



**Discussion Papers in Economics**

**WILL EUROPE'S FISCAL COMPACT HELP AVOID FUTURE  
ECONOMIC CRISES?**

By

**Graham Bird**

(Claremont McKenna College, Claremont Graduate University and  
University of Surrey)

&

**Alex Mandilaras**

(University of Surrey)

DP 12/12

Department of Economics  
University of Surrey  
Guildford  
Surrey GU2 7XH, UK  
Telephone +44 (0)1483 689380  
Facsimile +44 (0)1483 689548  
Web [www.econ.surrey.ac.uk](http://www.econ.surrey.ac.uk)  
ISSN: 1749-5075

## **Will Europe's Fiscal Compact Help Avoid Future Economic Crises?**

Graham Bird\* and Alex Mandilaras\*\*

\*Claremont McKenna College, Claremont Graduate University and University of Surrey

\*\* University of Surrey

### **Abstract**

The eurozone crisis has focused attention on what caused it, how it can be handled and what can be done to avoid future crises. Against this background all but two member states of the European Union have signed a draft treaty, the 'fiscal compact', that seeks to eliminate structural fiscal deficits. This paper critically examines the theoretical logic behind the compact. It also empirically estimates the relationship between fiscal deficits and economic crises in Europe. It concludes that economic crises, measured in terms of output shortfalls, have had little to do with public sector deficits. Private sector deficits and crises in the banking sector appear to be more important. The paper also identifies a number of flaws in the design of the compact and argues that it will do relatively little to ensure that future crises are avoided. The fact that in spite of these reservations the agreement was signed reflects the significance of a particular combination of contemporary political economy factors.

## 1. Introduction

It is often assumed that large fiscal deficits eventually lead to crises in one way or another. The first generation currency crisis model, for example, presents fiscal deficits as playing the key role in causing crises. Here fiscal deficits are monetised. This results in inflation, a decline in competitiveness, a current account deficit, a fall in international reserves, evaporating confidence and a collapse in the value of the currency. The Greek crisis in the late 2000s has also been widely attributed to loose fiscal policy; although in this case it did not lead to a rapid growth in the money supply but to an excessive build up of debt.

Against such a background, it is easy to see why it might also be assumed that constraining or eliminating fiscal deficits will significantly reduce the incidence of crises. The 'fiscal compact' negotiated by European states in 2012 appears to reflect this point of view. But is it reasonable to make this assumption? Does it necessarily follow that Europe's fiscal compact will be an effective way of avoiding future crises? A number of elements are contained in answering this question. The first relates to the theoretical connections between fiscal deficits and economic crises, and to the macroeconomic effects of fiscal policy. The second involves the empirical connection between fiscal deficits and crises. Has the crisis in Europe been fiscally driven or have there been other forces at work? To make sense of Europe's fiscal compact, it would need to be established that both from a theoretical and empirical perspective there are significant links between fiscal deficits and the incidence of crises.

The third element relates to the detailed design of the compact. Does it provide an appropriate avenue for fiscal coordination in Europe, or is it possible that the compact could make matters worse? The final element is whether the compact will actually be implemented and whether the signatories will comply with the commitments that they have made. In this article we try to answer these questions.

The article is organised as follows. Section 2 provides a brief institutional description of Europe's fiscal compact. Section 3 investigates the links between fiscal deficits and crises from a theoretical point of view, and also discusses the contemporary (and less contemporary) theoretical debates about the effects of fiscal policy. Section 4 uses descriptive data to consider the causes of the crisis in the eurozone. Section 5 goes on to examine more formally the connections between fiscal deficits in Europe and the eurozone crisis. Section 6 assesses the fiscal compact in the light of the analysis in the previous sections and considers whether the compact could make economic crises more likely and more severe rather than less likely. It also explores the political economy of the compact and the likelihood that countries will honour their commitments. In the concluding section we examine the implications of our analysis for the design of macroeconomic policy within Europe directed towards reducing the likelihood of future crises.

## **2. Europe's fiscal compact: the institutional background and details**

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 twelve eurozone members. The TSCG has the status of an intergovernmental agreement, although the intention is to adopt it as European law within five years of its activation. Only eurozone members are bound by the compact, although other EU signatories will become bound by it if they join the eurozone.

The compact reflects the latest stage in an historical trend towards attempting to impose tighter fiscal constraints in Europe. 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 per cent of GDP and the amount of debt to no more than 60 per cent 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). The reform of the SGP was referred to as the 'six pack' because it involved five new regulations and one directive. Following the six pack reform, some members of the eurozone, led by Germany, sought to strengthen still further Europe's oversight and influence over fiscal policy in member states and to extend enforcement by involving the European Commission and the European Court of Justice. 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 favour of member states adopting balanced budget laws in order to limit the future accumulation of debt (so-called 'debt brakes'). Although these ideas met with some initial resistance, the fiscal compact shares some similar features.

The compact involves the following components. First, general government budgets are to be balanced or in surplus, with an annual structural deficit not exceeding 0.5 per cent of GDP (the rule is less strict for countries with government debt significantly below 60 per cent 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. The legal provisions (quoting from the draft treaty) should have 'binding force and permanent character, preferably constitutional.' Third, member states with public debt in excess of 60 per cent of GDP are required to reduce it by an average annual rate of 5 percentage points until they comply with the 60 per cent upper limit. 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 per cent 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.

### **3. The fiscal compact and economic theory**

The fiscal compact raises a range of controversial theoretical issues. Many of them are fundamental to enduring debates in macroeconomics. Keynesians and neo-Keynesians favour the active use of fiscal policy as a tool for manipulating aggregate domestic demand in order to deliver non-inflationary 'full' employment. This implies injecting aggregate demand into the economy by running a fiscal deficit when there is a problem of low economic growth and high unemployment, and running a fiscal surplus when there is a problem of inflation and an unsustainable current account deficit. According to this view, the structural components of the fiscal balance should be used to reinforce the automatic counter-cyclical and stabilizing effects of fiscal policy, as deficits increase during a recession with the decline in tax revenue and the increase in government expenditure on welfare programmes and unemployment benefit. In circumstances where there is a liquidity trap that prevents interest rates from being reduced further, Keynesians believe that it is unwise to limit the discretionary use of fiscal policy.

Critics of this approach include monetarists and new classical macroeconomists. While expressing relatively little opposition to automatic fiscal stabilizers, they strongly oppose the manipulation of structural deficits in an attempt to manage aggregate domestic demand. The essence of their case rests, for monetarists, on beliefs that there are long and variable lags in the operation of fiscal policy that may result in it being destabilizing. By driving up the rate of interest they also claim that increased government expenditure crowds out a broadly equivalent amount of private sector investment. For new classical macroeconomists it rests on the notion of Ricardian equivalence. An increase in the size of the fiscal deficit encourages households to defer consumption and increase saving in anticipation of higher levels of taxation in the future. For both groups of theorists, the conclusion is that fiscal policy will be an ineffective instrument for affecting domestic aggregate demand.

Critics also believe that governments will be unable to resist the temptation to exploit their ability to use fiscal policy for short term political purposes and that they will opt to expand demand in order to garner political support, particularly shortly before elections, only to opt for tighter fiscal policy once they have been elected.

More recently, critics of fiscal stimulation as a way of pulling out of recession have gone further and have claimed that fiscal deficits and debt have an adverse effect on household and market confidence and therefore on aggregate demand. They argue that, as a consequence of this, fiscal deficits are actually contractionary. While traditionally there would have been a debate about the size of the government expenditure multiplier, there is now a debate about its sign, with critics of fiscal stimulation arguing that fiscal deficits have a negative effect on economic growth and that 'fiscal austerity' has a positive effect by creating greater confidence; the so-called 'expansionary fiscal contractions hypothesis'. Much of the recent literature has focused on these issues (see, for example, Alesina, 2010, Elmendorf and Furman, 2008, Freedman et al. 2010, Ilzetzki et al. 2009, IMF, 2010, Romer and Romer, 2010, Tsibouris et al. 2006, and von Hagen and Strauch, 2001).

Another simple, but nonetheless useful macroeconomic concept in assessing the impact of fiscal deficits is the familiar open economy expression:

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

This expression lies at the heart of the 'twin deficits' approach that links fiscal deficits and current account deficits. The formula shows that, provided there is no change in the private sector balance between savings (S) and investment (I), then it follows that an increase in government expenditure (G) relative to tax revenue (T), or a fall in T relative to G will be associated with an increase in imports (M) relative to exports (X) and a deterioration in the current account of the balance of payments.

With an enduring fiscal deficit, the current account deficit will ultimately become unsustainable and then a crisis is likely to occur. However, the central assumption relates to the stability of  $(S - I)$ . If the private sector balance is unstable, changes in it can either endorse or neutralise the effect of the changing fiscal balance on the current account. Thus, for example, an increase in the fiscal deficit will not lead to a weaker current account if private sector saving relative to investment increases by at least as much as the increase in the fiscal deficit. For this reason, fiscal and current account deficits may not in practice be twinned.

The open economy expression shows how current account deficits may arise from excesses in either the private sector or the public sector, and that correcting fiscal deficits will not necessarily lead to a reduction in current account deficits. Large current account deficits that reach crisis proportions may in theory occur alongside situations where there is fiscal balance or even a fiscal surplus if the private sector exhibits a sufficiently large deficit. As noted above, some aspects of theory assume that there is a functional connection between the private sector and the public sector, with an increase in the fiscal deficit bringing about an increase in private sector saving and a fall in private sector investment, either through financial crowding out and Ricardian equivalence or through the adverse effects of the deficit on debt and therefore on market confidence.

From this albeit simplistic discussion of the underlying theory, it can be seen that, in principle, the association between fiscal deficits and crises is far from straightforward. Fiscal deficits may lead to crises where they result in unsustainable current account deficits and excessive debt accumulation that damages market confidence. The effects will be more pronounced where financial markets have miscalculated risks and where domestic saving is low. However, they may not, where they occur against a background of underutilised productive potential and significant output gaps, or where crowding out



serves to simply redistribute aggregate demand between the private and public sector rather than affect the overall level of demand; although in this latter case there are likely to be different marginal propensities to consume and to import across sectors, and sectoral redistribution may therefore indirectly affect important macroeconomic aggregates. Furthermore, fiscal deficits may not lead to crises where the private sector is in surplus and where the stock of debt is low.

Policy makers who have advocated tighter fiscal discipline in the form of Europe's fiscal compact appear to have been more persuaded by the argument that fiscal deficits have had deleterious effects and that they have significantly contributed to the incidence of crises. They therefore also believe that eliminating fiscal deficits will reduce the incidence of crises. Against this theoretical background, in what follows we proceed to investigate some empirical connections. In the next section we plot out what was happening to fiscal imbalances, current account imbalances and competitiveness prior to the crisis in the eurozone at the end of the 2000s. After that, and in section 5, we more formally estimate the relationship between fiscal deficits and crises in the form of declines in output.

#### **4. Fiscal deficits and crises in Europe: some descriptive statistics**

Chart 1 provides information about fiscal deficits in the build up to the crisis in the eurozone. All of the countries shown in the chart have been affected by the crisis but, as the chart shows, not all of them had experienced fiscal deficits in the period prior to it. Thus in 2007, both Ireland and Spain had fiscal surpluses. Fiscal deficits were more limited in Italy and Portugal than they were in Greece. Indeed, it is Greece that provides the most dramatic evidence of a connection between fiscal deficits and crisis. The question then arises as to whether the situation in Greece has been inaccurately assumed to apply to all problem countries.

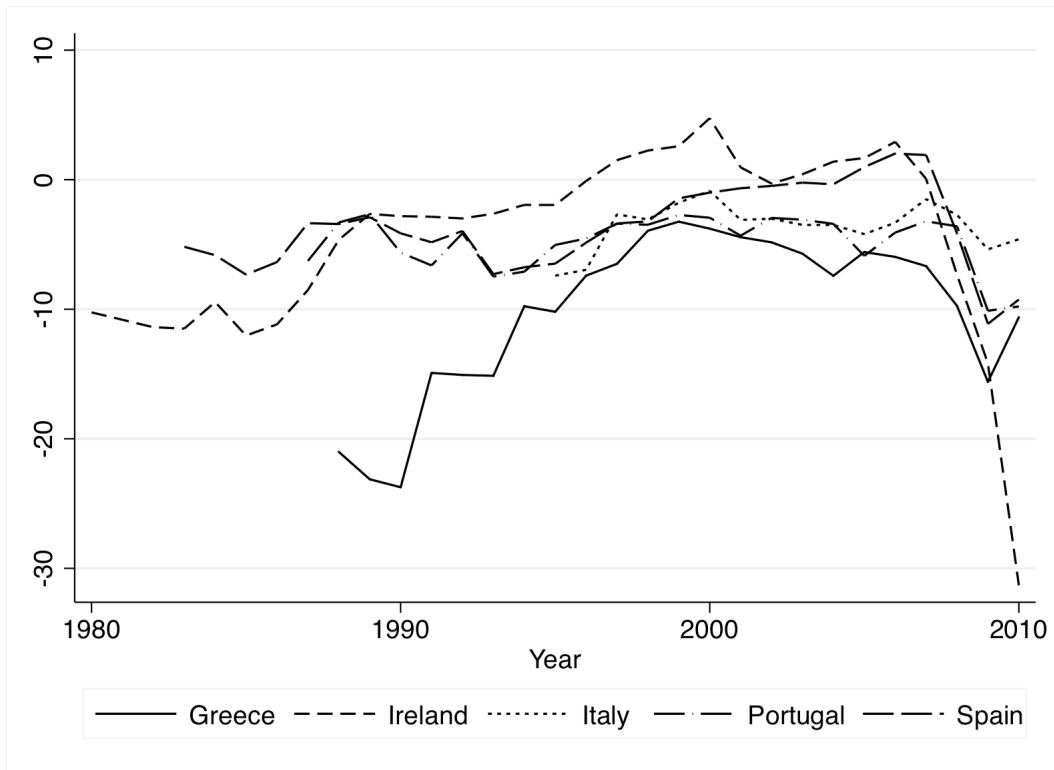


Chart 1: Budget Balance (%GDP) for Selected Eurozone Members

Other imbalances apart from fiscal ones also appear to be connected with the eurozone crisis. Chart 2 for example shows that Portugal, Ireland, Italy, Greece and Spain (conventionally referred to as the PIIGS) had persistent current account deficits in the period since 2000, with Ireland, over the period 2010-2011, being the only exception. Chart 3 shows that for all the PIIGS the real exchange rate appreciated over the period 1999-2011 relative to other members of the eurozone. In the case of Ireland, the data in Chart 1 show the rapid decline in the budgetary balance that was associated with the government's policies designed to underwrite the banking system. This would suggest that economic crises may, in some circumstances, be the consequence of problems in the private sector and in the banking sector.

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. A similar argument is developed in more detail by Wihlborg et al. (2010) where they claim that the eurozone crisis 'isn't just fiscal'.

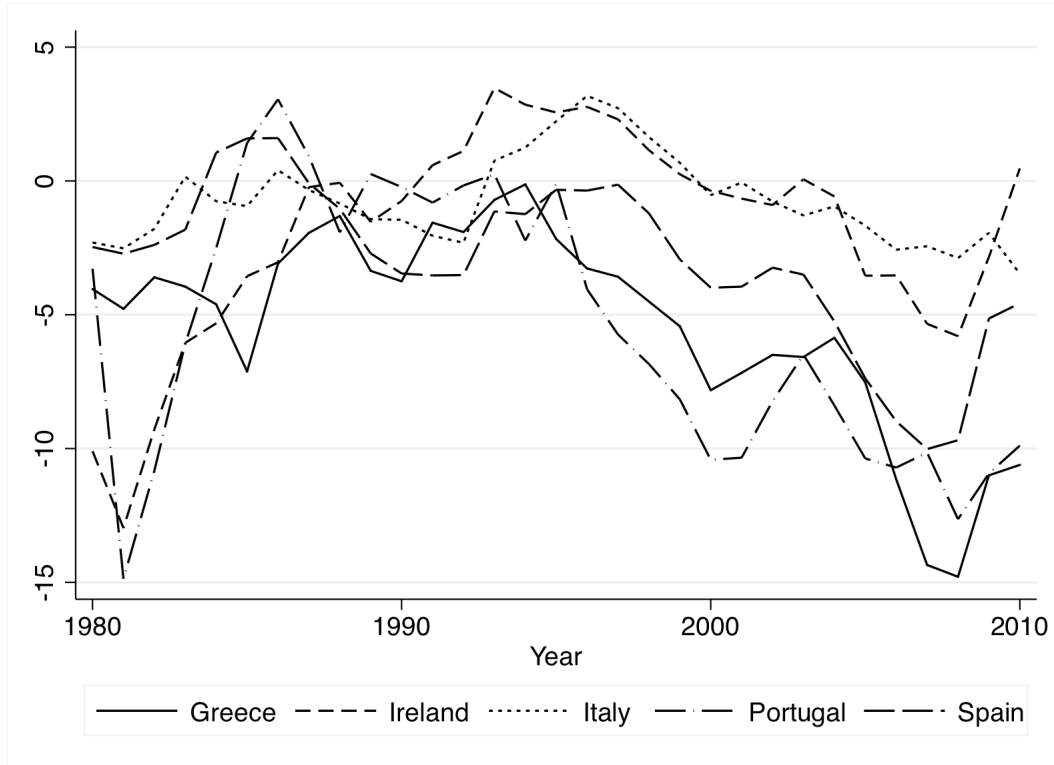


Chart 2: Current Account Balance as % of GDP, PIIGS (1980-2010)

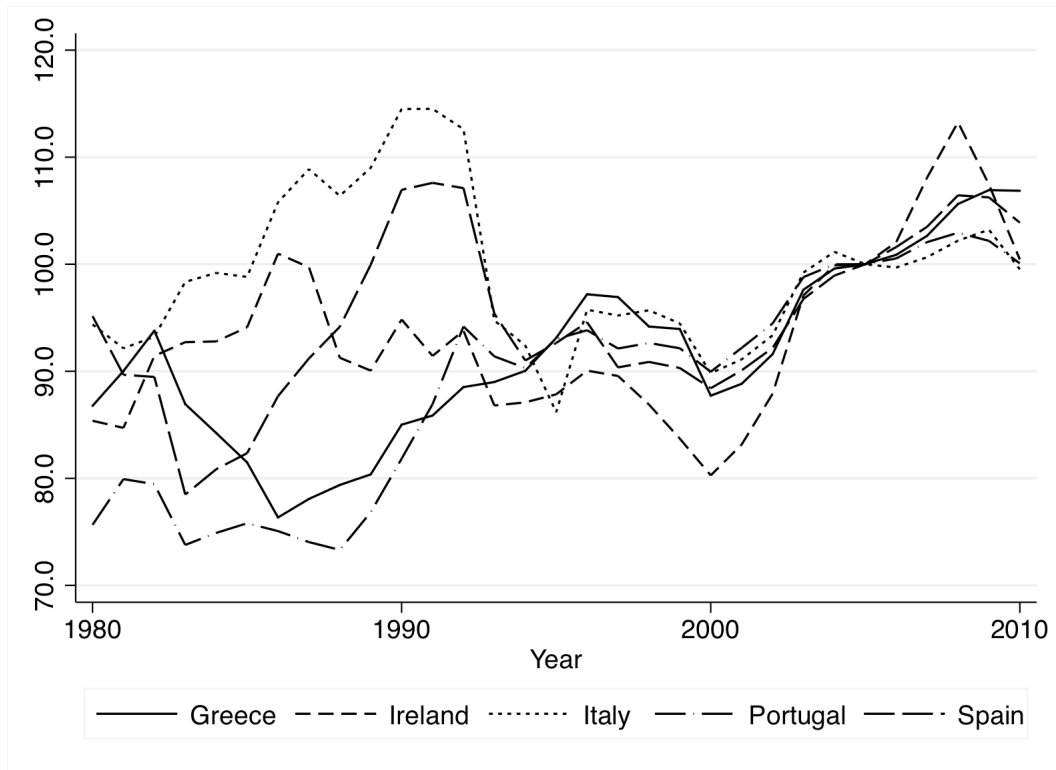


Chart 3: Real Effective Exchange Rate, PIIGS (1980-2010)

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.

However, before returning to this issue and a fuller examination of the logic behind Europe's fiscal compact, in the next section we empirically investigate the association between fiscal deficits and economic crises in a little more detail.

## 5. Fiscal deficits and crises in Europe: regression analysis and results

An economic crisis can manifest itself in several ways. In this paper, we confine ourselves to examining contributing factors to significant drops in real output. We

define an output crisis as an annual percentage reduction in real GDP that lies in the 10<sup>th</sup> percentile of the empirical distribution (for each country).<sup>1</sup> As can be seen from Table 1 there are 74 such episodes in our sample.<sup>2</sup> Chart 4 shows that output crises tend to be synchronised. This is particularly evident for the recent crisis, during which almost every EU country experienced a significant drop in output.

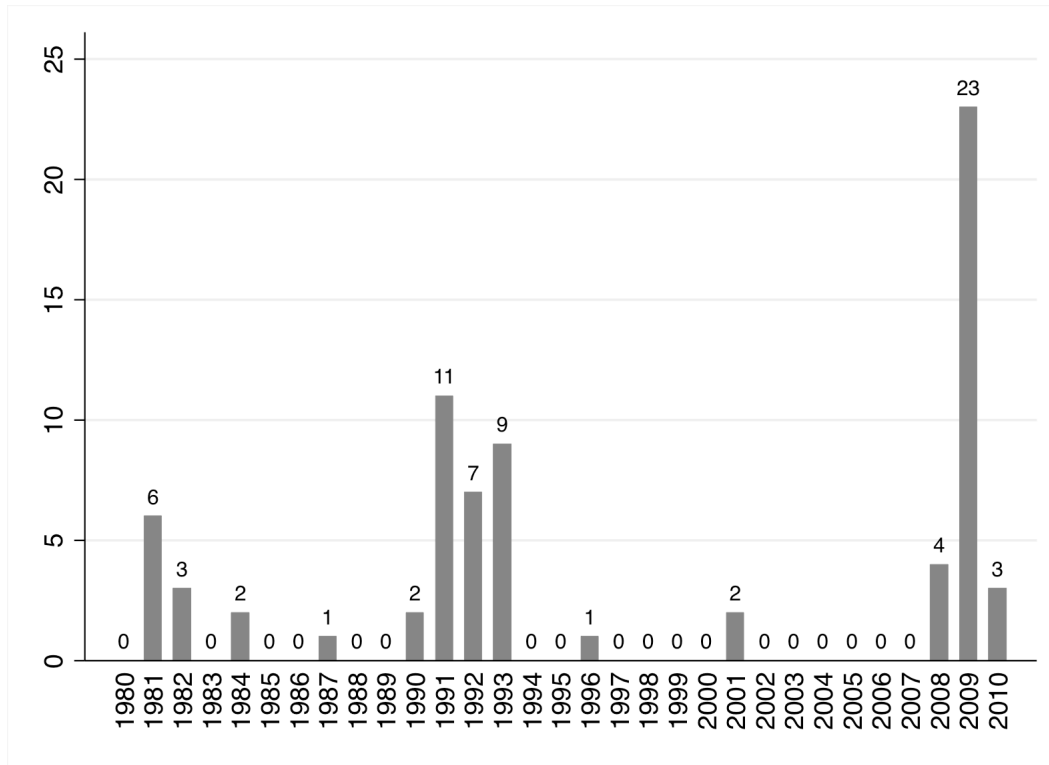


Chart 4: Output Crises in the EU, 1980-2010

Data on the budget balance (% GDP) are from the Economist Intelligence Unit. We construct an additional variable by subtracting investment from national savings (again expressed as % GDP). This helps us to reflect the balance between private sector saving and investment. Data on these two variables are taken from the IMF's *World Economic Outlook*. Our first specification is supplemented by a dummy variable for EMU membership. The first column in Table 1 shows how many years a country had been a

<sup>1</sup> Real GDP data are from the World Bank's World Development Indicators.

<sup>2</sup> Our sample consists of the 27 European Union members, as in 2010.

eurozone member by 2010. We estimate a logit model with cluster-robust errors, where all the explanatory variables, with the exception of EMU membership, are lagged by one year.<sup>3</sup> The estimated coefficients as well as the marginal effects are reported in the first two columns of Table 2.

We discover that the difference between national saving and investment is significantly associated with output crises, in contrast to the budget balance, which is insignificant. The negative sign implies a negative relationship between output crises and national savings minus investment i.e. improvements in the latter are linked to a reduced probability of a sharp recession. Other things being given, an increase in national saving, incorporating private sector saving is associated with the reduced probability of an output crisis. Of course, this is not necessarily a causal effect, as the results may reflect an improving private balance during non-crisis years. The EMU dummy is also significant indicating that output crises occur more frequently for countries that have adopted the euro. This may imply that the loss of the exchange rate instrument has carried a cost in terms of output shortfalls.

As a robustness check, but not reported in detail here, we also estimated a model that includes consumption, investment, the current account balance and the budget balance (all expressed as a percentage of GDP), as well as the EMU dummy on the right hand side of the equation. Again we find that the budget balance is insignificant. In addition to the EMU dummy, consumption and the current account balance are significant and have the expected negative signs. Output crises are significantly linked to higher levels of private sector consumption and to the current account deficits with which this may be associated. But they are not linked to fiscal deficits.

Moving on, we consider an extended specification of our base model with additional control variables. Consistent with our previous discussion, we include the percentage

---

<sup>3</sup> The panel logit estimator is not significantly different than the pooled estimator, i.e. the panel level variance is insignificant. Results reported here are from a pooled model.

change in the real effective exchange rate, and the incidence of banking crises. Data on banking crises are taken from Reinhart and Rogoff (2008), and data on the effective rate are from the *World Development Indicators*. Average values of these variables for each EU country are reported in Table 1. We also include data on debt, again taken from Reinhart and Rogoff, since the fiscal compact and the SGP incorporate limits on it, and since much of the public discussion of the eurozone crisis has focused on excessive indebtedness. Finally, we include data on international reserves (from WDI) since, in principle, these should allow countries to cushion themselves against output shortfalls.

In the extended estimation, national savings minus investment and the EMU dummy retain their signs and statistical significance. Interestingly, the budget balance now has a *positive* and significant coefficient. It is difficult to know how to interpret this result. It would seem to suggest that automatic stabilisation is not a dominant factor in influencing the budget balance during recessions. Perhaps the statistical association captures the link between measures of fiscal austerity and output. This connection has been examined in detail by the IMF (IMF, 2009). Debt seems to have a similar relationship with output; increases in indebtedness of the central government are associated with less frequent output crises.

Table 1: Descriptive Statistics 1980-2010

	<b>EMU Dummy</b>	<b>Output Crisis</b>	<b>Banking Crisis</b>	<b>Growth</b>	<b>S - I</b>	<b>Budget Balance</b>	<b>REER</b>	<b>Debt</b>	<b>Reserves</b>
	(Sum)	(Sum)	(Sum)	(Mean)	(Mean)	(Mean)	(Mean)	(Mean)	(Mean)
<b>Austria</b>	12	3	3	2.02	-0.25	-2.85	0.10	49.51	5.92
<b>Belgium</b>	12	3	3	1.82	1.53	-4.64	-0.43	97.59	4.84
<b>Bulgaria</b>	0	3	0	1.57	-3.95	-1.71	5.24	62.37	22.35
<b>Cyprus</b>	3	2	0	4.29	-4.58	-4.58	-0.32	NA	20.56
<b>Czech Rep.</b>	0	2	0	1.59	-3.78	-2.66	3.66	NA	21.54
<b>Denmark</b>	0	3	9	1.73	1.37	0.06	0.27	57.06	9.89
<b>Estonia</b>	0	3	0	1.32	-7.20	0.23	NA	NA	13.99
<b>Finland</b>	12	3	4	2.20	1.26	1.15	-0.58	33.51	5.35
<b>France</b>	12	3	5	1.78	0.51	-3.46	-0.53	48.45	2.54
<b>Germany</b>	12	3	3	1.72	0.62	-1.76	-0.47	27.10	3.61
<b>Greece</b>	10	3	8	1.73	-5.37	-10.10	0.63	86.57	4.69
<b>Hungary</b>	0	3	8	1.17	-3.97	-4.62	1.83	91.69	16.16
<b>Ireland</b>	12	3	4	4.14	-1.94	-4.59	0.44	65.74	8.13
<b>Italy</b>	12	3	6	1.38	-1.08	-3.60	0.06	NA	3.13
<b>Latvia</b>	0	3	0	0.56	-6.67	-2.13	NA	NA	14.93
<b>Lithuania</b>	0	2	0	0.01	-7.44	-3.77	NA	NA	12.70
<b>Luxembourg</b>	12	3	0	4.12	7.84	1.84	-0.24	NA	0.58
<b>Malta</b>	3	2	0	3.41	-6.45	-5.64	-0.31	NA	56.14
<b>Netherlands</b>	12	3	3	2.18	4.79	-2.85	-0.22	NA	5.02
<b>Poland</b>	0	2	5	3.65	-3.78	-2.76	-38.28	NA	10.26
<b>Portugal</b>	12	3	3	2.20	-6.35	-4.82	0.88	38.58	7.77
<b>Romania</b>	0	3	10	0.91	-5.57	-3.61	-5.60	NA	10.76
<b>Slovakia</b>	2	2	0	2.01	-5.28	-4.59	3.82	NA	13.08
<b>Slovenia</b>	4	2	0	2.12	-0.80	-1.45	NA	NA	13.08
<b>Spain</b>	12	3	9	2.51	-2.97	-3.68	0.19	36.40	5.82
<b>Sweden</b>	0	3	4	2.04	2.40	-0.65	-1.43	54.08	6.14
<b>UK</b>	0	3	6	2.15	-1.56	-2.82	-0.77	38.91	2.92
<b>Totals</b>	154	74	93	2.09	-1.79	-3.19	-1.91	57.04	10.78

Notes:



The coefficient of banking crises is sizeable and statistically significant. Banking crises and sharp recessions tend to go together. However, the level of international reserves does not appear to play a significant role in our sample. The role of changes in the real effective exchange rate is more difficult to disentangle. While the estimated coefficient is insignificant, the marginal effect is significant. The negative sign indicates that increases in competitiveness are linked to a reduction in the frequency of output crises.

Table 2: Results from logit Estimations

	Spec I	Spec I	Spec II	Spec II
	Estimates	Marginal Effects	Estimates	Marginal Effects
<b>Saving-Investment</b>	-0.067*** (0.023)	-0.005*** (0.002)	-0.106*** (0.036)	-0.007*** (0.002)
<b>Budget Balance</b>	-0.006 (0.042)	-0.0004 (0.003)	0.080* (0.043)	0.005* (0.003)
<b>EMU</b>	1.018*** (0.290)	0.075*** (0.019)	0.599** (0.299)	0.038** (0.019)
<b>REER</b>			-0.109 (0.068)	-0.007* (0.004)
<b>Debt</b>			-0.018* (0.009)	-0.001** (0.0005)
<b>Reserves</b>			-0.032 (0.034)	-0.002 (0.002)
<b>Banking Crisis</b>			2.549*** (0.411)	0.161*** (0.018)
<b>Constant</b>	-2.937*** (0.284)		-2.157*** (0.301)	
<b>Observations</b>	580		332	
<b>Pseudo R sq.</b>	0.042		0.267	
<b>Wald test</b>	17.74***		91.21***	

Notes: Dependent variable is a reduction in real output, which is in the 10<sup>th</sup> percentile. Independent variables are lagged with the exception of the EMU dummy. The private balance, budget balance, debt and reserves are expressed as percentages of GDP. The real effective exchange rate is expressed as a percent change over the previous year. Asterisks \*, \*\* and \*\*\* denote significance at the 10, 5 and 1 percent levels, respectively. Cluster robust errors are reported in parentheses.

Overall, our results suggest that fiscal deficits have not been the prime cause, or even a significant cause of economic crises in Europe. Over time, crises seem to have been more significantly associated with deficiencies in private sector saving (or excessive investment) and, perhaps not unconnected with this, the incidence of banking crises.

There is also some evidence to suggest that the eurozone has been particularly vulnerable to economic crises that involve sharp output shortfalls.

## **6. The fiscal compact: a political economy assessment.**

While the theoretical analysis in section 3 suggests that fiscal deficits may sometimes be an important or determining factor in causing economic crises, the empirical evidence presented in this paper raises doubts about their relevance in the context of sharp output shortfalls in Europe. The root cause of problems may lie elsewhere. Crises may be more importantly linked to private sector imbalances and changes in competitiveness associated with real exchange rate appreciation. The danger is then that eliminating fiscal deficits and aiming for balanced budgets throughout the eurozone may do little to reduce the likelihood of future economic crises in Europe. The fiscal compact may even make matters worse and lead to more (and deeper) crises rather than fewer of them. Faced with a recession, it may be unwise to strive for budgetary balance.

Fiscal deficits need to be evaluated in the context of the overall macroeconomic picture. Whether or not they are excessive depends on a range of other factors including the size of the output gap and 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 (see, for example, IMF, 2009, Cottarelli and Jaramillo, 2012, and Giavazzi and Pagnano, 1990).

If the assumption behind the fiscal compact is that balanced budgets will lead to current account balance of payments equilibrium across all member countries of the eurozone, then it follows from the algebra of the open economy expression presented earlier that all private sectors throughout eurozone countries will also need to be in balance. This is not how things stand in 2012 and not 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. 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. Or, to put the point another way, 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.

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 certainly result in falling income and rising unemployment. Similarly, if within the eurozone 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 eurozone income and a significant increase in eurozone unemployment. This will then increase cyclical fiscal deficits because of automatic changes in tax revenue and government expenditure. Aiming for balanced budgets or surpluses during a recession therefore appears to be counterproductive.

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 raised unemployment in the short term." (IMF, 2009). 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.” This is the position in which Europe finds itself in 2012/13.

Analogies may be drawn with the way in which the East Asian crisis in 1997/98 was handled. The IMF’s initial response to that crisis is illustrative of the kind of problems that can arise from inappropriate and excessively tight discretionary fiscal policy, and the kind of policy that Europe’s fiscal compact is endeavouring to embed as a rule in a formal treaty. In the East Asian case, the Fund advocated tighter fiscal policy as a way of correcting current account deficits in the aftermath of the crisis. However, along with others, it failed to anticipate accurately the extent to which the private sector would respond to the crisis, with investment falling relative to saving, and this affected the need for fiscal correction. In such circumstances, tight fiscal rules may be destabilizing, and the trend rate of economic growth is generally acknowledged to be adversely affected by such instability. There are lessons from the East Asian case for the design of fiscal policy in Europe.

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. It makes economic crises more likely. It also means that when they occur they will be deeper. Countries will be left with no instruments with which they can seek to manage aggregate domestic demand.

Why then would countries sign up to the compact? There are a number of potential explanations. First, there is the bargaining power of Germany as Europe's strongest economy. It is difficult for countries that may need Germany's financial support to resist German pressure to sign the compact. Its design reflects Germany's influence and preferences. Contemporary German policies are not constrained by the compact.

Second, there is, one suspects, a strong element of time inconsistency. Countries may believe that they can derive short term benefits by signing up to the compact, both by maintaining Germany's commitment to providing financial assistance, and by having a positive effect on market confidence, thereby minimising the risk premium they have to pay on the debt they issue. In the long term, they may believe that the details of the compact leave enough scope for them to evade the rules. There are ambiguities in the treaty document over what constitutes a structural deficit as opposed to a cyclical one. There are certainly disagreements about how best to measure fiscal consolidation and cyclically adjusted primary balances (see, for example, IMF, 2010, for a summary of some of them). The fiscal compact makes allowance for 'exceptional circumstances' and also for prolonged recessions or, in the words of the draft treaty, 'severe economic downturns.' This may mean that reluctant signatories believe that they will be able to continue to use discretionary fiscal policy to some extent.

Third, experience with the Stability and Growth Pact may be interpreted to imply that the imposition of penalties is not entirely credible. In any event, short term benefits may be perceived to outweigh longer term costs that are heavily discounted. If the weaker constraints involved in the SGP have been found to be unenforceable, what chance is there that the stronger ones involved in the fiscal compact will be? The irony here is that, in these circumstances, the whole exercise will lack credibility and this is likely to mean that the perceived short term benefits in terms of influencing market confidence will not materialise.

Furthermore, research into the impact of fiscal responsibility laws (FRLs) in nine emerging economies as measured by key fiscal balances suggests that they did not have a significant effect (Thornton, 2009). Although fiscal performance improved in the countries with FRLs, it also improved in much the same way in countries that did not have them.

## **7. Concluding remarks**

There is plenty of evidence to demonstrate that it is not a good idea to run unsustainably large fiscal deficits and to amass excessively large amounts of external debt. Poor macroeconomic management certainly makes countries more vulnerable to a crisis. The eurozone crisis shows that financial markets cannot always be relied upon to effectively constrain fiscal deficits. It therefore may seem logical to impose the condition that countries should, over the business cycle, run a balanced budget. This is what lies behind Europe's fiscal compact signed in 2012 by twenty three members of the European Union.

However, ruling out (or strictly limiting) the scope for discretionary fiscal policy will make macroeconomic management more difficult. Europe's new fiscal compact puts too much emphasis on achieving a balanced budget and avoiding debt accumulation. Although there are brief allusions to them in the draft Treaty, there is too little emphasis on the other potential ways of minimizing the risks of future economic crises that focus on controlling private sector deficits and the vulnerability of the banking system.

On the basis of projections published in the IMF's *Fiscal Monitor* and the effects of fiscal consolidation reported earlier in this article, complying with the fiscal compact would imply a contraction in eurozone output of more than 1 per cent over a two year period, as well as a rise in unemployment of nearly one percentage point. However, there would be considerable variation within the eurozone. The output and unemployment

costs in Germany would be zero, while the costs in Spain, for example, would involve a reduction in GDP of more than 1.5 per cent, and a rise in the rate of unemployment of more than one percentage point.

While the compact aims at reducing the incidence of crises, it may do relatively little to achieve this. Furthermore, it will reduce the scope for handling crises if they do occur. This is of particular concern when other adjustment tools, including monetary policy and, perhaps in particular, exchange rate policy, are not available. This could mean that the EMU becomes more prone to deep economic crises involving shortfalls in output and increases in unemployment, and this may adversely affect the durability of the eurozone itself. A policy designed to strengthen the eurozone may end up having the opposite effect.

The analysis in this paper implies that there may be superior options available. These would involve a more rounded view of fiscal deficits. It would take into account private sector imbalances and would put banking sector reform centre stage. Fiscal coordination would also be organised in a way that recognises the fact that imbalances can take the form of surpluses as well as deficits. It would seek to exert pressure on countries with structural surpluses and with private sector surpluses to relax fiscal policy.

In addition to this, if there is a desire to limit the scope for discretionary fiscal policy by imposing constraints on the size of structural deficits – as recently articulated by Blanchard et al. (2010) - there is a case for increasing the degree of automatic fiscal stabilization, such that stronger counter-cyclical effects are built into the fiscal balance.

## **References**

Alesina, A., 2010, Fiscal adjustment: lessons from recent history, paper prepared for ECOFIN conference, Madrid, April, 15.

- Blanchard, O., G. Dell’Ariccia and P. Mauro, 2010, Rethinking macroeconomic policy, *IMF Staff Position Note*, SPN/10/03, Washington DC, International Monetary Fund.
- Cottarelli, C., and L. Jaramillo, 2012, Walking hand in hand: fiscal policy and growth in advanced economies, *IMF Working Paper*, WP/12/137 Washington DC, International Monetary Fund.
- Elmendorf, D. and J. Furman, 2008, If, when, how: a primer on fiscal stimulus, The Brookings Institution.
- Freedman, C. M. Kumhof, D. Laxton, D. Muir and S. Mursula, 2010, Global effects of fiscal policy during the crisis, *Journal of Monetary Economics*, 57 (5) 506-526.
- Giavazzi, F. and M. Pagnano, 1990, Can severe fiscal contractions be expansionary? Tales of two small European countries, *NBER Macroeconomics Annual*, Volume 5, Cambridge, Massachusetts, National Bureau of Economic Research.
- Illizetzi, E., E.G. Mendoza and C.A. Vegh, 2009, How big are fiscal multipliers? *CEPR Policy Insight*, No. 39, London, Centre for Economic Policy Research.
- IMF, 2010, Will it hurt? Macroeconomic effects of fiscal consolidation, *World Economic Outlook*, October, Chapter 3, Washington DC, International Monetary Fund.
- IMF, 2012, Fiscal Monitor, January update, Washington DC, International Monetary Fund.
- Wihlborg, C., T.D. Willett and N. Zhang, 2010, The euro debt crisis: it isn’t just fiscal, *World Economics*, 11 (4) 51-77.
- Romer, C. D. and D.H. Romer, 2010, The macroeconomic effects of tax changes: estimates based on a new measure of fiscal stimulus, *American Economic Review*, 100 (3) 763-801.
- Reinhart, C.M. and K.S. Rogoff, 2008, This time it’s different: a panoramic view of eight centuries of financial crises, *NBER Working Paper* 13882, Cambridge, Massachusetts, National Bureau for Economic Research.
- Thornton, J., 2009, Do fiscal responsibility laws matter: evidence from emerging economies suggests not, *Journal of Economic Policy Reform*, 12 (2) 127-132.



Tsibouris, G.C., M.A. Horton, M.J. Flanagan and W.S. Maliszewski, 2006, Experience with large fiscal adjustments, *IMF Occasional Paper*, No 246, Washington DC, International Monetary Fund.

Von Hagen, J. and R. Strauch, 2001, Fiscal consolidation: quality, economic conditions and success, *Public Choice*, 109 (3-4) 327-346.