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Saving the Euro: a Pyrrhic Victory?

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Summary points

- The survival of the euro has entailed a lengthy recession and has left an ominous legacy of public debt, but the fundamental flaws in its original design have not been corrected.
- In the 1930s the collapse of the Gold Standard was an integral part of the recovery process from the Great Depression, but many policy-makers believe that to mimic this approach in the case of the eurozone today would be too risky.
- Fiscal consolidation alone seems inadequate to address the fiscal sustainability problems of highly indebted economies in the euro area; financial repression and debt relief will also be needed to address the debt overhang.
- The design of the European Central Bank is not helpful for spearheading economic recovery in the present circumstances. Indeed, a 'subservient' 1950s-style central bank, rather than an independent one, would be more effective.
- The crisis has inflicted significant damage to future growth prospects in the eurozone, both through the debt legacy it has created and in terms of the impetus it has given to detrimental supply-side policies.
- The euro has probably been saved, but this has come at a very high price, resulting in what may well be a 'lost decade' for southern Europe.

Introduction

The euro appears to have survived the crisis. Despite numerous predictions that at least one country would leave the eurozone, and fears that a disorderly collapse of the economic and monetary union could ensue, the worst seems to be over. Today thoughts are turning to recovery, while the urgency of fundamentally reforming the currency union has receded. The survival of the euro and the prospect of enduring even relatively limited sovereign default are in marked contrast to the 1930s when the Gold Standard disintegrated completely and there was a major sovereign debt crisis.

Prima facie, the continued existence of the eurozone may be viewed as a success. Yet exiting the Gold Standard was a big part of the solution to the macroeconomic problems of the Great Depression. Economies which devalued early, such as the Nordic countries, experienced an early return to strong growth. Similarly, countries which defaulted grew more rapidly than those which did not. This raises the question as to whether the survival of the single currency and the associated bailout programmes have come at a very high price in terms of much-reduced growth prospects. For troubled members of the eurozone, there is a threat of a 'lost decade' that is more akin to Latin America in the 1980s than to Scandinavia 80 years ago.

To economic historians familiar with the inter-war experience, the survival of the euro seems rather puzzling and raises a number of interesting questions. If this time it is different, why? If the disintegration of the euro is still a threat, what does economic history suggest will be required to prevent this occurring, and what are the implications for growth? Similarly, in the absence of default – and within the eurozone where most of the traditional approaches to dealing with the adverse fiscal legacy of the crisis are precluded – how will countries deal with the burden of very high public debt-to-GDP ratios? And, finally, can fiscal sustainability be achieved without seriously damaging growth?

This paper reviews the post-crisis prospects for medium-term growth in the euro area and concludes both

that the process of saving the euro has been costly and that the downside risks to growth are considerable in a world of high debt-to-GDP ratios and an incompletely reformed currency union.¹ In this context, the options available to policy-makers are rather unattractive.

What can we learn from the 1930s?

In 1929 virtually all major economies were on the Gold Standard, but by late 1936 the French devaluation signalled the final demise of an international monetary system based on free convertibility of currencies into gold at a fixed parity. Famously, the United Kingdom made an ignominious exit in September 1931, having rejoined the Gold Standard only six years earlier. The decision to leave the Gold Standard has been analysed by Wolf (2008), who used an econometric model to examine the odds of staying on gold. He found that a country was more likely to leave if its main trading partner did so, if it had returned to gold at a high parity, if it was a democracy or if the central bank was independent. On the other hand, his findings showed that a country was less likely to leave if it had large gold reserves, less price deflation and strong banks.

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In other words, decisions as to whether to leave the Gold Standard were influenced by the strength of worries about the loss of monetary discipline, the extent of deflationary pain and deteriorating international competitiveness. The model predicts departures well and reveals that France was under the least pressure to exit in the early 1930s. It also suggests that democratic politics undermined the Gold Standard. With a much broader

¹ This paper draws on themes developed in Crafts and Fearon (2010) and Crafts (2013a and 2013b).

Table 1: Real GDP in the 'sterling bloc' and the 'gold bloc', 1929–38 (1929 = 100)

	Sterling bloc	Gold bloc
1929	100.0	100.0
1930	100.4	97.3
1931	95.8	93.6
1932	96.1	90.3
1933	98.8	93.2
1934	105.0	92.5
1935	109.1	93.4
1936	113.9	94.6
1937	117.7	101.0
1938	119.5	100.8

Notes: The 'sterling bloc' comprised Denmark, Norway, Sweden and the UK, all of which left the Gold Standard and devalued in September 1931; the 'gold bloc' comprised Belgium, France, Italy, the Netherlands and Switzerland, all of which stayed on the Gold Standard until the autumn of 1936, apart from Belgium, which exited in March 1935. Source: Derived using Maddison (2010) and updated with the Maddison Project (2013).

electorate, the use of deflationary policies to stay on gold was much less acceptable than in the nineteenth century. For example, this can be seen clearly in the pivotal case of the UK where the changed political climate resulted in the politicization of monetary policy even after the country's return to gold, and this was reflected in the great reluctance of the Bank of England to raise interest rates in the 1931 crisis when the bank rate was only increased to 4.5%.²

It is well known that staying on the Gold Standard in the 1930s increased the severity and duration of the downturn associated with the Great Depression (Bernanke, 1995). In contrast, early abandonment of the fixed Gold Standard exchange rate promoted early and often quite rapid recovery. This is highlighted in the contrasting fortunes of the 'sterling bloc' and 'gold bloc' countries shown in Table 1.

For the typical small open economy, the big problem as the Depression took hold was being subjected to

deflationary pressures as world output and prices fell while being severely constrained in policy-making by adhering to the Gold Standard. The concept of the macroeconomic trilemma suggests that such a country can only have two of a fixed exchange rate, capital mobility and an independent monetary policy (Obstfeld and Taylor, 2004). It follows, therefore, that for countries on the Gold Standard, a monetary policy response to deflationary shocks needed to be coordinated across countries (thereby allowing interest rate differentials to remain unchanged). But as Wolf (2013) makes clear, international coordination was out of the question. Besides having no control over monetary policy, staying on the Gold Standard required reductions in prices and money wages to maintain competitiveness and entailed a period of high real interest rates and increases in real labour costs and unemployment - overall a very difficult adjustment. By the end of 1933, France had suffered a loss of competitiveness of nearly 30% versus the UK (Eichengreen, 1992, Table 12.3). Leaving the Gold Standard delivered autonomy over monetary policy that allowed lower interest rates, ended deflationary pressure, cut real wages and also stimulated investment (Eichengreen and Sachs, 1985).

The 1930s saw a massive resort to protectionist policies and are often seen as a period of 'trade war'. Increased barriers to trade clearly played an important role in reducing trade volumes in the 1930s; protectionism perhaps accounted for around 40% of the 24% fall in the volume of trade in the early 1930s (Madsen, 2001). The goals of protectionist policies were typically to safeguard employment, to improve the country's balance of payments and to raise prices. Unlike today, there were no constraints from World Trade Organization (WTO) membership. Protectionism is usually thought of as the triumph of special-interest groups but in this period it may have been more a substitute for a macroeconomic policy response. Eichengreen and Irwin (2010) found that, on average, tariffs were higher in countries that stayed on gold longer and so had less scope to use monetary or fiscal

² The UK exit from gold in 1931 can plausibly be interpreted as a 'second-generation currency crisis' when a speculative attack was in effect accommodated by the authorities who were unwilling to raise interest rates at a time when market expectations of devaluation responded strongly to increases in unemployment (Eichengreen and Jeanne, 2000).

policies to promote economic recovery. Their research suggests that the financial crisis of 1931, rather than the Smoot-Hawley tariff, was the real trigger for the trade war of the 1930s.³

For the UK, leaving the Gold Standard had a further major advantage, namely that it made the fiscal arithmetic of dealing with the large overhang of public debt from the First World War and the price deflation of the 1920s much less daunting. This is illustrated in Table 2.

The required primary budget surplus as a percentage of GDP for fiscal sustainability (defined in terms of stabilizing the public debt-to-GDP ratio) depends positively on the size of the outstanding stock of debt as a percentage of GDP and the real interest rate, and negatively on the rate of growth of real GDP. Compared with the late 1920s, the recovery of the 1930s was characterized by much lower real interest rates on government borrowing once price falls ended and interest rates could be reduced, and by faster GDP growth. In fact, the interest rate/growth rate differential was negative in the mid-1930s, implying that it would even have been possible to run primary budget deficits and to reduce the debt-to-GDP ratio.

Table 2: UK fise	cal su	istaina	ability o	data, 1	925-	29
and 1933–38						
	Ь	i	π	g	d	b*

1925–29 average	6.78	4.72	-0.99	2.22	1.636	5.71
1933–38 average	5.04	3.67	1.67	3.59	1.612	-1.38

Note: The required primary budget surplus-to-GDP ratio, b^* , satisfies the condition that $\Delta d = 0$, where $\Delta d = -b + (i - \pi - g)d$.

Sources: b, primary budget surplus-to-GDP ratio (%); *i*, average nominal interest rate on government debt (%); and *d*, public debt-to-GDP ratio (%) from Middleton (1996); π , rate of inflation (%) based on GDP deflator from Feinstein (1972); *g*, 4th-quarter real GDP growth rate (%) from Mitchell et al. (2012).

Table 3: Real GDP per capita in Latin America, 1929–38 and 1980–89 (1929 and 1980 = 100)

1929	100.0	1980	100.0
1930	93.1	1981	98.1
1931	85.8	1982	94.8
1932	80.7	1983	90.0
1933	85.3	1984	91.6
1934	90.9	1985	92.7
1935	94.3	1986	94.9
1936	98.1	1987	96.2
1937	101.6	1988	94.9
1938	102.7	1989	94.1

Note: Latin America comprises Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela. Source: Maddison (2010).

In the UK, this circumstance arose partly because of the direct effects of the so-called 'cheap money policy' which held nominal interest rates down in a world of limited capital mobility, and partly because of strong private-sector growth. But it was also greatly aided by the end of price deflation once interest rates had reached the 'lower bound'.⁴ The cheap money policy was run by HM Treasury, not the Bank of England, the implication being that debt management objectives were given a large weight in monetary policy.

Sovereign default was widespread in the 1930s – in Latin America much more so than in the debt crisis of the 1980s – and was an important element of the world economic crisis and the withdrawal of Latin American countries in particular from the world economy. Default was typically triggered by the increased burden of debt service as the Great Depression intensified and export prices fell while real interest rates rose. An analysis of the implications of default shows that it promoted growth, especially for heavy

3 The Smoot-Hawley tariff refers to the United States Tariff Act of 17 June 1930, which significantly raised levels of protection and is often seen as provoking substantial retaliation by other countries.

4 The reductions in the debt-to-GDP ratio, which fell from 1.79 in 1933 to 1.44 in 1938, were about two-thirds due to budget surpluses and one-third due to the favourable interest rate/growth rate differential (Crafts and Mills, 2012). The 'lower bound' is that nominal interest rates cannot be negative – when it is reached, real interest rates are higher the faster prices fall.

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defaulters (Eichengreen and Portes, 1990). A comparison of growth in Latin America (Table 3) shows that recovery in the 1930s came much sooner, with 1929 levels of real GDP per capita being regained by 1937, whereas the 1980 level was not matched until 1994. In the 1930s, sovereign debts were owed to private bondholders rather than to banks. This was important in permitting a relaxed attitude by lender governments, which contrasted with the pressure exerted in the 1980s to limit default, given the systemic risks to American banks (Eichengreen and Portes, 1989).

This analysis highlights several points of relevance to today's eurozone crisis. First, in the 1930s, devaluation, perhaps accompanied by default, was the route to recovery. Macroeconomic trilemma choices were dramatically revised. Second, exit from the Gold Standard was contagious. Third, when orthodox macroeconomic policies were unavailable as a way to fight unemployment, protectionism was to be expected. Lastly, falling prices make achieving fiscal sustainability at high public debtto-GDP ratios very demanding in terms of the required budget surplus so that if deflation is required to restore competitiveness in a fixed exchange-rate system, 'austerity fatigue' is a likely consequence.

Why has the euro not collapsed like the inter-war Gold Standard?

Despite the apparent precedent of the 1930s, the eurozone has not yet collapsed, so this time it may be different for several reasons, which implies that the benefit/cost ratio of leaving the Gold Standard was rather different from that of exiting the eurozone. First, an exit from the Gold Standard was much easier. Countries had their own currencies in place and there was no equivalent to today's treaty obligations, which mean that leaving the euro entails an exit from the EU. Indeed, there was much less risk of provoking 'the mother of all financial crises' through capital flight and a devastating run on the banks (Eichengreen and Temin, 2013). Second, in the 1930s there was no real equivalent to today's 'doomloop' of deadly feedback effects between sovereign debt and banking crises. The threat to public finances from financial instability is much larger than in previous generations because bank balance sheets are now much larger relative to GDP.⁵ The ratio of bank assets to GDP was at least three by 2009 in six countries (Austria, Belgium, France, Ireland, the Netherlands and Spain) (Obstfeld, 2013), whereas until the 1970s it was typically less than one in advanced countries (Schularick and Taylor, 2012). Equally, the threat to financial stability from sovereign default is considerably greater now than in the 1930s because the debts are owed to banks rather than to private bondholders.

The threat to public finances from financial instability is much larger than in previous generations because bank balance sheets are now much larger relative to GDP

Third, the perception of dire consequences of a devaluation and default for other eurozone countries in an integrated capital market with much bigger bank balance sheets that feature substantial amounts of sovereign debt led to the provision of financial support with conditionality under the auspices of the 'troika'.⁶ Moreover, the European Central Bank (ECB) has acted as a lender of last resort not only to banks but also to sovereigns through sovereign debt purchases and its offer of outright monetary transactions (OMT).

This list is notable for three missing items. First, there is no suggestion that countries remain in the euro

⁵ According to the criteria adopted by economists from the International Monetary Fund, there have been systemic banking crises in eight eurozone economies since 2008 (Austria, Belgium, Germany, Greece, Ireland, Luxembourg, the Netherlands and Spain), with borderline-systemic crises in four more (France, Italy, Portugal and Slovenia) (Laeven and Valencia, 2012).

⁶ The 'troika' comprises three lenders, namely the European Central Bank, the EU and the IMF.

because the fundamental flaws in its original design will soon be removed. The European Commission (2012) has proposed a redesign for the Economic and Monetary Union (EMU) which would eventually develop a fully-fledged banking union, fiscal union and participatory democracy at the federal level - in effect a 'United States of Europe'. This could greatly reduce the risks of banking crises, better sharing of burdens of adjustment between surplus and deficit countries, together with the realization of economies of scale in the provision of federal public goods, the internalization of externalities and mutual insurance against asymmetric shocks. However, this outcome seems quite unlikely any time soon; voters in different European countries have very different preferences for the design of a reformed EU. In other words, 'heterogeneity costs' are probably too high to allow the realization of these putative benefits (Spolaore, 2013).7

Current estimates by the OECD are that for the euro area as a whole real GDP in 2014 will still not have regained its pre-crisis peak

Second, the survival of the euro is not based on good macroeconomic outcomes. Economic performance in eurozone countries remains very weak, as Table 4 demonstrates. Current estimates by the Organisation for Economic Co-operation and Development (OECD) are that for the euro area as a whole real GDP in 2014 will still not have regained its pre-crisis peak. Meanwhile, the experience of Greece, Ireland, Italy, Portugal and Spain looks much more like that of the countries which remained on the Gold Standard in the early 1930s than

	2007	2012	2014
Real GDP (2007 = 100)			
France	100	99.9	100.4
Germany	100	103.5	105.9
Greece	100	80.0	75.2
Ireland	100	93.9	96.6
Italy	100	93.1	91.8
Portugal	100	94.2	91.9
Spain	100	95.9	94.6
Euro area	100	98.8	99.3
Inflation (% per year)			
France	2.6	1.3	0.8
Germany	1.6	1.3	1.7
Greece	3.3	-0.8	-2.1
Ireland	0.7	1.9	1.2
Italy	2.4	1.6	0.9
Portugal	2.8	-0.1	0.0
Spain	3.3	0.3	0.4
Euro area	2.3	1.2	1.1
Unemployment (%)			
France	8.0	9.9	11.1
Germany	8.3	5.3	4.8
Greece	8.3	24.2	28.4
Ireland	4.6	14.7	14.1
Italy	6.1	10.6	12.5
Portugal	8.0	15.6	18.6
Spain	8.3	25.0	28.0

Table 4: Euro area macroeconomic indicators

Note: Inflation based on GDP deflator. Source: OECD (2013).

Euro area

those which left. Prolonged recession has been accompanied by rapidly rising unemployment, from 7.4% in 2007 to a projected 12.3% in 2014 in the euro area, but with much more dramatic increases in both Greece and Spain, in particular, where unemployment is forecast to be around 28% next year. Price deflation has generally been avoided, but inflation remains very low so the growth

7.4

11.2

12.3

⁷ On measures of ethnic, linguistic and cultural diversity typically used to proxy for 'heterogeneity costs', the EU countries are not good candidates to form a European federation.

of nominal GDP in the euro area is projected to average only about 1.5% per year in 2013 and 2014. It is apparent that public debt-to-GDP ratios are high and rising, as Table 5 highlights. Indeed, prolonged recession and the costs of dealing with banking crises have wreaked havoc with the fiscal indicators.

	2007	2012	2014
France	73.0	109.7	116.3
Germany	65.6	89.2	85.1
Greece	119.3	165.6	189.2
reland	28.6	123.3	126.4
taly	114.4	140.2	143.9
Portugal	75.5	138.8	147.3
Spain	42.4	90.5	103.5
Euro Area	72.3	103.9	106.9

Third, competitiveness problems have not been fully resolved even though balance-of-payments deficits are much smaller than in 2007. Continued membership of the euro has not been facilitated by wage flexibility. Indeed, euro-periphery economies appear close to downward nominal wage rigidity - only in Greece were labour costs per hour lower in 2012 than in 2008 (Eurostat, 2013). Substantial further improvements in competitiveness are required to restore sustainable external positions in the face of high external debt, and many more years of high unemployment will be needed to achieve these adjustments (Guillemette and Turner, 2013). The labour market adjustment issues in the periphery would be mitigated if the ECB credibly targeted higher rates of inflation for a period; this would not only reduce real interest rates but would also lower real wages and restore competitiveness in the periphery (Schmitt-Grohé and Uribe, 2013).

How can policy-makers address the legacy of high public debt-to-GDP ratios?

Since 2007, public debt-to-GDP ratios in the eurozone have risen considerably and for many countries are well above the Maastricht limit of 60%. If projections of interest rate/growth rate differentials of well over two percentage points for the high-debt eurozone economies are correct (Ghosh et al., 2013), then just stabilizing the debt-to-GDP ratio will require primary budget surpluses of around 3% of GDP to be maintained permanently. This would be a level which is about the maximum sustained for any lengthy period in advanced economies (IMF, 2013). The fiscal consolidation needed to bring debt ratios down to the 60% level over, say, a 20-year period looks extremely painful in a number of countries, including Greece, Ireland, Portugal and Spain (OECD, 2013) and is quite possibly beyond what is politically feasible (Buiter and Rahbari, 2013). This suspicion is supported by the historical record of how big reductions in debt-to-GDP ratios have been achieved. As Table 6 shows, in cases where the average reduction was from a ratio of 137% to 80%, only a little more than half the reduction came from budget surpluses, with interest rate/growth rate differentials contributing at least as much - an outcome that will be very difficult to repeat in today's circumstances. In any event, dealing with the legacy of the crisis through fiscal orthodoxy alone will entail a long period of high public debt-to-GDP ratios.

What are possible alternative strategies? One obvious option is 'financial repression', which is based on trying to hold down the interest rates at which government borrows and works through manipulating the interest rate/growth rate differential.⁸ In the era of capital controls, this played a major part in the reduction in public debt-to-GDP ratios in the UK and elsewhere after the Second World War (Reinhart and Sbrancia, 2011), as is reflected in the 1945–70 data in Table 6. This was a period when central banks were generally 'subservient' to governments rather

^{8 &#}x27;Financial repression' occurs when governments intervene to gain access to funds at below-market interest rates typically through moral suasion, regulations imposed on the capital market, including imposing obstacles to international capital mobility, and restrictions on interest rates.

Start	Initial ratio	Final ratio	Decrease	Budget surplus component	Growth-interest differential component	Residual adjustment
Pre-1914	88.9	62.3	26.7	18.5	9.3	-1.2
1914-44	121.7	87.7	34.0	23.1	12.0	-1.0
1945-70	92.3	32.7	59.6	20.7	53.2	-14.2
Post-1970	73.6	46.3	27.3	22.7	0.8	3.8
Ratio > 80	136.7	79.6	57.1	29.0	37.4	-9.3
Ratio < 80	55.2	33.9	21.3	15.1	4.3	1.9

Table 6: Breakdown of large debt-ratio reductions (averages as % GDP)

Notes: Examples do not include cases where default occurred. The accounting is based on a permutation of the fiscal sustainability formula and the residual adjustment covers valuation effects, errors and 'below-the-line' fiscal operations. Source: Ali Abbas et al. (2011).

than independent (Goodhart, 2010) and this greatly facilitated 'financial repression' in the UK, for example, in the 1930s.

Although EU rules guarantee free movement of capital and the independence of the ECB, countries largely retain sovereignty over fiscal and financial matters, and that gives them scope for financial repression which has already been exploited (van Riet, 2013). Even at the European level, Basel III rules for capital adequacy of banks will privilege government bonds as zero-risk and EU law allows for capital controls in exceptional circumstances. Governments under financial stress may well be granted increased leeway to introduce national regulatory actions and moral suasion in support of government debt financing.⁹

A second possibility is simply to write down public debt by some combination of default, restructuring or debt forgiveness. Debt restructuring surely should play some part when banks are strong enough, but this is unlikely to be a major step towards achieving the 60% 'safe level' for all the problem countries. The 'haircut' needed to achieve this for a country with a debt-to-GDP ratio of 150% is 60%, which for a country capable of growing at 2% per year and able to borrow at a real rate of 5% would allow the debt-to-GDP ratio to be stabilized thereafter at the 'safe level' by running a primary budget surplus of 1.8% of GDP.

It is perhaps helpful, therefore, to remember that, at the end of the 1980s, Brady Bonds played an important part in ending Latin America's 'lost decade' (Arslanalp and Henry, 2006). Paris and Wyplosz (2013) note that to forgive only 25% of the debts of Greece, Ireland, Portugal, Italy, Spain and France would cost about €1,200bn, an undertaking which can probably only be carried out by having the ECB buy up government debt in exchange for perpetual interest-free loans, in effect monetizing the debt at the eurozone level.¹⁰ Although this is a neat technical solution, provided that a credible framework could be devised to preclude any repetition down the road (namely to remove the future moral hazard), the political obstacles are probably insuperable.

This further reinforces the point that, in current circumstances, the eurozone would benefit from having a different sort of central bank. More inflation would help adjustment in southern Europe, while holding down interest rates for the purpose of financial repression and monetizing some of the debt would help address the debt overhang problem.

⁹ Van Riet (2013) itemizes a list of measures already undertaken that epitomize financial repression, especially in distressed eurozone economies, and discusses the financially repressive implications of new prudential regulations and protective measures against market turmoil. Reichlin (2013) views recent trends in bank balance sheets to a greater bias in favour of domestic government bonds as a 'balkanization' of the market.

^{10 €1,200} billion added to the ECB's balance sheet in this way would increase it by about 50%.

What are the implications of the crisis for eurozone growth prospects?

Overall, the implication of this analysis is that many eurozone countries face a debt overhang that is likely to last for many years. The long-term implications of high levels of public debt are likely to be unfavourable for growth. The adverse impact can occur through a number of transmission mechanisms, including reductions in market-sector capital formation, higher long-term interest rates and higher tax rates. Empirical research on advanced economies has found negative relationships: for example, Kumar and Woo (2010) estimate that a 10 percentage point increase in the debt-to-GDP ratio is associated with a fall of about 0.2 percentage points in growth. If taken literally, this could imply that the future trend growth rate would be as much as 0.75 percentage points lower than countries' pre-crisis performance.¹¹

Continuing fiscal consolidation is unlikely to be expansionary; on the contrary, the implications are likely to be deflationary and to entail (possibly considerable) GDP losses

Continuing fiscal consolidation is unlikely to be expansionary; on the contrary, the implications are likely to be deflationary and to entail (possibly considerable) GDP losses. The estimates in Guajardo et al. (2011) are that, on average, a fiscal consolidation of 1% of GDP reduces real GDP by 0.62% over the following two years in the absence of mitigating effects through monetary stimulus and/or exchange-rate depreciation. If the fiscal adjustment is achieved through expenditure cuts rather than tax increases and accompanied by structural reforms, the evidence is that output losses may be lower, in particular because private investment tends to respond favourably (Alesina et al., 2012). Nevertheless, it is reasonable to suppose that post-crisis fiscal adjustment is likely to be a drag on medium-term growth.

It is generally believed that expenditure-based consolidations have a greater chance of success (Molnar, 2012) and it might be thought that if this argument informs post-crisis policy it would minimize harmful supplyside effects on growth by mitigating distortionary tax increases. However, cuts in expenditure on education (which adds to human capital) and on infrastructure (which adds to physical capital) are bad for long-term growth. Unfortunately, it is noticeable that, at high levels of debt, addressing a rising debt-to-GDP ratio typically entails cuts in both public investment and education spending (Bacchiocchi et al., 2011). Hence the strong likelihood that post-crisis fiscal consolidation will undermine these expenditures is not good news for the growth prospects of highly indebted EU countries.

A further implication of high public debt-to-GDP ratios is that they seriously reduce the scope for fiscal stimulus to boost growth. As is well known, worries about fiscal sustainability have already undermined a willingness to use fiscal stimulus. Much less widely noticed, however, is that the legacy of the crisis will be a lengthy period when public debt-to-GDP ratios are at a level which potentially renders fiscal stimulus ineffective. Auerbach and Gorodnichenko (2011) find that at debt-to-GDP ratios of more than 100%, fiscal multipliers are close to zero, even in deep recessions, while Ilzetzki et al. (2010) suggest that, on average, the fiscal multiplier is zero on impact and in the long run is actually negative at debt-to-GDP ratios above 60%. For euro area economies, which have given up the independent monetary policy instrument, the implication may be that they have little or no scope to deliver economic stimulus through expansionary macroeconomic policies.

¹¹ Although there is a significant negative relationship between debt and growth, the magnitude seems to vary across countries and the claim that a particular threshold – such as the 90% debt-to-GDP ratio suggested by Reinhart and Rogoff (2010) – can be identified as the point where the adverse effect intensifies is probably not robust (Egert, 2013).

Table 7: Number of crisis-era protectionistmeasures recorded by Global Trade Alert

a)	Βv	type	
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Bailout/state aid	517	Investment	112
Trade defence	517	Migration	94
Tariff	263	Export subsidy	83
Non-tariff barrier (n.e.s.)	173	Trade finance	78
Export taxes	123	Public procurement	52

b) Number of measures imposed by G20 countries

EU	69	Japan	49
France	98	UK	105
Germany	107	US	49
Italy	101	G20	1359

Note: 'Trade defence' comprises anti-dumping, countervailing duties and safeguard measures. Source: Evenett (2013).

In the 1930s, countries 'trapped' in the Gold Standard turned to imposing barriers to trade, faute de mieux. Today's equivalent includes an increased reluctance to implement the Single Market in services and the creeping protectionism documented by Global Trade Alert in Table 7. These interventions are mostly not flagrant violations of WTO rules, and traditional tariff measures are only a small part of what has happened. The European Commission and EU member states have been by far the most active protectionists.¹² EU protectionism has entailed a relatively high level of discrimination against foreign commercial interests and of selectivity among firms, compared with other leading economic powers. And 84% of interventions in the EU have employed policy instruments that are subject to low or no regulation by the WTO, using measures such as bailouts, trade finance and subsidies, with the EU state-aids regime effectively suspended (Aggarwal and Evenett, 2012).

In Europe, the post-Depression response was also to embrace selective industrial policy, picking winners and supporting national champions but especially helping losers, a reaction which was intensified when macroeconomic troubles and globalization challenges returned in the 1970s (Foreman-Peck, 2006). In practice, industrial policy was heavily skewed to slowing down the exit of badly performing firms with adverse consequences for productivity performance and this may be an inherent characteristic of such policies (Baldwin and Robert-Nicoud, 2007). Also, allowing creative destruction to take its course can be seen to have been a superior policy for high-income countries (Fogel et al., 2008). Unfortunately, in the aftermath of the present crisis, the early signs are not good; there has already been a serious reversion to the use of selective industrial policy and this has come in the guise of helping losers.

The threat, both to growth and to European economic integration, is of populist governments which seek to take damaging anti-market measures

Across Europe in the 1930s – although the link was not automatic and depended on the electoral system and democratic tradition – prolonged stagnation significantly increased the electoral prospects of right-wing extremist parties (de Bromhead et al., 2013) and these were not market-friendly. In this context, not only might it be reasonable to worry about recent election results, but it should also be recognized that opinion polls show disappointingly low support for the market economy in countries where economic recovery seems a remote

¹² Clearly, this does not entail a return to the rampant protectionism of the 1930s. Nevertheless, the direction is certainly towards a slowdown in economic integration.

prospect. Last year, in response to the question 'Are people better off in a free market economy?', only 44% in Greece, 47% in Spain and 50% in Italy agreed (Pew Research, 2012). In 2007, 67% in Spain and 73% in Italy had agreed with that question (no data for Greece). This does not bode well for the market-friendly supply-side reforms which pre-crisis experience suggested would partly underpin medium-term growth (OECD, 2013). Instead, the threat, both to growth and to European economic integration, is of populist governments which seek to take damaging anti-market measures.

Finally, the legacy of the crisis for capital-market integration is likely to be a negative one. Not only are there significant fiscal pressures for financial repression, but these will be reinforced by the difficulty of resolving banking-sector problems in the absence of a fully-fledged banking and fiscal union and in the presence of very big bank balance sheets relative to the fiscal resources of individual nations. In these circumstances, countries may be unable to sustain both cross-border financial integration and financial stability on the basis of national fiscal independence and may seek to withdraw from a single financial market to reduce financial stability risks (Obstfeld, 2013). Overall, it seems clear that, while the euro may have been saved, medium-term growth prospects have been jeopardized.

Conclusion

Taken at face value, the example of the 1930s suggests there are big attractions for struggling eurozone economies to return to growth via a strategy of devaluation and default, and to exit from the currency union. The advantages would potentially include improved competitiveness and circumventing downward nominal wage rigidity, less need to run primary budget surpluses in pursuit of fiscal sustainability, and the opportunity to implement a new monetary policy framework. However, whether an exit can be achieved without triggering a massive financial crisis is doubtful, and probably enough has been done to persuade those thinking of leaving the eurozone not to take the gamble.

Overall, it seems clear that, while the euro may have been saved, medium-term growth prospects have been jeopardized

The ECB was designed for a normal economy to promote benign macroeconomic outcomes through a form of inflation targeting. Its independence is prized not least by Germans who formerly put their faith in the Bundesbank. In present circumstances, however, a 'subservient' 1950s-style central bank might actually be more conducive to economic recovery.

Conventional wisdom is still that medium-term growth prospects are unaffected by the eurozone crisis. Considering both the direct effects and the pressures to change policies in directions that will undermine rather than stimulate growth, this seems too optimistic. A major implication of the crisis is a long period of very high public debt-to-GDP ratios in eurozone economies. Past experience says that this could reduce growth performance by 0.75 percentage points per year. Attempts to address this issue through fiscal consolidation, which may last for many years, will further depress growth and it seems likely there will be some retreat from economic integration in both trade and capital markets, while market-friendly reforms that could improve growth performance are now far less likely.

References

- Aggarwal, V.K. and Evenett, S.J. (2012), 'Industrial Policy Choice during the Crisis Era', *Oxford Review of Economic Policy*, 28(2): 261–83.
- Alesina, A., Favero, C. and Giavazzi, F. (2012), 'The Output Effects of Fiscal Consolidation', NBER Working Paper No. 18336 (New York: National Bureau of Economic Research).
- Ali Abbas, S.M., Belhocine, N., El-Ganainy, A. and Horton,
 M. (2011), 'Historical Patterns and Dynamics of Public
 Debt Evidence from a New Database', *IMF Economic Review*, 59(4): 717–42.
- Arslanalp, S. and Henry, P. (2006), 'Debt Relief', *Journal of Economic Perspectives*, 20(1): 207–20.
- Auerbach, A. and Gorodnichenko, Y. (2011), 'Fiscal Policy in Recession and Expansion', NBER Working Paper No. 17447 (New York: National Bureau of Economic Research).
- Bacchiocchi, E., Borghi, E. and Missale, A. (2011), 'Public Investment under Fiscal Constraints', *Fiscal Studies*, 32(1): 11–42.
- Baldwin, R.E. and Robert-Nicoud, F. (2007), 'Entry and Asymmetric Lobbying: Why Governments Pick Losers', *Journal of the European Economic Association*, 5(5): 1064–93.
- Bernanke, B. (1995), 'The Macroeconomics of the Great Depression: a Comparative Approach', *Journal of Money*, *Credit and Banking*, 27(1): 1–28.
- Buiter, W. and Rahbari, E. (2013), 'Why Do Governments Default and Why Don't They Default More Often?', CEPR Discussion Paper No. 9492 (London: Centre for Economic Policy Research).
- Crafts, N. (2013a), 'What Does the 1930s Tell Us About the Future of the Eurozone?', University of Warwick CAGE Working Paper No. 142.
- Crafts, N. (2013b), 'Long-Term Growth in Europe: What Difference Does the Crisis Make?', National Institute Economic Review, Vol. 224, No. 1.
- Crafts, N. and Fearon, P. (2010), 'Lessons from the 1930s Great Depression', Oxford Review of Economic Policy, Vol. 26, No. 3.

- Crafts, N. and Mills, T.C. (2012), 'Fiscal Policy in a Depressed Economy: Was There a "Free Lunch" in 1930s Britain?', University of Warwick CAGE Working Paper No. 106.
- De Bromhead, A., Eichengreen, B. and O'Rourke, K.H. (2013), 'Political Extremism in the 1920s and 1930s: Do German Lessons Generalize?', *Journal of Economic History*, 73(2): 371–406.
- Egert, B. (2013) 'The 90% Public Debt Threshold: the Rise and Fall of a Stylized Fact', OECD Economics Department Working Paper No. 1055 (Paris: OECD).
- Eichengreen, B. (1992), Golden Fetters: the Gold Standard and the Great Depression, 1919–1939 (New York: Oxford University Press).
- Eichengreen, B. and Irwin, D. (2010), 'The Slide to Protectionism in the Great Depression: Who Succumbed and Why?', *Journal of Economic History*, 70(4): 871–97.
- Eichengreen, B. and Jeanne, O. (2000), 'Currency Crisis and Unemployment: Sterling in 1931', in P. Krugman (ed.), *Currency Crises* (Chicago: University of Chicago Press).
- Eichengreen, B. and Portes, R. (1989), 'Settling Defaults in the Era of Bond Finance', *World Bank Economic Review*, 3(2): 211–39.
- Eichengreen, B. and Portes, R. (1990), 'The Interwar Debt Crisis and Its Aftermath', *World Bank Research Observer*, 5(1): 69–94.
- Eichengreen, B. and Sachs, J. (1985), 'Exchange Rates and Economic Recovery in the 1930s', *Journal of Economic History*, 45(4): 925–46.
- Eichengreen, B. and Temin, P. (2013), 'Fetters of Gold and Paper', in N. Crafts and P. Fearon (eds), *The Great Depression of the 1930s: Lessons for Today* (Oxford: Oxford University Press).
- European Commission (2012), A Blueprint for a Deep and Genuine Economic and Monetary Union: Launching a European Debate (Brussels).
- Eurostat (2013), Eurostat News Release 54/2013.
- Evenett, S.J. (2013), *What Restraint? Five Years of G20 Pledges on Trade* (London: Centre for Economic Policy Research).

- Feinstein, C.H. (1972), National Income, Expenditure and Output of the United Kingdom, 1855–1965 (Cambridge: Cambridge University Press).
- Fogel, K., Morck, R. and Yeung, B. (2008), 'Big Business Stability and Economic Growth: Is What's Good for General Motors Good for America?', *Journal of Financial Economics*, 89(1): 83–108.
- Foreman-Peck, J. (2006), 'Industrial Policy in Europe in the 20th Century', *EIB Papers*, 11(1): 37–62.
- Ghosh, A.R., Kim, J.I., Mendoza, E.G., Ostry, J.D. and Qureshi, M.S. (2013), 'Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies', *Economic Journal*, 123(2): F4–F30.
- Goodhart, C.A.E. (2010), 'The Changing Role of Central Banks', BIS Working Paper No. 326 (Basel: Bank for International Settlements).
- Guajardo, J., Leigh, D. and Pescatori, A. (2011),'Expansionary Austerity: New International Evidence',IMF Working Paper No. 11/158.
- Guillemette, Y. and Turner, D. (2013), 'Policy Options to Durably Resolve Euro Area Imbalances', OECD Economics Department Working Paper No 1035 (Paris: OECD).
- Ilzetzki, E., Mendoza, E.G. and Vegh, C.A. (2010), 'How Big (Small?) Are Fiscal Multipliers?', NBER Working Paper No. 16479 (New York: National Bureau of Economic Research).
- IMF (2013), Fiscal Monitor April 2013.
- Kumar, M.S. and Woo, J. (2010), 'Public Debt and Growth', IMF Working Paper No. 10/174.
- Laeven, L. and Valencia, F. (2012), 'Systemic Banking Crises Database: an Update', IMF Working Paper 12/163 (Washington, DC: International Monetary Fund).
- Maddison, A. (2010), *Historical Statistics of the World Economy*, 1–2008AD. http://www.ggdc.net/maddison.
- Maddison Project (2013), *Per Capita GDP Update*, http://www.ggdc.net/maddison-project.
- Madsen, J. (2001), 'Trade Barriers and the Collapse of World Trade During the Great Depression', *Southern Economic Journal*, 67(4): 848–68.
- Middleton, R. (1996), *Government versus the Market* (Cheltenham: Edward Elgar).

- Mitchell, J., Solomou, S. and Weale, M. (2012), 'Monthly GDP Estimates for Interwar Britain', *Explorations in Economic History*, 49(4): 543–56.
- Molnar, M. (2012), 'Fiscal Consolidation Part 5: What Factors Determine the Success of Consolidation Efforts?', OECD Economics Department Working Paper No. 936.
- Obstfeld, M. (2013), 'Finance at Center Stage: Some Lessons of the Euro Crisis', CEPR Discussion Paper No 9415 (London: Centre for Economic Policy Research).
- Obstfeld, M. and Taylor, A.M. (2004), *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge: Cambridge University Press).
- OECD (2013), Economic Outlook (Paris: OECD).
- Paris, P. and Wyplosz, C. (2013), 'To End the Eurozone Crisis, Bury the Debt Forever', VoxEU, 6 August.
- Pew Research (2012), 'Pew Global Attitudes Project', at http://www.pewglobal.org.
- Reichlin, L. (2013), 'The ECB and the Banks: the Tale of Two Crises', CEPR Discussion Paper No. 9647 (London: Centre for Economic Policy Research).
- Reinhart, C.M. and Rogoff, K.S. (2010), 'Growth in a Time of Debt', *American Economic Review Papers and Proceedings*, 100(2), 57378.
- Reinhart, C.M. and Sbrancia, M.B. (2011), 'The Liquidation of Government Debt', NBER Working Paper No. 16893 (New York: National Bureau of Economic Research).
- Schmitt-Grohé, S. and Uribe, M. (2013), 'Downward Nominal Wage Rigidity and the Case for Temporary Inflation in the Eurozone', *Journal of Economic Perspectives*, 27(3): 193212.
- Schularick, M. and Taylor, A.M. (2012), 'Credit Booms Gone Bust: Monetary Policy, Leverage Cycles and Financial Crises, 1870–2008', American Economic Review, 102(4): 102961.
- Spolaore, E. (2013), 'What Is European Integration Really About? A Political Guide for Economists', *Journal of Economic Perspectives*, 27(3): 12544.
- Van Riet, A. (2013), 'Financial Repression to Ease Fiscal Stress: Turning Back the Clock in the Eurozone?', paper

presented to Banco Central do Brasil 8th Annual Seminar on Risk, Financial Stability and Banking, São Paolo.

- Wolf, N. (2008), 'Scylla and Charybdis: Explaining Europe's Exit from Gold, January 1928 to December 1936', *Explorations in Economic History*, 45(4): 383–401.
- Wolf, N. (2013), 'Europe's Great Depression: the Failure to Coordinate Economic Policies after the First World War', in N. Crafts and P. Fearon (eds), *The Great Depression of the 1930s: Lessons for Today* (Oxford: Oxford University Press).

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