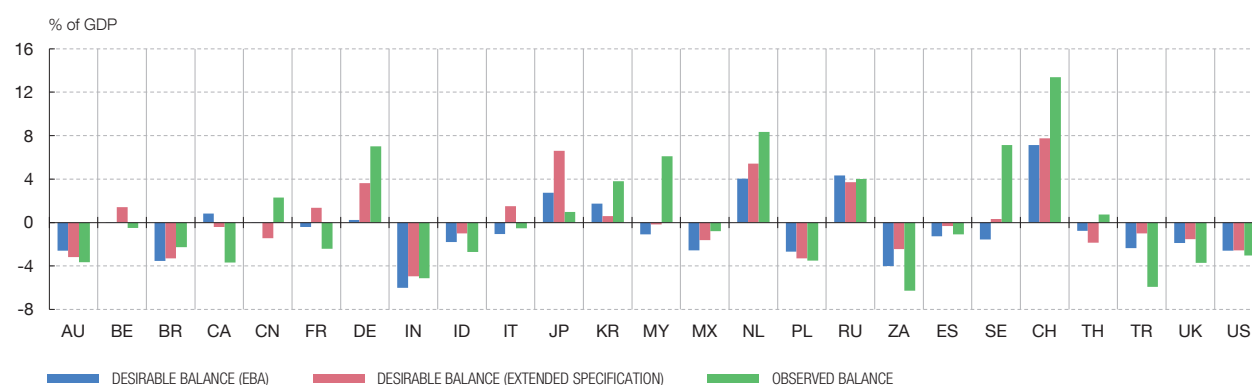
The top panel of Chart 2 compares the balances observed in 2012 and the desirable balance according to the two specifications considered: that of the IMF and the proposed extension. The bottom panel of Chart 2 directly presents the difference between the observed balance and the respective desirable balances, i.e. the estimated imbalance for each country.[14]

According to the IMF (EBA) estimate, the current account surplus observed in 2012 was higher than would be desirable in several Asian economies and, within the European Union,
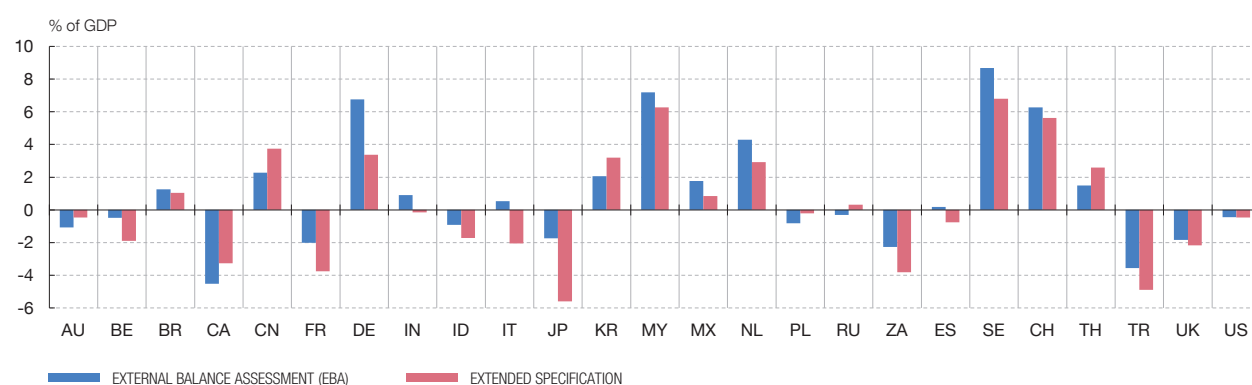
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13 The imbalances shown in the *External Sector Report* are not directly those resulting from this analysis, but can rather be qualified by different types of information and analysts' own judgement. See IMF (2013), Box no. 6.

14 Chart 2 shows the imbalances obtained by the EBA, which refer only to 25 of the 49 countries making up the sample used in the estimate. IMF (2013) shows that, for the imbalances of the 49 countries to be mutually consistent, only a minor correction is necessary, since they account for 90% of world GDP. The imbalances of the 25 countries depicted in Chart 2 need not be globally consistent (i.e. totalling zero).

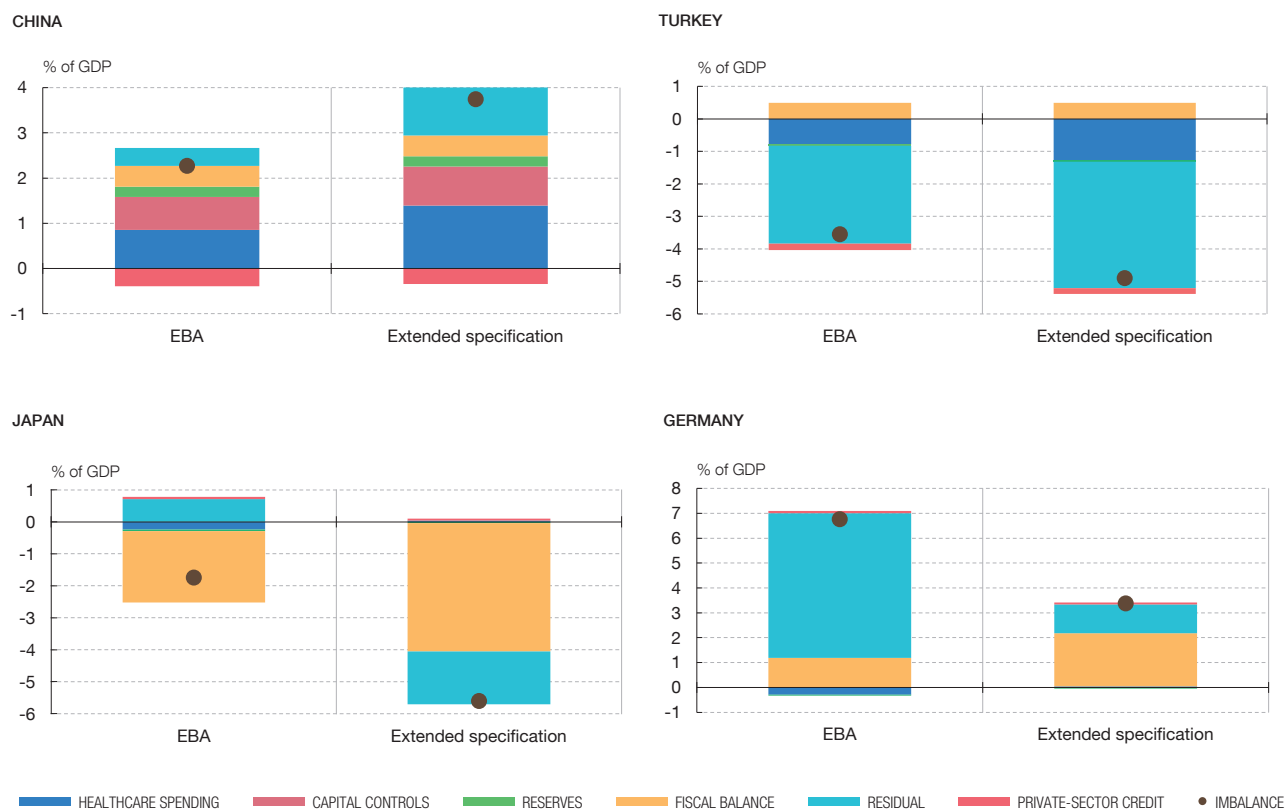**OBSERVED AND DESIRABLE CURRENT ACCOUNT BALANCES (2012)**

% of GDP

DESIRABLE BALANCE (EBA)   DESIRABLE BALANCE (EXTENDED SPECIFICATION)   OBSERVED BALANCE

CURRENT ACCOUNT IMBALANCES (2012)

% of GDP

EXTERNAL BALANCE ASSESSMENT (EBA)   EXTENDED SPECIFICATION

SOURCES: IMF and Banco de España.

in countries such as Germany, Sweden and the Netherlands. Moreover, several advanced economies, such as Japan and Canada, posted a lower-than-desirable current account balance, along with certain European countries, such as France and the United Kingdom, and emerging economies, such as Turkey and South Africa. In Spain's case, the differences between the desirable and observed balances are minimal and close to zero in both cases.

In particular, according to the EBA, China, Malaysia, South Korea and Thailand registered an excessive surplus in 2012 that would be attributable to an insufficient degree of social protection (proxied by public healthcare spending), which encourages high precautionary saving, owing to restrictions on capital movements (which hamper the possibility of financing growth) and to foreign exchange market interventions. For their part, Germany, Sweden, the Netherlands and Switzerland recorded a strong current account surplus in 2012. The marked population ageing projected for these countries (which requires the build-up of saving) and their low growth prospects (which encourage capital transfers to more dynamic economies) can explain this surplus only in part. Other advanced economies, such as Japan and the United Kingdom, posted a lower-than-desirable current account, owing chiefly to a fiscal policy deemed excessively lax, which gives rise to an insufficient external surplus (in Japan's case) or an excessive deficit (United Kingdom). Despite the fact the United States posted a current account deficit in 2012, this balance is similar to what would be desirable, according to the EBA, owing mainly to the dollar's status as a reserve currency and to US political and institutional stability, which are attractive to foreign capital. Optimally high healthcare spending and a relatively high desirable fiscal

CHINA

TURKEY

JAPAN

GERMANY

HEALTHCARE SPENDING   CAPITAL CONTROLS   RESERVES   FISCAL BALANCE   RESIDUAL   PRIVATE-SECTOR CREDIT   • IMBALANCE

SOURCES: IMF and Banco de España.

deficit explain, moreover, why the desirable national saving and external balance levels are relatively low.

The lower panel of Chart 2 compares the EBA-estimated current account imbalances with those resulting from estimates made using the extended specification. The differences between both may stem from the effect of the deviations by the policy variables from their desirable benchmarks, which is different in the two specifications, or from the size of the residual. In several Asian economies – China, South Korea and, to some extent, Thailand – the distortion due to the insufficient degree of social protection takes on greater significance in the extended specification (Chart 3, for China), as healthcare spending has a greater impact on the current account balance in the countries perceived as less safe.

In some emerging economies running a deficit, such as Turkey, the external imbalance in the regression with differential effects is bigger, since this regression provides a lower desirable deficit than that of the EBA. In Turkey's case, this is mainly due to demographic factors: Turkey has a high proportion of youths and a low dependency ratio, the positive impact of which on saving and the current account balance that would be desirable is far greater in the extended estimation[15].

In Japan's case, the imbalance obtained with the extended specification is far greater than that estimated by the IMF. This is due chiefly to the deviation by fiscal policy from the

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15 Moreover, the benchmark established by the IMF implies that public healthcare spending in Turkey is above the desirable figure, generating a more pronounced policy distortion in the extended specification, which estimates an impact of this determinant that is greater in absolute terms.

desirable benchmark, which has a greater impact on the regression with differential effects for safe countries than on the EBA.[16] The differences observed in Belgium's case also arise from the fiscal distortion.

Finally, for the set of industrialised countries with a strong surplus, namely Germany, the Netherlands, Switzerland and Sweden, the regression with differential effects of safe countries leads to a higher benchmark surplus than that resulting from the IMF estimation, although it is still below the surplus these economies post, whose estimated external imbalances remain considerable. Contributing to the lesser imbalance is the correlation between safe countries and certain characteristics warranting a bigger surplus, such as the notable effect of the pace of ageing (see Chart 3, for Germany) or the impact of the lower growth prospects for these economies. Furthermore, the high healthcare spending of these European countries scarcely has an effect on the current account, as they are safe economies. However, in this group of European countries, although the estimated imbalance is lower with the extended specification, the impact of the fiscal distortion is greater, as excessively contractionary fiscal policies, in relative terms, have been implemented.

Conclusions

The capacity of certain countries, perceived as safe destinations by investors, to sustain high current account deficits over long periods and to attract foreign capital at times of turbulence on international financial markets entails a lesser relationship between their current account balance and their macroeconomic fundamentals. The present article confirms this hypothesis, providing evidence that the risk perception of an economy as an investment destination effectively influences the way in which fundamentals affect the external balance.

To test this, an extension of the model for the current account balance that the IMF uses in assessing the external position of countries in its *External Sector Report* is employed. Thus, factors such as fiscal policy, the level of social protection and the pace of ageing affect the economies in different ways depending on the perceived degree of risk, and the restrictions on capital movements only prove significant in the less safe countries. Likewise, the capacity to attract foreign capital to finance future growth is hampered at times of financial market crisis, except if countries that are safe destinations for investment are involved.

The external imbalances calculated in this article with the IMF's extended methodology are qualitatively similar to those obtained with the IMF's original methodology, although differences arise in terms of their scale and the attendant factors. The results entail lower imbalances in the advanced economies, which showed excessive surpluses in the original specification (and slightly greater ones, in general, in the emerging economies), and bigger imbalances in the economies with excessive deficits, the odd exception aside.

This paper is a contribution to the methodology for the analysis of global imbalances developed by the IMF, which is still to take its final shape and which is one of the palpable results of the renewed framework of economic cooperation within the G-20.

10.4.2014.

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16 The size of the residual also influences the scale of Japan's imbalance, proving positive in the EBA regression and negative in the extended estimation. These differences arise from the different effects estimated for demographic factors, healthcare spending and the fact of having a currency that is used as an international reserve currency.

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