2.5
From Austerity to Growth in Europe: Some Lessons from Latin America[1]

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2.5.1 Introduction

This paper is in two sections. The first briefly outlines some relevant lessons from the Latin American debt crises for the current European financial crisis. The second part deals with the European crisis, discussing pan-European measures to promote growth as well as exploring options for reducing and/or postponing debt servicing in European countries with difficulties for market access, with a view to opening greater space for national growth-oriented strategies within them. It then examines the possibility of less fiscal consolidation in European countries with market access, and shows in some detail, using the example of the UK, how such a policy would lead to far higher output and employment.

2.5.2 Lessons from Latin America for Europe

2.5.2.1 The boom

It is widely known, but bears repeating, that excessive financial liberalization without proper regulation leads to crises. This was a clear lesson from the Latin American debt crisis but is also applicable more universally. It was certainly true in Europe and in the USA. The only mystery is why this lesson – so obvious to those with any knowledge of economic history – is never learned. Though ignorance of history may play an important role, the importance of greed and the power of vested interests is also clear. In the case of developed countries, there was a role for complacency; crises happened in 'underdeveloped' countries, whose financial sectors were not as sophisticated, mature or deep as 'developed' ones. The risk that now the opposite becomes true needs to be avoided. Latin American countries must not believe that because their financial sectors were relatively immune from the North Atlantic crisis that started in 2007, they would not be susceptible to future ones if they liberalize or do not regulate

properly. Lessons have to be carefully learned here from what went wrong in the USA and Europe so that mistakes are not repeated.

Booms, which originate to a considerable degree, from the very rapid expansion of domestic and external credit, or other flows, typically precede busts. These lead to overheating and large current account deficits. In the case of Latin America, net capital flows during the pre-1980s debt crisis years (1977–81) reached 4.5 percent of GDP annually; Chile's net capital flows reached 12.7 percent of GDP annually in those years, which was something of an outlier (Ffrench-Davis and Griffith Jones, 2005). What is emphasized far less often is that in Europe capital flows, mainly within the EU, also played a very major role (and, in fact, numerically an even bigger one) in the origins of the crisis. Thus, in Greece, the cumulated capital flows grew from around 30 percent of GDP in early 2002 to around 80 percent of GDP in early 2008 (almost 10 percent of capital flows as proportion of GDP annually). In Spain this stock grew from just over 20 percent of GDP in early 2002 to 60 percent in mid-2008, around 7 percent of capital flows as proportion of GDP annually, with similar increase reported for Portugal (Pisani-Ferry and Merler, 2012, based on Eurostat data).

From this comparison, it can be seen that capital flows were, on average, higher to the periphery European countries during the 2002–08 years then they were to Latin America in the 1977–81 debt crises years. These massive capital flows were accompanied in Europe, as they had been previously in Latin America, by very low spreads as lenders and investors massively underestimated risk. In the case of the Latin American countries, the fact that 'correct' reforms were carried out, encouraged foreign capital; however many of the reforms made – such as financial and capital account liberalization – in the end contributed to the severity of the reversals of capital flows. Similarly, in the case of Europe, the fact that countries like Greece, Spain and Portugal were members of the Euro Zone contributed to incredibly low spreads, with no proper assessment of risks.

The origin of the current account deficits in both cases may be either public or, more typically, private deficits. In the cases of Argentina and Chile, the current account deficit was clearly financed by debts of private debtors to private creditors. This was also the case in several, though not all, of the European countries. For example, Spain had a fiscal surplus till 2007; the large Spanish fiscal deficits only emerged as the crisis intensified, due to falling tax revenues, increased spending to try to revive the economy and – later – funds used to rescue the banks. This is often now forgotten, as the blame is placed on "profligate governments."

2.5.2.2 The management of the crisis

One of the key lessons from the management of the Latin American debt crisis was that drastic austerity without timely debt service reduction leads to major

recession, in spite of large official flows. This in fact both makes the crisis worse and also leads to low growth or recession (like in the "lost decade" to development in Latin America). It also passes the cost from creditors to debtors, and from private creditors to public actors. In fact, much of the official flows (for example, the IMF) go to finance debt servicing to creditors rather than funding debtor countries. Lessons have not been learned and a similar pattern has been followed for Europe, with the exception of the debt reduction for Greece which has been, according to many observers, both insufficient and somewhat late in its implementation. There has also been talk of a lost decade in Europe, although at least politicians' rhetoric and some initial actions have been shifting, albeit very slowly, towards growth.

Particularly damaging in Latin America was the need to compress imports, which in Latin America fell by around 40 percent, which resulted in an important fall in per capita GDP, that then recovered extremely slowly (see Bertola and Ocampo, 2012). The large compression of imports in Latin America was to finance the massive negative net transfer of resources from the region to the rest of the world. There are similarities with the Greek case where the imports of goods fell by around 20 percent between 2007 and 2011, with the value of exports growing by around US$9 billion and imports falling by around $15 billion (Holmes et al., 2012).

One important lesson to be drawn from the Latin American debt crisis, as well as from other examples, is that early debt service reduction, postponement and/or debt relief accelerates the resolution of the crises, as it facilitates the early restoration of growth. If debt levels are very high (and the issue is one of solvency), then debt reduction may be a precondition for its resolution. However, it is difficult *ex ante* to judge whether the problem is one of liquidity or of solvency, as the process of crisis management itself may determine whether it will be one or the other. However, there are several examples where countries that have defaulted or have been granted major debt reduction have better restored growth. This is clearly the case with Argentina in the 2000s; an interesting European precedent is that of Poland, with major debt reduction managed to grow much more than Hungary, which serviced its high debt faithfully.

One particularly interesting precedent is the massive debt relief given to Germany in the 1950s. As is pointed out by the German economic historian Ritschl (2012), German internal wartime statistics suggest transfers from occupied countries in Europe on clearing account were close to 90 percent of Germany's 1938 GDP. After World War II, recipients of Marshall Aid were asked to sign a waiver stating that no claims against Germany could be brought unless the Germans had fully repaid Marshall Aid. This meant that, by 1947, all foreign claims on Germany were blocked, including the 90 percent of 1938 GDP in wartime clearing debt.

The London Agreement on German Debt, signed in 1953, perpetuated these arrangements. The settlement of post-1933 debts was postponed to a reparations conference to be held after a future German unification. To date no such conference has been held after the reunification of 1990.

The fact that Germany was treated so well by the Allies after World War II offers an interesting precedent for how it should treat its debtors in the 2010s.

A key problem for debt reduction is the vulnerability of creditor banks to debt reduction; this is much more serious in the European case than in Latin America, because the main lenders to the Southern European countries were creditors and investors from other European countries. Thus, a major debt reduction or default in Europe would damage the banking systems of Europe itself.

In the Latin American case, US debt relief – via the Brady Plan in 1989 – started only after key creditor banks, like Citibank, had sufficient provisions to withstand the debt relief. The major loan loss provisions made by US banks in 1987, which implied that the 12 major US banks had loan loss reserves of over 25 percent of their doubtful loans, with European banks having somewhat higher provisions ranging from 30 percent to 50 percent (Griffith-Jones, 1988), made the debt reduction in the Brady Plan feasible without endangering the solvency of US and European banks. The debt relief granted to large Latin American countries by the Brady Plan averaged around 35 percent of the part of the debt that was restructured, as can be seen in Table 2.5.1. The debt reduction as a proportion of the total debt of those countries was, however, smaller.

The implication from these figures is that the Latin American region had to suffer a lost decade for its growth and development in order to ensure the survival of US/European banks, as the necessary debt relief was only granted when it became clear that the banks could take the losses.

There were other preconditions for the Brady Plan taking place, such as growing debtor impatience at the asymmetry of sacrifices, and the urgent need to restore growth. This need was particularly strong in the case of new democratic governments that needed to respond to a far greater extent to the wishes of their people than the previous dictatorships.

2.5.3 Europe

In this part we will first discuss measures to promote growth at the European level. We will then examine policies that need to be introduced at the national level to promote higher growth levels, distinguishing between those countries that have difficulties in accessing private financing which need help with lowering their debt service costs, such as Spain and Italy, and countries that currently have market access, such as the UK and Germany.

Table 2.5.1 Original Brady/exchange issue amounts (US$ bn) and multilateral debt relief agreements with commercial banks

Country	Total Brady debt issued	Percentage of all Bradys	Official reduction agreement date	Debt forgiveness in exchange agreement	Moody's update	S & P update
Latin America						
Argentina	25.4	15.00	Apr-93	35	B	B3
Brazil	50.7	29.90	Apr-94	35	BBB–	Baa3
Costa Rica	0.6	0.40	May-90	n.a.	BBB–	Ba1
Dom. Rep	0.5	0.30	Aug-94	35	B	B1
Ecuador	6.1	3.60	Feb-95	45	B–	Caa3
Mexico	36.9	21.70	Mar-90	35	BBB–	Baa1
Panama	3.2	1.90	May-96	45	BBB–	Baa3
Peru	4.9	2.90	Nov-96	45	BBB–	Baa3
Uruguay	1.1	0.60	Feb-91	n.a.	B+	B2
Venezuela	18.6	10.90	Dec-90	30	BB–	B2
Non-Latin						
Bulgaria	5.1	3.00	Jul-94	50	BBB–	Baa3
Ivory Coast	1.3	0.80	May-97	50	NR	NR
Jordan	0.7	0.40	Dec-93	35	BB	Ba3
Nigeria	2.1	1.20	Jan-92	n.a.	B+	NR
Philippines	4.2	2.50	Jan-90/Dec-92	n.a.	BB	Ba3
Poland	7.9	4.70	Oct-94	45	A–	A2
Vietnam	0.6	0.30	Dec-97	50	BB–	B1
Total	169.9	100				

Source: World Bank (1999).

The approach that gives more emphasis to growth, and is critical of excessive austerity, as a way to overcome the sovereign debt crisis, was given increased impulse in the debate amongst economists by the fact that the IMF recognized (WEO, 2012) that fiscal multipliers ranged currently in Europe between 0.9 and 1.7, with the Euro Zone in the higher part of the range, and thus were significantly higher than IMF previous estimates. This explained why optimistic growth projections from fiscal consolidation produced by the IMF and others had been incorrect. The clear implication, therefore, is that countries would have grown more, and would have seen their debt to GDP ratios fall more, if they had engaged in less austerity. As we discuss below (and as is also shown econometrically by Holland and Portes, 2012), the negative impact of excessive fiscal consolidation in a recessionary context is multiplied by the fact that European countries trade so much with each other.

2.5.3.1 The need for pan-European action for growth

This section (drawing on Griffith-Jones et al., 2012) focuses on finding a policy approach that quickly facilitates and stimulates future growth, and thus goes beyond austerity through measures taken at a European level. Increasingly, as economic performance has deteriorated in most European countries, the EU leaders, public and even financial markets, who initially demanded fiscal consolidation to reduce new financing needs, have begun to stress with growing urgency the need for placing a far greater emphasis on economic growth. Meaningful actions on a sufficient scale have not yet been taken, however, something which is reflected in continued stagnation and increasing unemployment in the Euro Zone at the time of writing.

This section makes specific proposals about how one key EU institution, the European Investment Bank (EIB), can expand its lending significantly in ways that will make a meaningful contribution to growth, particularly in those countries whose economies and citizens have suffered most from the sovereign debt crisis. We also examine the role which EU Structural Funds can play, both on their own, and especially as a complement to EIB lending, to make a further contribution to EU growth. After outlining the types and scale of measures that can be taken, the likely impact on GDP and employment – which would be significant – is modeled. One important advantage of this approach is that with fairly limited public resources a very large impact can be achieved due to the benefits of leverage.

It is encouraging that, after Francois Hollande proposed a very similar plan to this, it was in principle adopted by the European leaders, including Mrs. Merkel in the leaders' summit of June 2012. Slowly steps are being taken to start implementing such a plan. Of course, the "devil is in the detail," and the key issue is the scale and speed at which it will be carried out; also crucial is the issue whether key complementary measures will be adopted to prevent the crisis further derailing European growth.

2.5.3.1.1 Policy context

There is a growing consensus that it will prove impossible to lead the EU out of crisis without stimulating sustained growth. There is an urgent need to avoid a downward spiral for banks, enterprises and consumers. A widespread resolution of the sovereign debt crisis will only succeed with a significant growth impulse. To ignore this is not only bad arithmetic and worse economics, but also ignores the clear lessons of history.

There is currently a need for an additional growth-promoting financing strategy which:

- Produces rapid and significant effects.
- Enhances productive capacity, encouraging present and future sustained growth by financing economically sustainable projects and activities.
- Supports the growth of both existing and new competitive small and medium-sized enterprises. Such enterprises have been suffering particularly badly from a severe lack of access to private credit, which has been stagnating during the crisis or, worse still, declining.

There is the need for a concept that is not only desirable but also feasible. A sound initiative, which has real chances of success, therefore needs to be:

- Feasible to implement quickly. Time is short; at the time of writing, every day 4,000 additional Spanish citizens are entering unemployment.
- Have sufficient size to make a meaningful contribution, to help kick-start growth and reduce unemployment.
- Be cost-effective in terms of a large impact with relatively limited additional public resources; the measures proposed provide significant leverage.

The historical experience of the Marshall Plan after World War II can serve as a valuable reference concerning the minimum size of such a program. The plan for Europe consisted of $13–14 billion, in current prices approximately €70 billion annually (or $100bn in 2010 prices, as estimated in the literature). That represents annual additional investment of about 0.5 percent of European GDP, over a period of about five years, altogether about 2.5 percent of GDP. A similar order of magnitude would be a minimum today.

2.5.3.1.2 The Dimension of the EU budget

The EU budget equates to approximately 1 percent of annual European GDP. To generate a significant growth impulse it is important to use the EU budget in an effective way which will maximize its impact via leverage. Increased lending by the EIB, as well as project bonds, are ideal instruments for the pursuit of these aims. One key challenge is to deploy such instruments on a meaningful

scale, to do it rapidly as well as channeling them towards efficient investments, as it is so urgent to re-start growth.

Regarding the dimension, this proposal would involve additional budgetary resources that represent only a very small proportion of the total EU budget allocated to growth; however, as shown below, the impact on growth would be large, given the multiplier effects provided by leverage.

The European Commission planned expenditure of €1,000 billion for the seven years from 2014 to 2020, of which 38 percent were assigned to Structural Funds, 9 percent to employment and social matters and 8 percent to research and innovation. In fact, the approved budget by EU governments for that period has been somewhat smaller.

2.5.3.1.3 Additional resources: use of EU Structural Funds which were not drawn down

Structural Funds provide between 2 and 3 percent of GDP to regions with developmental deficits. The draw-down of these funds has been especially difficult since 2007, being slowed down by the crisis, for example, due to the lack of ability for co-financing by governments forced to contract fiscal budgets. For that reason, a big sum of pledged, but not drawn-down, funds was available in 2012 and 2013 (including final down-payments until 2015). Some 25 percent of the Regional Funds are not even allocated.

Even more important is the fact that not all the volumes being allocated will be drawn down because of delays and difficulties linked to the crisis. In the framework of an immediate program to recover growth, the task ought to be to rededicate these funds and channel them into activities for growth. It has been estimated that up to €80 billion is available for such re-use. To achieve this task, more flexibility by national and European administrations is required. What is also needed is targeted regrouping of funds into economically viable projects, especially "shovel-ready" ones, in areas such as:

- Energy efficiency and renewable energy
- Promotion of competitive, preferably export-oriented enterprises
- Financing of small and medium-sized enterprises that are credit rationed
- Financing of innovation in enterprises and enterprise spin-offs

2.5.3.1.4 Dimensions of an immediate program from the EU budget

If a concerted effort is made using rechanneling, an annual amount of €15 billion can be easily pooled from the existing European budgets (up to the end of 2013) for direct use in such a growth initiative in an immediate program. This volume could be raised from the new budget for the period 2014 to 2020 to about €25 billion per year.

This volume of investment must be complemented with money from other sources, including national and private ones, and be increased as much as possible by its multiplier effect. However, it will not be possible without the EU budget.

2.5.3.1.5 Achieving leverage effects with the EU budget

Achieving leverage with the EU budget is, in effect, the easiest and most promising path to put the EIB to better use.

The basic mechanism is to use a part of the EU budget as a risk buffer. Thereby EIB loans for projects become less risky, which permits either higher volumes or lower interest rates, sometimes facilitating otherwise impossible financing for particular projects. The leverage effect with the most mature product (innovation) was projected to be five, thereby having €1 billion from the EU budget, facilitating €5 billion of credit in innovation.

In this area empirically verifiable experiences in Europe exist. Examples are in the financing of innovation (RSSF) and in regional financing (JESSICA, JEREMIE). The initiative for SMEs in Greece is likewise similar.

2.5.3.1.6 EU-project bonds and the EIB

One way forward is through project bonds. Large projects could be co-financed by the EIB alongside private capital from pension funds and insurance companies that currently do not fund large investment projects, due to high perceived risks. Before the financial crisis, these risks were absorbed by large mono-line insurers (such as AIG), with the help of which the financing of such projects were transformed into triple-A bonds. After the crisis, this insurance is no longer available.

The project bonds would work in similar ways. Private investors would advance 25 percent in equity. The EIB would finance the next 25 percent as mezzanine tranches. The final 50 percent (senior tranches) would hopefully reach a rating of BBB+ or A–, thereby becoming an allowed investment class for pension funds and insurance companies. Regarding the mezzanine tranche, the EU would absorb half of the risk using the risk buffer and be liable for first losses.

The EIB would maintain financing for the entire time part of the project, thereby adding an additional element of quality for the insurers and pension funds.

As the risk of financing for the EIB is thereby reduced – compared to the risk if the EIB were to do it all on its own – these projects are fundable, given the current equity of the EIB. If the bank receives this risk buffer, it can lend up to four times the amount of low-risk loans as compared to independently realized projects.

If one wanted to reach, for example, a loan volume of €160 billion in four years, and €40 billion per year, this corresponds to additional EIB financing activity of €10 billion per year, and €40 billion for the four-year period. To finance the €40 billion from the EIB (25 percent of 160 billion) for four years, €20 billion from EU budgets for the risk buffer, and €5 billion yearly, are needed.

2.5.3.1.7 Increasing the equity of the EIB

For the EIB to play an even more active role in the framework of a substantial EU growth program, the injection of new paid-in capital became necessary. Why is that the case? In the past, paid-in equity injections from member countries were financed through the cumulative profits of the EIB. Rating agencies now require a simple leverage ratio of eight to be also applied to the EIB, in the same way as it has been applied previously to private banks.

In fact, in 2013 the paid-in equity of the EIB had actually doubled; we are assuming here an increase of paid-in capital of around €12 billion. This, given a leverage of eight, would generate the ability for the EIB to increase loans by around €95 billion in total over the course of the next few years. If the loan increase is distributed over four years, it could, for example, have led to increased lending of €10 billion during 2012, to €35 billion lending growth in 2013, and to €25 billion annually in 2014 and 2015 (all these figures are for lending above that which would have happened without the capital increases).

The focal point of financing activity, as always with the EIB, will be economically viable projects. Such an earmarked capital injection could be dedicated especially to targets of focused pro-growth and employment policies, from the financing of innovation, to the promotion of SMEs, to economic landmark projects, such as a cable connection from the most suitable European locations for solar energy production in Crete to the mainland – an investment which is economically viable but finds no financiers.

Doubling equity became possible, as EU member governments injected a relatively small amount of paid-in capital. Compared to the massive sums injected to save the private banks, this is fairly small, with a huge multiplier effect on investment and growth.

2.5.3.1.8 Additional proposed EIB and EU growth program

In summary, two additional effects can be obtained with the help of the EIB. One is based on an equity increase of slightly more than €10 billion. This could permit extra loans of €95 billion for 2012–15. The second source stems from the use of EU budgetary means for risk buffers to finance infrastructure projects (project bonds) as well as projects to promote innovation. Devoting an annual amount of €5 billion from the budget to risk buffers facilitates an additional €10 billion in EIB loans per year.

Adding the different measures together, the proposed growth impulse (summarized in Table 2.5.2 and Figure 2.5.1 below) consists of:

- In 2012 €15 billion of activities funded by the EU budget (Structural Funds rededicated) and €20 billion of extra EIB loans (€10 billion financed by EU budgetary means for risk buffers, €10 billion financed by the capital increase); this implies altogether €35 billion for 2012.

Table 2.5.2 Additional proposed EIB and EU growth expenditure programme (in € billion)

	2012	2013	2014–2015 (annual)	2016–2020 (annual)
Additional EU budget	15	15	25	25
Additional EIB lending total	20	45	35	
– Risk buffers	10	10	10	
– Capital increase	10	35	25	
Grand Total	35	60	60	25

Source: Griffith-Jones et al. (2012).

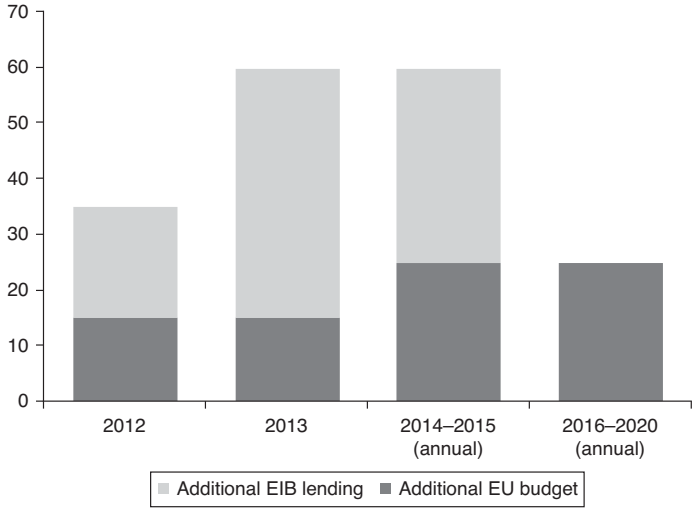

Figure 2.5.1 Additional proposed EIB and EU growth expenditure program (billions of Euros)

Source: Griffith-Jones et al. (2012).

- In 2013, €15 billion funded by the EU budget (again rededicated Structural Funds) as well as €45 billion of extra EIB loan activity (€10 billion financed by the EU budget for risk buffers, €35 billion financed by capital increases). This implies altogether €60 billion.
- In 2014 and 2015, €25 billion of activities funded by the EU-budget and €35 billion in annual EIB loans (again €10 billion by budgetary means for risk mitigation, and €25 billion of extra loans supported by the capital increase); this totals €60 billion per year.

- **Thus over the 2013–15 period, we have an average of €60 billion a year additional EIB lending and EU budget injections to finance extra investment and working capital**; this corresponds to about 0.5 percent of EU annual GDP. As discussed below, this could have a major impact on EU growth and employment.
- From 2016 to 2020, there would be continued €25 billion of additional activities funded by the EU budget.

It is both feasible and important to establish as soon as possible a reliable investment program of this size, in order to foster a credible, sustained growth impulse that carries Europe forward. It is encouraging therefore that the European leaders in their last summit have approved such a program, beginning the much-needed shift from austerity to growth. Unfortunately, the implementation of the plan has had a slow start, which is problematic, given the urgency of commencing the economic recovery.

Though slightly smaller, amounting to around 2 percent of GDP, but with quite important front-loading, this current plan could – as in the case of the Marshall Plan – contribute to a significant renewal of the growth dynamic in Europe.

2.5.3.1.9 Investment multiplier of the program for growth

The advantage of the outlined program for growth also lies in the fact that it attracts other financing partners, principally from the private sector. Thus an additional multiplier effect is created.

The most evident multiplier can be found in the risk-buffered activities of the EIB related to project bonds, where the explicit purpose is to bring private finance to work on infrastructure projects. The multiplier for this product is four. The promoter brings in some 25 percent of equity, the EIB (with the budget support of EC money) provides the next risky 25 percent as a kind of junior or mezzanine loan and, in addition, the EIB commits itself to an originate and hold strategy. The private investors are invited to come in with 50 percent of the financing as a senior loan (or in the form of project bonds). The resulting multiplier is four, when considered from the view of the EIB lending. The resulting multiplier is eight from the view of the EU budget.

The second pillar of the program is the additional EIB lending based on the capital injection. The lending of EIB on average contributes a financing share of 50 percent and another financing partner (or a group of) with the same size of 50 percent. If the additional lending of the EIB based on the capital injection is front-loaded for the first four years, the respective figures are €95 billion of additional EIB lending for the first four years, resulting in total investment of up to €190 billion.

Besides multipliers achieved by the leverage of the EIB and co-financing with the private sector, further multiplying effects can be achieved by the EIB co-financing with increased lending by national development banks where these exist; a very successful example is the KfW, now the second largest bank in Germany.

2.5.3.1.10 Estimating impact; EIB lending and EU expenditure creates one million jobs in Europe

In spite of the fact that the crisis broke more than years ago, European economic performance was still very poor at the time of writing. The growth prospects for the Euro Zone are even gloomier. Growth in Europe in 2013 is expected to be still below the historical growth rate. These figures could be significantly worse if the crisis deteriorates.

24 out of 27 EU countries are under the EU's Excessive deficit procedure and have been advised to tighten fiscal policy. This implies the focus has been on restoring balanced budgets in an attempt to "cutback" their way out of the crisis, a recipe which is clearly not working (Stiglitz, 2011).

A consensus is starting to form, viewing an expanded role of the EIB and of EU Structural Funds as one key of increasing investments in Europe. This view is supported by the European Commissioner for Economic and Financial Affairs, Olli Rehn: "With the European Investment Bank, the EU has a powerful institution to support growth and employment. But it is reaching the limits of what it can do with its current capital base. To allow the EIB to do more for growth and jobs, its capital needs have to be addressed" (Rehn, 2012). A similar plan was endorsed by European leaders.

How big a capital infusion is needed into EIB is the next question. If EIB's called-up capital is doubled and some €5 billion is injected as risk capital into the EIB, as well as additional resources being provided from the EU budget (see Table 2.5.2 and detailed discussion above), additional resources corresponding to €60 billion or ½ percent of EU GDP can be made available from 2013, due to the benefits of leverage, starting in 2013.

The preliminary model calculations are reported below using the international macroeconomic model HEIMDAL, which uses adaptive expectations. One of the advantages of the HEIMDAL model is that it is large, and therefore allows a considerable amount of detail at a country level, which is then aggregated for the Euro Zone. It allows different scenario analysis by changing parameters, for example, when consumer or investor confidence increases, although the limitations of space allow me to present only one central scenario.

The results presented illustrate the GDP and employment effects created by an EIB expansion like the one previously described. The calculations assume measures would lead to an increase in investments in the EU of 1/4 percent of

GDP in 2013 and 1/4 percent of GDP in 2014. (If effects in 2012 and 2015 were included the impact would be even higher.) It is assumed that primarily the southern European countries will benefit from the increase in investments.

Figure 2.5.2 shows the estimates of the European GDP growth both with and without additional resources. It shows how the investment pact increases GDP. In 2013 GDP is increased by 0.36 percentage points. Thus, instead of GDP in the EU growing at a rate of just above 1 percent the investments would increase growth in 2013 to almost 1½ percent. In 2014 the effect on growth is about 0.1 percent and GDP is increased overall during 2013 and 2014 by a total of 0.44 percent.

The calculations of the model show that the investment will create at least 1.06 million jobs towards 2014 on an EU level.

Table 2.5.3 reports the accumulated GDP and employment effects in a number of European countries by 2014. The investment would increase GDP in the range of 0.25–0.6 percent, depending on country-specific multipliers and investment shares. Naturally, we observe the largest effects in southern European countries, such as Spain, Portugal and Greece, where the investment shares are designed to be increased the most. However, open countries such as Germany and Finland will also experience large positive effects, with important spillover effects. EU GDP will increase by 0.44 percent as a result of the investment measures.

The effects of an investment package on European economies are particularly large because the countries are highly integrated. In the case of Spain the total job creation with an investment pact is divided into the effect arising from domestically created jobs and the effect arising from increased trade with

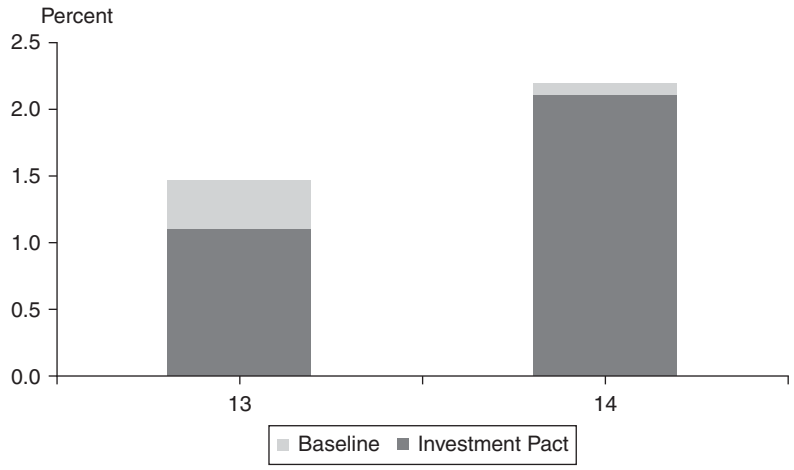

Figure 2.5.2 Estimates of the European GPD growth with and without investments pact
Source: Griffith-Jones et al. (2012).

Table 2.5.3 Effect of Investment Pact on GDP and employment

	GDP effect	Employment effect	
	Percent	1.000 persons	Percent
Germany	0.52	240	0.58
Poland	0.41	65	0.39
Finland	0.43	10	0.61
Denmark	0.43	12	0.42
Belgium	0.4	18	0.39
Sweden	0.35	15	0.31
Great Britain	0.36	86	0.29
France	0.25	83	0.32
Southern European countries with increased investment shares			
Spain	0.57	110	0.61
Portugal	0.62	31	0.66
Greece	0.47	20	0.5
Italy	0.34	104	0.45
EU-27	0.44	1,058	0.48

Source: Griffith-Jones et al. (2012).

other European countries. Of a total of 110,000 jobs created, 55,000 of them stem from increased trade. In other words the positive trade effects account for 50 percent of the jobs created.

Looking forward, the challenges facing Europe are not only to curb the debt crisis, but, equally importantly, to generate growth and jobs. Indeed, by supporting growth such measures will help ease the sovereign debt crisis and there may actually be a reduction in the ratio of debt to GDP (see also discussion below).

The figures above include only the direct effects from increased investments. It is very likely that increased investment will increase consumer and investor confidence in the private sector. Higher credit to SMEs, which the EIB encourages indirectly through lending to commercial banks for them to on-lend to SMEs, could create further major increases in employment, also not estimated here.

In addition, increased investment can have important supply-side effects for the future of the EU's competitiveness and the ability to grow and achieve structural transformation in the long term.

2.5.3.2 The need for more growth-oriented fiscal policies at a national European level

2.5.3.2.1 The need to lower debt servicing for countries with difficult market access

Clearly measures at a European level will help quite significantly, but as the estimates above show they would not be enough on their own to restart growth sufficiently, as they would increase EU GDP by less than half a percent by 2014

and create one million jobs. Many more jobs need to be created in Europe given the very high levels of European unemployment, though one million extra jobs would be a significant start.

It would be desirable therefore that countries also follow more expansionary fiscal and wage policies at a national level. This divides into two categories: firstly, countries like Germany but also to a certain extent the UK, which have considerable policy space at present as they clearly have market access to fund their deficits. Further below we discuss in some detail the case of the UK, and how its GDP evolution could be far more favorable if it consolidated its fiscal deficit later. The German case for both slower fiscal consolidation and higher wage increases seems so clear that it does not require any further elaboration. We focus in this section on countries with difficult market access and discuss options relating to lowering the cost of their debt servicing, with a view to opening more space for less restrictive fiscal policies and therefore positive growth and employment creation.

A key issue is how to significantly lower debt servicing for debtor countries with difficult access to markets. Lowering debt servicing should significantly reduce the need for so much austerity and hence help restore growth for debtor countries with difficult access to markets.

There are several possible routes to achieve reductions in the costs of debt servicing. We examine two here which could give significant debt servicing relief, but would – if properly designed and implemented – not undermine the solvency of creditor banks, especially European ones. Here there is an important distinction from the Latin American crisis; in that crisis, creditor banks were outside the region. Although Latin American countries took great care not to undermine the solvency of US and European banks by avoiding open default in the 1980s, it was not really their (Latin American) problem, except due to potentially negative indirect effects via the international economy, but such defaults would have been the problem of the US Federal Reserve and the European central banks. In the case of the Euro Zone crisis, it is European banks (especially German, French and British, but also Greek, Italian and Spanish), that are most vulnerable to any default/debt reduction of Euro Zone sovereign debt. Therefore, the difficulty of sovereign debt default is greater within the European region than it would have been in Latin America.

The two (not necessarily exclusive) routes for reducing debt servicing are:

1. Reduce the cost of debt servicing by ECB intervention. Economic implications are a little less clear in case of failure, but straightforward if it works (the good equilibrium).
2. Postponement of part or all of the debt servicing, via growth linked debt mechanisms.

2.5.3.3 Massive ECB intervention to buy sovereign debts

This approach was suggested by a number of economists (for example, Wyplosz, 2012) and perhaps most clearly articulated by Paul De Grauwe (2012). De Grauwe argued that:

> The only strategy that can work is one that uses the ECB's unlimited resources as its core. Thus, the ECB should announce a cap on the spreads of the Spanish and Italian government bonds, say of 300 basis points. Such an announcement is fully credible if the ECB is committed to using all its firepower, which is infinite, to achieve this target.

In fact, the ECB did announce an unlimited programme of government bond purchases in the autumn of 2012, called Outright Monetary Transactions, but only for paper of up to three years, and with strict conditions (see below). The president of the ECB, Mario Draghi, provided the following justification for such purchases:

> The Governing Council today decided on the modalities for undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area. We need to be in the position to safeguard the monetary policy transmission mechanism in all countries of the euro area. We aim to preserve the singleness of our monetary policy and to ensure the proper transmission of our policy stance to the real economy throughout the area. OMTs will enable us to address severe distortions in government bond markets which originate from, in particular, unfounded fears on the part of investors of the reversibility of the euro. Hence, under appropriate conditions, we will have a fully effective backstop to avoid destructive scenarios with potentially severe challenges for price stability in the euro area. We act strictly within our mandate to maintain price stability over the medium term; we act independently in determining monetary policy; and the euro is irreversible. (Draghi, 2012)

At the time of writing, this program was very successful in the sense that spreads of Italian and Spanish bonds had fallen significantly, without the ECB actually doing any purchases. There are two problems. One is that for such purchases to be activated (if necessary) there would be very strict fiscal conditions, which are themselves causing excessive austerity and low growth. This is supposed to deal with moral hazard. However, there has to be a fear that these institutional arrangements imply too much austerity, and thus defeat in part the main aim of reducing debt servicing cost – to give space for growth in countries with difficult market access. Nevertheless, this seems to be the political cost to pay for German, Finnish and Dutch support for ECB action.

Another reason for the ECB's reluctance to be a lender of last resort in government bond markets has to do with its business model. This is a model that says the ECB's main concern is the defence of the quality of its balance sheet, that is, it should avoid losses and show positive equity. Though De Grauwe and others dismiss this concern, it seems to have quite a lot of potential validity in certain circumstances.

According to De Grauwe, "the business model the ECB should have is one that it pursues financial stability as its primary objective (together with price stability), even if that leads to losses. There is no limit to the losses a central bank can bear, except as imposed by its commitment to maintain price stability." De Grauwe then correctly argues that: "A central bank should be willing to take such losses if in doing so it stabilizes financial markets. In fact when it successfully stabilizes financial markets losses may not even appear" (De Grauwe, 2012).

The key problem is what happens if this ECB intervention goes ahead but does not stabilize the financial markets. It may be useful to think of two scenarios: a positive and a negative one:

A. The positive scenario. If the ECB intervention of buying up sovereign debt works (either because the offer is by itself enough and the ECB can keep its powder dry, as has happened till now which is the best option, or such purchases are sufficiently large and for long periods, following Bagehot's principles of a lender of last resort, it should be completely open-ended), lower spreads would reduce the severity of the crisis, as has happened, and it should allow more fiscal space. The problem with the latter under the current ECB scheme is that accompanying fiscal programs are very restrictive, which limits the ability of expanded national public investment that could then lead to more growth. However, if the crisis is moderated, and even better growth restored as well, this leads to a good equilibrium, a desirable outcome.
B. The negative scenario. ECB intervention through buying up sovereign debt is actually activated, works for a time, but ultimately fails, for reasons such as: it is insufficiently large, not carried out for long enough (for political reasons), or there are other shocks from the international economy or others.

This second scenario is a bad equilibrium as this does not allow a solution to the crisis, but could also could imply a massive transfer of liabilities from private creditors to the ECB. Though it could partly be eroded by inflation, and diffused in other ways, ultimately a part of the debt would have to be absorbed by the ECB and possibly by EU governments. While it is valid for the ECB to provide unlimited liquidity if markets malfunction, and the problem is temporary, if a problem of solvency emerges, it will imply fiscal losses and transfers, as shown in the Southern Cone crises of the early 1980s. Of course,

distinctions between liquidity and solvency are always blurred *ex ante*, as was also learned in Latin America in the 1980s.

The other option is to increase the likelihood of the positive scenario by offering practically unlimited ECB intervention, which is currently the case, for paper up to three years. This has initially worked very well, as the ECB has not had to buy any debt at all; however, there is some small risk if the ECB had to buy a lot of debt the ECB would have to take losses on it if things went wrong. However, the ECB programme of OMT so far significantly reduces the likelihood of the negative scenario happening.

There is also the other option for lowering spreads, via Eurobonds or some other modality of mutualisation of debts; this option seemed even more difficult to get political support for from Germany, so we do not discuss it here. However, support for Eurobonds by the main German opposition party, the SPD, may lead to a reopening of this option, which is clearly desirable.

2.5.3.4 Is postponing some debt servicing till growth is restored in Europe an option?

There has been relatively little debate in Europe about the possibility of postponing debt service whilst economies are not growing, till the time when growth is restored.

However, GDP-linked warrants have been introduced into the Greek debt restructuring (see Appendix 1 for details). Apparently, Greek warrants have less potential to be as expensive as the Argentina warrants were (using official Argentine data, we estimate in Griffith-Jones and Hertova, 2012, that servicing Argentine warrants will represent 34 percent of total Argentine debt servicing in 2012, an extremely high cost). However, Greek warrants do not seem to make a very important contribution to overcoming the massive debt overhang of Greece, which is the crucial challenge.

Perhaps what would be required instead would be to systematically explore the option of a major postponement of servicing of large parts of the official debt, particularly in Greece via a partial or total debt service holiday, till economic growth is restored or restored to a certain level. A precedent lies in the "bisque clause" that Keynes negotiated in the US loan to the UK after World War II, which allowed the UK to have a complete debt-servicing holiday in those years when its economy's performance was weak, with the total debt accumulating and being paid in the future. This clause was used by the UK for a number of years (see Stiglitz et al., 2009).

One advantage of such an approach for creditors is that it would not require creditors holding that debt to take losses, as it would represent a postponement of debt servicing, rather than a reduction in the net present value of total debt servicing. For official creditors, which represent a very large proportion of Greek debt, implementation would be simple once agreement reached.

What seems increasingly clear is that for the future, once the European crisis is finally finished, and countries are restored to growth and creditworthiness, there is a very strong case for European countries to fund themselves via GDP linked bonds, as these will protect them during downturns, as well as discouraging excessive overheating in good times (Griffith-Jones and Shiller, 2006).

2.5.3.5 The case for slower consolidation in the UK

There is a different situation for countries that may need to do fiscal consolidation eventually, but where doing it now (as in the case of the UK) will cause unnecessary output and employment costs, causing lower growth than necessary in Europe and worldwide.

For a long time in the UK there has been a debate about whether fiscal consolidation should be done sooner or later, with more Keynesian economists arguing that it is better to delay fiscal consolidation during a period of depressed output, as in the UK, particularly when spreads on government debt are very low. These economists have argued strongly that an approach, different from the current UK government approach of major early fiscal consolidation, would result in far higher output and employment. A very interesting paper from a leading UK think-tank NIESR (Bagaria et al., 2012) has formalized this analysis and produced very clear results, which confirm the more Keynesian position. We summarize the analysis and results below, as it seems highly relevant to the discussion about the space for growth in Europe as a way out of crisis.

Bagaria et al. start by emphasizing that long-term interest rates remain low in virtually all major developed economies outside the Euro Area. However, many of the major economies introduced fiscal tightening measures despite a widespread slowdown in GDP growth and a level of GDP that remains well below that of 2007. The IMF estimates that the overall global fiscal position tightened by 1 percent of GDP in 2011 (IMF, 2012).

Although the long-term government borrowing rates are at historic lows in the UK, Bagaria et al. (2012) argue that over the medium- to long-term fiscal consolidation is essential for debt sustainability. The UK has announced fiscal consolidation measures amounting to a total of 7.4 per cent of GDP over the fiscal years 2011–12 to 2016–17.

Bagaria et al. (2012) assess the impact of the scale and timing of this fiscal consolidation programme on output and unemployment in the UK. They use the National Institute's model, NiGEM, to first analyse the impact of the ongoing policy on the UK economy using the standard version of the model, which would reflect impact in "normal" times. However, we do not appear to be in "normal" times but in a prolonged period of depression, defined as a period when output is depressed below its previous peak. The impact of fiscal tightening during a depression may be different from that in normal times.

There are a number of channels that the differences may feed through; for each the model is modified to take account of the differential impacts.

First, there is the interest rate response. Under normal circumstances a tightening in fiscal policy can be accommodated by a relaxation in monetary policy. However, with interest rates already at exceptionally low levels, a further tightening of fiscal policy is unlikely to result in such an offsetting monetary policy reaction. While quantitative-easing/credit-easing measures have been introduced, the effects of these measures are also limited by low interest rates on 'risk-free' assets.

Secondly, during a downturn, when unemployment is high and the level of job security is low, a greater percentage of households and firms may find themselves liquidity constrained. This is likely to be particularly acute when the downturn is driven by an impaired banking system as lending conditions will tighten beyond what would be expected in a normal downturn.

Finally, long spells of depressed output and high unemployment can lead to "hysteresis" which keeps the productive capacity of the economy persistently or even permanently lower (for example, through the "scarring" effect of unemployment). The economy may converge to the steady-state levels of output and employment in the very long run, but in the medium term output levels could be substantially lower. The time the economy takes to converge to the long-run steady state is also prolonged.

The Bagaria et al. paper (op cit.) measures the potential impact on the economy, both in the short and long term, of postponing the planned consolidation measures that were introduced from 2011–12 onwards until the UK economy has emerged from the current period of depression (see Table 2.5.4).

The Bagaria et al. paper models two scenarios (one of which is the current UK government strategy of consolidating during a period of recession and the other being waiting till the UK economy recovers before undertaking the same consolidation). The results suggest that the recession in 2012 could have been avoided had there been a delay to the introduction of fiscal tightening measures. The estimates in Bagaria et al. are presented in Table 2.5.4, which shows marked differences between the two scenarios in level terms. These indicate that the cumulative loss of output from early consolidation accumulated over the period 2011–21 amounts to £239 billion in constant 2010 prices. This is equivalent to 16½ percent of 2010 GDP (or about 1.3 per cent of total output over the entire period). These losses are sustained despite the fact that the growth rate of GDP is expected to be higher after 2016 under the early consolidation scenario compared to the delayed consolidation scenario, as consolidation measures in the latter are ongoing until 2020. In the long run, the level of GDP should converge to a common level.

Table 2.5.4 GDP in £ billion, 2010 prices under two scenarios

	Consolidate during a depression	Consolidate in normal times	Difference	% 2010 GDP
2011	1478	1489	11	0.8
2012	1476	1505	29	2
2013	1495	1535	40	2.8
2014	1531	1575	44	3
2015	1572	1622	49	3.4
2016	1614	1660	45	3.1
2017	1654	1686	33	2.3
2018	1694	1708	14	1
2019	1738	1737	–1	–0.1
2020	1785	1775	–10	–0.7
2021	1832	1817	–15	–1
Sum 2011–21	17869	18109	239	16.6

Source: Bagaria et al. (2012).

This important paper shows clearly that postponing fiscal consolidation in the UK would have been a desirable strategy and that the current strategy is inflicting unnecessary pain on the UK economy. Indeed, fiscal policy choices have to be considered in the light of the monetary policy response function. When monetary policy is constrained by the zero lower bound on interest rates, the impact of fiscal policy (the fiscal multiplier) will be magnified compared to *normal* times. The health of the banking sector is also an important factor. When unemployment is high, a greater percentage of households and firms are likely to find themselves liquidity constrained. This is likely to be particularly the case when the downturn is driven by an impaired banking system, as lending conditions tighten beyond what would occur in an ordinary downturn. Heightened liquidity constraints magnify the impact of contractionary fiscal policy on output and unemployment.

2.5.3.6 The case for less consolidation at a European level

The case made above for the UK about the benefits of slower consolidation are equally (or more) relevant at the level of the European Union. Monetary policy is constrained in similar ways, with a weak banking sector contributing to very high unemployment, implying that both households and firms are liquidity constrained. Additionally, if all European countries consolidate simultaneously, output will fall due to the contraction of trade amongst European countries. Holland and Portes (2012) modelled the impact of the additional fiscal consolidation in the European Union for the

2011–13 period and estimated – using the National Institute Econometric Model – that in the current scenario of recession or very low growth this will lead to a decline of GDP of 4 percent below what it would have been! Furthermore, their modelling also shows that fiscal consolidation is self-defeating as regards debt to GDP in current circumstances. Indeed, given the current state of the economy, fiscal consolidation would lead to an increase of debt to GDP ratios by 2013 in the EU, in the case of all countries excluding Ireland. Current policies would therefore seem to be self-defeating, or as Joseph Stiglitz and Paul Krugman have eloquently put it, more like a collective suicide pact.

The alternative of slower and less fiscal consolidation at the national level, combined with pro-growth initiatives at the European level, along the lines outlined above, seem therefore the best path to follow as soon as possible to restore the growth of output and employment.

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Appendix 1: Greek GDP-linked securities*

In February 2012, Greece issued GDP-linked securities as part of what is considered the biggest sovereign debt restructuring in history. The deal, which was

*This Appendix draws from Griffith-Jones and Hertova (2012).

agreed to as part of Greece's €130 billion bailout from the European Union and the IMF, and massive austerity measures taken by Greece, erased about €100 billion from Greece's staggering debt. The country's sovereign debt still stands at 160 percent of its GDP, the highest in Europe. In the deal, private sector bondholders agreed to a loss of 53.5 percent of nominal value, and over 70 percent of the net present value of the Greek bonds they are holding.

In total, €172 billion of Greek private debt has been swapped in the deal, with a participation rate of 85.8 percent for bonds issued under Greek law (€152 billion) and 69 percent for foreign-law bonds and bonds issued by state enterprises (€20 billion). Overall, the participation rate would reach 95.7 percent, following the use of Collective Action Clauses.

Participating holders received detachable GDP-linked securities, with a notional amount equal to the face value of new bonds.

The securities will provide on October 15 every year starting in 2015 until 2042 an annual payment under the following conditions:

- Nominal GDP equals or exceeds the reference nominal GDP.
- Real GDP growth is positive and in excess of specified targets. Based on the set levels of reference GDP levels, the threshold for real GDP growth starts at 2.9 percent for 2015, and then gradually falls to 2 percent for 2016 and onwards.
- Each annual payment will not exceed 1 percent of the notional value of the bonds.

If the above conditions are met, the government will make a payment as follows:

Payment = (1.5 × (Real GDP Growth Rate – Reference Real GDP Growth Rate)) × Notional value of the GDP-linked securities

As in the case of Argentina, payment based on growth in a given year will not be made until the following year and the securities will not pay out a principal.

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References

Bagaria, N., Holland, D., and Van Reenen, J. (2012) "Fiscal consolidation during a depression," Centre for Economic Performance Special Paper, no. 27, August. Available online at http://cep.lse.ac.uk/pubs/download/special/cepsp27.pdf.

Bertola, L. and Ocampo, J.A. (2012) "Learning from Latin America: Debt Crises, Debt Rescues and When and Why They Work," Institute for the Study of the Americas. Available online at http://americas.sas.ac.uk/fileadmin/ISA/documents/events/Papers/Bertola_and_Ocampo_paper.pdf.

De Grauwe, P. (2012) "The ECB Can Save the Euro – But It Has To Change Its Business Model," July 30, Institute for New Economic Thinking Blog. Available online at http://ineteconomics.org/blog/inet/paul-de-grauwe-ecb-can-save-euro-it-has-change-its-business-model.

Draghi, M. (2012) "Introductory Statement to the Press Conference (with Q&A)," European Central Bank Press Conference. Available online at http://www.ecb.int/press/pressconf/2012/html/is120906.en.html.

Ffrench-Davis, R. and Griffith Jones, S. (2005) *Coping with Capital Surges: The Return of Finance to Latin America* (London: Lynne Rienner Publishers).

Griffith-Jones, S. (1988) *Managing World Deb*, (Hertfordshire: Harvester Wheatsheaf).

Griffith-Jones, S. and Shiller, R. (2006) "A Bond That Insures Against Instability," *The FT*, July 10. Available online at http://www.ft.com/cms/s/2/b7155454-1039-11db-8f6f-0000779e2340.html.

Griffith-Jones, S., Kollatz-Ahnen, M., Andersen, L. and Hansen, S. (2012) "Shifting Europe from Austerity to Growth: a Proposed Investment Programme for 2012–2015, " FEPS–IPD–ECLM Policy Brief. Available online at http://stephanygj.net/papers/austerity-to-growth.pdf.

Griffith Jones, S. and Hertova, D. (2012) "Growth-Linked Securities," Global Economics in C.F. Bergsten and C.R. Henning (eds), *Extraordinary Times: Essays in Honor of John Williamson* (Washington, DC: Peterson Institute for International Economics).

Holland, D. and Portes, J. (2012) "Self-defeating Austerity?," VoxEU. Accessed online at http://www.voxeu.org/article/self-defeating-austerity. Longer version: Holland, D. and Portes, J. (2012) "Self-defeating Austerity?," *National Institute Economic Review*, 222.

Holmes, P., Gonzalez, J.L., and Gasiorek, M. (2012) "Greek Trade Balance Improves but Overwhelmingly Due to the Recession," Trade Sift Note, University of Sussex. Available online at http://www.sussex.ac.uk/caris/documents/tradesift-sample-report-greek-trade-balance-improves-but-overwhelmingly-due-to-the-recession-june2012.pdf.

IMF (2012) World Economic Outlook. October.

Pisani-Ferry, J. and Merler, S. (2012) "Sudden Stops in the Eurozone," *Vox EU*, April 2.
Available online at http://www.voxeu.org/article/public-capital-flows-replacing-private-flows-eurozone-what-it-means-policy.

Rehn, O. (2012) 'Restoring growth in Europe: confidence, reforms and investment', Speech given at Institute of European Studies, Vrije Universiteit Brussel, 5 May.
http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/330&format=HTML&aged=0&language=EN&guiLanguage=en.

Ritschl, A. (2012) "Germany, Greece and the Marshall Plan," *The Economist*, June 15.
Available online at http://www.economist.com/blogs/freeexchange/2012/06/economic-history.

Stiglitz, J. et al. (2009) "Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System," United Nations.
Available online at http://www.un.org/ga/president/63/PDFs/reportofexpters.pdf.
Stiglitz, J. (2011) "Eurozone's Problems are Political, Not Economic," *The FT,* July 20.
http://blogs.ft.com/the-a-list/2011/07/20/eurozones-problems-are-political-not-economic/?#axzz22xVOk8ij.
World Bank (1999) *Global Development Finance. Analysis and Summary Tables* (BofA Merrill Lynch Global Research).
Wyplosz, C. (2012) "End of Game? Don't bet on it," Vox EU, July 25.
Available online at http://www.voxeu.org/article/end-game-don-t-bet-it.