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Fiscal Consolidation - Does it deliver?

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Abstract[1]

This note examines recent experiences of fiscal consolidation in a selection of euro area countries. It illustrates the pace and composition of consolidation, together with expected budgetary impacts over 2008 to 2015. The effectiveness of consolidation measures is assessed through the lens of change in the structural budget balance and headline debt ratios. The assessment takes into account efforts undertaken to date (2008-2011), together with consolidation plans over 2012 to 2014 announced as of end April 2012. Country-specific examples focus on EU-IMF Programme countries; Greece (GR), Ireland (IE), Portugal (PT), together with Spain (ES) and Cyprus (CY).

1 Introduction

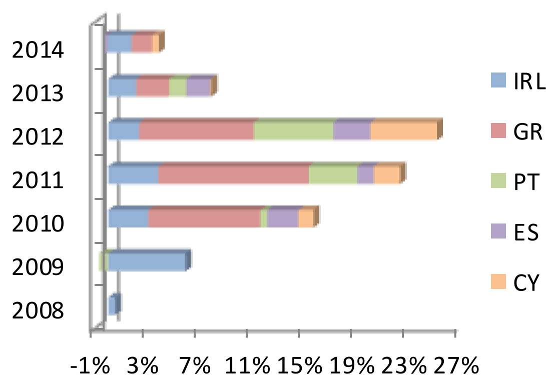
Fiscal consolidation can be understood as a policy-induced episode of revenue raising or expenditure tightening. It is the means through which discretionary fiscal policy sets out to achieve an improvement in the deficit and ultimately restore budgetary balance. In 'normal times' standard policy often involves allowing 'automatic stabilisers' to operate throughout the economy. Essentially, such stabilisers involve the economy taking in less tax revenue and spending more on transfers in times of downturn, and vice versa during periods of upturn. During the current crisis however, structural fiscal weaknesses have meant such stabilisers no longer provide a sufficient backstop to fiscal difficulties faced by euro area countries. Instead, the crisis has required a more deliberate policy response.

In the period since 2008, the depth and pace of consolidation efforts has varied considerably across countries, with Ireland having commenced its current episode relatively early (2008) compared to the other countries in this sample, where efforts began in 2009 in Portugal (PT), and in 2010 in the case of Greece (GR), Spain (ES) and Cyprus (CY). This selection of countries is by no means exhaustive, with fiscal correction either planned or already undertaken across a host of other euro area countries including Germany, Italy, Austria, the Netherlands, Belgium, France, and Slovakia. The inclusion of this specific subset of countries is motivated by their application for or participation in formal assistance programmes and the fact that all five are currently the subject of intense market scrutiny.

[1] Irish Economic Analysis Division, Central Bank of Ireland. The views expressed in this paper are those of the author and do not necessarily reflect those of the Central Bank of Ireland or the ESCB. Comments from G. Hondroyiannis (Bank of Greece), Marios Polemidiotis (Central Bank of Cyprus), Patrick Quill (Department of Finance), John Flynn and Thomas Conefrey (CBI) are gratefully acknowledged.

This note uses April 2012 Stability Programme Update (SPU) fiscal projections for 2012 to 2015.[1] Episodes of consolidation are identified on the basis of announced policy measures. They are quantified on the basis of anticipated, ex-ante yields from measures outlined by the governments concerned. Yields are expressed as a proportion of the nominal GDP projections detailed in SPU (2012). The amounts reported include carry-over effects of measures expressed on a full-year basis.[2] Whilst projected yields attempt to take account of the direct effect of tax increases on inflation for example, consolidation amounts reported here do not take into account the wider negative effects of austerity on employment, output and prices more generally.

Figure 1: Distribution of Ex Ante Consolidation Efforts 2008-2014 as % GDP



Source: Based on published national budgetary plans expressed as % April 2012 SPU nominal GDP. ES excludes additional measures announced 11th July. PT excludes positive impact on revenue of 1.6% GDP and 3.5% GDP in 2010 and 2011 respectively from reclassification of *Portugal Telecom pensions transferred into general government.*

The chart above illustrates the total amount of fiscal consolidation undertaken, together with amounts currently planned over 2012 to 2014 across this sample of countries.

Although certain countries have specified aggregate consolidation plans for 2015; in many cases amounts are not detailed on a harmonised, measure-by-measure basis and therefore are not considered here.

Each of the above countries has undertaken efforts to date to 'stand against the wind' of the fiscal crisis. It is worth noting however that, had the funding support offered by Programme participation not been forthcoming, the amount of austerity which would have been necessary to support an immediate closure of the deficit in each case would be considerably greater than the amounts reported here.

This note self-avowedly is silent on the feedback loop between fiscal austerity and growth. Periods of fiscal contraction inevitably involve a cost to those directly affected (the tax payer/welfare recipient). Notwithstanding these costs, this note examines the effectiveness of austerity in terms of delivering quantifiable budgetary outcomes. Assessing how effective announced consolidation efforts are can be measured by reference to a number of parameters; a narrowing in yield spreads, a lowering in gross government debt ratio or closing in headline deficit. However, each of these metrics can be hampered by secondary factors beyond the direct control of discretionary fiscal policy. For example, the headline deficit can be bloated by statistical reclassifications (often related to banking sector assistance) and other one-off, temporary measures which distort the underlying fiscal position. Furthermore, change in the gross debt stock is not driven uniquely by factors over which fiscal policy

[1] A part of the European Semester, each government with a deficit in breach of 3% of GDP must submit an outline of its fiscal strategy (Stability Programme Update) for the current and following 3 years each April to the European Commission (EC). The EC then assess the adequacy of these provisions for compliance with the Stability and Growth Pact.
[2] The full effect is allocated to the year in which the announcement was made.

exerts direct control. Policy can influence the primary balance (deficit excluding interest payments) in a given year. However, debt dynamics are also driven by changes in the real burden of the underlying debt stock (the 'snowball effect') and a host of 'other factors' beyond those already captured through the deficit channel.

In light of these distortions, a preferable lens through which to assess effectiveness of consolidation efforts is to examine the improvement in the estimated structural balance.[3] This measure, now at the centre of EU fiscal surveillance and embodied in the Fiscal Compact, strips contributions from cyclical (factors owing to the economic cyclical) and temporary factors from the headline deficit. Admittedly, however, this tool itself is not exempt from criticism. Given the shortcomings of estimating the structural balance and difficulties regarding its precise measurement, using the latter to gauge the success of consolidation efforts necessarily comes with a health warning. Nonetheless, its use in a cross country sample, based on standardised methodology applied at a point in time can be illustrative.

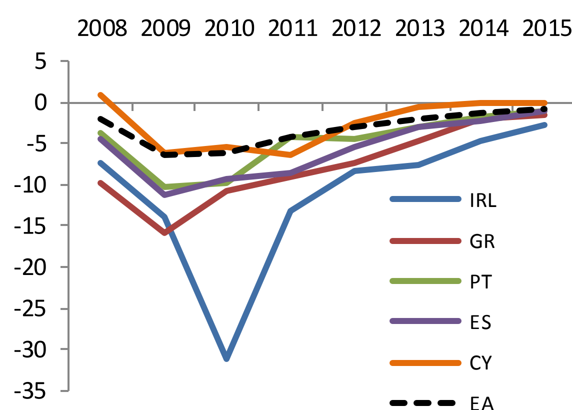
This note examines announced consolidation efforts and the impact which improvement in the deficit has on debt dynamics. Whilst revealing likely contributions from existing banking-related injections and growth projections to debt to 2015, this piece does not pronounce on policy objectives of bank debt relief or growth-inducing policies. The note is structured as follows; section 2 provides an outline of headline fiscal trends out to 2015. It then elaborates on the timing and composition of consolidation efforts undertaken and planned to 2014 (section 3 and 4). Section 5 assesses the effectiveness of these efforts, whilst section 6 illustrates the benefit which consolidation delivers in terms of reducing government debt. Section 7 concludes.

[3] As the structural balance is not directly observable there are a number of methodological approaches to measuring it. The estimates in this note are based on the harmonised European Commission approach where the cyclical component of the budget balance is estimated by applying an aggregate budgetary sensitivity elasticity to an estimate of the output gap (calculated by means of a structural production function based approach). See European Commission Economic Paper No. 374, March 2009 Box 1 for further details.

1. Overview of Fiscal Outlook

This section gives an overview of the fiscal picture across the countries considered. Based on SPU projections for 2012 onwards, the charts below illustrate the paths of a number of headline fiscal aggregates over the period 2008 to 2015. Protracted deficits over the period to 2014 have contributed to persistently elevated debt ratios (further analysis of precise contributions to debt accumulation outlined in Section 6).

General government deficit (as % GDP)



Source: April 2012 SPU for IRL, PT, ES, EA. GR based on March 2012 *IMF Staff Report*. EA average based on weighted average of EA17 SPUs excluding GR for 2012-2015.

Primary deficits are not the only factor driving the headline deficits reported above. Since the outset of the crisis, banking related injections have exacerbated deficit profiles across many euro area countries. Over the 2007-2011 period, banking assistance has

weighed cumulatively on the Irish headline deficit to the tune of 26pp of GDP.[4] At a euro area level, bank support worsened the deficit by 0.7% GDP in 2010 and by 0.04% GDP in 2011. The impact of these injections was most striking in the Irish case where, in 2010, 20.2pp of the 31.2% of GDP headline deficit related to banking assistance. This amount in turn reflects the impact of the 2010 promissory note granted to the then Anglo/INBS (now IBRC), and EBS.

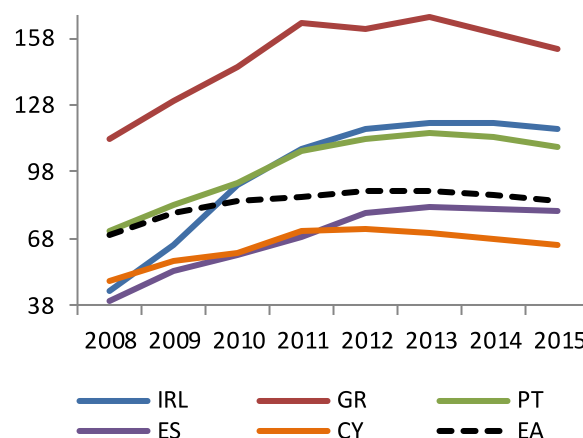
Net impact of banking assistance on deficit 2009-2011 as % GDP

	2009	2010	2011
Ireland	-2.3%	-20.2%	-3.3%
Portugal	0.0%	-1.3%	-0.5%
Spain	0.1%	0.1%	0.1%
Greece	0.2%	0.4%	0.3%
Cyprus	0.1%	0.2%	0.1%
Euro Area	-0.1%	-0.7%	-0.04%

Source: Eurostat Supplementary Table for Financial Crisis, EDP notification April 2012. CY figures reflect temporary fees from issuance of special bonds. http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit/supplementary_tables_financial_turmoil).

The chart below illustrates the profile of the general government debt ratios across the sample. Greek projections are based on the *March 2012 IMF Staff Report* and take account of the €198bn PSI (Public Sector Involvement) debt write-down agreement reached in March 2012, 54% GDP of which was gross debt reducing. Notwithstanding this inclusion, Greek public debt is still envisaged to peak at 167% GDP in 2013. The impact of PSI on headline debt reduction is muted on account of inclusion of some €50bn (25% GDP) in bank recapitalisation provision, together with other offsets, including but not limited to; PSI-related European Financial Stability Facility (EFSF) bonds, arrears and accrued interest costs. GR fiscal projections exclude the additional 7% of GDP in consolidation which the IMF have deemed necessary to meet the 2014 primary surplus target of +4.5% GDP, details of which are expected to be announced during the summer.[5]

General government Debt (as % GDP)



Source: April 2012 SPU for IRL, PT, ES, EA. GR based on March 2012 IMF Staff Report. EA average based on weighted average of EA17 SPUs excluding GR for 2012-2015.

The impact of banking injections on fiscal balances is not just confined to past outturns. A series of bank-related impacts on public debt are also likely in 2012. Some 0.8% of GDP relating to the already announced €1.3bn Irish Life & Permanent (ILP) injection, expected in the case of Ireland, is already captured in these debt profiles. Similarly the PT SPU provisioned in advance for a €6bn (3½ % GDP) bank impact on debt in 2012 via its Bank Solvency Support Facility (BSSF). Announcements provisioning for a further €50bn (25% GDP) were made in relation to GR and are captured in the debt profiles here. Provision for up to €100bn (9.4% GDP) in relation to ES, was made subsequent to SPU publication and are not included in the either the deficit or debt projections reported in this Note. No provision in made in relation to CY.[6]

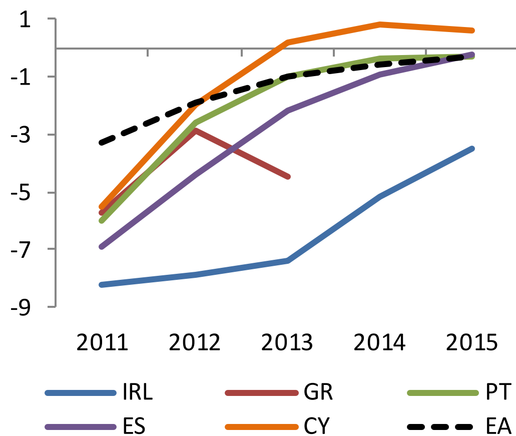
[4] Contributions were positive across other euro area countries; Germany, Austria and the Netherlands with the impact ranging from 0.5% GDP to 1.4% GDP pa over 2007-2011.The net impact of bank support on the deficit was positive in the case of BE, GR, ES, FR and CY due to receipt of guarantee fees and accrued interest, ranging from 0.1% GDP to 0.4% GDP pa over 2007-2011.

[5] On August 2nd 2012 the new Greek government announced an additional €11.5bn (5.5% GDP) in cuts over 2013-14 relative to amounts considered here.

[6] The CY application for assistance made on June 25th did not specify how much support will be required for the banking sector support. The lower estimate given was €1.8bn to €6bn (10% GDP).

Headline deficit and debt paths can be obscured by the effect of banking measures beyond the control of fiscal policy. In contrast, the structural balance reveals a truer picture of the underlying fiscal position of the economy. It nets off the effect of cyclical transactions from the headline balance. Such transactions include the effect of cyclically-driven tax revenues, higher unemployment benefits due to cyclical downturn, and other one-off temporary measures (e.g. those relating to banking sector injections).

Structural Balance as % GDP

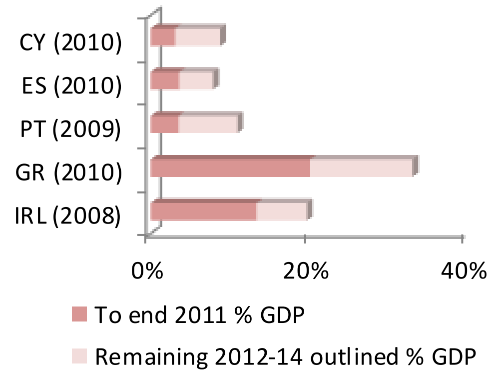


Source: Estimated using SPU inputs based on standardised EC structural balance methodology. EA weighted average excluding GR. GR estimates to 2013 only, based on July 2012 European Commission report.

2. Timing of Fiscal Consolidation

In terms of the timing of announced consolidation efforts, in the Irish case efforts have been heavily frontloaded, with almost 13½% of GDP in measures undertaken by end-2011. Just over 6% GDP remains over 2012-2014 (together with a further 1.1% GDP outlined for 2015). In the Greek case, almost two thirds of consolidation efforts outlined as of end April have already been undertaken. Greek consolidation amounts referred to in this note incorporate those outlined in the 2011 *Medium Term Fiscal Strategy* (MTFS), *Budget 2012* and the February 2012 *Supplementary Budget*. They do not reflect the additional 7% GDP in measures which the IMF deem necessary for Greece to secure achievement of their +4.5% GDP primary balance programme target by 2014.

Consolidation efforts outlined 2008-2014
(*year commenced*)



In the case of CY and PT, the remaining currently specified effort (mostly in 2012) outstrips efforts made to end 2011 quite considerably. Amounts for ES refer to those outlined as of end-April 2012, and do not include the additional austerity measures announced in mid-July.

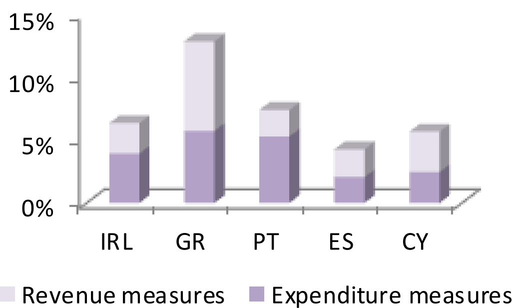
In relation to Ireland, a total of 21% of GDP in consolidation measures have been specified for the period 2008-2015. Of the 13½% of GDP in measures undertaken to end 2011, just over 9% of GDP of these related to spending measures (2% of GDP from capital expenditure cuts, the remainder from current savings; paybill reductions, public sector pension levy, reductions in social welfare spending). A further 4% of GDP related to revenue side measures over 2008 to 2011 (income levy, changes to PRSI/health levy (2009), income tax changes to tax credits and bands (2011)).

3. Composition of Fiscal Consolidation

Literature on the optimal composition of fiscal correction finds that consolidation episodes that focus on expenditure reduction appear more successful at reducing deficits in a sustainable and structural manner that is least damaging to growth (Blochliger, Song & Sutherland, OECD 2012). Cutting the least

productive elements of public spending, rather than raising taxes, can be less damaging to growth and prospective future recovery (Alesina & Ardagna 2010). Nonetheless, during large and protracted periods of consolidation, a range of policy levers requiring multiple instruments is often necessary in order to bolster the prospects for success (Molnar, OECD 2012).

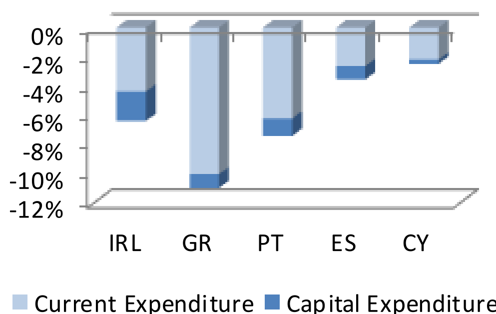
Planned consolidation 2012-2014 as % GDP



Source: Based on announced measures. GR figures include announced measures as of February 2012 and exclude 7% GDP in additional measures the IMF deem necessary for GR to meet its 2014 SB target of +4.5% GDP.

Currently, the composition of consolidation programmes across the broader EU appear balanced slightly in favour of expenditure (with the exception of Belgium and Italy). The chart below outlines the specific split between expenditure and revenue-based measures across the countries considered in this note.

Expenditure based consolidation measures 2011-2014 (as % GDP)



Note: PT figures include announced cuts of additional 2 months' pay to civil servants over 2011-2014. A constitutional court ruling on 6 July rendered cuts over 2013-14 unconstitutional.

In terms of the envisaged split in expenditure cuts, the majority of consolidation is expected to fall on the current side (social payments, public paybill, and intermediate consumption).

A headline overview of the most common expenditure cuts is as follows:

- Public sector wage and employment cuts (**GR**, **IE**[7], **ES**, **PT**, **CY**)
- Public sector downsizing (**GR**, **IE**, **ES**, **PT**), rationalisation of public expenditure based on spending reviews (**IE**)
- Reduction in Capital expenditure (**PT**, **IE**, **GR**, **ES**) and intermediate consumption (**GR**, **IE**)
- Cuts in social transfers (**PT**) rationalisation of benefits (**GR** **PT**, **IE**, **CY**)
- Pension freezes /reductions (**GR**, **ES**, **PT**, **CY**)
- Tightened control of/reduced transfers to Local Government (**GR**, **ES**, **PT**)

The list below highlights the most salient types of revenue raising measures undertaken to date (and those currently outlined to 2014);

- **PT:** Increased consumption taxes (VAT), lower labour taxes, tax on banking sector, raise in corporation tax rate on high profits.
- **ES:** Suspension of income tax deductions, increase in rates on high incomes, raise in excise duties, real estate property tax, limit corporation tax deductions, increase personal income tax, raise VAT.

[7] The public sector pension levy introduced in 2009 is included here as an effective public sector wage cut.

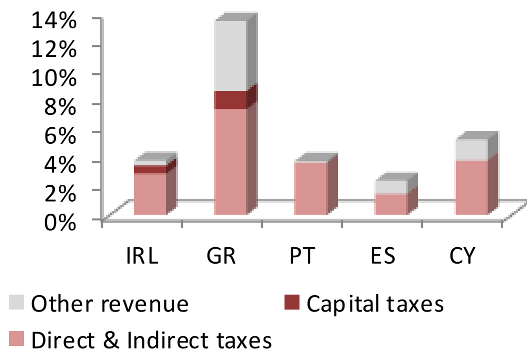
- **CY:** Increase in social contribution rate, property tax, public and private sector levies, levy on financial deposits.

- **GR:** Broaden tax base, reduce exemptions. Special levy on profitable firms. Levy real estate property, increase VAT, excise and other indirect taxes.

- **IE:** Increase VAT rate, introduce property tax, increase excise duties.

On the revenue side, the vast proportion of announced measures relate to direct and indirect taxes, with smaller contributions proportionately from capital taxes and other revenues (social contributions). Prospective revenues from privatisation receipts are not recorded in the consolidation amounts outlined below.

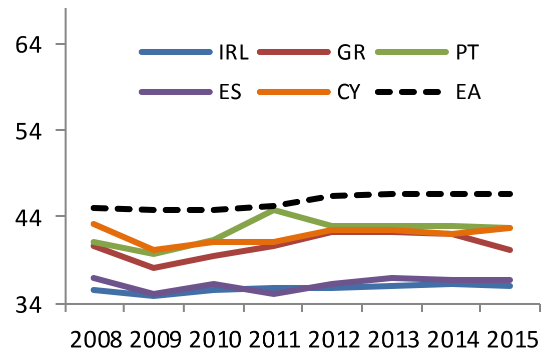
Revenue based consolidation measures 2011-2014 (as % GDP)



Note: GR 'other' includes revenues over 2011-2014 from the bank liability scheme brought in in 2010. Figures exclude 2% GDP in tax evasion revenues assumed by GR government over 2011-2014. CY figures include dividend income from Central Bank of Cyprus and Cyprus Telecommunication Authority (CYTA) specified in SPU consolidation amounts. Irish bank guarantee figures are not included in amounts above. Irish figures do not include revenue from the sale of state assets.

In aggregate terms, the expected impact of these measures on the headline revenue and expenditure ratios is plotted below. Whilst SPUs implicitly envisage further consolidation requirements in 2015 (1.1% GDP in the case of Ireland), specific measures are not outlined in detail on a harmonised basis and therefore are omitted from the charts above.

General Government Revenue Ratio (as % GDP)



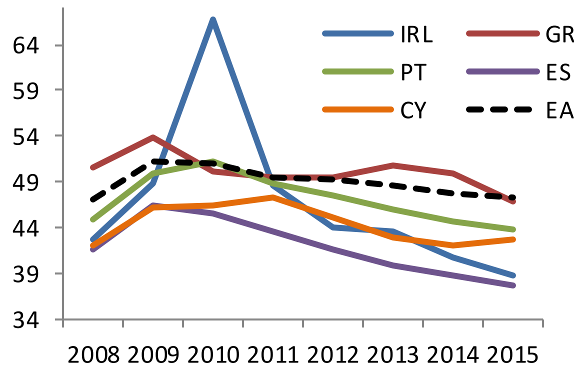
Source: April 2012 SPU for IRL, PT and ES. EA average based on weighted average of EA17 excluding GR. GR based on March 2012 IMF Staff Report figures.

In the case of Ireland, in spite of the fact almost 7% of GDP in revenue raising measures will have been taken over 2008-2015, the revenue ratio remains persistently flat and the lowest in this sample, at a level comparable to that of Spain, the Balkan States, and Bulgaria. This reflects the narrowness of the Irish tax base and the consequent collapse in revenue since the boom. Furthermore, the Irish headline revenue ratio is flattered by an average of 4½% of GDP in non-tax revenue (excluding social contributions) per annum over 2011-2015. This buoyancy reflects but is not limited to revenues from bank guarantee fees, central bank surplus income and dividend incomes.

In contrast, on the spending side, expenditure ratios are contracting more sharply. Nonetheless, in the context of a contracting economy, nominal expenditure cuts deliver less in terms of closing overall budget balances. The spike in the Irish expenditure ratio, at nearly 67% GDP in 2010, reflects the 20.2% GDP impact as a result of the Eurostat classification of the promissory note as a deficit worsening capital transfer.

The fact that Ireland has benefitted from fairly modest ex-post effects of these consolidation efforts also reflects the difficulty of introducing austerity measures during a period of prolonged deflation, in contrast to the Irish experience in the late 1980s when high inflation levels helped erode some of the deficit.

General Government Expenditure Ratio (as % GDP)



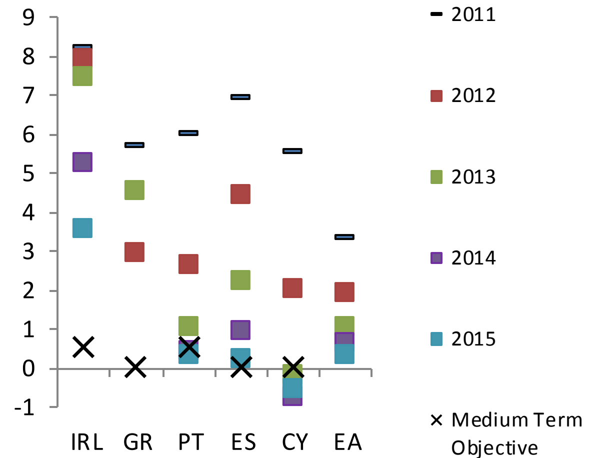
Source: Based on SPU projections with exception of GR where figures relate to March 2012 IMF Staff Report.

4. Effectiveness of Consolidation Efforts

Precisely how effective these efforts are at delivering lasting budgetary benefits can be assessed by (i) examining whether fiscal targets are achieved and (ii) whether the debt ratio reverts to a sustainable downward path. As discussed above, rather than the trajectory of the headline deficit, it is the evolution of the structural balance which is most telling. The chart below traces the envisaged path of the general government balance stripped of its cyclical and temporary factors over 2011 to 2015 (the structural balance). The Medium Term Objective (MTO) is the reference point set by the European Commission in the context of the SGP, and represents the medium-term structural balance to which countries must aspire for the purposes of SGP compliance.

The degree to which frontloading of consolidation efforts is at play is evident from the next illustration. In the case of PT, CY and ES in particular, measurable strides in terms of improvement in the structural deficit are anticipated in 2012.

Structural Deficit 2011-2015 (as % GDP)

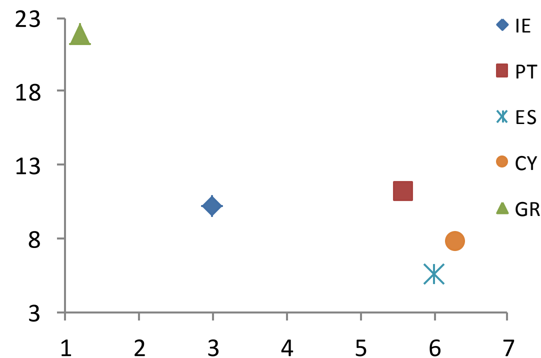


Source: Based on SPU structural balance estimates. EA average based on SPU excluding GR. GR estimates to 2013 only, based on European Commission (July 2012).

Of note is that, on the basis of SPU-outlined consolidation efforts, CY, PT and ES make sufficient progress in correcting their structural deficit so as to attain their MTO by 2015. Ireland, in contrast, despite the 21% of GDP in nominal consolidation undertaken over 2008 to 2015 remains some way off achieving its MTO of a -0.5% GDP structural balance by 2015.

The scattergram overleaf pitches the amount of consolidation effort outlined over 2011-2014 against the provisioned improvement in the structural balance which these efforts are designed to support. As is clear, GR, IRL and PT experience a relatively high consolidation burden relative to the improvement which these efforts is envisaged to secure. ES and CY on the other hand secure a relatively large improvement in structural balance on the basis of more modest consolidation efforts, largely reflecting their composition of growth.

Consolidation relative to SPU-projected structural improvement 2011-2014



Note: GR figures based on amounts over 2011-2013 due to lack of data. GR structural improvement based on European Commission estimates (July 2012).

5. Role of Consolidation in Reducing Debt Ratio

The change in the debt ratio between one year and the next depends on a number of interrelated yet distinguishable factors. The standard debt accumulation equation provisions that the change in debt ratio is driven by the primary deficit (including explicitly recognised bank support), and the difference between nominal interest rate paid on the debt stock and nominal growth (the 'snowball effect'). There are also a host of 'other factors' driving the change in debt stock, beyond what is channelled through the primary deficit.

The decomposition outlined in the charts below illustrates the various contributions to debt over the 2008 to 2015 period, using SPU fiscal projections of the debt ratio, the primary balance, nominal growth and interest rates. Contributions to the deficit from banking-related injections are shown explicitly and are based on harmonised EDP data collected by Eurostat. Primary balances have been recalibrated to strip out the impact of Eurostat-recognised bank-related capital transfers, and corrected for bank-related interest. However, the grey bars below do not fully capture the relative impact of banking injections on respective debt trajectories, as there are certain injections which for statistical purpose Eurostat rule are debt worsening but not deficit worsening. In the Irish case, this impact amounts to 1.4% GDP in 2009 (where the recap of AIB and BoI (unlike that of Anglo) was recorded on the debt but not on the deficit). In 2010 the corresponding amount is 0.3% GDP, rising to 2.3% GDP in 2011 (largely the part of the PCAR injection not already captured in the 3.7% capital transfer included on the deficit). In 2012, the corresponding amount, currently estimated at 0.8% GDP, largely reflects the previously outlined €1.3bn ILP assistance, which, pending Eurostat's statistical ruling has been provisionally treated as a financial transaction[8]. As a result, this 2012 transaction is considered debt but not deficit worsening in these figures.

As a result of statistical classification differences between deficit and debt worsening bank assistance, a further (less than 1% of GDP per annum average) banking impact on debt is captured in the respective 'other factor' contributions reported for all countries in the charts below.

Furthermore, as there has been no ruling from Eurostat on the treatment of up to €100bn (9.4% GDP) in ES banking injection and this requirement was not known at the time of the SPU, the charts for Spain below exclude the impact of this announcement. Similarly, in the case of PT, the subsequent 3.9% GDP announcement (€6.6bn banking support requirement for Banco Commercial Portuguese, Banco BPI and State-owned Caixa General de Depositos) is partially (3.6% of the full 3.9% GDP) captured in the debt but not recorded in the bank recapitalisation component. A similar ambiguity regarding statistical treatment pertains in relation to the Greek €50bn 2012 bank recap, which is captured on the debt trajectory but reflected in 'other factors' rather than explicitly in the banking contribution bar in 2012.

[8] See Budget 2012 D.8.

Turning to each country in turn, the following charts illustrate respective contributions to debt over the 2008 to 2015 period.

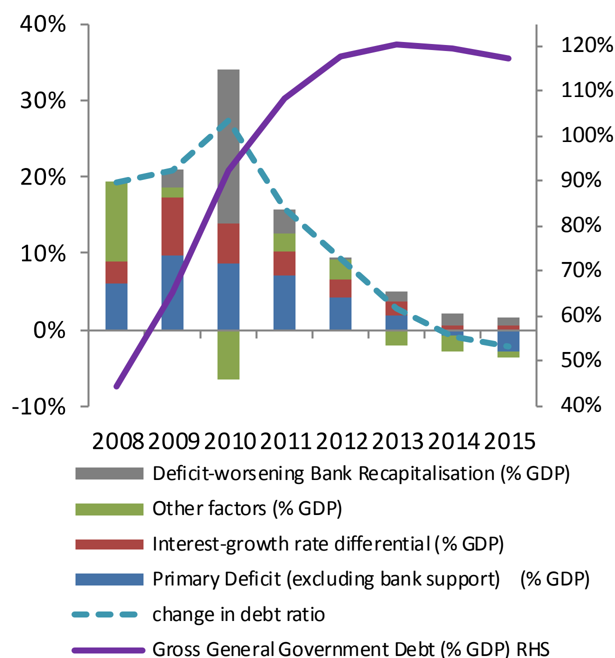
Contributions to Irish Debt

In the Irish case, of the 27.3% GDP increase in the debt ratio in 2010, 20½pp of this was as a result of banking-related injections. The on-going positive contribution to debt from banking assumed from 2013 onwards reflects expiry of the interest holiday on the original promissory note structure. The headline primary deficit recorded in 2010 was 28% GDP; however the underlying adjusted primary deficit excluding bank support amounted to 8½ % GDP.

As a consequence of the relatively robust levels of nominal growth, coupled with the interest savings secured as a result of the July 2011 EU programme rate reduction, the 'snowball effect' is relatively muted in the Irish case. The positive contribution to debt dynamics emanating from 'other factors' over 2011-2012 reflects the assumed accumulation of precautionary cash balances in line with SPU provisions. Also included is the impact of PCAR and ILP injections not already reflected on the deficit, as well as implicit credit union and Insurance Contribution Fund (ICF) assistance provisions outlined in the SPU. Through a constellation of factors (low interest rates, modest nominal growth, and the beneficial impact of 'other factors' over 2013-2015), Irish consolidation is expected to contribute both positively and significantly to stabilising debt dynamics over the period. In this respect, consolidation can be proxied by the reduction in the primary deficit which is projected to turn to surplus in 2014. Debt dynamics remain sensitive to nominal growth outturns.[9]

[9] See IMF Staff Report June 2012 debt sustainability analysis outlined in Annex 1 for further published discussion of these sensitivities.

Contributions to Irish General Government Debt 2008-2015 (as % GDP)



Source: Estimated using April 2012 SPU and Eurostat financial crisis table data.

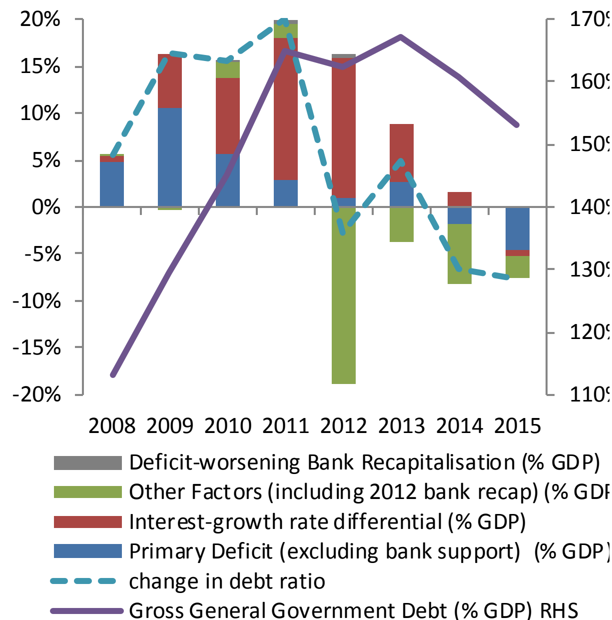
Contributions to Greek Debt

In contrast, weak growth coupled with high interest rates are compounding Greek debt reduction efforts. In spite of running low primary deficits over 2011-2013 (with the latter projected to turn to surplus by 2014), a punishing 'snowball effect' (red bar) together with various offsetting ' other factors' absorb the benefit of on-going consolidation measures. These offsetting factors also engulf a sizeable portion of the recently announced debt reduction (private sector involvement PSI) programme.

Greek projections (based on March 2012 *IMF Staff Report* figures) take account of the €198bn (97% GDP) PSI together with refined estimates of resolution costs. Provision is also made for €50bn (25% GDP) in banking recapitalisation in 2012. The 2012 bank recap is reflected in 'other factors' rather than as deficit worsening bank recapitalisation' since Eurostat have yet to rule on what portion of this must be recorded on the deficit.

Excluding the recently announced Greek bank recapitalisation programme, former bank-related injections peaked at modest levels in terms of their contribution to the headline Greek deficit at 0.4% GDP in 2011.

Contributions to Greek General Government Debt 2008-2015 (as % GDP)



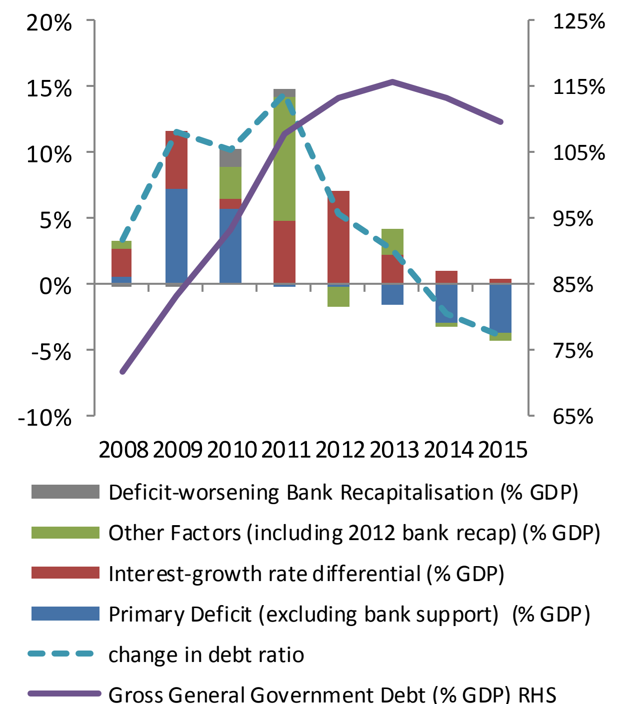
Source: Based on IMF Staff Report data March 2012. Banking recapitalisation figures from EDP Notification April 2012.

On the basis of March 2012 IMF estimates, Greek gross debt is projected to peak at 167% of GDP in 2013.

Contributions to Portuguese Debt

In relation to Portuguese debt, no account is taken, in the deficit-worsening bank recapitalisation bar below of the €6.6bn (3.9% GDP) injection announced on June 4th in respect of Banco Commercial Portuguese, Banco BPI and Caixa General de Depositos. An estimate of the cost of the 2012 bank recapitalisation needs was however included in the SPU debt trajectory (amounting to €6bn or 3½ % GDP). The 2010 'deficit-worsening bank recapitalisation' shown here includes 1.3% GDP in respect of called guarantees provided to Banco Privado Portuguese (0.3% GDP) and reclassification of part of the assets of Banco Portuguese de Negocios (1.0% GDP). The sizeable positive contribution to debt from 'other factors' in 2011 relates to accumulation of unused Programme deposits, valuation effects and the transfer of assets from banking sector pension funds to general government. The drag in 'other factors' from the 2012 bank recap (3½ % GDP), is offset by a decline in deposits and privatisation receipts allocated to debt redemption.

Contributions to Portuguese General Government Debt 2008-2015 (as % GDP)



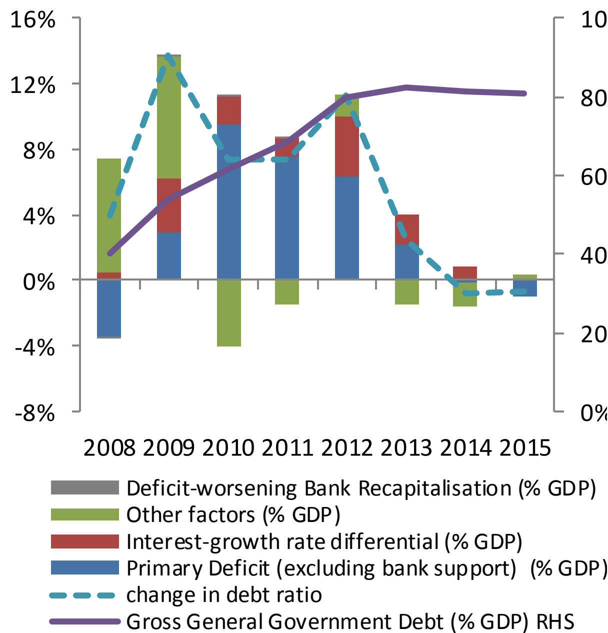
Source: Estimated using April 2012 SPU and Eurostat financial crisis table data.

Despite recording near primary balance in 2011 and 2012 (before turning to significant surplus throughout 2013-2015), the 'snowball effect' of divergent interest-growth dynamics weighs heavily on Portuguese debt dynamics out to 2013, before more significant stabilisation in debt is profiled for 2014-2015. On the basis of SPU projections, debt is projected to peak at 116% GDP in 2013.

Contributions to Spanish Debt

On the basis of SPU figures which do not include additional consolidation outlined in July or the impact of 2012 bank recapitalisation, Spanish debt is projected to peak at 82% of GDP in 2013. Turning to Spanish debt dynamics, from the chart below it is evident that persistent primary deficits (averaging 5½ % GDP per annum over the 2009 to 2013 period) have been the main contributing factor to Spain's elevated debt trajectory. Moreover, these figures, illustrated on the basis of April 2012 SPU projections, do not include the impact of the €100bn (9.4% GDP) banking injection announced on June 9th 2012. Notwithstanding this announcement, banking-related injections have, to date, made very small inroads on the Spanish general government deficit (0.1% GDP in each of 2010 and 2011).

Contributions to Spanish General Government Debt 2008-2015 (as % GDP)



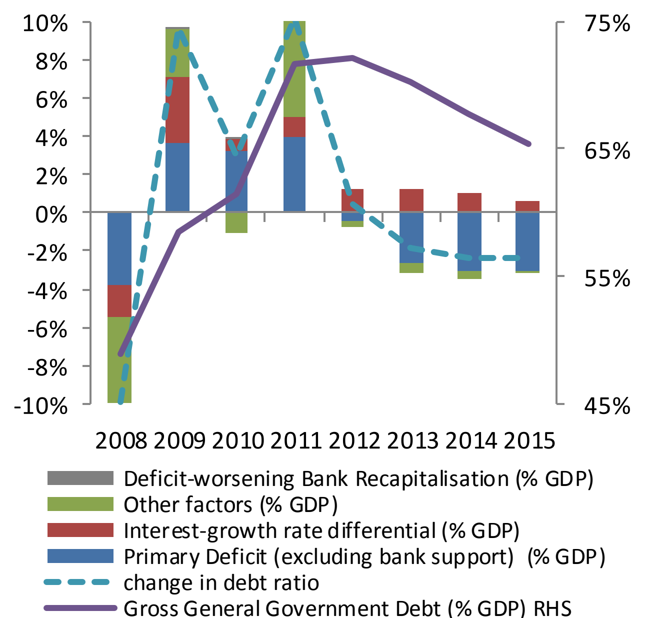
Source: Estimated using April 2012 SPU and Eurostat financial crisis table data.

The positive contribution from 'other factors' in 2012 relates to the anticipated reclassification of local and regional government debt as part of general government debt, together with ESM paid in capital contributions.

Contributions to Cypriot Debt

Projections for Cyprus do not incorporate the impact of the yet undefined banking and fiscal support package applied for on June 25th. In the case of Cyprus, the contribution to deficit from banking-related transactions to date (end-2011) has actually been positive (reflecting the receipt of guarantee fees). This highlights the fact that prior to announcement of the Greek PSI debt write-down programme there were little or no banking related issues at play in Cyprus. The large positive contribution from 'other factors' in 2011 relates to the accumulation of currency and other deposits (4½% GDP) (including the bilateral loan received from the Russian government) and financial support given by CY to other programme countries (½% GDP). Primary deficits contributed negatively to debt accumulation over the period 2009-2011, but are set to improve debt dynamics considerably over the period 2013-2015. On the basis of SPU estimate, debt is projected to peak at 72% of GDP in 2012, one year earlier than other countries considered in this note.

Contributions to Cypriot General Government Debt 2008-2015 (as % GDP)



Source: SPU April 2012. Primary balance includes CBC dividend income revenues but excludes temporary fees for issuance of special purpose bonds (recorded as deficit improving bank related revenues (0.1% GDP in 2011).

6. CONCLUSIONS

Since the beginning of the crisis, fiscal consolidation efforts across Programme countries have varied in both their timing and degree of intensity. How successful consolidation is at delivering meaningful budgetary benefits can be seen through the evolution of the structural balance. In light of adverse interest-growth dynamics, and other one-off impacts worsening the deficit, the burden of consolidation can at times be high relative to the aspired pay-off in terms of improvement in the debt. In terms of how effective consolidation efforts are in bolstering more stable debt dynamics, the lever over which discretionary fiscal policy has direct control -the primary balance- plays just one part. Debt dynamics are determined by a number of factors in addition to the primary budget balance. Gross general government debt levels, which on the basis of April Stability Programme Update projections are expected to peak in 2013, remain elevated in spite of even the most concerted of efforts at minimising the primary deficit. Fly-away interest-growth dynamics and other factors contributing to the debt can, at times, exert such a strong impact on dynamics that they dwarf efforts being made in the fiscal consolidation arena.

This note limited its scope to examining the effectiveness of consolidation efforts in terms of delivering budgetary benefits. It has not attempted to illustrate the potential impact which further EU-wide bank debt restructuring or varied growth outturns (relative to those shown here) might exert on debt dynamics. Reported consolidation efforts are in some cases sufficient to achieve debt sustainability by the end of 2015. Notwithstanding announced efforts, debt profiles remain subject to projected growth outturns materialising. Where existing consolidation commitments are pursued in conjunction with other potential mitigants, such as bank debt restructuring or growth-enhancing policies, further progress towards securing sustainability can be achieved.

REFERENCES

Alesina, A.F., S. Ardagna (2009) "Large changes in Fiscal Policy: Taxes versus Spending", NBER working paper No. 15438.

Blochliger, H., D.H. Song, D. Sutherland (2012) "Fiscal Consolidation Part IV: Case studies of large fiscal consolidation episodes", OECD Economics Department Working Papers No. 935.

Girouard, N., C. Andre (2005) Measuring cyclically adjusted budget balances for OECD countries", OECD Economics Department Working Paper No. 434.

Larch, M., A. Turnini (2009) "The cyclically adjusted budget balance in EU fiscal policy making", *European Economics,* Economic Paper No.374, March 2009.

Molnar, M (2012) "Fiscal Consolidation Part V: What factors determine the success of fiscal consolidation efforts?", OECD Economics Department Working Papers No. 936.

Stability Programme Updates (April 2012) as submitted by national governments to European Commission as part of European Semester.

2012 Report on Public Finances in EMU, *European Economy*, 4 July 2012, European Commission.

Budget documentation from national governments over the period 2008 to 2012.

Greece: Medium Term Fiscal Strategy 2011, Budget 2012, Supplementary Budget 2012 (approved February 2012). Figures do not include additional cuts announced August 2nd 2012.

***Ireland*:** National Recovery Programme (November 2010), Budget 2011, Medium Term Fiscal Statement (MTFS, November 2011), Budget 2012.

Portugal: Budget 2011, March 2011 measures, Budget 2012, Fiscal Strategy Document 2012-2015 (SPU April 2012).

Spain: Budget 2011, Budget 2012, Stability Programme Update (April 2012). ES figures do not include additional austerity measures announced 11 July 2012.

Cyprus: Stability Programme Update, April 2012.