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The Fiscal Multiplier debate
and the eurozone response to
the crisis

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The Fiscal Multiplier debate and the eurozone response to the crisis

- a) Europe's output crisis: will the fiscal compact help or hinder?**
- b) The Theory Debate: Monetarism and the new classical macroeconomics**
- c) Fiscal imbalances and output crisis**

Fiscal imbalances and output crises in Europe: will the fiscal compact help or hinder?

Bird and Mandilaras, 2013

- **The eurozone crisis has involved sharp output declines and has generated much discussion about the appropriate design of macroeconomic policy**
 - both in terms of dealing with the contemporary situation and minimizing the risks of future crises.
- Much of the debate surrounding the crisis has focused on fiscal policy.
- All but two member states of the European Union have signed a draft treaty, the ‘fiscal compact’, that seeks to eliminate structural fiscal deficits.

Graham Bird & Alex Mandilaras (2013) Fiscal imbalances and output crises in Europe: will the fiscal compact help or hinder?, Journal of Economic Policy Reform, 16:1, 1-16, DOI: 10.1080/17487870.2013.765081

http://baobab.uc3m.es/monet/monnet/IMG/pdf/Fiscal_imbalances_and_output_crisis_in_EU_Will_fiscal_compact_help_or_hinder_Bird_Mandilaras_2013.pdf

Fiscal imbalances and output crises in Europe: will the fiscal compact help or hinder?

Bird and Mandilaras, 2013

- Much of the debate surrounding the crisis has focused on fiscal policy.
- All but two member states of the European Union have signed a draft treaty, the 'fiscal compact', that seeks to eliminate structural fiscal deficits.
- The Bird and Mandilaras (2013) paper examines the **relationship between fiscal balances and output shortfalls** amongst the eurozone countries allowing for other factors.
- In the light of the findings it **critically assesses the fiscal compact.**

Fiscal imbalances by MS

- The descriptive data revealed by the charts therefore imply that, while **fiscal deficits** are certainly far from irrelevant, **they are not by any means the whole story.**
- Other **imbalances and macroeconomic misalignments** appear to have played an **important part** in leading to the eurozone crisis

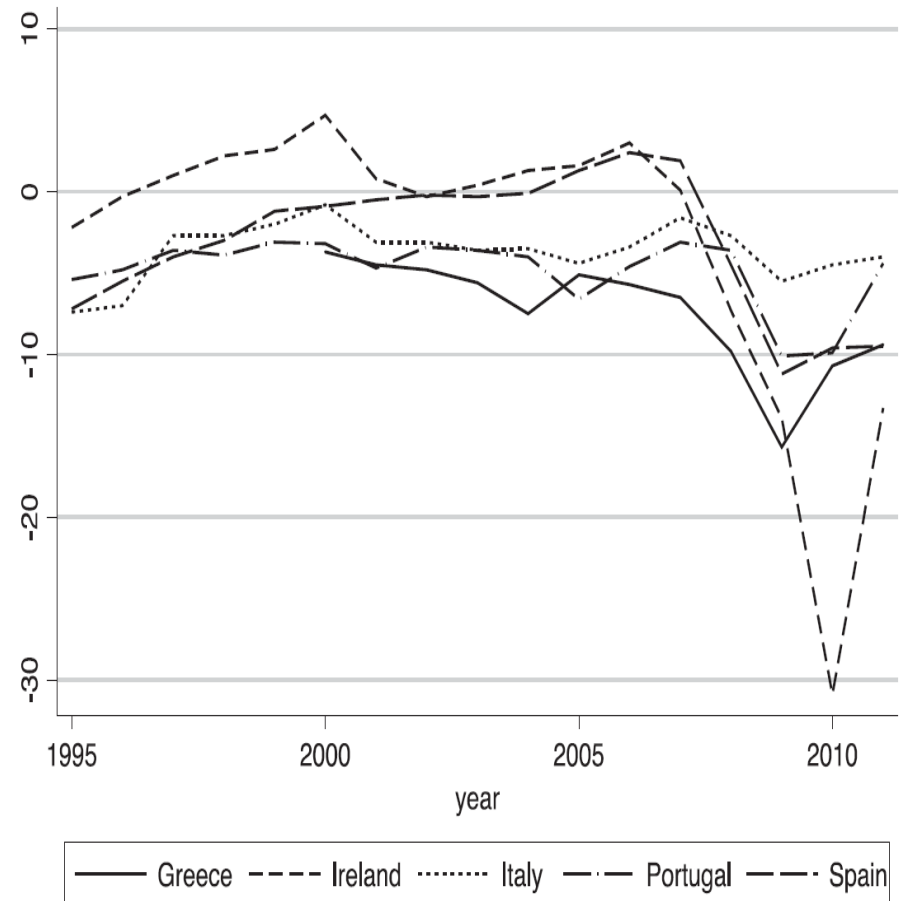


Figure 1. Budget Balance (%GDP), PIIGS (1995–2011).

Current account balance

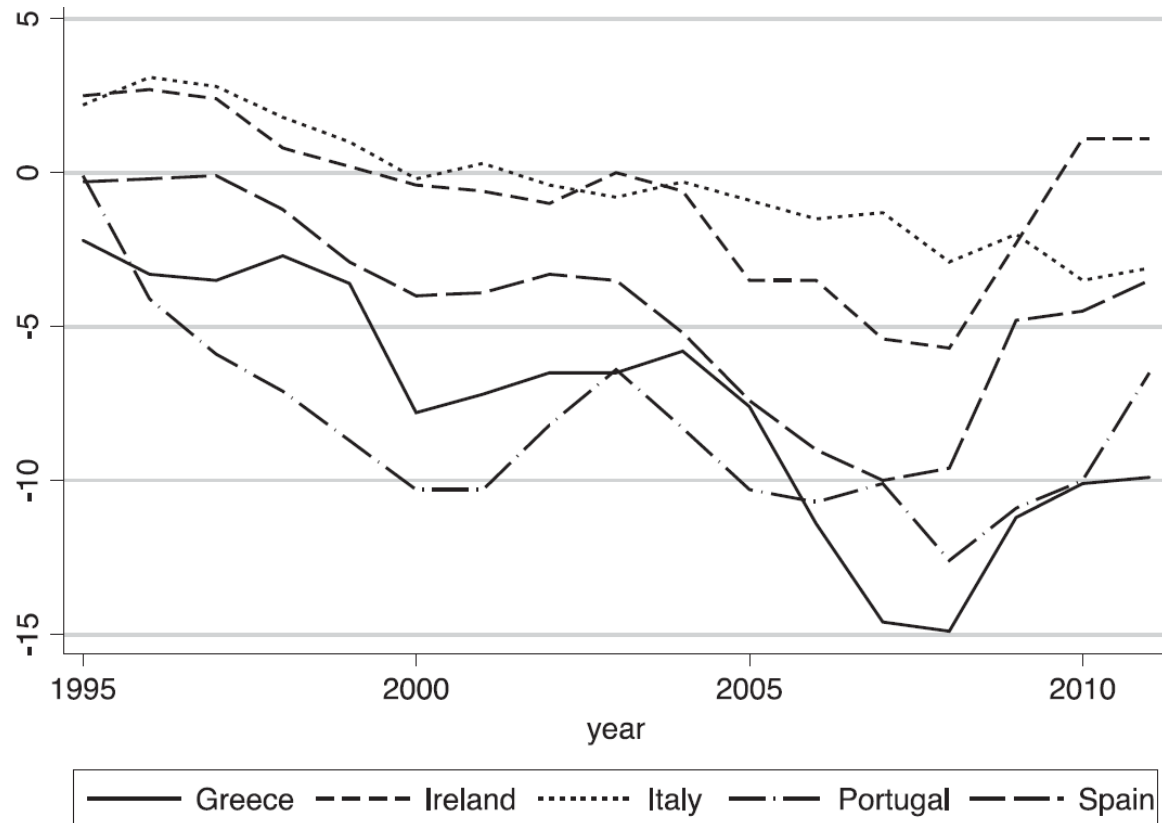


Figure 2. Current account balance (% GDP), PIIGS (1995–2011).

Europe's fiscal compact

- Europe's fiscal compact is formally embodied in the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG).
- This was signed by all members of the European Union, with the exception of the United Kingdom and the Czech Republic, in March 2012 and is scheduled to be activated in January 2013, subject to ratification by at least 12 eurozone members.
- It builds on the Stability and Growth Pact (SGP),
- which seeks to limit the size of fiscal **deficits in member states to no more than 3% of GDP** and the amount of **debt to no more than 60% of GDP**.
- In March 2011 the SGP was reformed to make **more automatic the procedures for penalising** countries that failed to comply with the rules (the so-called **Excessive Deficit Procedure**, or EDP).

Debt brakes

- Germany proposed the idea of a 'transfer union' within which access to 'bail-out' funds would be conditional on accepting direct European control of national budgetary policy.
- Germany also argued in favor of member states adopting balanced budget laws in order **to limit the future accumulation of debt** (so-called '**debt brakes**').

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Debt brakes:

- **First**, general government budgets are to be balanced or in surplus, with an annual **structural deficit not exceeding 0.5% of GDP** (the rule is less strict for countries with government debt significantly below 60% of GDP).
- **Second**, member states are required to introduce legislation to enforce this rule, with the **legislation incorporating an automatic mechanism for correcting excessive fiscal deficits**.
- **Fourth**, states with excessive fiscal deficits are required to submit to the European Commission and Council **a programme that explains how the deficits will be corrected**. The implementation of the programme will then be **monitored**.
- **Fifth**, states that **do not adopt** a balanced budget rule **will be fined up to 0.1% of GDP**.
- **Sixth**, access to financial assistance from the **European Stability Mechanism (ESM)** will be **conditional upon compliance with the rules of the fiscal compact**

b) The Theory Debate: Monetarism and the new classical macroeconomics

Fiscal imbalances and output crises: theoretical background

- While there is little theoretical disagreement about the effects of variations in the level of economic activity on the fiscal balance and about the existence of cyclical automatic stabilizers,
There is substantial disagreement about the macroeconomic effects of discretionary fiscal policy.
- A traditional **Keynesian** approach sees fiscal policy **as influencing the level of domestic aggregate demand and thereby national income and output**, with the
 - **size of the effect** depending on the **size of government expenditure and tax multipliers**.
- Expansionary fiscal policy either has an impact on real output or on inflation depending on the size of the output gap.

Monetarists challenge these Keynesian ideas.

- **First**, they argue that there are significant but variable **lags in the operation of fiscal policy**. These can result in it **becoming destabilizing**.
- **Second**, they argue that increases in government expenditure **crowd out a broadly equivalent amount of private sector expenditure by driving up the rate of interest**.
 - According to this approach, fiscal expansion has **little effect on aggregate demand** but merely alters its composition.

New classical macroeconomics assumes Ricardian equivalence.

- It argues that **fiscal expansion, deficits and debt accumulation** will lead people to expect a **future increase in taxation** that **will encourage them to increase their current saving**.
 - Again, in these circumstances, **fiscal expansion will have little or no effect on aggregate demand**.

The expansionary fiscal contractions hypothesis

More recently, the debate over the effects of fiscal policy has been taken a stage further,

- with **critics of fiscal stimulation** arguing that fiscal deficits have a **negative effect on economic growth** and that, by the same token,
- **‘fiscal austerity’** has a positive effect by
 - creating **greater market confidence**; the so-called **‘expansionary fiscal contractions hypothesis’**.
- Much of the recent literature has **focused on these issues** (see, for example, von Hagen and Strauch 2001, Tsibouris et al. 2006, Elmendorf and Furman 2008, Ilzetzki et al. 2009, Alesina 2010, Freedman et al. 2010, IMF 2010, and Romer and Romer 2010).

What does inherited theory tell us about the relationship between fiscal deficits and the incidence of economic crises?

- As already noted, **according to Keynesian theory**, and in circumstances where there is a **significant output gap**,
- **fiscal deficits will lead to**
 - **increasing output and falling unemployment.**
 - They should not lead to a crisis.
- However, if the deficits persist **beyond the point of full capacity utilization**, they are likely to lead to **inflation, an appreciation in the real exchange rate, a loss of competitiveness and balance of payments deficits.**
 - The **negative effects** will be particularly marked **where the deficits are monetized.**
 - **A crisis** may be expected to follow.

Monetarism and new classical macroeconomics

According to monetarism and new classical macroeconomics these effects on domestic aggregate demand

- will not ensue but, in spite of this, crises may still be associated with **large fiscal deficits**
 - via the expansionary fiscal contractions hypothesis.
- The simple open economy expression,

$$X - M = (S - I) + (T - G),$$

Where:

X is exports,

M is imports,

S is saving,

I is investment,

T is tax revenue and

G is government expenditure

also suggests that that fiscal deficits may be associated with economic crises

- where they **outweigh private sector surpluses** and
- where the resulting **current account deficits are unsustainable**.

**c) Fiscal imbalances and output
crisis**

The eurozone crisis 'isn't just fiscal'.

The eurozone crisis 'isn't just fiscal'. Wihlborg et al. (2010)

The implication follows that a policy response that focuses narrowly **on eliminating fiscal deficits may not be sufficient to eradicate**, or even significantly reduce, the **possibility of future crises**.

A more rounded approach that deals with other imbalances and misalignments may be needed.

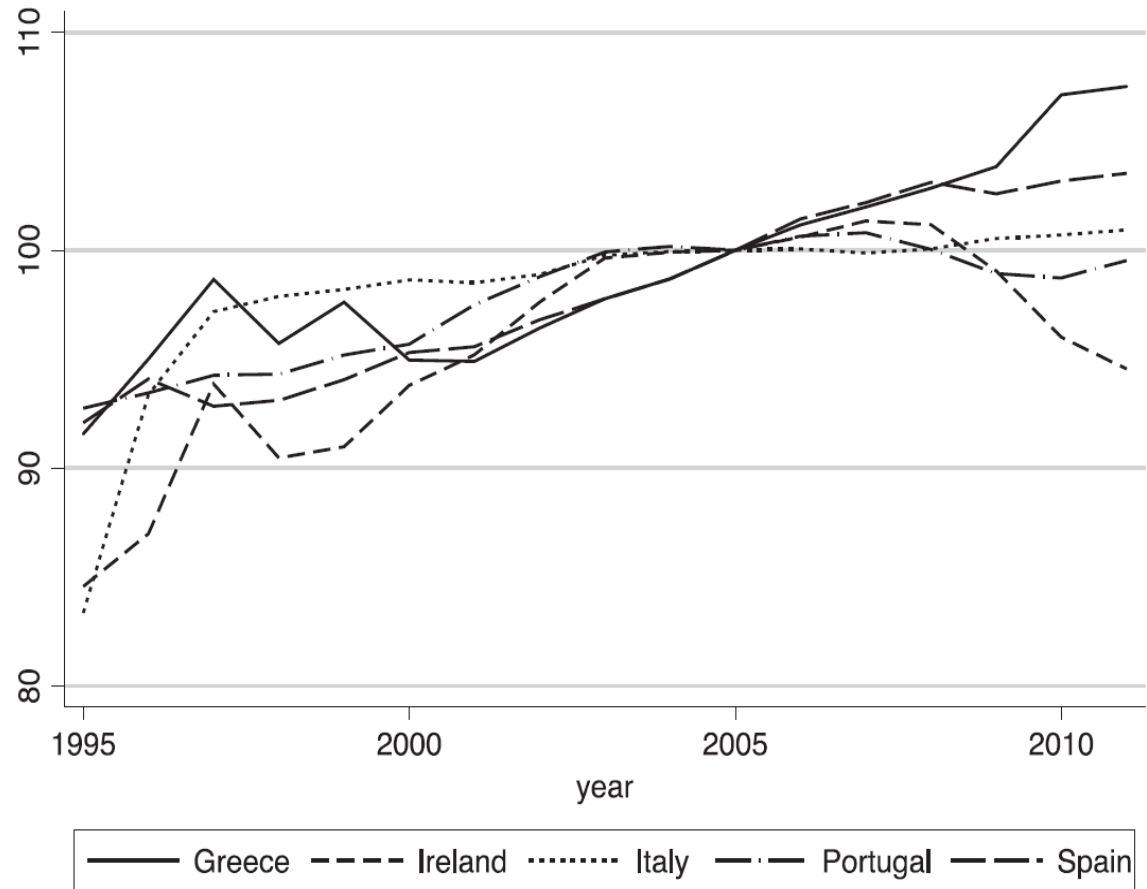


Figure 3. Real effective exchange rate, PIIGS versus eurozone partners (1995–2011).

Currency crisis theory

- While first generation currency crisis theory further suggests that **fiscal deficits may be a key factor in leading to crises** in some circumstances,
 - second and third generation models show that this **is not always the case**.
Economic crises are not always just fiscal in their origins.
- They may be associated with **excessive private sector expenditure**,
 - which may be financed through **over-leveraging**,
 - **leading to related instability in the domestic banking sector**.
- There may also be other factors at work such as **currency overvaluation**.

The automatic effect may be accentuated by policy decisions that are based on Keynesian ideas.

- However, cyclical changes in the fiscal balance may be offset **where policy makers believe in the theory of contractionary expansion** since
 - this theory implies that **fiscal consolidation** will lead to a **decline in the size of the fiscal deficit during a period of economic recession**.

Fiscal deficits and crises in Europe: regression analysis and results

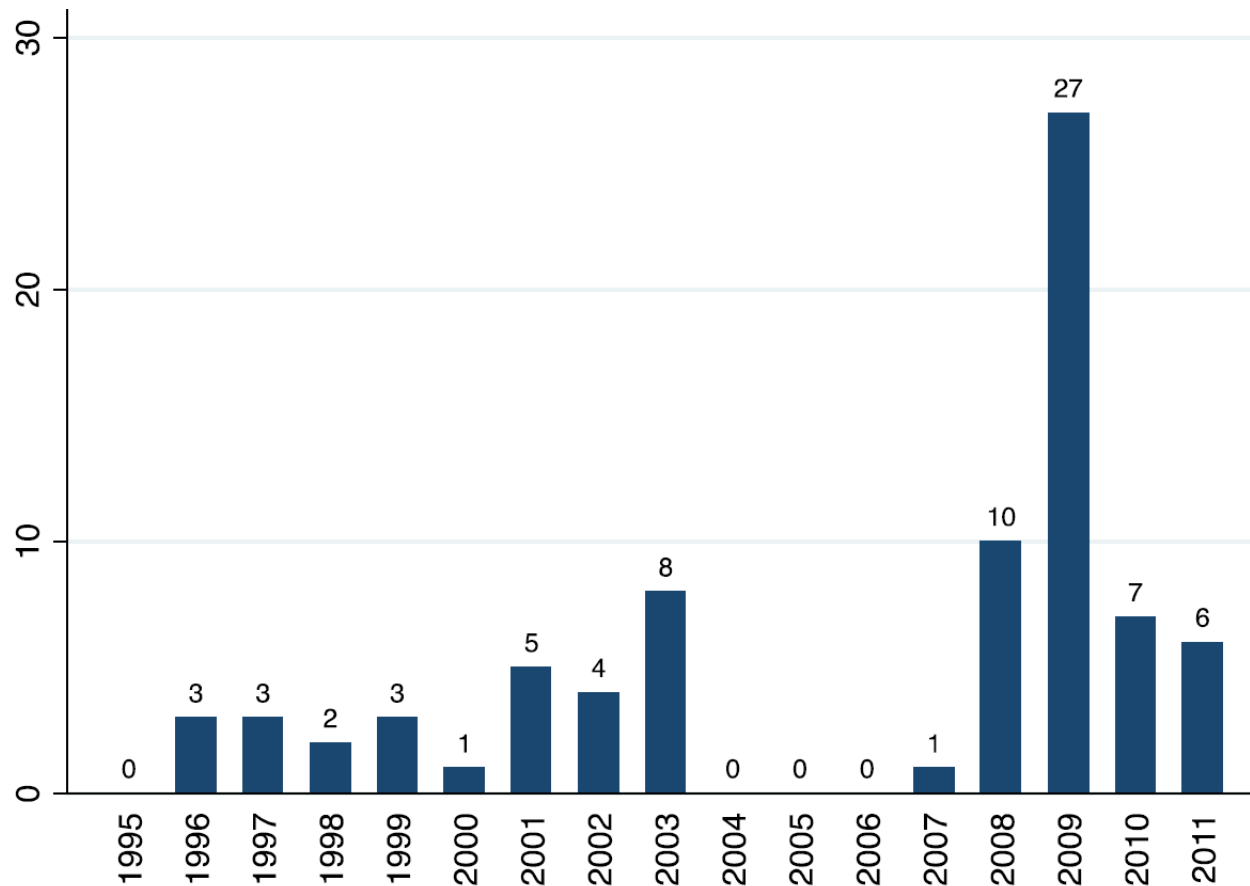


Figure 4. Output crises in the EU, 1995–2011. Source: G. Bird and A. Mandilaras, 2013 p.6

Decomposing the growth rate into its trend and cycle components

- As a further check, we decompose the growth rate into its trend and cycle components using a Hedrick-Precott filter – see Figure. 5.
- This allows us to model the cycle as a continuous variable.
- How does the cycle relate to the private and government balances?

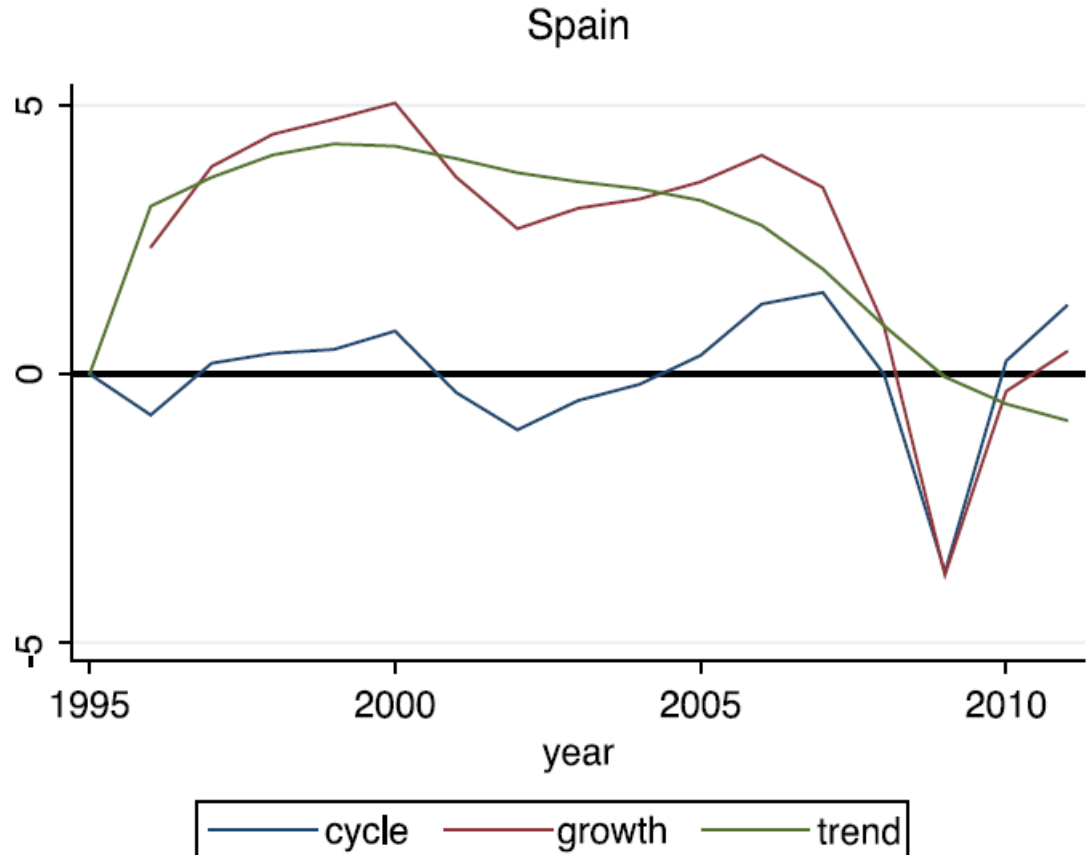
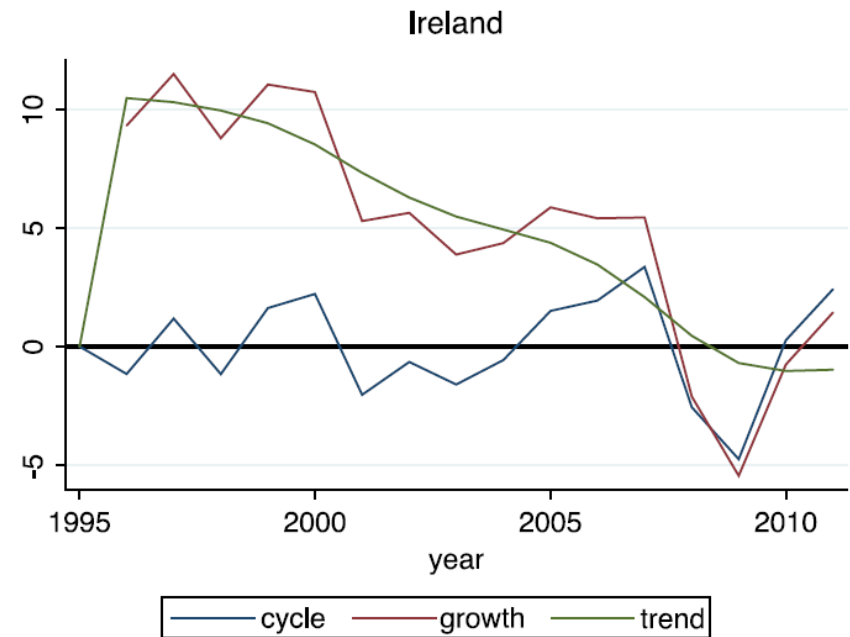
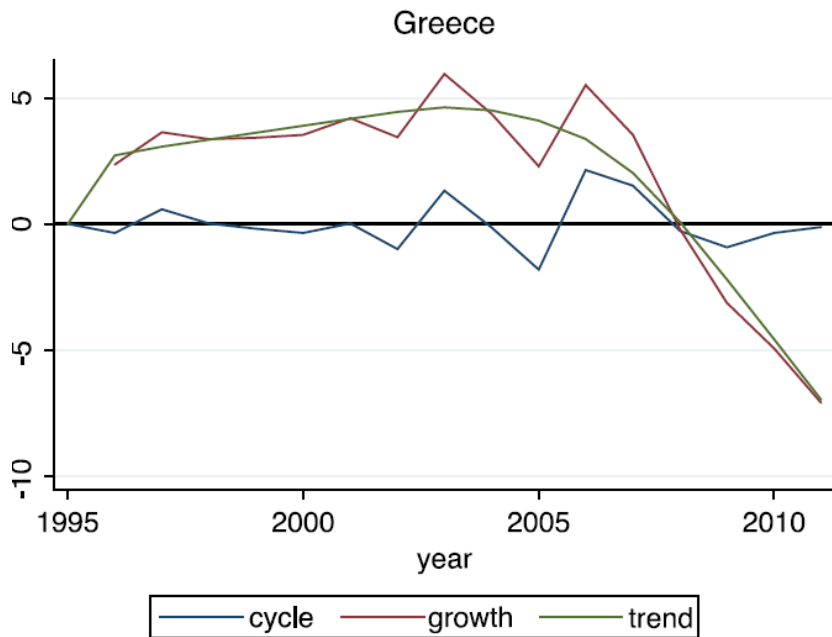


Figure 5. Growth, trend and cycle, PIIGS (1995–2011).

Decomposing the growth rate into its trend and cycle components /2



Private balance

- In the contemporaneous estimations we see that the sign of the private balance has changed.
- In addition, the positive relationship between output crises and the private balance remains statistically significant across specifications.
 - The **gap between private saving and investment increases during output crises**.
 - In additional estimations we find that this result is **driven by the investment component** of **the private** balance, i.e. it is the reduction in investment during crises that underlies the
- **positive relationship between output crises and the private balance.**
This is a point that we discuss further later.

In the same estimations, we also break down the government balance into its components, tax and government spending.

- We find a **significant negative relationship between tax and output crises** across the three specifications, indicating that when there is a crisis, tax revenue declines.
- Correspondingly, the **relationship between output crises and government spending is positive**, showing that **government expenditure rises during crises**.

The fiscal compact: discussion and assessment

- that fiscal deficits may sometimes be an important or determining factor in causing economic crises,
- the empirical evidence presented in this paper raises some doubts about their relevance in the context of sharp output shortfalls in Europe.
 - Even though results from a subset of specifications are compatible with the existence of a significant negative **relationship between the government balance and output crises**,
 - **appropriate statistical tests reject** these specifications **in favour** of others in which **the relationship disappears**.
- Even if the relationship had been a robust one, it would be **extremely difficult to substantiate a causal effect of deficits on output shortfalls**.

fiscal consolidation may even make matters worse

- Our econometric analysis has shown that such **shortfalls may be more significantly linked to private sector imbalances.**
- The **contraction of investment during output** crises is statistically significant, **while private savings appear unchanged.**
- **The overall result is that the private sector balance increases.**
- Two other factors that may be associated with sharp declines in output are the changes in competitiveness associated with real exchange rate appreciation, and banking crises.
- Seeking to **eliminate fiscal deficits** and aiming for **balanced budgets** throughout the eurozone **may do little to reduce the likelihood of future economic crises.**
- When faced with an output crisis, **fiscal consolidation, as envisaged in the fiscal compact, may even make matters worse and lead to more crises.**

Current account balance of payments equilibrium across all EMU member countries?

- Whether or not **fiscal deficits are excessive** depends on a range of other factors including the **size of the output gap, the size of private sector imbalances**, the amount of outstanding **debt** and the relationship between **fiscal deficits** and economic **growth**,
 - which itself may be different in the short term and in the long run
- If the assumption behind Europe's fiscal compact is that balanced budgets will lead to **current account balance of payments equilibrium across all member countries** of the euro zone,
 - then it follows from the algebra of the open economy expression **that all private sectors** throughout euro zone countries **will also need to be in balance**.
- This is neither how things have stood in the past nor how they seem likely to stand in the foreseeable future.
- In any case, the idea of **achieving balance between domestic saving and investment is at odds with the basic purposes of monetary integration**.

EMU MS running balance of payments deficits while others are running surpluses

- If it is accepted that some countries will, at certain times, be running **balance of payments deficits** while **others are running surpluses**,
 - then the implication is that there will have to be either private sector or public sector imbalances that reflect this state of affairs.
- if it is accepted that private sector saving may not always equal private sector investment in all countries, **with saving exceeding investment in some, and falling short of it in others**, then it follows that **current account balance will require the public sector to be in deficit in the former group and in surplus in the latter group.**

Current account versus fiscal deficit

- There is a **strong analytical connection** between the stance of **fiscal policy** and the observation that the balance of payments is a **zero sum game**.
- **Not all countries can simultaneously run current account surpluses.**
- Attempts to **reduce current account deficits will fail** if they are not accompanied
 - **by a willingness amongst surplus countries to see their surpluses decline.**
- In the absence of this willingness, such attempts will result in falling income and rising unemployment.
- Similarly, if within the euro zone **the fiscal compact forces countries to eliminate fiscal deficits**, but **does nothing to encourage** countries with **fiscal surpluses to reduce** them,
 - then it is likely that there will be a significant **fall in euro zone income** and a significant **increase in euro zone unemployment**

Evidence collected by the IMF

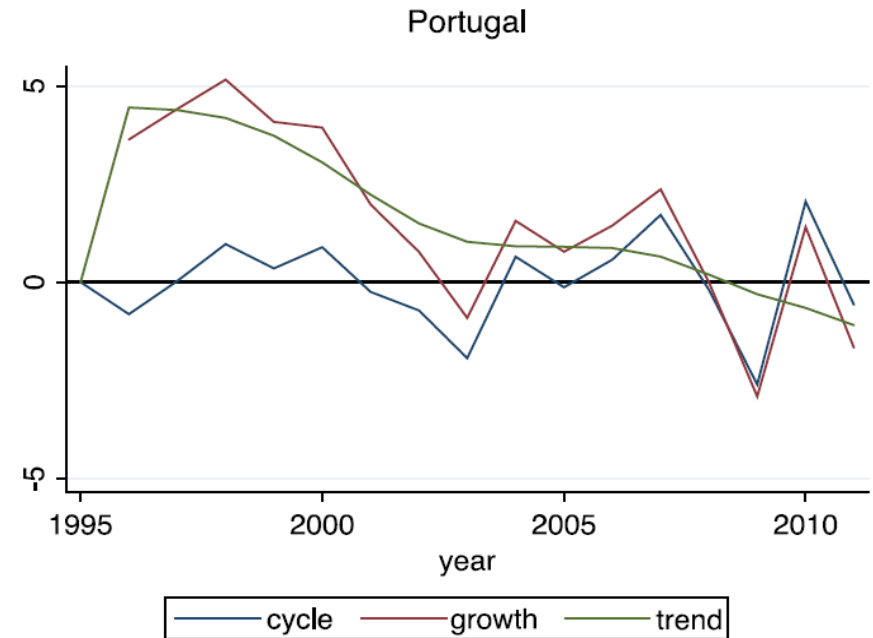
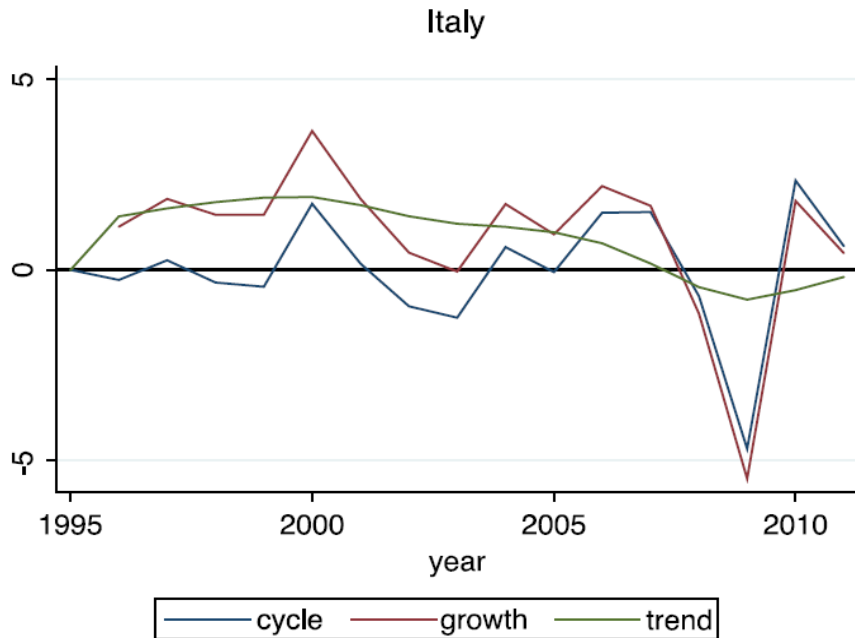
Adopting tighter fiscal policy has a contractionary effect

Evidence collected by the IMF, and briefly referred to earlier, confirms that **adopting tighter fiscal policy has a contractionary effect.**

In a comprehensive examination of the effects of 'fiscal consolidation' based on historical experience and simulation,

- the **Fund concludes** that it “**typically reduces output and raises unemployment in the short term**”(IMF 2010).
- The Fund also claims that its findings suggest that “**budget deficit cuts are likely to be more painful if they occur simultaneously** across many countries, and if monetary policy is not in a position to offset them.”[like in the EMU]
- **This is the position in which Europe finds itself in 2012/13.** (G. Bird and A. Mandilaras, 2013)

Budget deficit cuts effects of growth in after fiscal compact (2010)



Fiscal compact is its built-in asymmetry

A further potentially fundamental problem with Europe's fiscal compact is its built-in asymmetry.

- **It discourages structural fiscal deficits but does not discourage**, and even encourages, **structural fiscal surpluses**.
- The compact would be internally consistent **if the objective was to achieve universal balance across current accounts**, private sector and public sector accounts – although, as noted above, this **undermines the basic purposes of economic and monetary integration**.
- But there is an internal **inconsistency** where a limit is imposed on structural budgetary deficits **but no similar limit is imposed on structural fiscal surpluses**.
- **Such asymmetry creates a recessionary bias**. [Germany do care because it external demand, emerging countries, is now in expansion and has a large exporting sector]
- It makes economic crises **involving sharp output declines more likely**.
- **Countries will be left with no instruments with which they can seek to manage aggregate domestic demand**.

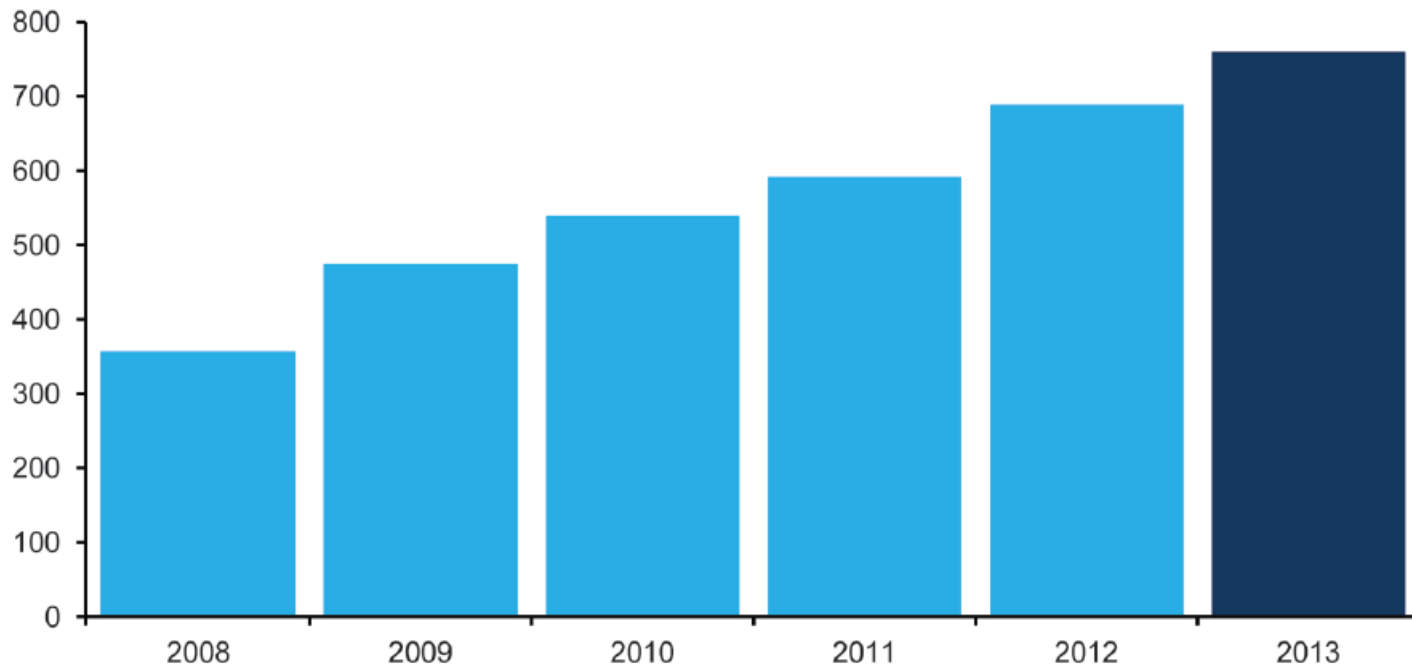
Exercise: The fiscal compact: discussion and assessment

- Comment the following graphs about Spain
- Relate with the available economic theory

Spanish public debt evolution

Exhibit 4

Spanish central government outstanding debt (billions of euros)

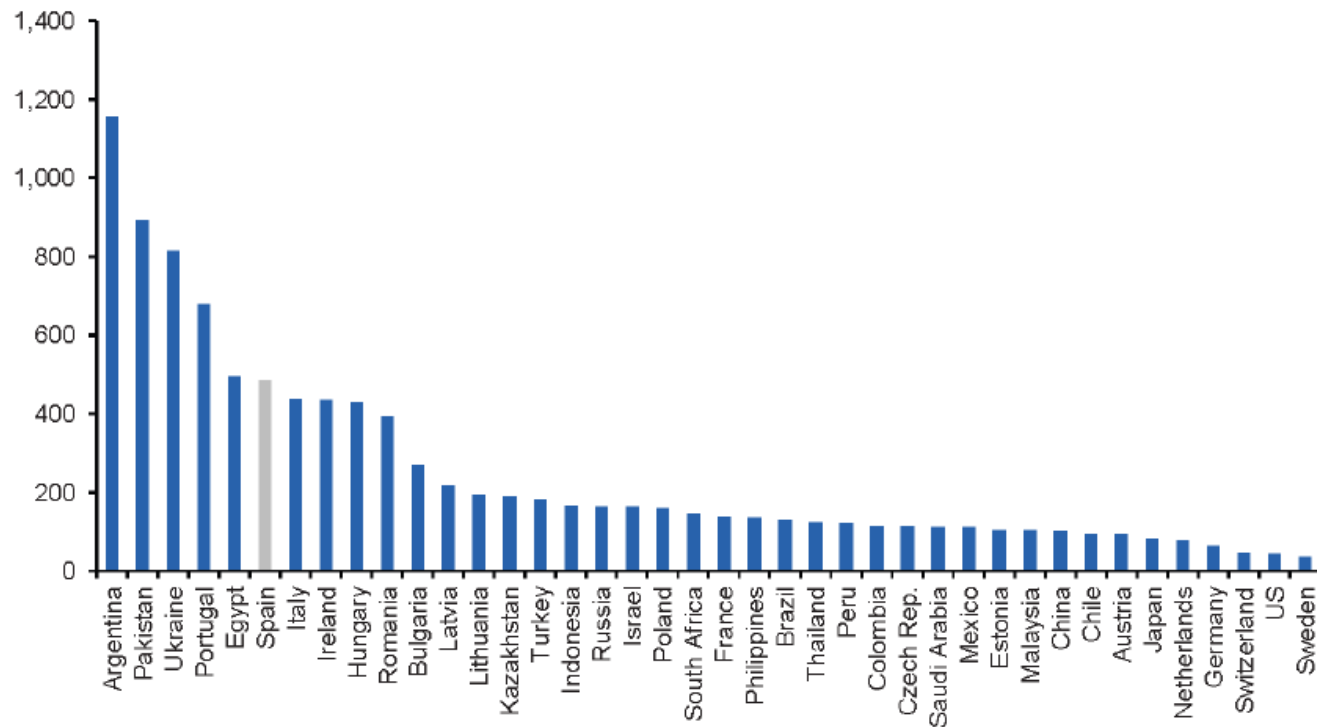


Sources: Afi, Spanish Treasury.

Credit Default Swaps (CDS) Spread 2012

Exhibit 9

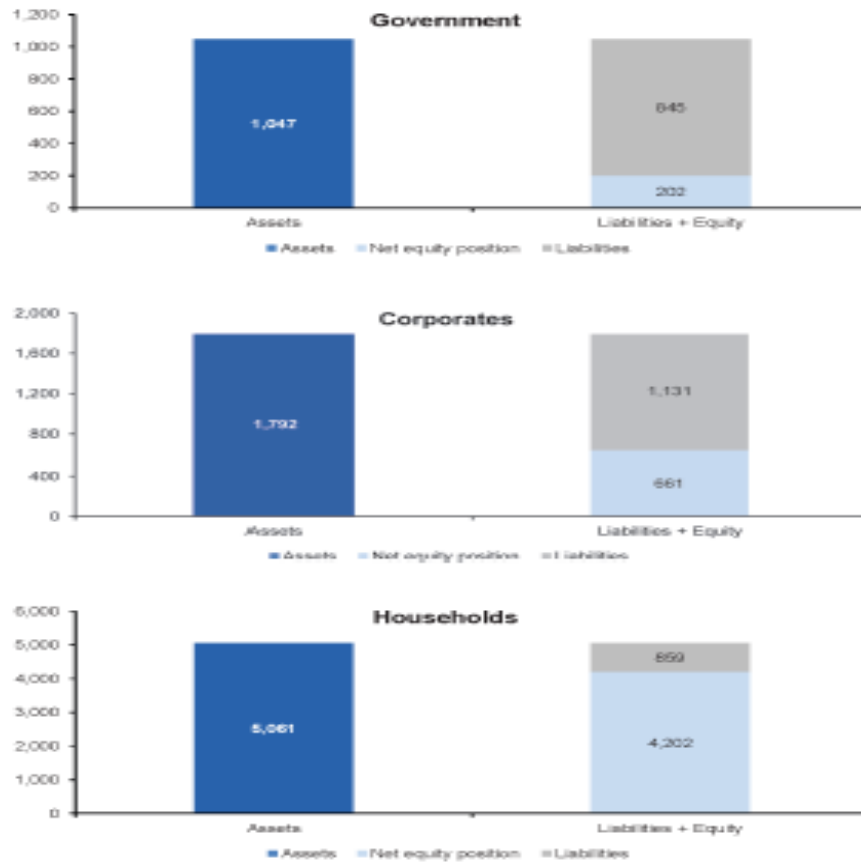
Sovereign CDS spread



Source: Factset.

Balance sheets

Exhibit 11
Balance sheets of Spanish government, corporates, and households



Sources: Bank of Spain, Funcas, Artano.

Asset split of Spanish household

Are the Spaniards the richest?

Exhibit 12

Asset split of households (% of total assets)

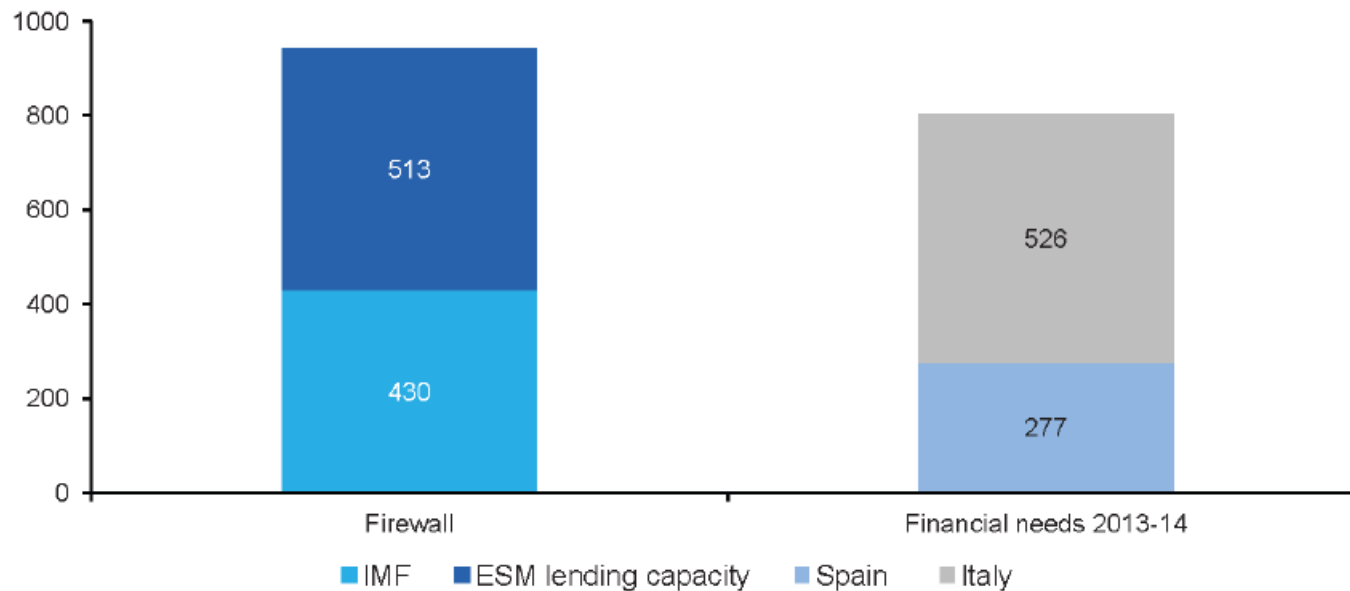


Source: Oliver Wyman.

Resources and public needs in Spain and Italy

Exhibit 13

ESM/EFSF resources and gross financial public needs in Spain and Italy (€ bn.)

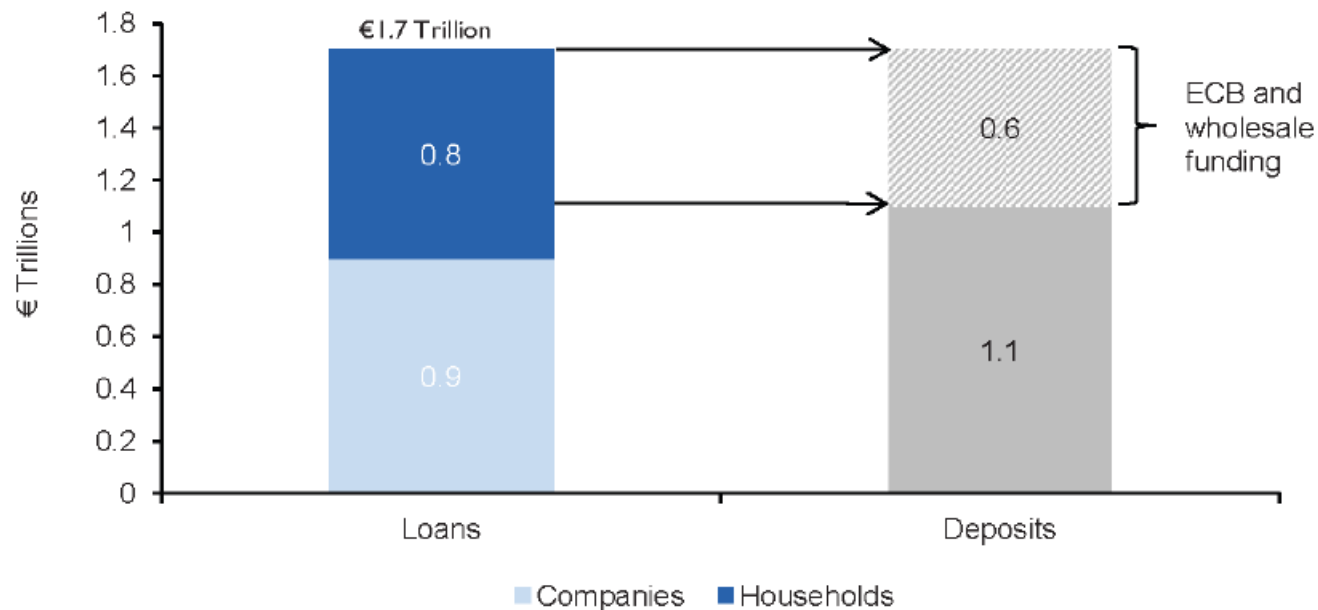


Source: Bloomberg.

Financial system loan book funding Structure, Spain and the ECB funding

Exhibit 14

Financial system loan book funding structure

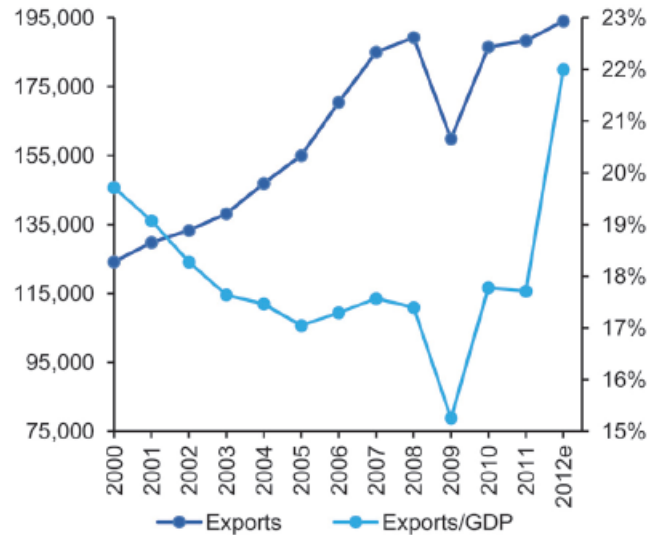


Sources: Arcano, Bank of Spain.

Spanish Exports

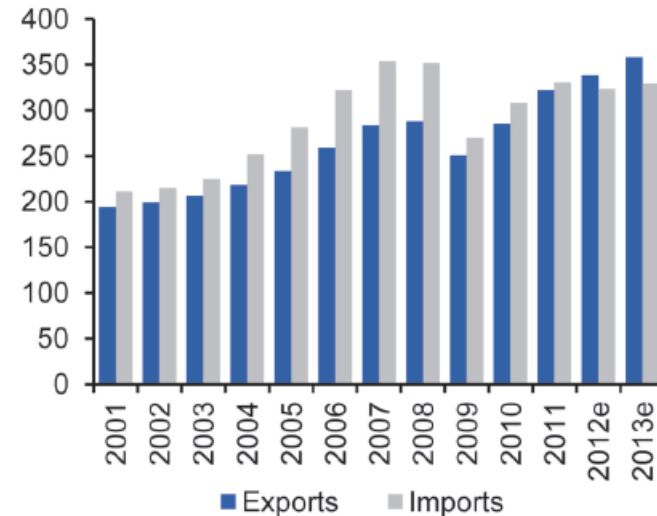
Exhibit 15

Evolution of Spanish exports (€ mm.)



Source: INE.

Spanish exports and imports of goods and services (€ bn.)



Sources: Historical figures and projections provided by Eurostat.

Residents versus Rest of the World debt tenants

Exhibit 2

Spanish government debt holdings (% of total)

