

Measuring external debt in a context of macroeconomic imbalances

João Cadete de Matos¹, Ana Margarida de Almeida², Lúcia Maria Nunes³, and Daniela Black Miranda^{4,5}

¹ Director, Banco de Portugal, Statistics Department, Lisboa, Portugal

² Deputy-Director, Banco de Portugal, Statistics Department, Lisboa, Portugal

^{3,4} Banco de Portugal, Statistics Department, Lisboa, Portugal

⁵ Corresponding author: João Cadete de Matos, e-mail: jcmatos@bportugal.pt

Abstract

The exploitation of new methodologies and indicators is considered valuable in measuring a key macroeconomic indicator like the external debt. The recent Portuguese economic developments illustrate the need and usefulness of having a multidimensional approach of this indicator, with several balance of payment items, such as the current and the capital account balances, the foreign direct investment or the reserves assets being carefully analysed when reading the external conditions faced by the economy. Only such an approach can provide with a comprehensive measure of external debt consistent across the range of debt instruments, institutional sectors and valuation methods used. This paper develops an assessment of external debt measures and concludes about their potential advantages and disadvantages. Comparisons are made by focusing on alternatives like external gross debt against external net debt, external debt vis-à-vis international investment position, and external debt at nominal value against external debt at market value.

Key Words: external debt; valuation; debt instruments; institutional sectors

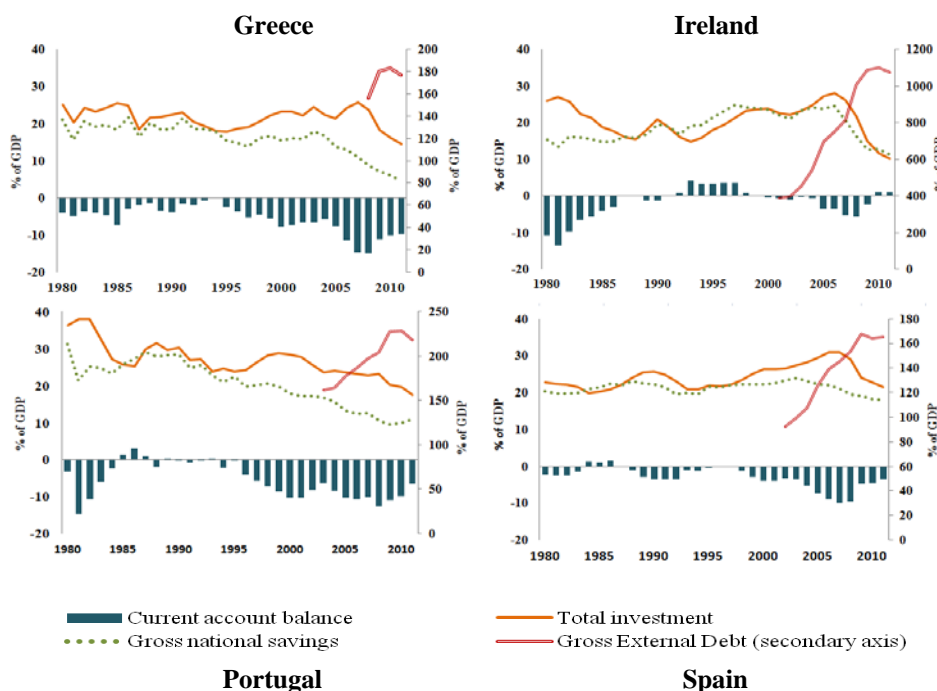
1. Background

In today's globalized world no country can be fully insulated from what happens in the global economy. The current international economic and financial crisis proved it, as its transmission has occurred largely through the balance of payments (BoP) channel, which has a great relevance in the assessment of the country's vulnerability to external exposure. One of the BoP components - the current and the capital accounts balances - mirrors the saving and investment behavior of the economy. When a country runs a current account deficit, it is building up liabilities to the rest of the world that are financed by flows in the financial account. The macroeconomic impact of a current account deficit depends on how the country is using imported capital, as well as how much it has borrowed from abroad in the past. Even if the country is inter-temporally solvent, its current account deficit may become unsustainable if it is unable to secure the necessary financing. According to the IMF (2012), while some countries, such as Australia and New Zealand, have been able to maintain current account deficits for several decades, others such as several European countries experienced sharp reversals of their current and capital accounts during the recent global crisis. Such reversals presented themselves highly disruptive because private consumption, investment, and government expenditure had to be curtailed abruptly when foreign financing started to be no longer available and, indeed, the countries were forced to run large surpluses to repay in short order what they borrowed in the past. The economic theory suggests that persistent current account deficits generally lead to a rise in a country's external indebtedness, causing a rise in both the credit risk premium and the borrowing costs.

Figure 1 shows the evolution of these variables for the four euro area countries that requested financial assistance from the European Union (EU), European Central Bank (ECB) and International Monetary Fund (IMF): Greece, Ireland, Portugal and Spain. As one might observe, over the last decade these countries have been running large external imbalances, reaching current account deficits of 15%, 6%, 13% and 10% of

the GDP, respectively, with levels of the gross external debt that exceeded 100% of the GDP.

Figure 1: Current account, investment and saving



Source: ECB, IMF

This critical state of accumulated external indebtedness was possible through the participation of these countries in the euro area, arising from the behavior of private agents and from public policies deeply inappropriate to the demands of a new regime arising from the adoption of the single currency. The programmes of economic and financial adjustment were prepared with the goal of allowing countries to return to a path of sustained growth within a framework of financial stability, as also to re-establish the confidence of participants in international financial markets and to restore the sustainability of their external debts.

Debt sustainability is assessed on the basis of indicators of the debt stock. Different methodologies can be used when measuring the external exposure of a country, through a multidimensional exploitation of the range of debt instruments, institutional sectors and valuation methods used. Only such an approach can provide a comprehensive analysis of this current and useful theme.

In section 2 we will develop an assessment of external debt measures, applying them to the Portuguese case and conclude about their potential advantages and disadvantages. In section 3 we will summarize the conclusions and build up some recommendations.

2. Comparing external debt indicators

For the purpose of this analysis external debt is based on the fact that if a resident has a current liability to a nonresident, that requires payments of principal and/or interest in the future. This liability represents a claim on the resources of the resident's economy, being an external debt of that economy. The liabilities may include debt securities, such as bonds, notes and money market instruments, as well as loans, deposits, currency, trade credits and advances due to non-residents (IMF, 2012). The debt could be issued with different maturity profiles by different institutional sectors such as the general government, the banks and the other sectors. Although not always available, other additional details would be useful to improve the analysis, like the

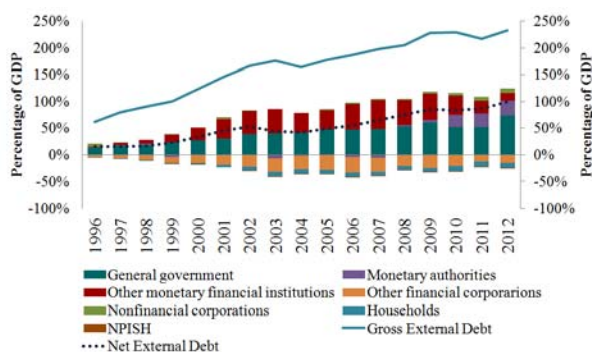
geographical breakdown of creditors and debtors and the residual maturity beyond the original one.

2.1. Gross external debt against net external debt

Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities by the residents of an economy that require payment(s) of principal and/or interest by the debtor at some point(s) in the future and that are owed to nonresidents. For some, gross external debt *per se* only captures one side of an economy's external exposure to international debt markets. For others, net external debt (obtained by subtracting from the gross external debt liabilities the related gross external debt assets), could provide additional insights into the sustainability of external debt. The recently massive use of certain types of financial contracts, such as repurchase agreements, securities lending, collateralised loans and securitisation issues, tend to drive up gross external debt figures. This is because these types of financial contracts simultaneously create new debt positions in both assets and liabilities, which can only be offset by using the net external debt as an indicator. While large and increasing gross external debt positions only provide an indication of accumulating imbalances in, and the potential vulnerabilities of, an economy, significant net external debt levels provide a clearer picture on the existence of such problems (Dias, 2010). Large imbalances in the net external debt and large net interest payments are a credible early warning signal of rising risks concerning the ability of the economy to successfully meet its external financial obligations, particularly in periods of economic distress or when hit by an external shock.

Figure 2 illustrates the evolution of these two measures in the Portuguese economy. Although they have the same trend, there is a gap between the gross and the net external debt series, which reflects the above referred developments on the assets side. The gross external debt has increased noticeably over the last years. At the end of 2012, it amounted to 233% of GDP, which means an increase of 132 percentage points (p.p.) since the end of 1999, the year that marked the beginning of the 3rd phase of the European Monetary Union, i.e., the introduction of a single currency in the area. If one focuses the analysis on the net external debt, it reached 100% of the GDP at the end of the last year. Until 2010, only three institutional sectors had a relevant weight on the net external debt: general government, other monetary and financial institutions and other financial corporations. After 2010, Banco de Portugal started to have an important role as an intermediary in the increased financial dependence of Portuguese banks from the ECB, as also as due to the disbursements received in the context of external financial assistance, since the second half of 2011.

Figure 2: Gross external debt vis-à-vis Net external debt – Portugal



Source: Banco de Portugal

2.2. External debt against international investment position

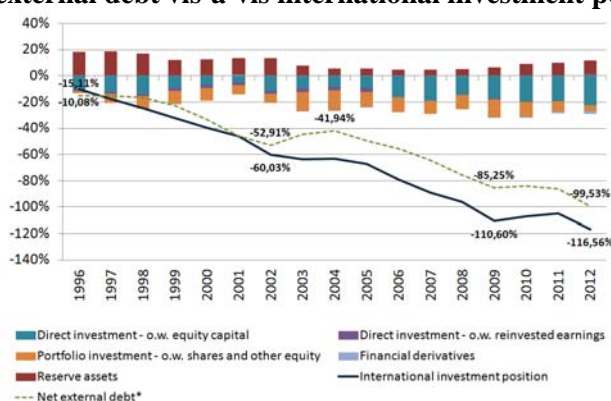
Beyond external debt indicators, other kinds of measures can contribute to the

enrichment of the analysis, of which, the IIP. The IIP translates the overall net external financial position of a country, i.e., measures the respective external financial assets minus liabilities, which includes, in addition to the net external debt, the net position in equities, financial derivatives and reserve assets.

The new methodological manuals, such as the Balance of Payments and International Investment Position Manual, 6th edition (BPM6), give increased emphasis to the IIP statistics in international accounts compilation and analysis, by recognizing that although balance of payments analysis has an important role in understanding sustainability and vulnerability, IIP data are useful for other purposes, such as measuring rates of return of external financial investment, analyzing economic structure, and studying the relationship with domestic sources. Additionally, IIP and other external macroeconomic indicators are included in the Macroeconomic Imbalances Procedure scoreboard, which is a surveillance mechanism that aims to identify potential risks early on, prevent and correct harmful macroeconomic imbalances in the EU.

Figure 3 shows the evolution of the net external debt and of the IIP for Portugal. As one can observe, the two series are almost coincident until 2001, the point in time when a stable gap starts to emerge. The reasons why this occurred are related to the decrease of the weight of the reserve assets since the Portuguese accession to the euro area. The highest gap started on 2004 and was caused by the worsening of the current and capital accounts translating a raise of the financing needs, which was covered by external funding of equity capital through foreign direct and portfolio investments.

Figure 3: Net external debt vis-à-vis international investment position – Portugal



Source: Banco de Portugal

2.3. Excluding foreign direct investment liabilities from external debt

Residence is a key concept to the definition of external debt. Some issues could, however arise, regarding the inclusion or not of some entities to which the concept of residence could be difficult to implement, such as enterprises located in free trade and other offshore zones, or the case of the special purpose entities (SPE). According to the international standards, enterprises located in offshore zones should be attributed to the economies in which they are located. On the other hand, SPE are always treated as separate institutional units if they are resident in a different territory to their owners. Thus, debt issues on the balance sheet of entities legally incorporated or domiciled in an offshore center are to be classified as external debt of the economy in which the offshore center is located. Any subsequent on-lending of the funds raised through such debt issues to a nonresident, such as to a parent or subsidiary corporation, is classified as an external asset of the offshore entity and external debt of the borrowing entity. IMF (2012) encourages separately identification of the gross external debt of the country, namely if the size of offshore liabilities related to the rest of the economy has a significant weight.

3. Conclusions and recommendations

Many governments of advanced economies are dealing with large external deficits and increasing external debts. Some of these countries find themselves with high levels of external debt, and in some cases they will be close to double the existing figures before the recent financial crisis. Some European countries, which requested for external financial assistance – such as Greece, Ireland, Portugal or Spain –, are currently under enormous pressure to control their levels of external debt. Indeed, the recent economic developments illustrate the need and usefulness of having a multidimensional approach of this indicator

Gross external debt is simply the stock of outstanding external debt. Net debt is the difference between gross debt and the related financial assets that the country holds vis-à-vis the rest of the world. According to OECD data, the difference between gross and net debt could be very large for some countries like Japan, or be very close like Greece. The net debt could be an appropriate measure of external indebtedness, if one considers a country with a significant amount of assets which need to be considered when thinking about the solvency of its external accounts. There are, however, some concerns with the concept of net debt. In addition to some measurement questions (which assets to include, at which value), a country needs to refinance all its gross debt and not only the net part, so in terms of flows, the gross debt matters.

External debt statistics together with the IIP have continuously become important inputs in the process of economic policy formulation. IIP provides very comprehensive information for monetary authorities who found important to explain external sector developments, its sustainability and impact on the domestic sector and to induce any necessary changes through policy actions.

International standards defend that debt issues on the balance sheet of entities legally incorporated or domiciled in an offshore center are to be classified as external debt of the economy in which the offshore center is located. In some economies, separate identification of the gross external debt of resident offshore entities is useful, because of the potential size of their liabilities relative to the rest of the economy.

The measurement of external debt of both nominal and market values seem to be valuable, mainly in periods of market instability, allowing a more accurate analysis.

All of these analyses should be completed by the use of detailed data, such as breakdowns by institutional sector, financial instrument, maturity or geographical counterparty.

References

- Brissimis, S. *et al* (2010), “Current account determinants and external sustainability in periods of structural change”, ECB, Working papers series
- IMF (2009), “Balance of Payments and International Investment Position Manuals”, International Monetary Fund, 6th edition
- IMF (2012), “External Debt Statistics: Guide for Compilers and Users – Draft for worldwide comments”, International Monetary Fund
- IMF (2003), “External Debt Statistics: Guide for Compilers and Users”, International Monetary Fund
- IMF, World Economic Outlook Database, International Monetary Fund, October 2012
- Dias, J. (2010), “External debt statistics of the euro area”, IFC Bulletin n 34, Bank of International Settlements