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Is the 'EURO' a Defunct Currency?

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ABSTRACT: In this paper we provide a brief discourse on the theory of optimum currency areas to serve as a basis for constructive criticism of the conceptual framework of the eurozone. With particular reference to the Greek economic crisis, we argue that the very architecture of the EU experiment involving the single currency was inherently flawed from the outset in so far as political pressures to speed up the process towards a politically unified Europe has resulted in what is perceived as the worst economic *impasse* in the history of modern capitalism.

Keywords: Optimum Currency Area; Economic and Monetary Integration; Euro; Greece.
JEL Classifications: E42; F13; F33; F42

1. Introduction

Research into the nature of and implications arising from the establishment of an optimum currency area (OCA) has been ongoing since the pioneering work by Mundell (1961) and McKinnon (1963). The topic has increased in significance in more recent years, particularly in the context of developments within the European Union (EU) and as a result of the formation of *euroland* (or *eurozone*) on 1 January 1999. A heated debate has been ongoing concerning the consequences of deeper European integration and the economic costs and benefits of Economic and Monetary Union (EMU) involving the creation of the single European currency, the euro.

The topic has also grown in significance in the context of the sovereign debt crisis which has rocked a number of European states in recent years. The scale of the crisis has led to speculation about the very survival of the euro currency itself and the future pace of European integration (including not only monetary union but also fiscal harmonisation – and, perhaps, ultimately political union). Suggestions have been raised by some observers that it might be wiser for euro members to pause and consider forming a "two-speed" eurozone with the strongest countries forging ahead with ever-closer integration and the others taking a longer time-scale to adjust.

This paper seeks to make a contribution to this debate by first providing a brief theoretical discourse on the theory of optimum currency areas as the basis for a constructive criticism of the conceptual framework which underpins the eurozone. In particular, with reference to the Greek economic crisis, we argue that the very architecture of the EU experiment might have been inherently flawed at the outset, in so far as political pressures to speed up the process towards a politically unified Europe have resulted in what is perceived as the worst economic *impasse* in the history of modern capitalism. Ostensibly, the extent to which some member states of the EU have pursued a neoliberalist agenda since the birth of the unification plans appears to have been a contributing factor to the economic derailment of the 'euro-train' and the bleak long term economic prospects facing a number of EU member states.

The rest of the paper is organized as follows: Section 2 captures the fundamental aspects of the meaning of an optimum currency area by succinctly reviewing the existing literature whilst Section 3 provides an insight into the framework within which the single European currency was envisaged. Section 4, by drawing on the Greek economic crisis, argues why the entire theoretical framework might be inherently flawed. Finally, Section 5 provides some concluding remarks and views concerning the way forward.

2. Theoretical Basis of an Optimum Currency Area

An *optimum currency area* (OCA) refers to the 'optimum' geographical size within which the general means of payments is *either* a single common currency (as in the case of the euro) *or* a group of currencies whose exchange values are irrevocably pegged to one another with unlimited convertibility for both current and capital account transactions on the balance of payments, but whose exchange rates fluctuate in unison against the major currencies from the rest of the world.

In this context, the idea of an 'optimum' is defined in macroeconomic terms with respect to the maintenance of so-called *internal* and *external* balance. Internal balance is achieved at the optimal trade-off point between inflation and unemployment – consistent with zero (or non-accelerating) inflation and a rate of unemployment which is "voluntary" in the sense that the only people unemployed are those who are unwilling to work at the going wage rate (defined as *classical unemployment*). This trade-off is appropriately illustrated with reference to the Phillips curve (Phillips, 1958). External balance is concerned with the maintenance of sustainable balance of payments positions (i.e. the absence of persistent current account deficits or surpluses).

The concept of OCAs was originally developed in the 1950s and early 1960s in the context of research and analysis concerning the relative merits of fixed versus flexible exchange rate regimes. There have been many early supporters of flexible exchange rates, most notably Milton Friedman (1953), who argued that a country experiencing price and wage rigidities should adopt flexible exchange rates in order to maintain both internal and external balance. Under a system of fixed exchange rates with price and wage rigidities, any effort by policy makers to correct international payments imbalances would result in unemployment (arising from an over-valued currency and a consequent loss of international competitiveness) or inflation (arising from an under-valued currency leading to rising import prices). In contrast, under flexible exchange rates the induced changes in relative prices and real wages (and hence international competitiveness) would, in the long-run, eliminate international payments imbalances without much of the burden of real adjustment, in particular, on employment levels. Such an argument in favour of flexible exchange rates provides support for the view that a country should adopt a floating exchange rate regime irrespective of its fundamental economic characteristics, since market forces will ensure continuous adjustment towards internal and external balances.

The main problem with Friedman's logic concerning flexible exchange rates is that it fails to recognise that countries fundamentally differ in so many ways – for example, in terms of endowments of natural resources, productivity levels, capital-labour ratios, skill levels etc. Given such differences, the theory of optimum currency areas claims that, if a country is sufficiently highly integrated with the "outside world" in terms of financial transactions, financial mobility or commodity trading, then a fixed exchange rate regime (or, in the extreme, a single currency) may be more effective and more efficient in reconciling internal and external balances than a system of flexible exchange rates. This is the core of the argument put forward by supporters of the euro within the context of the Single European Market, although a question remains concerning the extent to which the degree of integration that has so far been achieved between the current members of the European Union is sufficient to provide an appropriate foundation for the creation of a successful OCA, let alone a single common currency. Supporters of the euro further argue that integration is a dynamic and ongoing process – and that criticism against the euro is, therefore, inappropriate (and, in some cases, based on nationalistic tendencies on the part of some countries from outside the area). However, the recent "euro crisis" has put the spotlight on those countries in the eurozone that have failed to ensure appropriate structural and sustainable adjustments enabling them to remain competitive and attractive to investors within the single currency area, in particular Greece, Spain, Portugal, Ireland and Italy.

As noted above, the pioneers of research into OCAs were Mundell (1961) and McKinnon (1963). The focus of their research was an attempt to identify the most fundamental economic properties required to define an 'optimum' currency area. In this context, recognition should also be given to the parallel contribution by Ingram (1962). Later research by a number of others including Grubel (1970), Corden (1972), Ishiyama (1975) and Tower and Willet (1976) moved the attention away from the required fundamental properties of an OCA to an evaluation of the costs and benefits which stem from OCA participation. Hamada (1985) later studied the implications of an individual country's decision to participate in an OCA from the standpoint of social welfare.

Following a period of diminished research interest, the introduction of the European single currency in 1999 paved the way for what some commentators see as the renaissance of the OCA debate (Dellas and Tavlas, 2009). As a result, a number of research studies have emerged recently which offer further insights into recent events with some describing the situation as an 'intellectual purgatory' surrounding debate concerning the future of the EU. Table 1, below provides a summary of the most recent research studies conducted on OCA properties and EMU. These studies look at various aspects of an OCA in terms of the degree of labour mobility, financial market integration, trade integration, inflation rates and price flexibility as well as fiscal integration. As summarised in the table, there is conflicting evidence concerning the extent to which EMU has resulted in sufficient harmonisation between the member states – it is clear that the eurozone area has not yet met the full conditions required for the effective operation of an OCA.

Table 1. Recent studies on EMU harmonisation

Labour mobility	
Issing (2000)	*Evidence of rigidity in the labour markets in the run up to EMU.*
Alesina, *et al* (2010)	*Evidence of a two-tier labour market.*
European Commission (2008); Campolmi and Faia (2009)	*Evidence of significant correlation between rigidity, and both unemployment and inflation.*
Arpaia and Pichelmann (2007); OECD (2010); Zemanek (2010)	*Rigidity was responsible for diminished competitiveness in the euro are and the periphery.*
Hein and Truger (2005); Blanchard (2007)	*Rigidity was identified as a key factor responsible for weak output growth and thus, higher unemployment.*
Financial Integration	
European Commission (2008)	*Strong integration and evidence of increased intra-EMU FDI*
Fratzsher and Stracca (2009)	*Integration led to diminished domestic shocks but also to shared of national risks.*
Danthine, *et al*. (2001)	*Convergence of interest on public debt (now reduced).*
Mongelli (2008)	*Private debt markets and intra-EMU FDI increased.*
Trade Integration	
European Commission (2008)	*Increase in intra-EMU trade.*
Fontagne, *et al*. (2009)	*Reduced price volatility and discrimination due to intra-EMU trade.*
Berger and Nitsch (2008)	*Once the historic tendency is removed, there is not significant increase in intra-EMU trade.*
Kappler (2011)	*Evidence of positive correlation of trade and business cycles in the long run rather than the short run.*
Inflation rates and price flexibility	
Mongelli (2008)	*Considerable reduction of the dispersion of inflation to historic levels*
Lopez and Papell (2007); Zhou *et al*. (2008)	*Convergence on inflation rates started before the unification, casting doubts on the role of the single currency in the process.*
Chen and Mahajan (2010)	*No evidence of PPP between currency blocks than inside them.*
Fiscal Integration	
OECD (2000)	Fiscal discipline dwindled after EMU creation.
Zemanek (2010)	Fiscal anarchy is to be held responsible for the sovereign debt crisis.

3. Blazing the OCA Trail: The Single European Currency

In the EU region, the existing policy mix fostered by the European governments, especially after the ratification of the 1992 Maastricht Treaty has been directed to ensuring price stability and 'sound' government finances. According to the principles of EMU, at national level, monetary autonomy is transferred to a supranational, independent authority, the European Central Bank, whereas budgetary policy autonomy is maintained at national level with limitations concerning the size of both budgets deficits and gross public debt.

The rules and procedures that underpin EMU are aimed at achieving certain macroeconomic objectives such as the prevention of inflationary pressures across the EU region, the avoidance of negative spillover effects from irresponsible budgetary policies inside EMU by individual states (and thus the need for debt bailout) as well as encouraging policy co-ordination to support the efficient operation of the Single Market and the free flow of goods, services, people and capital.

Arguably, monetary and budgetary policies should work in the same direction so that low inflation and sustainable growth can be achieved. A bad concoction of policies may lead to high real interest rates, low investment and slow economic growth (Debrun, 1997).

According to the Stability Pact within EMU, it is important that EU economies are safeguarded against potential debt-bailouts. In the event of a debt crisis by an individual country, the pressure is either on the monetary authority (ECB) to accommodate the debt or on the rest of the member states to bailout the country in distress. In the same line of argument, Goldstein and Woglom suggest that "under these circumstances, the central bank would find it difficult to credibly commit itself to price stability and other members would find their own incentives for implementing sound fiscal policies distorted" (Goldstein and Woglom, 1992:228). In addition, Giavazzi and Pagano (1995) maintain that large deficits undermine the effectiveness of monetary policy and make public finances more fragile. Hence, balanced or in surplus budgets will enable the entire region to reduce the dead-weight cost of taxation and make funding social security liabilities much easier.

Fundamentally, in neoclassical economics economic growth is contingent on savings (Cesaratto, 1999). Thus, the current economic practice of targeting balanced government budgets is based on the notion that excessive budget deficits absorb national savings which will push up long term interest rates and, in turn, 'crowd out' private sector investment.

Uncontrollably large budget deficits within the EU region can also negatively affect the value of the euro against other external currencies which in turn can result in cross-border spillovers. Co-ordination of national budgetary policy is therefore needed to ensure that such spillovers are kept at bay as well as to provide a safety margin that allows automatic stabilisers to operate effectively when the economy is in recession (Keller, 1999).

Theoretically, the adoption of a single currency in the eurozone was supposed to lead to convergence by promoting trade as well as providing better access to markets for European enterprises, at domestic as well as at international levels.

It is worth noting, however, that the presumed benefits - for both consumers and enterprises - arising from the elimination of transaction costs and risk, as well as the perceived price transparency and competition, are still to be realized by Greece as well as by a number of other eurozone countries.

According to the OCA theory, the economic environment that a single currency nurtures should be conducive to growth and prosperity (Mundell, 1961; McKinnon, 1963; Kenen, 1969). The European experience to date, however, suggests that such a prospect is rather elusive. According to Krugman (1993) and DeGrauwe (2000), the adverse effects of an asymmetric shock can only be offset by a high degree of labour mobility and fiscal coordination – in other words, fiscal federalism. It is thus imperative that countries within a monetary union are equipped with the appropriate budgetary policies to deal with problems arising from persistent high levels of unemployment and imperfect mobility of labour.

The demand shocks that have been permeating the EU region since the onset of the global financial crisis of 2007/8 are, in the main, due to the policy mix across countries (in terms of fiscal expansion followed by fiscal contraction) as well as the extent of specialization existing across regions and countries. The nature of such an economic environment is rather at odds with the OCA's postulates.

In principle, EMU is set up to support economic convergence and well as to deepen market integration. The latter bolsters the degree of sector specialization as well as reinforces differences in the structure of production. In effect, pronounced differences in the structure of production are bound to increase the probability of demand shocks experienced by individual and neighbouring countries. This has led to a lower speed of adjustment which, in conjunction with the extant rigidity of labour and product markets, has aggravated the problem still further.

Within EMU, national monetary authorities have lost control of monetary policy as this is entirely entrusted to an independent ECB. As a result, the occurrence of a demand shock is, in all likelihood, will have an adverse as well as a heterogeneous impact on the entire region. The intensity of the impact, given the ongoing process of specialization and deepening of production will be further magnified.

The associated internal cost of adjustment will chiefly depend on the size and incidence of asymmetric shocks as well as on the efficacy of alternative adjustment mechanisms, namely labour markets and fiscal policies. In other words, a country experiencing an adverse impact should pursue internal policies to deflate the economy, i.e. causing wages to decrease so that the country maintains its competitiveness. The concomitant fiscal contraction will burden the economy, raising regional unemployment still further. A lowering of average wages will exacerbate the already crippled sectors and problematic regions whilst the better-off countries will enjoy the benefits of wealth concentration, demanding high quality products and services.

Amongst mainstream neoclassical economic thinking, it is widely argued that markets are efficient and always adjust accordingly to rectify any disequilibria. By the same token, one cannot dispute the very fact that the introduction of the euro has resulted in growing income inequalities and considerable deterioration in the standards of living for some countries. In other words, the so-called 'winners' or 'dominant players' have enjoyed increases in their purchasing power, while some other countries and groups of individuals have seen their wages dwindle markedly, experiencing inflated prices even for what essential goods and services.

In Greece, for instance, the structure of production as well as employment stands in stark contrast to the EU average due to the relatively high share of GDP stemming from the agricultural and other residual professional sectors. Thus, any demand shocks in the European economy are translated into asymmetric and adverse shocks that are detrimental to the Greek economy.

4. Jumping off the EMU 'Ghost-Train'

Arguably, the architecture of the EMU project is fundamentally flawed in that its founding objective was to form a political rather than a monetary union (see Feldstein, 1997; DeGrauwe, 2000; Bernanke, 2005). According to Eichengreen (1990) and Artis *et al.* (1998), this notion is predicated on the fact that a number of countries that were allowed to enter the monetary union did not meet the OCA criteria.

As a result, the introduction of the euro as a 'gravitational currency' within the EU region has recently come in for a lot of criticism. The initial exuberance that the newly-established trading and reserve currency enjoyed in the first years of its circulation was superseded by frustration and indignation.

A closer look at the mechanics of the single currency suggests that the euro could be held responsible for the growing divergence of the eurozone economies. In particular, a glance at the impact of a strong euro on the Greek economy suggests that whilst consumption has been growing dramatically for many years, investment in productive capacity and efficiency has dwindled alarmingly. The end result has been a marked decline in competitiveness that has compromised the future economic growth and prosperity of the economy – for decades to come.

Assuming that the Greek drachma had never been replaced by the strong euro, then a devaluation of the drachma and a policy put in place to boost interest rates would have stifled household as well as state spending.

The fact that the euro has tended to strengthen against the world's main trading currencies over time has caused demand for imports to increase significantly which, in conjunction with excessive state borrowing triggered by historically low interest rates, has resulted in an explosive economic environment.

What has followed in recent years has made the headlines of many newspapers around the world – reporting chronic fiscal deficits, unsustainably high public debt; inability to protect the already battered productive base of the economy and gaping current account deficits calling for internal devaluation. In the absence of such adjustments, the outcome has been unprecedented cuts in wages and living standards accompanied by an increase in unemployment to record levels.

In contrast, a number of northern European economies led by Germany have enjoyed a period of economic renaissance since the birth of the Single Market and the euro.

It is worth mentioning that right up to the start of the crisis in 2007, the political leaders and the economic think-tanks of the European Union, instead of pushing for institutional changes towards the alleviation of inequality by reforming the role of the ECB, entrenched themselves in their national boundaries clinging on to the ever so desirable but 'sterile' political power.

In Greece, any stimulus in economic growth came mainly from increased consumption and the inexplicably inflated unproductive sectors of the economy (state, banks, trade and private services) whilst the productive sectors (excluding tourism and transport), industry and agriculture experienced unprecedented declines.

At the time, the Greek administration appeared to be rather reluctant to devise any plans to salvage the declining productive base. It instead resigned to the inevitability of neoliberalism succumbing hence to free market ideology. The emerging economic environment in Greece was passively accepted, with people borrowing excessively to satisfy the artificially shaped consumption needs, whilst banks' profits soared. The unfolding spending spree gave way to an explosive environment with households and businesses struggling to meet their future obligations whilst banks saw their profit getting eroded, experiencing inevitable liquidity shortages.

It could be argued that the inception of the euro as a single currency in the EU region was, in fact, a core element of a 'subliminal' vision to consolidate the prospect of a political union – European federalism - with the ECB playing an instrumental role in assuming key responsibilities in the conduct of monetary policy within the framework of a restrictive fiscal policy regime.

In view of the deep recession that has now come to plague parts of the EU region, cultural as well as national differences between member states have resurfaced, ushering in an era of unprecedented polarization between political leaders as to who is to be held responsible for triggering the economic crisis.

At present, the economically developed countries of the north have to contemplate ceding part of their so-called legitimately acquired benefits of EU and euro membership. At the same time, they may have to consider devising a way to facilitate the expulsion from the eurozone of those countries that many commentators would now argue should not have been allowed to be admitted in the first place. Ultimately, this could lead to a dismantling of the monetary union.

The question, therefore, is not whether or when Greece will leave the euro but rather whether the euro is already leaving Greece! The euro cannot functions effectively in such an environment where there is a lack of political will to support and consolidate the union irrespective of any political costs.

On the other hand, if Greece is to survive as an economy with or without the euro, it must carry out wide-ranging reforms without delay aimed at curbing spending on non-productive investment and its concomitant bureaucratic practices, and instead focus its efforts on how to implement polices tailored to boost what Kaldor calls 'the engine of growth' i.e. productive investment.

5. Concluding Remarks

This paper has set out the theory of OCAs *vis a vis* the European single currency and has pulled together a number of issues which merit further attention. On the empirical front, different studies provide conflicting evidence in relation to the eurozone being an OCA. Developments in the eurozone will, undoubtedly, have major and long-lasting implications concerning the pace of closer integration within the European Union. More and more attention is being focused on the need for fiscal harmonisation between the euro member states in order to avoid renewed sovereign debt crises in the future. This issue is central to the very future and survival of the euro itself – but the extent to which all member governments are prepared to relinquish fiscal sovereignty has yet to be tested. It is hoped that this review of OCA research will provide a useful platform and background for discussions concerning the future of a single common currency in Europe.

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