

**Constantinos
Alexiou**

School of Management,
Cranfield University,
UK
✉ constantinos.alexiou@cranfield.ac.uk

Joseph G. Nellis

School of Management,
Cranfield University,
UK
✉ j.g.nellis@cranfield.ac.uk

Challenging the *Raison d'être* of Internal Devaluation in the Context of the Greek Economy

Summary: This paper provides a critical assessment of the austerity measures that are being implemented in the crisis-stricken countries of the Eurozone, and in particular, the implications of internal devaluation for the Greek economy. The theoretical underpinnings and phases of internal devaluation are explored. A detailed statistical analysis of key macroeconomic indicators pertaining to the Greek economy is carried out. Alternatives to internal devaluation are proposed in this paper, laying the foundations for a reassessment of the policy of austerity and the implications for recovery and sustainability of economic activity in Greece and other countries of the Eurozone.

Key words: Internal devaluation, Greek economic crisis, Austerity, Eurozone.

JEL: E62, E66.

Ostensibly, the ongoing implementation of austerity measures in the Eurozone has contributed significantly to the dismal economic performance of the region as a whole, particularly in terms of the sustained increase in the unemployment rate, reaching more than 12% by the beginning of 2013. Most economists and commentators expect the economic outlook to remain depressed for the foreseeable future, giving rise to the likelihood of a “Lost Decade” and, for the worst hit countries in Southern Europe, a “Lost Generation”. The hoped-for benefits that are expected to be reaped from the austerity measures are and will continue to be frittered away, due in the main to the deepening and lengthening of the economic recession.

In Greece, the expected adverse impact of what is known as “internal devaluation”, which commenced in 2012, has already taken its toll - according to the Greek Institute of Labour Studies (2012), within only six months from the implementation of this policy, the economy sharply contracted. Similar shrinkage in economic activity was also experienced by Italy, Spain, Portugal, and Ireland as these countries have been following a similar policy.

The main objective of this paper is to challenge the theoretical underpinnings and the expected impact of the internal devaluation policy being pursued by Greece under the austerity framework that has been enforced on the country by the so-called “troika” (European Central Bank – ECB, European Commission – EC and International Monetary Fund – IMF). In Section 1, we explain the theoretical context underpinning the rationale for austerity, while in Section 2 we set out the *raison d'être* of internal devaluation. This is followed in Section 3 by a detailed empirical analysis of key macroeconomic indicators both prior to and since the onset of the financial crisis in order to assess the economic impact of internal devaluation. Section 4 puts forward alternatives to internal devaluation, providing a platform for debate concerning

the future direction of policy, both in Greece and across the Eurozone as a whole, in relation to stability of the financial system combined with recovery and sustainability of economic growth. Finally, Section 5 brings together the key points and summarizes the main conclusions.

1. The Theoretical Context of Austerity Policy

In the *Traite de la Circulation et du Credit* in 1761, Isaac de Pinto (1774) was one of the first to contribute to the debate about the potentially beneficial effects of government spending by arguing that national debt and stock market speculation in securities played an instrumental role in fostering credit, thus increasing the circulation of money and promoting economic prosperity. In stark contrast, David Hume (1752) and Adam Smith (1776) were of the view that debt financing was associated with profligate government spending which in the long run would burden future generations of taxpayers. In the same line of argument David Ricardo referred to debt as one of the worst afflictions a nation can be exposed to. On a different note, Thomas Malthus (1836) seconded that those living on the interest from the national debt “contribute powerfully to distribution and demand ... they ensure effective consumption, which is necessary to give the proper stimulus to production”.

Prior to the publication of the *General Theory* in 1936, John Maynard Keynes (as well as the majority of the economic thinkers of his time) shared the view that savings determined the level of investment and that monetary policy was the preferred approach for dealing with economic fluctuations. In the Preface of *The General Theory*, Keynes reconsidered his initial position by writing “I, myself, held with conviction for many years the theories which I now attack, and I am not, I think, ignorant of their strong points. The composition of this book has been ... a struggle to escape from habitual modes of thought and expression. ... The difficulty lies not in the new ideas, but in escaping from the old ones, which ramify for those brought up as most of us have been to every corner of our minds” (John M. Keynes 1936).

During the Great Depression of the 1930s, government deficits were regarded as economically beneficial during the slump, when the private sector was constrained and unable to stimulate effective demand to pull the economy out of depression. It was in this sense that austerity came into prominence as a policy instrument, which could be used at the peak of the business cycle to protect the economy from spiraling inflation. In the years that followed and more specifically during the “stagflationary” crises of the 1970s as well as during the decades preceding the 2007/2008 crisis, austerity was regarded as a policy prescription when the economy was at the “trough” of the business cycle, at the point when the excesses of a bubble-inflated boom had been revealed by its collapse (Suzanne J. Konzelmann 2012). In the aftermath of the 2007/2008 financial crisis, however, austerity has evolved into an economic concept that is strongly associated with credible governments who are single minded about eradicating their deficits, paying back their debts, as well as protecting the financial interests of investors in sovereign debt.

Broadly speaking, economic austerity involves some combination of public expenditure reductions and increased taxes in so far as it aims at reducing a country’s budget deficit and national debt. It is in this sense that financing public deficits has

economic, social and political consequences of its own and therefore the impact of austerity measures cannot be analyzed in a context other than that of social and political. Proponents of a policy of austerity tend to rest their case on the principles of export-led growth in that economic growth is contingent upon improving competitiveness as well as attracting foreign direct investment. Hence, it is argued by these proponents that the only way forward for the crisis-hit countries in the Eurozone is to take quite drastic measures, such as: the privatization of public enterprises and agencies, wage and pension cuts, layoffs of public employees, the contraction of the welfare state, deregulation of the labour markets and the weakening of the trade unions.

It is worth noting that such severe contractionary policies were already in place in Greece during the period 2009-2012, but they failed to deliver, in that both the competitive position of the economy and the inflows of foreign capital deteriorated even further. Contrary to what was expected, GDP over the period fell by 22%, the poverty level increased by a third to around 30% and the level of unemployment increased alarmingly, reaching more than 27% (Eurostat 2012).

Given the ongoing economic crisis in Southern Europe, which is being exacerbated by internal devaluation (see Section 2), a number of economists argue that a strong institution such as the ECB should have stepped in from the outset to deal with the crisis by underwriting all European sovereign debt, thus providing vital breathing space to the already crippled economies. In this context, it is worth noting that the sum total of the national deficits and debts of the worst affected countries are still comparable to the corresponding levels that have been reported by the USA and Japan (Paul J. Fitoussi 2012).

Within the E region, with the exception of the UK and the Czech Republic, all countries have concurred to the dogmatic implementation of fiscal consolidation along the lines proposed by the institutions at the heart of European policy making - the ECB and the EC - in an attempt to deal with the debt crisis. This consolidation has been most pronounced in those Eurozone member states most significantly affected by the crisis. The inevitable loss by Eurozone countries in terms of the inevitable loss of control over monetary policy and exchange rates, in conjunction with the absence of a common fiscal authority to smooth out the business cycles, has made overcoming asymmetric demand-side shocks very painful (Casimir Dadak 2011).

The International Monetary Fund (2012a) has produced estimates of actual and forecast changes in the cyclically adjusted fiscal balances for a number of countries in the EU, all of which have embarked on austerity measures. In the period 2009-2014, in the case of the four most affected countries, the IMF predicts that the required restructuring (reduction) of the General Government Fiscal Balance will have to amount to more than 17% of potential GDP in Greece and 11%, 9.7% and 8% in the cases of Ireland, Portugal and Spain respectively. This contrasts with a restructuring in the Netherlands and Germany of only 1.2% and 0.6% respectively. Not surprisingly, the notion that the revival of sustained economic growth is contingent upon such a relentless contraction of the most severely affected economies on the basis of achieving balanced fiscal budgets has recently come in for a lot of criticism (Claire Jones and Norma Cohen 2012). Furthermore, critics of Eurozone institu-

tions and policies have highlighted the potential costs of prolonged fiscal tightening (see for instance Jan Kregel 2012; Dimitri Papadimitriou and Randal Wray 2012). More specifically, according to Alvin Hansen and Papadimitriou (2012), “the current situation in Europe involves a self-defeating cycle of tight fiscal policies and low growth rates. We call this cycle of fiscal reduction and economic contraction a ‘fiscal trap’ to emphasize its self-reinforcing dynamics. Though the concept of a fiscal trap is not new, our version of this concept differs greatly from orthodox accounts of recent economic crises around the world” (p. 4).

In a similar vein, Martin Feldstein (2012) questions the efficacy of the internal devaluation policy orientation. He argues that the new fiscal discipline does not guarantee a smooth transition of the EU member states from recession to growth, in so far as it completely abandons the idea of the transfer of resources amongst the member states - thus effectively undermining the possibility of any progress towards a fiscal union. In the same line of argument, Kregel (2012) and Papadimitriou and Wray (2012) stress that the impact of ongoing fiscal tightening in the Eurozone will be severe and will haunt the region for many years to come. Jorge Uxó, Jesus Paúl, and Eladio Febrero (2011) add weight to this line of argument, stressing that the ongoing austerity policy in the Eurozone periphery will not solve the short-term economic crisis but instead will exacerbate the situation in terms of a negative shock in aggregate demand, thus threatening the ability of the peripheral economies to settle their debts for many years to come.

On a different note, Robert Boyer (2012) maintains that the widely implemented austerity measures are fallacious. More specifically, he challenges the conventional wisdom by firstly arguing that the main culprit for the present crisis is not the lax public spending policy pursued by governments over the years but the private credit-led speculative boom. Second, he posits that the assumption of the so-called “expansionary fiscal contractions” totally underestimates the short-term impact on domestic demand whilst overestimating the effects of the Ricardian equivalence, the “crowd in” effects resulting from lower interest rates as well as the positive impact on trade balances. Third, he regards the “one size fits all” approach as inherently problematic as the decimated peripheral economies of the Eurozone do not have the institutional nor political stamina to emulate the German success. The fourth fallacy according to Boyer (2012) is that the spillover from one country to another may precipitate the controversial “beggar my neighbour” policies from the interwar period.

Additional pressure on the EU member states to pursue further austerity expedients has also been exerted by the so-called “markets” in an attempt to make the crisis-hit countries accept harsher conditions should they want access to liquidity in the future. The emergence of the new economic environment that is starting to take shape in the EU region is characterized by the institutionalization of an internal devaluation policy orientation - devoid of any substantive measures to support future economic growth and job creation - that in all likelihood is destined to sink the peripheral economies into further and prolonged economic and social misery.

Some observers vehemently argue that the incumbent think tanks of the European establishment should dispose of their obsession of indiscriminately applying fiscal discipline across the EU region and instead channel their efforts towards the

development of an alternative framework with the objective of supporting economic growth, innovation, employment, income redistribution and welfare state reconstitution.

2. The *Raison d'être* of Internal Devaluation

The theoretical underpinnings of the policy of internal devaluation are predicated upon an adjustment mechanism that is supposed to kick in once the economy has veered off its equilibrium growth path. This mechanism is known as the channel of price competitiveness (or simply competitiveness channel) that consists of the process of wage setting, the process of price setting, as well as the impact of price competitiveness on exports and, hence, on the overall level of spending in the economy. In other words, an economy can improve its price competitiveness on the basis of internal devaluation by reducing the level of real or nominal wages with positive spillover effects on its exports and aggregate demand. With sufficient spare capacity present, a stimulus to demand can be expected to result in an increase in overall production and reduce unemployment, driving the economy towards a new equilibrium level associated with stable inflation (on a par with the inflation rate prevailing in competing countries) as well as an improved balance of payments situation.

In view of the above, the critics of internal devaluation focus on the efficacy of the competitiveness channel to restore equilibrium following an adverse shock. A general definition of competitiveness is provided by George Hatsopoulos, Paul Krugman, and Lawrence Summers (1988) on the basis of which competitiveness is the ability of a country to balance its foreign trade, whilst achieving a higher standard of living. A more precise and lucid definition suggests that structural competitiveness of a country is the maximum level of production (or the minimum rate of unemployment) that the country can achieve subject to two simultaneous constraints: firstly, the rate of inflation is kept constant and equal to the inflation rate experienced by competing countries and, second, the external account should be balanced (or positive, to cover any pending interest payment obligations of the country).

The first constraint is often referred to in the literature as achieving internal balance, while the second as achieving external balance. The conceptualization of this theoretical framework is the result of work by John Williamson (1985, 1993, 2009) who in 1983 developed the concept of the Fundamental Equilibrium Exchange Rate (FEER) to describe the situation where the real exchange rate corresponds to some natural level of production and a sustainable current account deficit or surplus. According to Jan Hansen and Warner Roeger (2000) and Rebecca Driver and Peter Westaway (2004), the equilibrium exchange rate envisaged by Williamson is that which corresponds to the so-called NAIRU (Non-Accelerating Inflation Rate of Unemployment) point that can be established under the open economy theoretical analysis.

Extensive literature in mainstream economic theory strongly suggests that the combination of high levels of production (or low unemployment) and stable inflation requires substantial reforms in the labour market, most of which are directly linked to the economic underpinnings of internal devaluation. Such reforms relate to the minimum wage, the legislative and institutional framework within which workers'

rights are enshrined, the collective bargaining framework, the amount and duration of unemployment benefits, the working time etc. (for more on this see Richard Layard, Stephen Nickell, and Richard Jackman 1991; Charles Bean 1998; Layard and Nickell 1998; Nickell 1998; IMF 1999; Tito Boeri, Layard, and Nickell 2000; IMF 2003; Nickel, Luca Nunziata, and Wolfgang Ochel 2005). According to the advocates of this mainstream approach, the required labour market structural reforms will ensure that downward pressure is exerted on wages, thus increasing the ability of the economy to achieve the desired level of production consistent with stable inflation. In other words, structural changes are supposed to enhance the efficacy of the adjustment of the economy through the channel of price competitiveness. However, this internal devaluation approach to adjustment fails to appreciate the significance of the structural competitiveness permeating the extant production systems as well as the main characteristics of contemporary markets.

In contrast to the internal devaluation approach to adjustment, alternative and heterodox economists, from an Anglo-Saxon perspective, attempt to shed light on the concept of competitiveness by emphasizing the importance of non-price structural supply-side factors such as: strengthening the capacity of the economy, the accumulation of productive capital, the improvement in the country's specialization in international trade, the adjustment of the production system to the demands of international competition, product quality etc. - see inter alia Anthony Thirlwall (1979), Jan Fagerberg (1988), John McCombie (1993), McCombie and Thirlwall (1994), Robert Rowthorn (1995), Fagerberg (1996), Robert Blecker (1998), Isabelle Bensedoun, Guillaume Gualier, and Deniz Ünal-Kesenci (2001), Wendy Carlin, Andrew Glyn, and John Van Reenen (2001), Peter Hall and David Soskice (2001), Philip Arestis and Malcom Sawyer (2005), Engelbert Stockhammer (2008), Gustavo Britto and McCombie (2009).

Nicholas Kaldor (1978) was amongst the first to stress the importance of structural factors in determining the competitiveness of a country's performance in international competition highlighting, for example, product quality, technological innovation as well as the geographical orientation of exports affecting the income and price elasticities of demand for imports and exports. In the same line of argument, Michel Aglietta (1997) argues that through industrial policy a country will be able to introduce technological innovations in production and, hence, increase its performance in foreign trade alongside institutional changes that encourage investment in new technologies. Furthermore, structural competitiveness depends on many other factors that revolve around qualitative aspects. Some of these aspects include: sectoral specialization and expertise in international trade; the composition and structure of the firms; the quality of labour relations; the social relationships formed within workplaces and the impact they have on the formation of collective forms of work organization; the key characteristics of the domestic market; the rate at which mechanical equipment is replaced; the types of products in which the country has comparative advantage; the reputation of products and many others (Aglietta 1997).

Despite the differences in the internal devaluation and structural adjustment approaches, it is envisaged that it is possible for the existing schools of thought to arrive at a consensus by developing a common framework of analysis. However,

while the formulation of appropriate mathematical models is feasible, the transformation of the equations embedded within the models so that they take into account the theoretical priorities to which each of the conceptual frameworks attach greater importance is a more daunting challenge.

2.1 From Theory to Reality - The Phases of Internal Devaluation

Potentially, the strategic phases envisaged by the troika according to which the Greek economy has to very swiftly go through are as follows: during the first phase, Greece is expected to rapidly reduce public deficit and debt levels through cuts in public sector pay and pensions along with significant reductions in public and social spending - without consideration of the devastating negative multiplier effects that these measures will have on across all sectors of the economy and national employment.

In the second phase, the troika suggests that subsequent economic recovery will come through improvements in the competitive position of the country. To achieve this objective, there have to be significant reductions in the minimum wage, allowances and pensions, the weakening of existing labour laws, the establishment of a private contract as a standard means of employment, a reduction in the power of trade unions, the invalidation of collective bargaining agreements, the promotion of labour market flexibility, etc.

The third phase envisages a programme of privatizations in tandem with further reductions in the salaries of civil servants, the wages of special payroll professions such as judges, policemen, university staff etc., the minimum wage, the scrapping of the Christmas and Easter bonuses, and finally the gradual abolition of severance pay.

The implementation of this raft of austerity measures will unavoidably have a calamitous adverse impact on the disposable income of both employees and retirees (which by 2019 is expected to have fallen by 50% in real terms). For comparison purposes, it is also worth noting that the GDP per capita in Greece in 2009 was 92% of the EU average, whilst in 2011 it plummeted even further reaching only 82% of the EU average. This contrasts with the picture in two of the strongest economies of the Eurozone - with GDP per capita in France and Germany over the same period falling from 108% to 107% and 128% to 120% of the EU average respectively (Eurostat 2012).

The increased interest in the policies relating to economic austerity has caused many researchers to reassess the studies supporting the “expansionary fiscal contraction” hypothesis. However, these have been largely discredited (IMF 2010; Jaime Guajardo, Daniel Leigh, and Andrea Pescatori 2011). In response to the latest finding concerning the method used to identify fiscal consolidation - a statistical measure that has been found to down-play contractionary and over-state expansionary effects - the IMF (2010) re-tested the expansionary austerity hypothesis. The results of this re-testing suggest that the short-term effect of fiscal consolidation was contractionary, and could be reduced by cutting interest rates, devaluing the currency and reducing expenditure rather than increasing taxes. Similar results have also been provided by Alberto Alesina and Roberto Perotti (1997) and Alesina and Silvia Ardagna (1998).

In the same vein, by revisiting the experiences of Denmark (1982-1986), Ireland (1987-1990), Finland (1992-1998) and Sweden (1993-1998), Perotti (2012) found that “the results cast doubt on some versions of the ‘expansionary fiscal consolidations’ hypothesis and on its applicability to many countries in the current circumstances” (p. 42). He goes on to conclude that past experience is not a reliable guide, arguing that: “Depreciation is not available to EMU members ... An expansion based on exports is not available to the world as a whole. A further decline in interest rates is unlikely in the current situation and incomes policies are not popular nowadays” (p. 42).

It is hard to see Greece getting back on track in the short-term as a result of austerity measures alone, with many commentators arguing that it is going to take decades for any problems to be resolved. According to Stephen Kinsella (2012) the short-term deflationary impact of austerity measures can be fully absorbed. It is the long-run effects that are cause for concern, with economists arguing for a default on unsecured debt to coincide with a massive public sector contraction to get the budget into balance (Morgan Kelly 2011).

The most worrying aspect of the current economic developments in the Eurozone is the lack of a viable plan to effectively reconstruct the already crippled economies. Such a plan would serve as means of deflecting the pernicious effects of internal devaluation through mobilization of the productive forces of the economies. Sustaining what many commentators regard as these ill-conceived austerity policies will only prolong economic stagnation in Greece as government revenues will continue to dwindle due in the main to unprecedented falls in purchasing power, disposable income and consumer spending. It is in this sense that it is argued that a bold and fundamentally different strategic plan is required, aimed at internally reconstructing the crisis-hit economies, including Greece, through appropriate public and private sector investment spending, wage and income redistribution policies as well as policies tailored to boost productivity.

It is imperative, therefore, that an appropriate solidarity funding mechanism, headed by the European Investment Bank and coordinated by the ECB, is put in place to provide the necessary support to the regions mostly affected by the ongoing economic crisis so that any contagion effects are eliminated or minimized. By the beginning of 2013, the ECB has channeled the staggering amount of €1 trillion to 120 European banks. Despite the fact that this extra liquidity has contributed significantly to the reduction of short-term interest rates, it has failed nevertheless to provide the additional stimulus that the productive sectors of the economies require in order to reverse the downturn of the economic cycle. As noted earlier, European unemployment has soared as a result, rising above the 12% mark across the Eurozone as whole. Instead, the injection of this liquidity has led to inflated stock market values while at the same time driving down 10-year government bond yields across Europe to historical lows (except in the crisis-hit countries). This reduction in bond yields has profound negative implications for pension annuity rates and retirement incomes as well as those relying on fixed-incomes linked to the government bond market.

Given the immense powers that the ECB possesses, it is envisaged to be the only institution in Europe that can effectively address the ongoing debt crisis by either issuing Eurobonds or by directing money to the distressed economies at a low or zero interest rate, thus enabling these economies to gradually reduce their fiscal deficits.

The roots of the European crisis lie in numerous factors, in particular the instability of the financial system, rather than being directly related to fiscal policy. Internal devaluation and austerity policies can only make a recession worse in the short-term as government layoffs and wage cuts undermine already weak consumer demand, investment, and tax revenues. However, by prolonging and deepening the recession, austerity measures and a theoretically flawed policy of internal devaluation inevitably erode the quality and quantity of the human and physical capital stock in the worst hit countries - and Greece in particular - resulting in the disease of “hysteresis”.

3. Assessing the Economic Impact of Greek Internal Devaluation

Policymakers across Europe have had to wrestle with the harsh reality of the consequences arising from the effects of the longest and deepest recession to hit the region since the 1930s. While initially envisaged as an appropriate policy tool to restore economic activity, internal devaluation has transpired to be an extremely blunt instrument that has yet to deliver the desired outcomes. In view of the recession that is still unfolding in some countries, particularly in Greece, we would argue that the current policy expedients are no longer capable of ensuring that market forces alone will be sufficient to reignite economic activity, as originally hoped. What we have been witnessing instead is prolonged depression of economic activity that is accompanied by growing social instability, resentment and uncertainty while stirring up fear and tensions.

As mentioned above, the hoped-for success of internal devaluation is predicated on price competitiveness and a growing contribution of exports to GDP growth. It is through this channel that the external sector of the economy is expected to take over and become the driving force of economic growth. Figure 1 maps out the contribution of both exports and imports of goods and services to GDP of Greece up to 2012.

The figure shows that since 2010 exports have contributed very little to GDP growth and, in fact, their contribution has even been much lower than the long-term average. Therefore, using internal devaluation as a means of creating a more export-orientated economic model for Greece that will ultimately lead to economic development has so far proven to be rather ineffectual.

As far as the contribution of imports of goods and services to GDP growth is concerned, since 2010 there has been a significant reduction in the trade deficit as imports have declined drastically in the face of an unprecedented economic contraction. Not surprisingly, the downturn in imports is mainly attributable to the substantial reduction in domestic demand. Such a development, however, can hardly be regarded as a successful change in the structure of the Greek economy, unless the prolonged internal devaluation will lead to the consolidation of leaner consumption pat-

terns, hence achieving a permanent reduction in imports. But even if this turns out to be the case, then it would not constitute a valid reason for triumphalism (on the part of the troika), as the end result will be lower standards of living and erratic economic growth for many years to come.

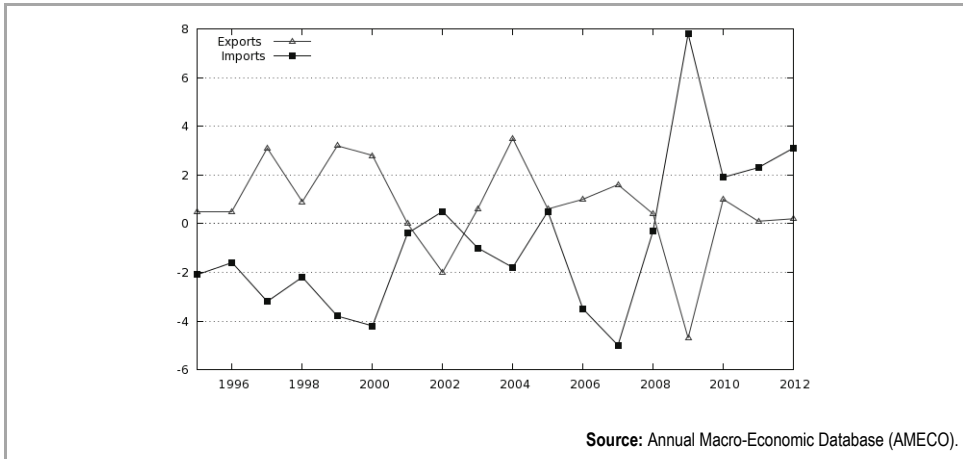


Figure 1 Contribution of Exports and Imports to Greek GDP Growth (% Changes)

Since 2010 a paradigm shift has impacted the Greek economy and its citizens as the effects of the process of internal devaluation have materialized. Successive reductions in public sector spending and tax increases have been implemented by the incumbent Greek government along the lines proposed by the troika. Figure 2 illustrates Greek domestic demand over the period 1990-2012. It can be observed that domestic demand since the peak in 2008 fell dramatically, reaching almost the demand levels that the economy experienced in 2000.

In view of the this, it is obvious that prolonging the implementation of the same policies will put additional stress on the economy which in the long run will have calamitous effects on domestic demand, squeezing it thus further down, to the levels last observed in the 1990s.

Equally dramatic is the reduction in domestic demand in Greece when compared to the 35 most developed countries in the world. More specifically, over the period 1996-2009, as shown in Figure 3, domestic demand in Greece grew at a much faster pace than the average for the 35 major countries. In the period since then, however, the picture has changed dramatically, with Greek domestic demand falling sharply - by approximately 20% - to levels below those in 1995.

Despite the bleak situation facing the economy in the context of internal devaluation, some commentators argue that a collapse in demand is a necessary “evil” that the economy has to go through in the short run in order to improve its competitive position. In particular, every time the domestic components of demand decline GDP will follow suit driving the economy into a deeper recession - without necessarily affecting the level of wages and prices (as Keynes observed, wages and prices tend to be “sticky” in the short run). Production adjusts to the new demand levels in the short run, whilst wages and prices take much longer to adjust.

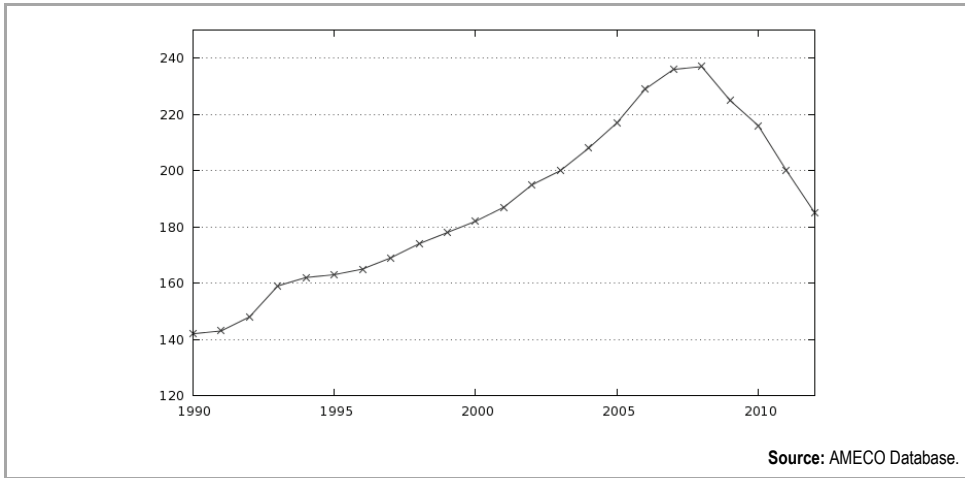


Figure 2 Greek Domestic Demand (2000 Prices; € Billions)

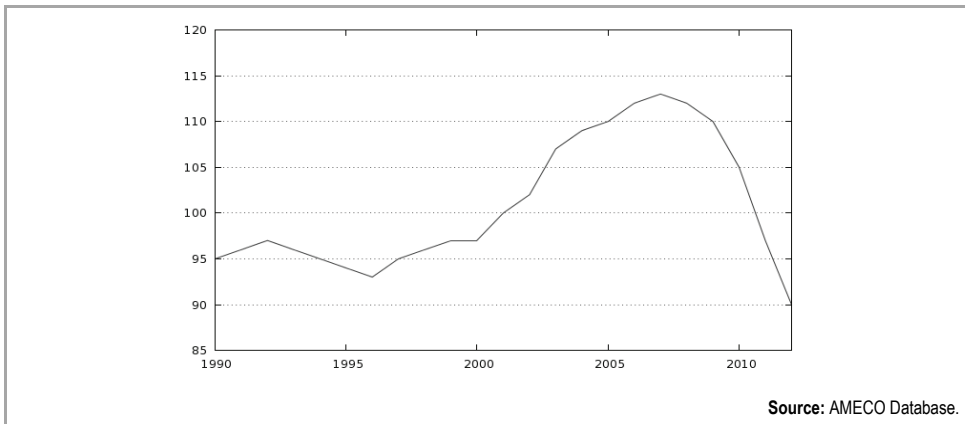


Figure 3 Greek Domestic Demand Relative to 35 Developed Countries (Constant Prices)

Figure 4 maps out the GDP growth rate of Greece together with the trend over the period since 1990. Given that internal devaluation will be pursued for the foreseeable future, it is expected that by the end of 2013 real GDP will have declined by more than 22% since the start of the crisis in 2007/2008 (European Commission 2012). It should be stressed that the unfolding dismal long-term prospects for the performance of the Greek economy appear to be the bleakest since the early 1970s.

Figure 5 shows the fluctuations in the level of GDP compared to the group of 35 most developed countries over the period 1995-2012. It can be observed that the cumulative decline in GDP for the recessionary period (2008-2012), is around 20% hence cancelling out the progress in economic activity that had been sustained over the pre-crisis period.

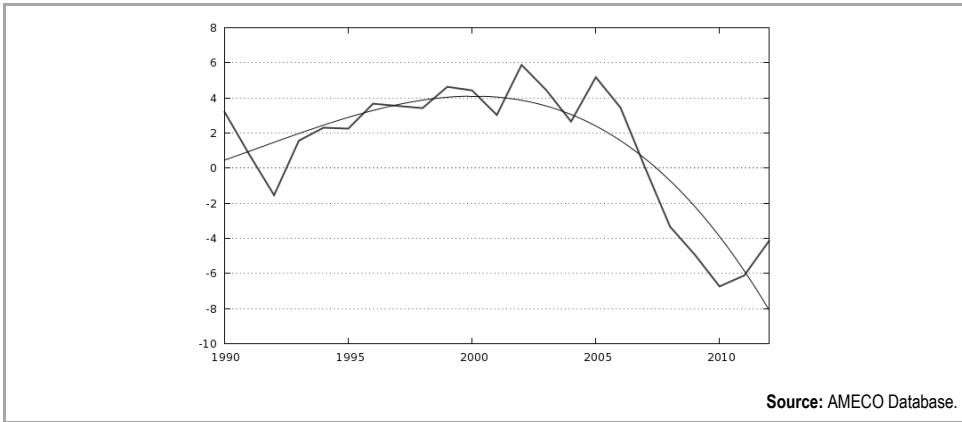


Figure 4 Greek Gross Domestic Product at Constant Prices (% Changes)



Figure 5 Greek GDP Relative to 35 Developed Countries (at Constant Prices)

On the basis of the theoretical underpinnings set out earlier, the main aim that policy makers hope to achieve through a process of internal devaluation can be explained through the impact of recessionary pressures - precipitated by dwindling domestic demand - on the economy, which is expected to have some bearing on the existing balance of power between businesses and workers. More specifically, the resulting mediocre levels of economic activity will cause unemployment to increase, hence shifting the bargaining power from workers and trade unions to employers (as illustrated by the Phillips curve). The intensity of this shift depends to a great extent on the magnitude of the resulting unemployment rate and the underlying structural reforms that are supposed to take place in the labour markets. In other words, the efficacy of such a policy alternative is predicated on labour market flexibility (in terms of wages and conditions of work) and weakened labour institutions (union power). It is through this channel that wages across the economy, public and private sectors are expected to fall.

According to Stockhammer, Özlem Onaran, and Stefan Edere (2009), however, a reduction in the wage share of national income by a 1% point leads to a reduction in aggregate demand by around 0.2% points of GDP. It is in this sense that the Eurozone is a wage-led demand regime, which has far-reaching implications for economic policy and growth.

So far the resulting impact of a policy of internal devaluation on employment in Greece has been disastrous. For example, in only a two-year period (2010/2011), as illustrated in Figure 6, the level of employment fell by 8.5%, in tandem with a 10.4% decrease in GDP. At the same time labour productivity dwindled by 2%.

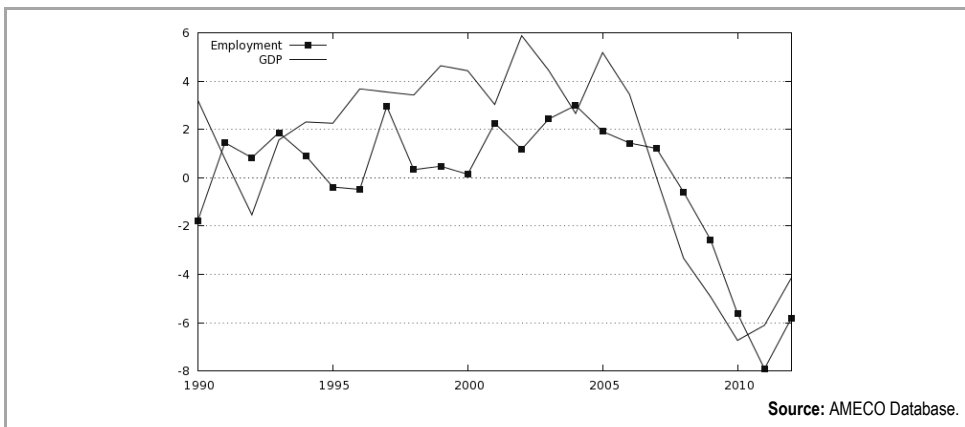


Figure 6 Greek GDP and Employment (% Changes)

During the first four years of the recession (2008-2011), production levels in general fell by about 12%. However, it is worth noting that a dramatic decrease in the degree of capacity utilization was succeeded by a comparatively smaller reduction in the number of employees as well as a concomitant reduction in labour productivity. This evidence supports the view that, in the short run, employment levels fall more slowly than falls in GDP as a result of declining labour productivity - but this is not sustainable in the long run.

Figure 7 shows that the Greek unemployment rate has more than tripled since 2008 from just under 8% to around 24% by 2012 - with youth unemployment (16-24 year olds) exploding to well over 55%. Such an unprecedented increase in unemployment can be attributed to, firstly, the number of workers being laid off and, second, to increases in the labour force (i.e. the number of people of working age either in work or actively seeking work). In particular, during the period 2009-2012, the labour force in Greece increased cumulatively by 0.9% (Greek Institute of Labour Studies 2012).

Prior to the crisis, increases in employment had a positive impact on the workforce as new employment opportunities attracted more workers to the labour market. Conversely, reductions in employment cause discouragement and eventually withdrawal from the active labour force. In the post-crisis period, however, the losses in employment were not accompanied by reductions in the workforce due in the main to

the dramatic decrease in the purchasing power of wages. As a result, households started looking for additional employment opportunities in an attempt to recoup the lost income caused by internal devaluation.

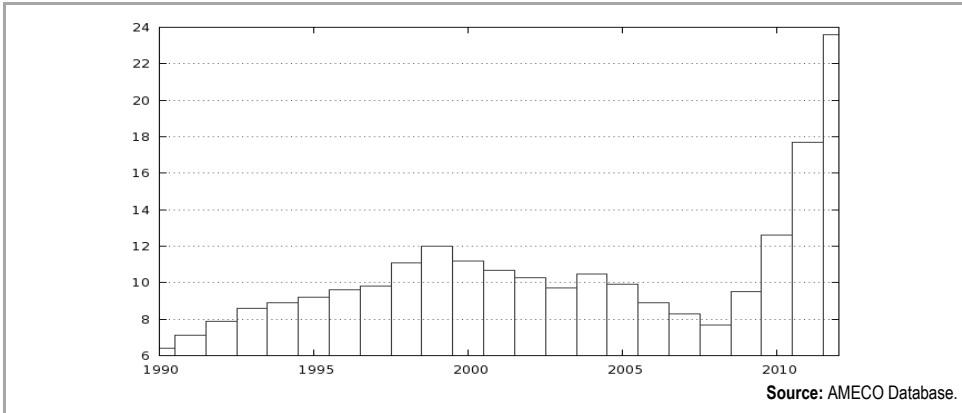


Figure 7 Greek Unemployment Rate (% of Labour Force)

Thus, internal devaluation has had a number of deleterious effects on Greece's economic activity and on the wellbeing of its citizens. So far the implementation of the austerity measures has led to an unprecedented decline in consumer and corporate spending, the level and growth of GDP, net capital formation, capacity utilization, productivity and employment. Furthermore, the dramatic and unprecedented increase in unemployment levels has plunged the economy into an even deeper and more prolonged recession.

The reduction in productive capacity and net capital formation has, inevitably, resulted in a sharp decline in Greek labour productivity (Figure 8). This has affected labour costs per unit of output relative to the 35 reference countries (Figure 9). The change in labour cost per unit of output equals the change in nominal gross wages minus the change in labour productivity. Therefore, to reduce unit labour costs the reduction in the nominal wage rate should be greater than the decrease in labour productivity. In other words, the ongoing recession should have caused an increase in unemployment and a concomitant reduction in wages to such an extent that it outweighs the negative effect that a reduced scale of production has on labour productivity. The empirical evidence indicates, however, that wages and unit labour costs are likely to fall even further relative to many other economies as the crisis is prolonged.

Over the period 2010-2011 the average nominal wage decreased by 6.4% compared to 2009, while labour productivity went down by 1.9% (Greek Institute of Labour Studies 2012). Therefore, labour costs per unit of output fell by 4.5%. Given that the existing policies will be in place for the foreseeable future, the decline in unit labour costs is expected to be significant (about 8%) due to the structural reforms that are currently taking place in the labour market, i.e. minimum wage reductions, scrapping of sectoral collective agreements etc. (European Commission 2012).

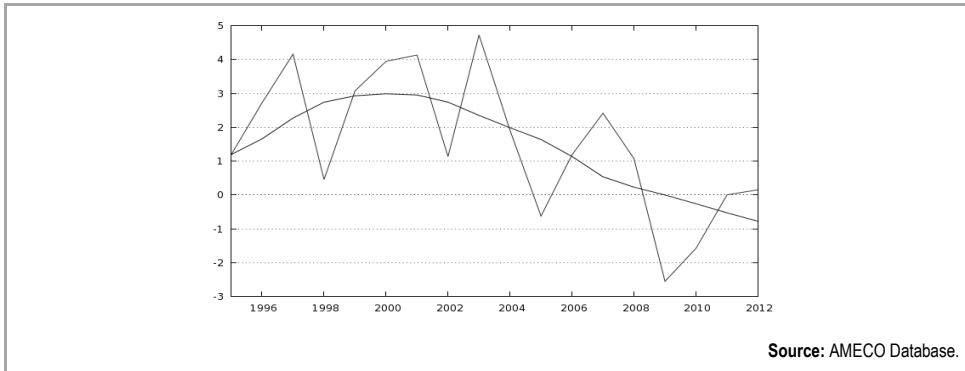


Figure 8 Greek Labour Productivity (% Changes)

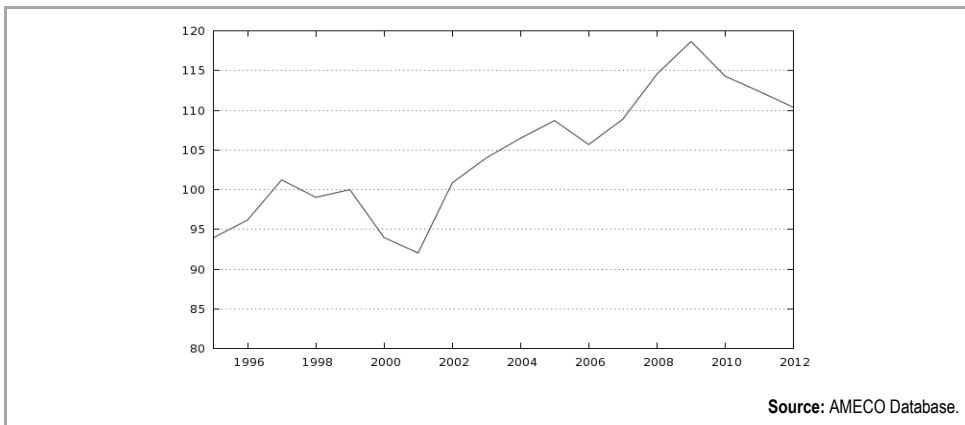


Figure 9 Greek Unit Labour Costs Relative to 35 Developed Countries

On the basis of the EC projections, investment and exports are expected to be the driving forces behind the imminent recovery. For this to happen it is imperative that export volumes increase considerably. Additionally, the expected gains from decreases in labour costs and structural reforms may not be sufficient to put the battered Greek economy back on track to recovery if domestic consumption remains weak - as is to be expected, given the projected path for wages - and if net exports do not compensate for the losses in domestic demand.

Given that the drop in the government component of aggregate demand is much larger than the improvement in the external balance - the government deficit is expected to drop to 2.1 % of GDP in 2014, from 7.3 % of GDP in 2012 - the scenario implies that the private sector balance turns negative again, with a return to net borrowing by the private sector. At present it is highly unlikely that the Greek private sector would be willing to increase its net debt in just two years, given the alarmingly high level of unemployment and declining incomes and without any substantial recovery in the country's financial sector. Figure 10 maps out fluctuations in net fixed capital formation for the period 1990-2012 which shows a collapse after 2008 - with unprecedented reductions in the capital stock of the Greek economy after 2010.

Given that fixed capital investment is the main channel through which new technologies and new ways of organizing production are introduced, it would be sensible to expect that the reduction in investment will have adverse effects on labour productivity. The counter argument to this resides in the “Darwinian” clearance approach on the basis of which low productivity firms will be driven out of the market. It is therefore through the Schumpeterian process of what is termed as “creative destruction” that the new road to performance will eventually be established by the high productivity firms. In passing, it should be stressed that dwindling aggregate demand implies closures of the least efficient firms in the long term. In the short and medium term, however, all firms are negatively affected.

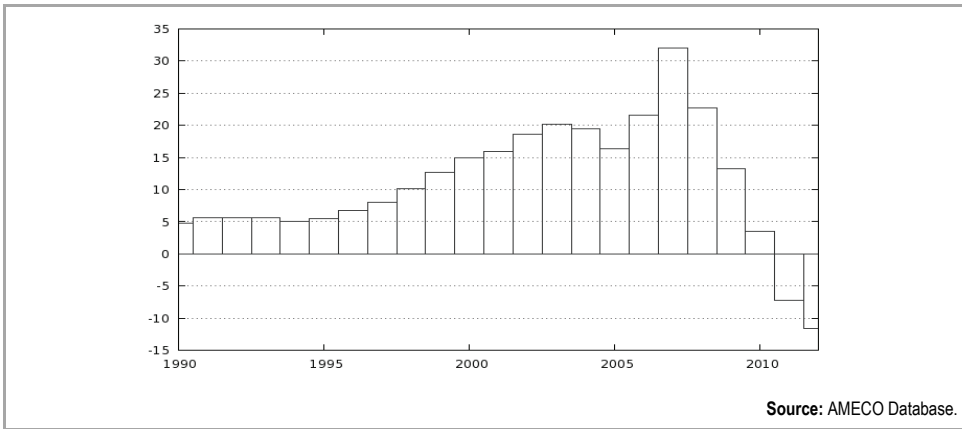


Figure 10 Net Fixed Capital Formation (% Changes at Current Prices)

Currently, the major criticism levelled at the way internal devaluation functions revolves around its adverse impact on the components of aggregate demand as well as the self-feeding recessionary environment that its policies imply. The emerging stifling economic environment hinders technological progress as investment in fixed capital is discouraged. The resulting negative impact on technology and innovation reduces labour productivity and hence price competitiveness. Thereby, the country’s ability to innovate as well as improve its position in the global markets is significantly limited as a result of this vicious circle.

According to Kaldor (1982), Russell Boyer and Pascal Petit (1991) and Mark Setterfield (1998), decreasing capital accumulation is cumulative, in the sense that once its negative effects are realized, a new period of decline in production, productivity, employment and investment will set in. The devastating effects on the economy are what the economy is experiencing currently - mass unemployment, poverty, erosion of productive capacity and social tensions. The vicious circle that follows is a self-perpetuating cycle of recession and misery that puts paid to any benefits expected to be reaped from the process of internal devaluation.

4. Alternatives to Internal Devaluation

From the theoretical and empirical critical analyses in Sections 2 and 3 above, it is clear that the results of internal devaluation have fallen far short of what the troika had anticipated with the Greek economy sinking deeper into recession. The existing obsession with the implementation of contractionary fiscal policies to reverse the economic downturn is unprecedented. The notion that achieving primary surpluses through squeezing public sector expenditures combined with increased taxation has been shown to be flawed, in the sense that the relentless imposition of restrictive fiscal policies on a country already in a recessionary spiral has resulted in a vicious circle of consolidation followed by contraction that can go on indefinitely. Recently, research work conducted by the IMF bolsters up the latter by suggesting that fiscal contractions are typically contractionary. The IMF has, belatedly, conceded that the magnitude of the negative multiplier effects resulting from fiscal austerity measures was underestimated (IMF 2012b). The question now arises as what should be the next steps for Greece and its “creditors”? We now explore some of the alternatives to the failed policy of internal devaluation and austerity.

An Exit from the Eurozone?

Ever since the onset of the crisis a number of commentators have suggested that exiting the Eurozone might have been the best alternative option for Greece. The constricting jacket of a common currency would be lifted, hence giving way to the currency devaluation mechanism through which current account deficits are reduced, and competitiveness is stimulated. The latter, in conjunction with capital controls and investment directed at strategic industries, would galvanize economic growth (Kieran Allen 2009; Alex Callinicos 2010; Costas Lapavitsas et al. 2010). In the case of Greece, however, the benefits to be gained from abandoning the common currency would be outweighed by the envisaged costs. There would be massive capital flight and devaluation of the new currency due to a collapse in investor confidence. But, paradoxically a prolonged depression might in itself force the economy out of the Eurozone.

Expansionary Monetary Policy by the ECB

The ECB has the power to play an instrumental role in lifting the crisis-hit member states out of the economic impasse as an alternative to fiscal austerity. One way for the ECB to achieve this would be through lowering interest rates as well as through further quantitative easing. The resulting higher inflation rate levels in the stronger economies (such as Germany) would be equivalent to a real currency appreciation of the core economies vis-à-vis the peripheral ones (suffering from deflation), thus enabling the crisis-hit economies to improve their competitive position. In this way, an expansionary monetary policy through quantitative easing will reduce substantially the burden on the economies in distress by supporting sovereign debt.

In passing, it should be noted that in 2012 Germany's net trade deficit was €43.4 billion - €27 billion with Russia, Libya, and Norway combined, €4.7 billion with Japan and €11.7 billion with China - whilst its trade surplus with the Eurozone's

trade deficit nations (France, Italy, Spain, Greece, Portugal, Cyprus and Ireland) amounted to a staggering €54.6 billion. In other words, German global trade surpluses are still being counterbalanced by the deficits of the crisis-hit Eurozone countries.

Regional and Industrial Policies

We would argue that austerity measures should be relaxed. The contractionary effects of fiscal policy should be eased and refocused on the reduction of unemployment by channeling public sector spending to viable and socially desirable investment projects. At the same time, there is a need for a centrally managed European fiscal policy to effectively transfer resources between richer and poorer regions thus insulating member states from undesirable economic shocks. Regional and industrial policies should be fundamentally reformed and the European Investment Bank, through issuing euro bonds, should urgently introduce a major program of investments, especially in the most crisis-stricken economies of the Southern Region. This will provide the leeway required for the distressed economies to slowly get back on track to recovery.

Reform of the Financial Sector

Given that the political economy of the advanced countries has been transformed by financialisation then the alternative to austerity will require considerably more than just a novel policy mix. It is imperative that the existing financial institutions undergo fundamental transformations. The uncontrolled expansion of the financial sector must be radically reversed. Currently, much of the mainstream debate has focused on what to do about the banks. A more radical perspective put forward by Peter Gowan (2009) concerns the introduction of “a public utility model”, in which banking and credit would be publicly owned and operate under democratic control.

The separation of traditional core retail and corporate banking activities from so-called “casino” banking involving a plethora of speculative and high risk financial derivatives should be enforced, alongside appropriate regulation of the operations of investment banks, hedge funds and private equity funds. It is therefore envisaged that a new model of financial and economic development is needed within which the role of public and cooperative commercial banks as a means to providing finance for sustainable investment projects should be reinforced (Erkki Liikanen 2012). This will require European-wide consensus and extensive changes in bank regulations.

In the same line of argument, Yanis Varoufakis and Stuart Holland (2013), in an attempt to provide a way out of the current economic crisis, put forward a modest proposal on the basis of which efforts should be centered around the creation of a Single Banking Area with a single authority that supervises directly and recapitalises the area’s banks. In addition they propose that the ECB offers member-states the opportunity of a Debt Conversion for their Maastricht Compliant Debt (MCD) but that the national shares of the converted debt would continue to be serviced by member-states. Finally, they propose an Investment-led Recovery and Convergence Program

which is fully Europeanised in the sense that it provides investments that are not backed by the taxpayers of the surplus countries.

Finally, having challenged the theoretical and practical implication of a policy based on internal devaluation, we argue strongly that the troika must urgently reconsider the enforcement of fiscal austerity and fiscal consolidation measures. Currently, there is a tendency, especially by politicians and economists subscribing to the neo-liberal tradition, to treat both concepts as though they have similar meanings. It is fundamentally erroneous to equate government finances with accounting alchemies of households or firms. Such a simplistic assumption underestimates the adverse impact of the reduction of public expenditure on GDP. In addition, the way governments manage fiscal policy, public finances and debt will vary according to the maturity of the country in terms of democracy (Abel Fernandes and Paulo Mota 2013). Given the existing differences between the northern and southern Eurozone countries in terms of political maturity and economic development, it is critical that a more versatile and customized approach to dealing with fiscal asymmetries is adopted by the member states.

5. Concluding Remarks

Undoubtedly, the current level of public sector debt in Greece and other peripheral economies is unsustainable. Contrary to the expectations of the designers of the austerity package - the so-called troika - the Greek economy continues to be dragged into a debt-deflation spiral that has precipitated a devastation of its productive base. The case for such aggressive austerity measures has largely been based on the work of Carmen Reinhart and Kenneth Rogoff (2010) in which they argue that there is a strong negative relationship between high gross public debt (as a percentage of GDP) and economic growth. However, the significance of this research has been challenged recently and it has been shown that, while there is indeed a negative relationship between the two variables, it is by no means clear-cut or as significant as Reinhart and Rogoff contend (see Thomas Herndon, Michael Ash, and Robert Pollin 2013).

It is therefore imperative that a novel alternative approach is devised, the key objective of which would be to rapidly draw the economy out of the extant “recessionary quicksand”. In the pursuit of this novel approach we maintain that the following key points in conjunction with the preceding analysis have to be considered:

i) Even though it is not officially acknowledged by the policy makers (for whatever reasons, both in Brussels and Greece), trying to reverse the Greek debt is a losing battle. As has become apparent, at least amongst prominent scholars of the economics profession, the unsustainability of the Greek debt undermines fiscal consolidation, financial stability and social cohesion.

ii) Given the significant impact of financialization on the Greek economy in recent decades, the Greek economic system has evolved into a somewhat rigid model, and has ignored the reality that the stability and growth of the country has traditionally depended on the viability of small and medium enterprises.

iii) The obsessive adherence to policies promoting internal devaluation as a means of restoring competitiveness has dramatically shifted the emphasis of policy,

thus jeopardizing the viability of the macroeconomy. The prolonged negative economic growth has been a harsh reality that both policy makers in Greece as well as in Europe have to contend with. What was once envisaged as an appropriate policy tool to restore economic activity, internal devaluation, has transpired to be a rather blunt policy alternative that has yet to deliver the hoped-for results.

An alternative economic approach aimed at emancipating the Greek economy from the crisis of the current economic system as well as the defunct ideological “artifacts” of the neoliberal dogma requires a model that will be based on more pragmatic assumptions, taking into account the idiosyncratic elements of the Greek economy. This alternative approach should seek to: a) renegotiate the existing loan agreement with the troika; b) establish an employment creation agenda through “employer of last resort” schemes; c) reconstruct and transform the existing banking system; and d) adopt a more flexible and more appropriate approach to the implementation of austerity and internal devaluation.

We strongly contend that this approach will give a new lease of life to the Greek economy by reactivating the current lethargic economic climate, hence shaping up an economic environment conducive to job creation and economic growth.

References

- Aglietta, Michel.** 1997. *Macroeconomie Internationale*. Paris: Montchretien.
- Alesina, Alberto, and Robert Perotti.** 1997. "The Welfare State and Competitiveness." *American Economic Review*, 87(5): 921-939.
- Alesina, Alberto, and Silvia Ardagna.** 1998. "Tales of Fiscal Adjustment." *Economic Policy*, 13(27): 487-545.
- Allen, Kieran.** 2009. *Ireland's Economic Crash: A Radical Agenda for Change*. Dublin: Liffey Press.
- Arestis, Philip, and Malcom Sawyer.** 2005. "Aggregate Demand, Conflict and Capacity in the Inflationary Process." *Cambridge Journal of Economics*, 29(6): 959-974.
- Bean, Charles.** 1998. "The Interaction of Aggregate-Demand Policies and Labour Market Reform." *Swedish Economic Policy Review*, 5(2): 353-382.
- Bensidoun, Isabelle, Guillaume Gaulier, and Deniz Ünal-Kesenci.** 2001. "The Nature of Specialization Matters for Growth: An Empirical Investigation." Centre d'Etudes Prospectives et d'Informations Internationales Working Paper 13.
- Blecker, Robert.** 1998. "International Competitiveness, Relative Wages and the Balance of Payments Constraint." *Journal of Post Keynesian Economics*, 20(4): 495-526.
- Boeri, Tito, Richard Layard, and Stephen Nickell.** 2000. "Welfare-To-Work and the Fight against Long-Term Unemployment." Department for Education and Employment Research Report 206.
- Boyer, Robert.** 2012. "The Four Fallacies of Contemporary Austerity Policies: The Lost Keynesian Legacy." *Cambridge Journal of Economics*, 36(1): 283-312.
- Boyer, Russell, and Pascal Petit.** 1991. "Kaldor's Growth Theories: Past, Present and Prospects for the Future." In *Nicholas Kaldor and Mainstream Economics*, ed. Edward J. Nell and Walter Semmler, 498-523. New York: St. Martin's Press.
- Britto, Gustavo, and John McCombie.** 2009. "Thirlwall's Law and the Long-Term Equilibrium Growth Rate: An Application to Brazil." *Journal of Post Keynesian Economics*, 32(1): 115-136.
- Callinicos, Alex.** 2010. "Austerity Politics." *International Socialism*, 128(2): 3-14.
- Carlin, Wendy, Andrew Glyn, and John Van Reenen.** 2001. "Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness." *Economic Journal*, 111(468): 128-162.
- Dadak, Casimir.** 2011. "Political Economy of the Euro Area Crisis." *Panoeconomicus*, 58(5): 593-604.
- De Pinto, Isaac.** 1774. *An Essay on Circulation and Credit in Four Parts and a Letter on the Jealousy of Commerce*. London: J. Ridley.
- Driver, Rebecca, and Peter Westaway.** 2004. "Concepts of Equilibrium Exchange Rates." Bank of England Working Paper 248.
- European Commission – EC.** 2012. "The Second Economic Adjustment Programme for Greece." European Economy Occasional Papers 94.
- Eurostat.** 2012. Annual Report.
http://epp.eurostat.ec.europa.eu/portal/page/portal/esgab/documents/EN_ESGAB%2012%20report.pdf (accessed April 15, 2013).
- Fagerberg, Jan.** 1988. "International Competitiveness." *The Economic Journal*, 98(391): 355-374.

- Fagerberg, Jan.** 1996. "Technology and Competitiveness." *Oxford Review of Economic Policy*, 12(3): 39-51.
- Feldstein, Martin.** 2012. "Dealing with Our Fiscal Problems." <http://www.nber.org/feldstein/SIEPR-3R.pdf>.
- Fernandes, Abel, and Paulo Mota.** 2013. "The Euro Zone Peripheral Countries' Sovereign Debt Crisis: Also a Case of Non-Mature Democracies?" *Panoeconomicus*, 60(3): 291-310.
- Fitoussi, Paul J.** 2012. *Austerity Non Serve Alla Crescita*. Formiche, 1er février 2012.
- Gowan, Peter.** 2009. "Crisis in the Heartland." <http://newleftreview.org/II/55/peter-gowan-crisis-in-the-heartland>.
- Greek Institute of Labour Studies.** 2012. "Annual Report on the Greek Economy." <http://www.inegsee.gr/ereynes-meletes/meletes.html> (accessed February 7, 2013).
- Guajardo, Jaime, Daniel Leigh, and Andrea Pescatori.** 2011. "Expansionary Austerity: New International Evidence." International Monetary Fund Working Paper 11/158.
- Hall, Peter, and David Soskice.** 2001. *Varieties of Capitalism*. Oxford: Oxford University Press.
- Hansen, Alvin, and Dimitri Papadimitriou.** 2012. "Fiscal Traps and Macro Policy after the Eurozone Crisis." Levy Economics Institute of Bard College Public Policy Brief 127.
- Hansen, Jan, and Warner Roeger.** 2000. "Estimation of Real Equilibrium Exchange Rates." European Commission Economic and Financial Affairs Economic Papers 144.
- Hatsopoulos, George, Paul Krugman, and Lawrence Summers.** 1988. "US Competitiveness: Beyond the Trade Deficit." *Science*, 241(4863): 299-307.
- Herndon, Thomas, Michael Ash, and Robert Pollin.** 2013. "Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff." Political Economy Research Institute Working Paper 322.
- Hume, David.** 1752. "Of Public Credit." In *Essays, Moral, Political and Literary*, ed. David Hume, 39-58. Indianapolis: The Liberty Fund.
- International Monetary Fund – IMF.** 1999. "Chronic Unemployment in the Euro Area: Causes and Cure." <http://www.imf.org/external/pubs/ft/weo/1999/01/0599ch4.pdf>.
- International Monetary Fund – IMF.** 2003. "Unemployment and Labour Market Institutions: Why Reforms Pay Off?" <http://www.imf.org/external/pubs/ft/weo/2003/01/pdf/chapter4.pdf>.
- International Monetary Fund – IMF.** 2010. "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation." <http://www.imf.org/external/pubs/ft/weo/2010/02/pdf/c3.pdf>.
- International Monetary Fund – IMF.** 2012a. *Fiscal Monitor: Balancing Fiscal Policy Risks*. Washington, DC: International Monetary Fund.
- International Monetary Fund – IMF.** 2012b. "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation." <http://www.imf.org/external/pubs/ft/weo/2010/02/pdf/c3.pdf>.
- Jones, Claire, and Norma Cohen.** 2012. "Debate Rages over Benefits of Fiscal Austerity." *Financial Times*. July 12.
- Kaldor, Nicholas.** 1978. "Causes of the Slow Rate of Economic Growth in the United Kingdom." In *Further Essays on Economic Theory*, ed. Nicholas Kaldor, 100-138. New York: Holmes & Meyer.
- Kaldor, Nicholas.** 1982. *The Scourge of Monetarism*. Oxford: Oxford University Press.
- Kelly, Morgan.** 2011. "Ireland's Future Depends on Breaking Free from Bailout." *Irish Times*. May 7.

- Keynes, John M.** 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Kinsella, Stephen.** 2012. "Is Ireland Really the Role Model for Austerity?" *Cambridge Journal of Economics*, 36(1): 223-235.
- Konzelmann, Suzanne J.** 2012. "The Economics of Austerity." University of Cambridge Working Paper 434.
- Kregel, Jan.** 2012. "Six Lessons from the Euro Crisis." Levy Economics Institute of Bard College Policy Note 2012/10.
- Lapavistas, Costas, Annina Kaltenbrunner, George Lambrinidis, Duncan Lindo, James Meadway, John Michell, Juan P. Paineira, Eugenia Pires, Jeff Powell, Alexis Stenforis, and Nuno Teles.** 2010. "The Eurozone between Austerity and Default." <http://www.researchonmoneyandfinance.org/media/reports/RMF-Eurozone-Austerity-and-Default.pdf>.
- Layard, Richard, Stephen Nickell, and Richard Jackman.** 1991. *Unemployment. Macroeconomic Performance and the Labour Market*. Oxford: Oxford University Press.
- Layard, Richard, and Stephen Nickell.** 1998. "Labour Market Institutions and Economic Performance." Centre for Economic Performance Discussion Papers 407.
- Liikanen, Erkki.** 2012. "High-Level Expert Group on Reforming the Structure of the EU Banking Sector." http://ec.europa.eu/internal_market/bank/docs/high-level_expert_group/liikanen-report/final_report_en.pdf.
- Malthus, Thomas.** 1836. *Principles of Political Economy*. London: William Pickering.
- McCombie, John.** 1993. "Economic Growth, Trade Interlinkages, and the Balance of Payments Constraint." *Journal of Post Keynesian Economics*, 15(4): 471-514.
- McCombie, John, and Anthony Thirlwall.** 1994. *Economic Growth and the Balance of Payments Constraint*. London: St Martin's Press.
- Nickell, Stephen.** 1998. "Unemployment: Questions and Some Answers." *Economic Journal*, 108(448): 802-816.
- Nickel, Stephen, Luca Nunziata, and Wolfgang Ochel.** 2005. "Unemployment in the OECD since the 1960s. What Do We Know?" *Economic Journal*, 115(500): 1-27.
- Papadimitriou, Dimitri, and Randal Wray.** 2012. "Euroland's Original Sin." Levy Economics Institute of Bard College Policy Note 2012/8.
- Perotti, Roberto.** 2012. "The Austerity Myth: Gain Without Pain?" In *Fiscal Policy after the Financial Crisis*, ed. Alberto Alesina and Francesco Giovazzi, 307-354. Chicago: University of Chicago Press.
- Reinhart, Carmen, and Kenneth Rogoff.** 2010. "Growth in a Time of Debt." *American Economic Review*, 100(2): 573-578.
- Rowthorn, Robert.** 1995. "Capital Formation and Unemployment." *Oxford Review of Economic Policy*, 11(1): 26-39.
- Smith, Adam.** 1776. *Of Public Debts' the Wealth of Nations*. London: Methuen & Co.
- Setterfield, Mark.** 1998. "History versus Equilibrium: Nicholas Kaldor on Historical Time and Economic Theory." *Cambridge Journal of Economics*, 22(5): 521-537.
- Stockhammer, Engelbert.** 2008. "Is the NAIRU Theory a Monetarist, New Keynesian, Post Keynesian or a Marxist Theory?" *Metroeconomica*, 59(3): 479-510.

- Stockhammer, Engelbert, Özlem Onaran, and Stefan Edere.** 2009. "Functional Income Distribution and Aggregate Demand in the Euro Area." *Cambridge Journal of Economics*, 33(1): 139-159.
- Thirlwall, Anthony.** 1979. "The Balance of Payments Constraint as an Explanation of International Growth Rate Differences." *Banca Nazionale del Lavoro Quarterly Review*, 128(791): 45-53.
- Uxó, Jorge, Jesus Paúl, and Eladio Febrero.** 2011. "Current Account Imbalances in the Monetary Union and the Great Recession: Causes and Policies." *Panoeconomicus*, 5(Special Issue): 571-592.
- Varoufakis, Yanis, and Stuart Holland.** 2013. "A Modest Proposal for Resolving the Eurozone Crisis." <http://varoufakis.files.wordpress.com/2013/07/a-modest-proposal-for-resolving-the-eurozone-crisis-version-4-0-final1.pdf>.
- Williamson, John.** 1985. *The Exchange Rate System*. Revised Edition. Washington, DC: Institute for International Economics.
- Williamson, John.** 1993. "Exchange Rate Management." *The Economic Journal*, 103(416): 188-197.
- Williamson, John.** 2009. "Exchange Rate Economics." *Open Economies Review*, 20(1): 123-146.