

Winter 12-14-2012

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Examining Eurozone Divergence

Charles Noble

Abstract: This paper provides a brief history of European integration followed by an examination of the Eurozone financial crisis and the economic divergence among particular economies (Germany compared with Greece, Portugal, Spain, and Ireland) it induced. Afterwards a list of structural and policy reforms meant to achieve economic convergence is provided. The paper concludes that in order for the Eurozone to achieve economic convergence, it would be best if Greece and Portugal exited the monetary union. The smaller, more homogeneous union could then more readily achieve economic convergence to function, both politically and economically, as a sustainable monetary union.

The conclusion of World War II brought an overwhelming consensus throughout Europe that any further war and destruction must be averted. European integration was sought after as a way to avoid any more violent conflict that had ravaged the continent for centuries. A crucial way to achieve European unity was economic integration. A number of projects throughout the 20th century developed and helped progress political and economic integration. However, this process slowed down significantly during economic downturns. During the oil crises of the 1970's integration halted in the face adversity. Various countries desired different policies, and these rifts paralyzed the integration process. Further meaningful integration, such as the creation of a common European market, was not embraced until 1986 (Lacina & Rusek, 2012, p. 71). These years of stagnant integration (roughly 1968 through 1986) are often called as the period of "eurosclerosis." This lack of unity in the face of adversity is especially foreboding when viewed in comparison with today's crisis. Integration made significant advancements after the collapse of European communism.

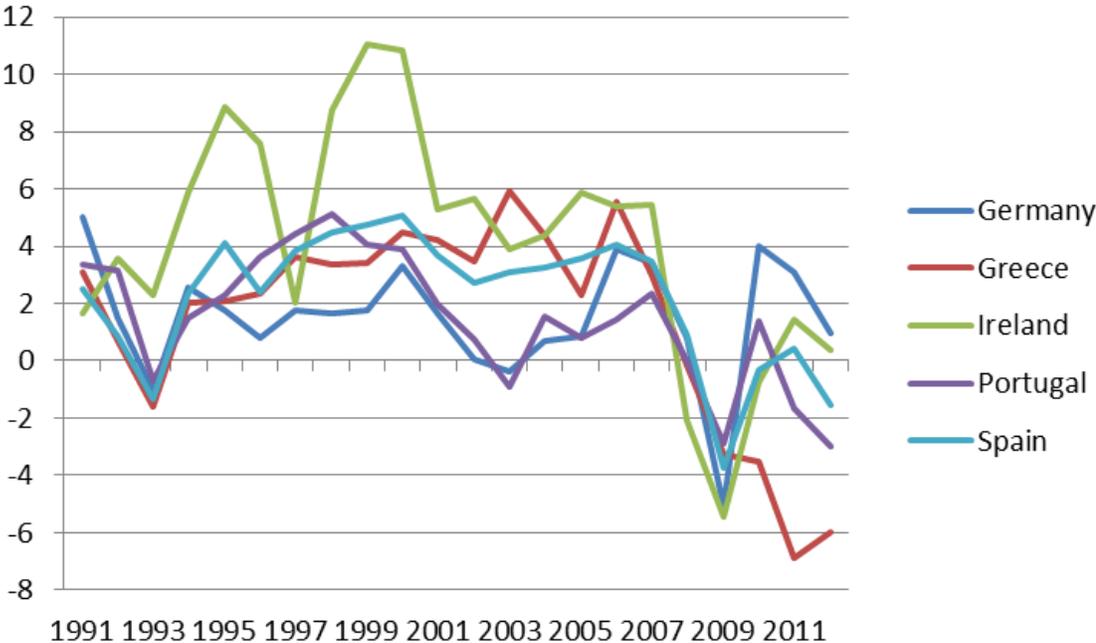
When the Berlin Wall fell in November 1989, it "fundamentally altered European politics" (Smith, n.d., 7). Although rejoiced and still celebrated today in Germany, its reunification reignited fears of "the German problem" throughout the rest of Europe. German leadership calmed these worries by stating their country would be deeply integrated with the rest of Europe,

which would make a powerful and belligerent Germany impossible. The new Germany would be a 'European Germany' instead of imposing its will on its neighbors creating a 'German Europe' (Smith, n.d., 7). Thus, after German reunification further European integration progressed. The European Union (EU hereafter) was formally established with the implementation of the Maastricht treaty on November 1st, 1993. The EU was comprised of three pillars: economic, common foreign and security policy, and justice and home affairs. Today the EU has 27 member states, with more seeking entrance, and has extended farther into Eastern Europe.

A more integrated subset of the EU is the European Monetary Union (EMU hereafter). The EMU seeks to facilitate trade and create economic convergence among members. Union members also share a common currency, the euro. The EMU was outlined in the above-mentioned Maastricht treaty, and was implemented after several years passed allowing for countries to reach set convergence criteria. That list of economic convergence criteria was created to ensure only countries with similarly strong fiscal and monetary institutions are allowed membership in the monetary union. Homogeneity was of the utmost importance because for a monetary union to function healthily, member states must have similar economic environments. The EMU also shares a single, independent central bank: the European Central Bank (ECB hereafter). The ECB has a sole mandate of price stability, which has been central to every decision it has made to date. In 1999 the initial EMU members were Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece joined this group in 2001, and the euro was introduced as physical currency that replaced old national currencies on January 1st, 2002. Slovenia joined in 2007, followed by Cyprus and Malta in 2008, the Slovak Republic in 2009, and Estonia in 2011. Today it is these 17 countries that face a colossal economic crisis.

The EZ financial crisis was precipitated by the US subprime mortgage crisis that started in in 2007. The economic downturn is clearly illustrated in Figure 1, where GDP percent change takes a sharp decline in 2008. However, the crisis currently facing the EZ is not affecting every member uniformly. There has emerged a clear demarcation between the groups of have and have-nots in the EZ. The “core” countries, led by Germany, have done remarkably well while the “periphery” countries, including Portugal, Ireland, Greece, and Spain (commonly referred to as PIGS) have floundered. This divergence has complicated and tested the EMU, especially as the periphery has verged on default and required financial support form the core. This chaos could ultimately break the EMU apart.

Figure 1. Real GDP in Annual Percent Change



(Source: IMF World Database)

The EZ accounts for almost 20 percent of global GDP; only slightly less than the US's share and well over twice as much as China's. Because of its size and the interconnected state of the global economy, any downturn in the EZ impacts the world. For example, the first bout of EZ instability in May 2010 caused the loss of \$2.5 trillion in US stock market capitalization (EIU, 2001, p. 2). The EU is arguably the world leader in taking a serious stand against climate change, which it sees it as a direct security threat. Therefore, a severe economic decline in the EU would directly affect sustainability progress. A complete break-up of the EMU would also be a severe blow to world politics and undo decades of European integration. Many economists predict that a EZ breakup would trigger an economic crisis worse than the above-mentioned recession. Therefore, the EZ's current emergency matters to the world.

After viewing the background information regarding the set-up of the EMU a central question emerges: if the EMU was created with guidelines to ensure convergent and homogenous economies, how did such dramatic divergence occur? Furthermore, what reforms can and should be made to ensure a healthy EZ? This paper seeks to address these questions. It is important to note that although each EZ member is important, to analyze events in every country would be beyond the scope of this paper. Therefore the focus is dedicated to Germany (which leads and represents the core) and four major crisis countries (Portugal, Ireland, Greece, and Spain). Reforms, whether currently implemented or hypothesized, are needed to ensure there is no government default or a complete EZ breakup. Although there are economically viable ways for the EZ to continue as a healthy monetary union in its current form, many are not politically feasible over the long-run. Such options include staying the course, transforming into a fiscal union, or breaking up completely. This paper will argue that the EZ would derive the most long-run benefit by allowing certain periphery countries (Greece and Portugal) to leave it. Although

this move would create huge short-run losses for all parties involved, it would allow Greece and Portugal to pursue monetary policy focused on their own well-being, instead of conforming to the ‘one-size-fits-all’ monetary policy of the ECB. The remaining smaller and more homogeneous group would need also to undergo serious framework changes as well to make sure convergence actually occurs within the remaining group. This would in turn create a healthier and sustainable EMU.

The paper progresses from an analysis of the Maastricht criteria to the financial crisis. Further examination detailing how divergence occurred follows. Afterwards a number of possible reforms is presented, ending with an explanation of the best-case EZ reform scenario.

The Maastricht Criteria of Convergence

As stated earlier, the Maastricht criteria for EMU membership are labeled ‘convergence criteria’ because they were created to ensure countries entering the union would be of a homogeneous nature. If countries are not homogeneous and require different economic and monetary policies, a blanket policy could become ineffective or even harmful. Therefore, convergence was the sought-after goal. Importantly, these criteria were created as a ‘one-size-fits-all’ set of rules under which every member was required to conform to the exact same rules.

The main Maastricht criteria are as follows:

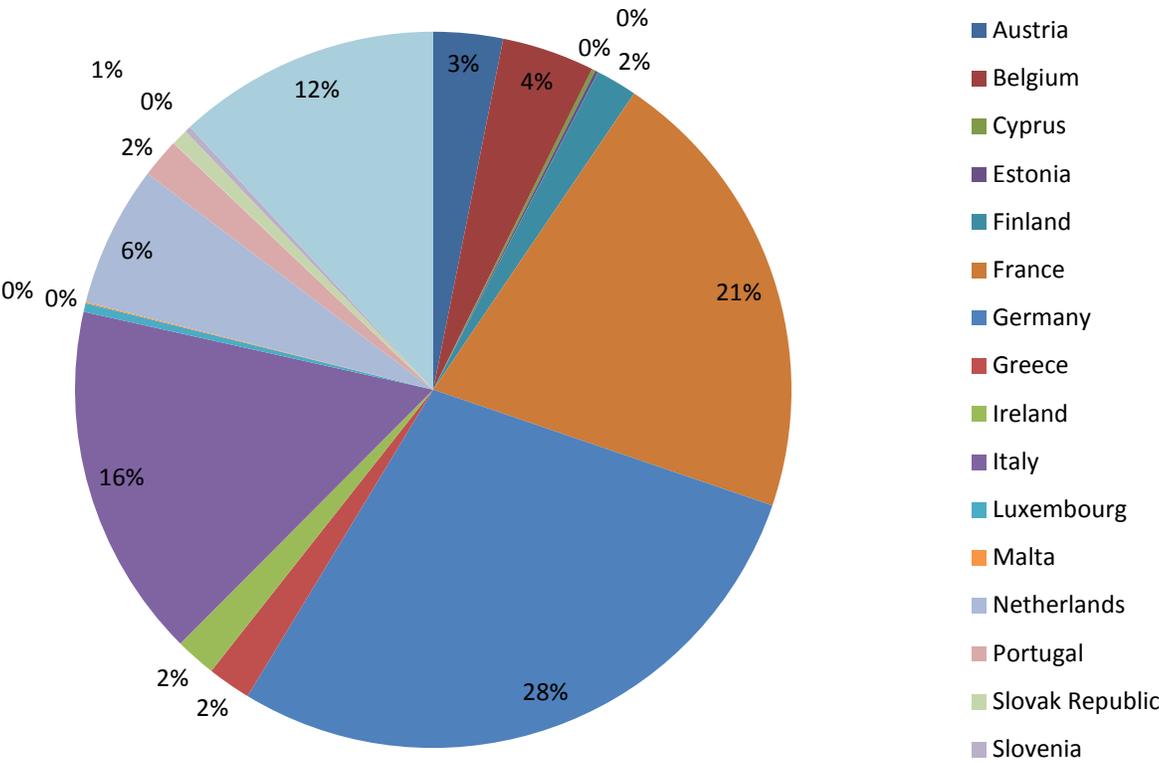
- Price Stability: Member States should have a price performance that is sustainable and an average rate of inflation that does not exceed by more than 2 percent
- Government budgetary position: Member States are to avoid situations of excessive government deficits, that is their ratio of planned or actual government deficit to gross domestic product should be no more than 3%, and their ratio of (general) government debt to GDP should be no more than 60 %, unless the excess over the reference value is only exceptional or temporary or the ratios have declined substantially and continuously
- Long-term interest rates: Member States should have had an average nominal long-term interest rate over a period of one year before the examination that does not exceed by

more than 2 percentage points that of the three best-performing Member States in terms of price stability

(Source: Eurostat Website, 2012)

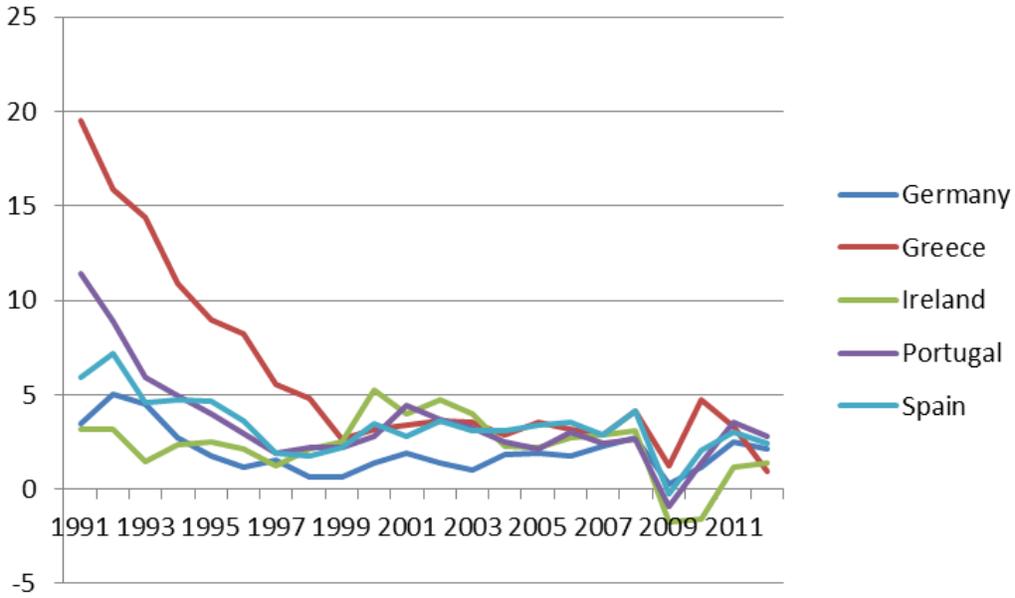
These criteria are meant to design a monetary union focused on stability. Inflation and interest rates were obvious convergence factors since, per Germany's demands for agreeing to enter the union, the sole mandate of the ECB is itself price stability. Figure 3 illustrates the inflation convergence that occurred prior to and after EZ creation. Figure 2 illustrates members' shares of EZ total GDP and highlights Germany's dominant economic role. The government's budget position was picked because of the need to prove fiscal responsibility to the financial markets. In 2000 the European Commission stated: "achieving and sustaining sound positions in public finances is essential to raise output and employment ... Low public debt and deficits help maintain low interest rates, facilitate the task of monetary authorities in keeping inflation under control and create a stable environment which fosters investment and growth" (Arestis & Sawyer, 2012, p. 5). Countries in the EMU lose the ability to devalue their currency when hit by a shock, so having a sound fiscal profile gives them more room to act. Interestingly there were "no direct incentives for fiscal restraint in booms" (Calmfors, 2012, p. 12). Governments could gain indirect benefit because restraint would decrease their debt, creating a larger cushion in the future if a deficit is needed. Economically, and over the long term, this seems like the logical thing to do. However, these benefits might not even be captured by the government currently in power. Without direct incentives or legislation politicians did not have as much motivation to chip away at their debt. Viewing Figure 4 it is obvious debt convergence was hardly achieved. Thus an added agreement to the criteria was created to let countries consistently lowering their debt towards, but above the 60 percent threshold, join the EZ.

Figure 2. Total EZ GDP Percentage Shares in 2012



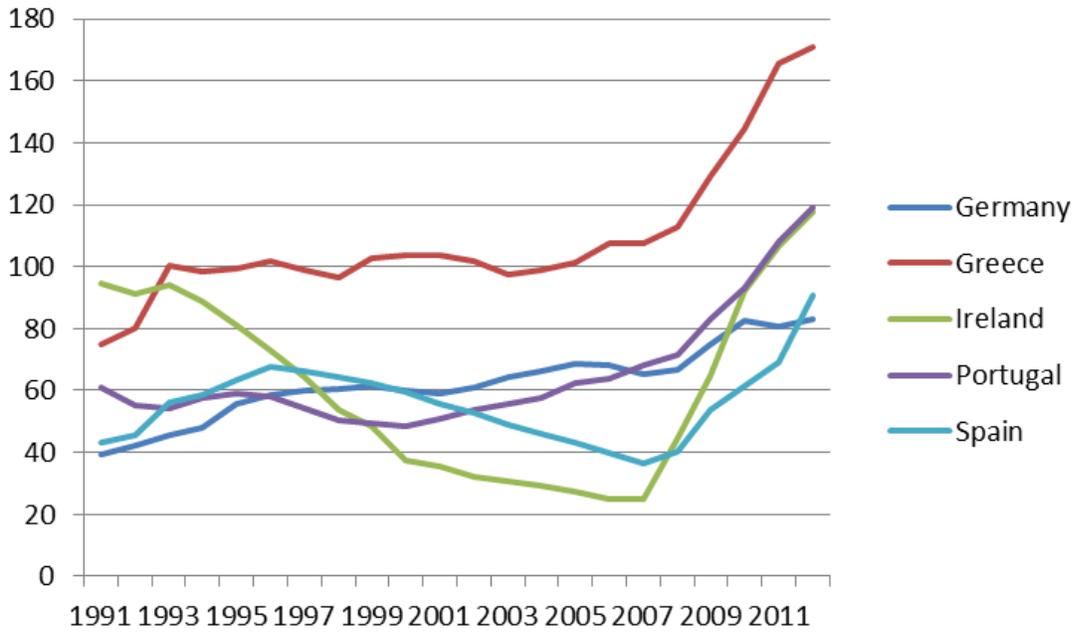
(Source: OECD World Database, 2012)

Figure 3. Inflation as a Percent Measured by Average Consumer Prices



(Source: IMF World Database, 2012)

Figure 4. Gross Government Debt as Percent of Real GDP



(Source: IMF World Database, 2012)

Another key feature of the Maastricht treaty, which was further enforced by the Lisbon treaty in 2007, was that under no circumstances could there be a bailout of a country facing a default on its debt. This rule was supposed to reduce the likelihood of free-rider problems. If members knew they could not be rescued because of irresponsible actions, in theory the likelihood of irresponsible fiscal behavior would decrease. This was partly for the appeasement of Germany as a hopeful assurance that the EMU would only remain as a monetary union without morphing into a transfer union as well. The above-mentioned criteria were considered sufficient enough to ensure healthy convergence among member states. This assumption would later prove to be entirely wishful thinking.

The first years of the EMU produced positive overall results. GDP growth was consistent, although not as high as other areas such as the US. Overall unemployment unfortunately remained persistently high. However, there was tremendous variability within the EZ and each statistic. In 1998, even several years after Maastricht, unemployment “varied from 2.6 percent in the Aaland region in Finland, 27 percent in Calabria, Italy, and 29.9 percent in Andalusia in southern Spain (Auerback, 2011, p. 92). For comparison, the variance in unemployment rates among US states is much less pronounced (Buch, 2012, p. 8).

Additionally, the Maastricht guidelines were not strictly enforced. As mentioned earlier, fiscal restraint was the central guideline for convergence. But the Maastricht guidelines were by and large ignored. “Even before the financial crisis struck in 2008 there were already a large number of breaches of the rules: in 45 out of 117 possible cases there were either deficits exceeding three percent of GDP or debt ratios exceeding 60 percent of GDP that were not falling ... yet no sanctions were imposed” (Calmfors, 2012, p. 10). This was not merely a minor breach by a small periphery country. Rather, from 2003 to 2005, the two largest economies of

the EZ, Germany and France, lobbied their way into successfully diluting the repercussions of breaking the rules because of their debt ceiling violations. This clearly undermines the authority, credibility, and transparency of the EMU and has fueled serious skepticism about the validity of its legislation and convergence aspirations.

However, despite its faults, the EMU was seen as a bastion of stability, as overall inflation was low and its current account was roughly balanced. This sense of pride was aptly described by an ECB official in 2008: “For its member countries, EMU has anchored macroeconomic stability, and increased cross border trade, financial integration and investment. For the EU as a whole, the euro is a keystone of further economic integration and a potent symbol of our growing political unity” (Bibow, 2012, p. 5). This perception of success would soon be turned upside down.

The Financial Crisis

The EZ formally entered recession in the spring of 2008. However, partly due to this sense of stability, the ECB did not start to take expansionary action until the fall of that year. Even after the collapse of Lehman Brothers in September 2008, which sent world financial markets into chaos German finance minister Peer Steinbrück, discussing expansionary policy, stated “this crisis originated in the US and is mainly hitting the US ... [In Europe and Germany, such a package would be] neither sensible nor necessary” (Bibow, 2012, p. 6). Many economists have been critical of the ECB’s response to the crisis, citing its’ lack of aggressiveness, especially compared with other central banks, as a reason why the crisis in the EZ has been so prolonged. Perhaps fueling this disbelief, EZ sovereign debt markets remained fairly placid until mid-2009. During this time market attention was drawn to the instability of the banking system

(Lane, 2012, p. 55). The economic slowdown and bank instability eventually began to directly affect EZ economies. Unemployment rose, and with it followed an increase in government spending and a decrease in tax revenue. This naturally created rising government budget deficits. These rising deficits then began to play into a vicious negative feedback loop. Credit was already expensive to obtain because of the instability created by the banking crisis. Investors began to realize that governments might have to step in to prop up failing banks, which created uncertainty and further impacted their borrowing costs. Governments faced with rising deficits were thus forced to spend even more money to finance it. Lane describes the plight of EZ members: “rising estimates of prospective banking-sector losses ... also had a negative indirect impact on sovereign bond values, since investors recognized that a deteriorating banking sector posed fiscal risks” (2012). Additionally, governments with higher deficits were seen as more unstable by financial markets, which further elevated their borrowing costs. This self-fulfilling prophecy wrought havoc on governments in the EZ. “Any deterioration in [either domestic banks or nations] ratings pulls down the others too” (Bibow, 2012, p. 30). This feedback cycle is clearly illustrated in Figure 4, which depicts skyrocketing debt.

This nascent stage of the crisis was elevated to a new intensity when Greece made an alarming announcement about its actual deficit statistic. In 2010 the Greek government revised its 2009 deficit forecast from 6 percent to 12.7 percent of GDP (Lane, 2012, p. 56). The estimate grew even larger as time progressed, and by the end of the year it had grown to 15.4 percent of GDP (Welfens, 2011, p. 23). These statements sent shockwaves through financial markets and put intense pressure on EZ governments. Later that year Greece had to officially request financial aid to avoid default and subsequently received a bailout of €110 billion in May of 2010. This was followed by an Irish bailout of €85 billion in November that same year. Portugal was

next in line and received €75 billion in May of 2011 (Lane, 2012, p. 56). The first aid package for Greece was not enough and another bailout worth €130 billion was given in March of 2012 (Lane, 2012, p. 59). Currently both Spain and Cyprus are also being considered for bailouts. Any possibility of default, which a bailout necessarily implies, sends financial markets into turmoil and brings down long-term confidence of the entire EZ. These bailouts fly in the face of the Maastricht rules and add another layer of EZ structural concern. “If the fundamental no-bail-out clause is not respected, why should one expect [any other] new rules to be respected? And why should [Maastricht criteria-breaching] fines act as a sufficient deterrent, if a country can borrow to pay these fines and then have someone else pay them in the end?” (Calmfors, 2012, p. 15). Many citizens of the core countries are upset because these aid packages are partially supported by their tax money.

This anger has the potential to severely damage European integration, both economically and politically. “The euro crisis has suddenly and expectedly mushroomed into a crisis for the political Project Europe, its future and its cohesion” (Darnstädt et al, 2011). A study conducted after the first Greek bailout found that roughly 60 percent of Germans would be opposed to any new bailout, and this number is sure to have risen after other aid packages have been given out (Darnstädt et al, 2011). The periphery countries in turn are protesting and vilify the core because of the austerity demanded for the bailouts.

The latest in a string of aid agency developments, which was given unanimous validity by EZ member governments in the fall of 2012, is the European Stability Mechanism (ESM hereafter). The ESM is a permanent facility set up to administer financial assistance in times of crisis with a projected lending capacity of €700 billion (Buch, 2012, p. 5). Its goal is to secure lasting and continual stability for the EZ. The ECB has also stepped in, purchasing what amounts

to 2 percent of EZ GDP of periphery bonds since 2010 (Lane, 2012, p. 60). In order to sidestep the Maastricht rules, the ECB has denied violating the no-bailout through manipulation of how its spending is allocated. Instead of purchasing government bonds on the primary market it is simply doing it through the secondary market, which is not a violation of the rules (Auerback, 2011, p. 99). Although they are colloquially called bailouts, they should not be mistaken as free money. They are loans, which although might not be fully repaid, have major strings attached. The implications of these conditions, namely austerity, will be discussed later.

In addition to the smaller periphery countries, Italy, the third largest economy in the EZ, has also come under intense scrutiny because of its debt. The crisis countries' annual spreads on government bond yields between Germany was nearly nonexistent prior to the disaster, but are now remarkably large (Lane, 2012, p. 56). Even France, the second largest economy in the EZ, had its credit rating lowered (Lane, 2012, p. 56) and its bond spread between Germany has begun to widen. Furthermore, the EMU entered a predicted recession in mid-2012 as the crisis dragged on. Many have observed that instead of being proactive and decisive, EMU officials are just muddling their way through the crisis, merely kicking the can down the road. The late Nobel prizing-winning economist Milton Friedman, noted for his research in monetary policy, argued that the EMU is a "fair-weather construct" that would not endure through its first economic downturn. Going further, in 2002 he predicted "Euroland will collapse in 5 to 15 years" (Darnstädt et al, 2012). His opinion still rings true today. A quote from 2001:

"I believe ... that [the EMU's] attainment was driven by political, not economic, considerations, by the belief that it would contribute to greater political integration—the much heralded United States of Europe—that would in turn render impossible the kind of wars which Europe has suffered so much. If achieved, political integration would render the monetary and political areas

coterminous, the historical norm. Will the euro contribute to political unity? Only, I believe, if it is economically successful; otherwise, it is more likely to engender political strife than political unity.” (Bowyer, 2012)

As mentioned earlier, an important stipulation of these bailouts is austerity, which is contractionary fiscal policy meant to reign in government debt. Government spending is slashed and taxes are raised. A decrease in government debt softens markets fears of the possibility of default which in turn makes it less expensive to finance that debt. The cycle is procyclical in each way. In addition to simple deficit reductions, austerity is also meant to push structural reforms meant to enhance efficiency and competitiveness that directly work to stimulate an economy. This increase in competitiveness is needed to elevate the periphery countries to create a homogeneous monetary union.

If a country with its own central bank faces an economic downturn it has the option to devalue its currency to make its exports cheaper, simultaneously decrease imports, and strengthen the economy. Finland, currently a well-performing core country, provides a fine example. Twenty years ago Finland was in a comparable position as Greece is today, albeit on a much smaller scale. Finland was able to turn things around and restore competitiveness by depreciating its currency, the Finnish markka, against the deutschmark by 50 percent from 1991 to 1993 (Bibow, 2012, p. 9). EZ countries do not have this ability in their economic toolbox. Furthermore, currency devaluation is only attractive to those members in trouble- it is certainly not to the EMU overall. Therefore, the PIGS have to conduct *internal* devaluation. This means a real devaluation of prices and wages within the country instead of with their currency. In theory, with enough austerity the PIGS can tackle both their debt and competitiveness problems, saving their economies. Despite its hopeful intentions, austerity is a tough medicine to swallow.

Austerity induces unemployment and cuts wages and pensions. It has been met with widespread anger in periphery countries, particularly Greece, where protests have turned violent. It is supposed to work over time, although the amount of which it takes is hotly debated among economists and politicians alike. To the annoyance of Germany, the main proponent of austerity, many economists dispute its effectiveness, especially as more time passes without any gains in Spain, and Portugal, and especially Greece. Economists with a more Keynesian view argue “it is not possible for both public and private sectors to restrict their expenditure simultaneously without also crippling economic activity ... Attempts by a government to also shrink its own balance sheet will simply worsen the tendencies toward stagnation” (Meadway, 2012, p. 156). Simply put, the German view summed up is that “the deficit countries must adjust. They must address their structural problems. They must reduce domestic demand. They must become more competitive and they must increase their exports” (Bibow, 2012, p. 32). Just how long is it feasible for countries to have unemployment levels well over 20 percent, as both Greece and Spain have? Illustrating how much of a human element there is, the Greek suicide rate has increased 40 percent in 2011 alone, going from among the lowest to the highest rates in Europe (Meadway, 2012, p. 156). Realistically, if there is no relief there will be a breaking point.

Sooner or later, as austerity drags on, incumbent governments will face overwhelming pressure to stop the pain. “Political fatigue ... is a clear and present danger” (EIU, 2011, p. 15). Although austerity is meant to cure economic ills over the medium-term and makes sense through an economic lens, nationalistic politicians campaigning on short-term cures could very likely remove their country from the EZ. “Abandoning monetary union will ultimately always be a political, rather than an economic, decision” (EIU, 2011, p. 18). Thus, if enough time of

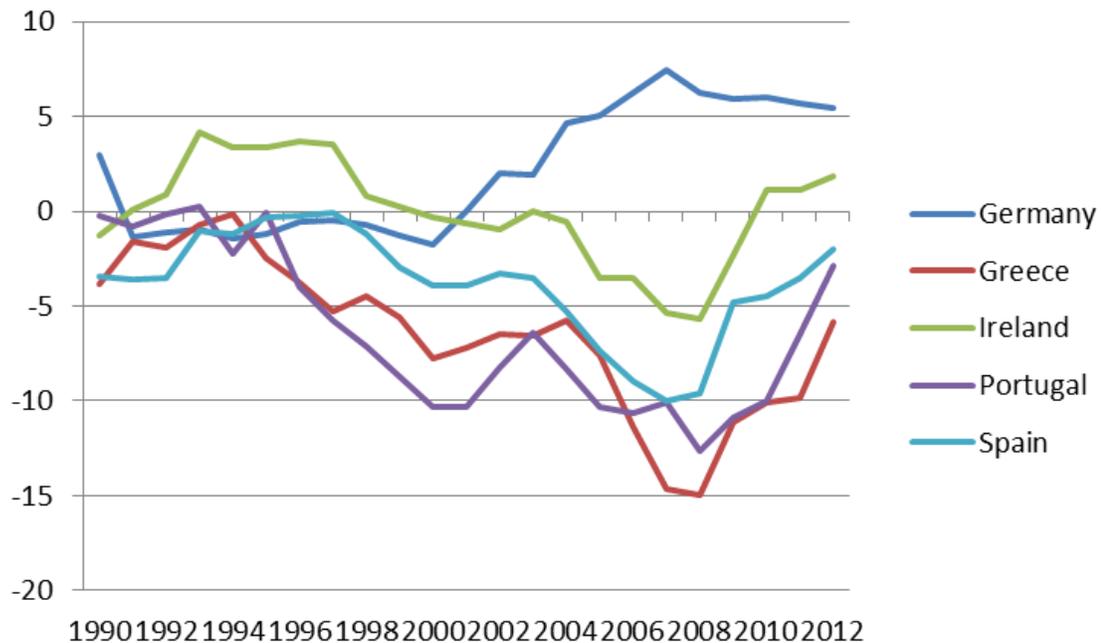
stagnant growth passes, this would leave an open door for extremist parties to take control of periphery governments with the intention of leaving the EMU.

With foreseeable gains in some periphery countries years away, political reality is running in direct opposition to long-run economic ambitions. There are clearly a host of possible outcomes, each with a certain amount of validity. However, before any legitimate recommendations can be made a closer examination is required. This topic is more nuanced than the simplistic and powerful opinion often espoused by the mainstream media. A deeper look into how the crisis unfolded is needed to understand how these dramatic imbalances occurred.

Examination of Divergence

A number of academic articles have linked the economic health of a EZ member to their present and historical current accounts to explain how the above-mentioned divergence occurred. A nation's current account is defined as "the nation's current international transactions, including exports and imports of goods and services, net income from abroad, and net unilateral transfer payments" (Gordon 191). Much like the above-mentioned deficit and debt statistics, although the external current account position of the EZ as a whole is more or less neutral, this general figure masks vast disparities among members.

Figure 5. Current Account Balance Measured as Percent of GDP



(Source: IMF World Database)

The troubled periphery countries have current account deficits, while the virtuous core countries, led and exemplified by Germany, hold surpluses. Figure 5 illustrates this divergence, showing the huge gap between Germany and the periphery's current account positions. This is not merely a coincidence. When this difference is put in historical context it becomes clear EZ members are not all homogeneous: "since the year 1960 ... the grouping is based on different intertemporal preferences: A preference for comparatively high saving rates, price stability, tight fiscal policy stances, high investment and export driven growth in the North and a preference for [the opposite] in the South and West" (Schnabl & Wollmerhäuser, 2012, p. 4). Due to monetary regimes such as Bretton Woods, and a general lack of international capital mobility, neither of which exist today, historically these differences were not allowed to get out of hand. During this time current account deficits were low. After Bretton Woods was dropped current account

imbalances grew, if only modestly. Exchange rate mechanisms like devaluation also were able to be used, which did not allow for any unsustainable current account relationships to form. Current account deficits increased further as integration progressed, but in some cases (namely Greece and Portugal) exploded at the creation of the EMU.

Interest rates on government debt, along with inflation rates, were the only legitimate economic convergence statistics experienced when countries joined the EZ. For better or worse, during the first years of the EZ any members' sovereign debt was seen as the same as Germany's to investors. Germany's national bank, the Bundesbank, was one of the most highly respected monetary institutions in the world. Always concerned (some would say obsessed) with inflation, Germany was considered one of the safest places in the world to invest money. This created a very low risk premium which allowed Germany to enjoy corresponding low interest rates. When periphery countries became members of the EZ they gained this benefit merely by association. Previously these countries did not have an easy time acquiring capital because of their economic status. With this newfound borrowing ability the periphery now had the option to invest and improve their economy. Ideally, borrowed money would be spent on improving efficiency and competitiveness. If the gains from those investments outweighed their associated borrowing costs, the economy would prosper. This would also create convergence among EZ members, one of its main goals in the first place. However, this did not happen. Ironically, "major change in economic conditions can heighten financial market risks ... including especially a change which ... seems to offer the promise of greater stability" (Honohan 155).

Greece and Portugal's Squandered Funds

Within the periphery there are two distinct subgroups: Greece and Portugal, and Ireland and Spain. The two groups have very different EZ membership histories, especially involving current account balances. Spain and Ireland's economic woes were not directly caused by their current account positions. Therefore those countries, although affected by the overall current account scheme which will be discussed shortly, will be analyzed later. However, Greece and Portugal's plight is directly linked to their current account positions. Instead of the intended rosy scenario playing out, these countries squandered their borrowed money in epic fashion. "The fiscal discipline and pro-growth reforms that euro-enthusiasts hoped would be imposed on Portugal from the outside were at best half-baked and for the most part never truly materialized" (Alves, 2011, p. 49). The same situation occurred in Greece. Instead of putting the borrowed funds to good use it was used to make wage increases that were out of line with productivity increases (IEU, 2011, p. 4). It was also used to fuel large current account deficits. Both Greece and Portugal are less developed countries prone to corruption, which induced a further waste of borrowed funds. Alves describes Portugal during the first decade of the EZ: "The reduction of economic freedom, the continued prevalence of an extremely rigid labour market, an inefficient and often unreliable justice system, and a pervading culture of nepotism and corruption ... contributed to [the current] outcome" (2011). A similar culture pervaded in Greece. "tax evasion is the national pastime ... [in 2010] the gap between what Greek taxpayers owed last year and what they paid was about a third of total tax revenue, roughly the size of the country's budget deficit" (Surowiecki, 2011). With unhealthy current account positions due to a lack of competitiveness and high government debt, these countries, with the exception of Portugal (whose debt level was lower than the required threshold), were in terrible shape when the

recession hit. This grotesque misallocation of resources has been the main point of villainy many have focused on and should not be dismissed. Although the ease of financing lubricated the process, it does not explain where the borrowed money came from. Knowing where the investment that fueled this binge came from is critical to the current scenario in the EZ.

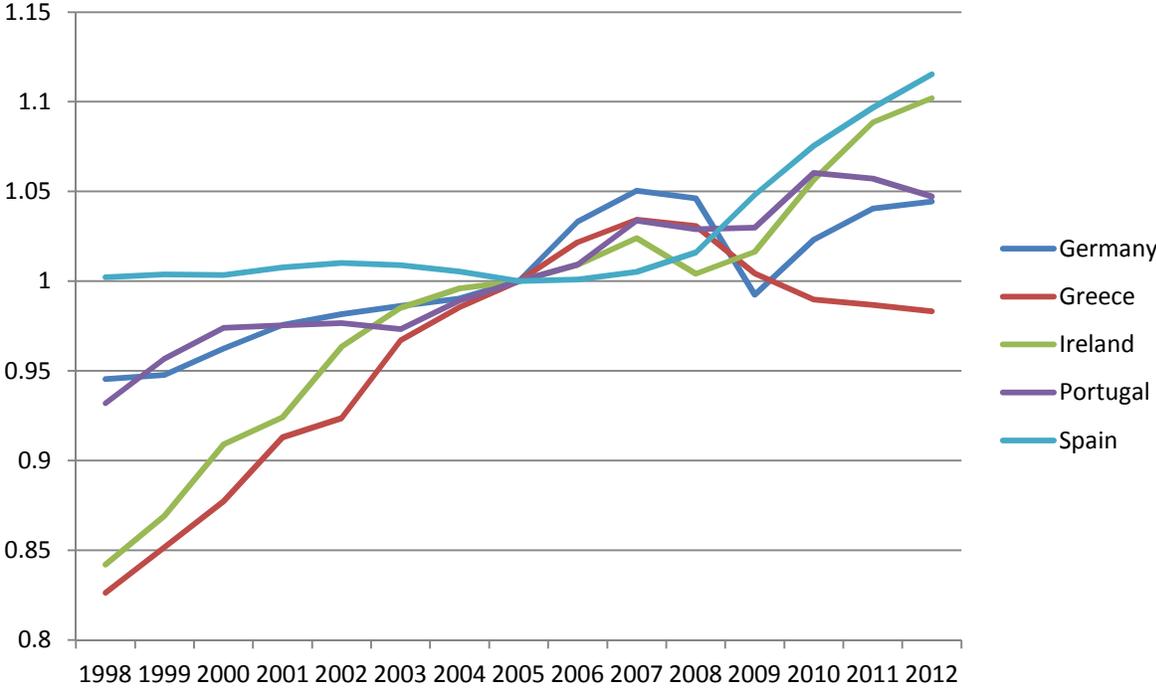
The country on the opposite end of the spectrum, lending money to Greece and Portugal, was Germany. While other core countries also acted as creditors, Germany played the leading role. Perhaps ironic, the imports from Germany that Greece and Portugal bought were purchased with money borrowed from Germany itself. Overall Germany invested heavily in the EZ. “At the beginning of the EMU, German investors’ portfolio choices were still strongly biased toward domestic securities, and securities of other [EZ] members were underrepresented compared to their share of the global market. In the following eight years, [EZ] shares in Germany’s foreign assets and liabilities surged beyond the corresponding levels of integration” (Bibow, 2012, p. 26). A question then arises: how did Germany finance this? If EZ members are locked in a shared currency union, how was Germany able to gain such a competitive advantage that allowed it to build up a remarkable current account surplus? The answer lies in an examination of Unit Labor Cost (ULC hereafter), as discussed next.

Germany’s Competitive Advantage

Current Account imbalances can occur in a number of ways. Unequal levels of competitiveness and domestic demand both are drivers. Domestic demand is mostly shaped by government policy and culture, whereas competitiveness is derived from the wage level compared to productivity (or the growth therein) and exchange rates. Importantly, Germany and northern European countries culturally have low domestic demand, while their southern

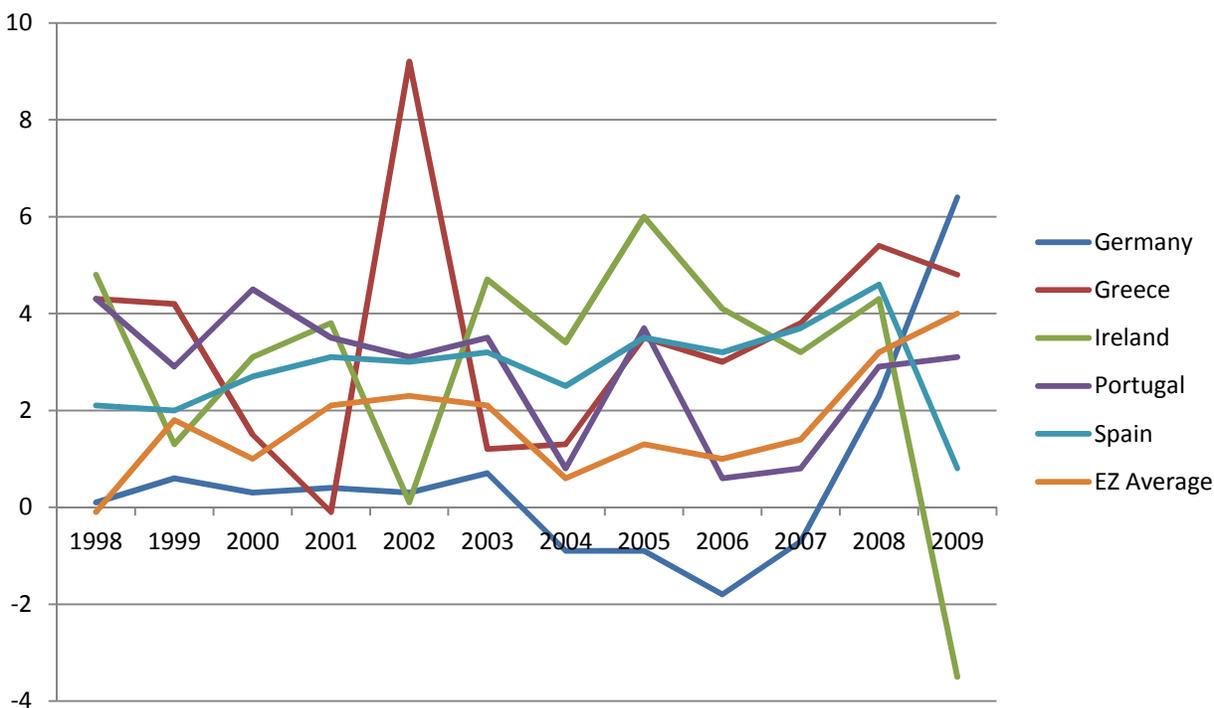
neighbors have high domestic demand. Although this does contribute to the imbalance it is not the main culprit of the current problem. Because EZ members do not have the option to fix competitiveness through devaluation, they can find competitive advantages mainly through changing the wage level, ULC, which is defined as the “measure the average cost of labour per unit of output and are calculated as the ratio of total labour costs to real output ... (ULCs) represent a direct link between productivity and the cost of labour used in generating output. A rise in an economy’s unit labour costs represents an increased reward for labour’s contribution to output” (OECD, 2012). It thus follows that since Greece and Portugal used their borrowed funds to disproportionately increase wages, their ULC increased. Although this explains some of the divergence, the more important divergence was not in the periphery, but Germany.

Figure 6. Labor Productivity of Total Economy, nominally indexed at 2005= 100



(Source: OECD World database)

Figure 7. Unit Labor Cost as a Percent Change



(Source: OECD database)

Outside the very short run, ULC is the most important determinant of inflation (Bibow, 2012, p. 14). As mentioned earlier, a common inflation rate at or near 2 percent was a part of the convergence criteria outlined in the Maastricht treaty. It then holds that to ensure homogeneity countries should have generally stuck to an ULC growth rate of 2 percent. The majority of EZ members more or less hit this mark during the first decade of the EZ- except Germany. During this time Germany had a much lower growth rate (at times even a decline) of ULC. However, Germany’s growth (or lack thereof) in ULC was not caused by an unaccounted for rise in productivity, but by a decline in wage inflation. “In other words, not German engineering ingenuity, but wage restraint gave German exporters an extra boost” (Bibow, 2012, p. 16). The buildup of ULC differences has been attributed by many economists to be the main source of

Germany's competitive edge. But Germany was only able to achieve their success because it strayed from the previously-agreed to homogeneity. Figure 6 illustrates that productivity gains in Germany and the periphery have been more or less uniform, while Figure 7 depicts how much lower German ULC growth was during the first years of the EZ. While the EZ financial crisis has hurt German exports to other EZ members because of their weakened economies, it has indirectly benefited Germany by depressing the value of the euro, making German exports cheaper on the global market. Between 2008 and 2012 the percent of non-EZ bound exports to 30 percent, up from its traditional 25 percent mark, illustrating this point (Bibow, 2012, p. 21). It is clear that although the unhealthy lifestyle of Greece and Portugal is to blame for the crisis, Germany is also partly to blame. Germany clearly was not acting as a homogenous member and benefitted by undercutting the rest of the EZ.

Ireland and Spain's Housing Bubbles

Before the crisis both Ireland and Spain were viewed as among the most dynamic economies in Europe. However, both countries experienced a tremendous crash and are now in disarray. Unlike Greece and Portugal, in both these cases the private sector was the main culprit, instead of wasteful government spending. Both countries experienced a housing bubble and subsequent pop similar to the US. The housing bubble had created more tax revenue, which is part of the reason why their governments were in a more or less sound fiscal position that did not violate the Maastricht criteria when the crisis hit. Similar to the current account deficits, the growth in Ireland and Spain's housing bubbles was precipitated by the drop in interest rates due to EZ membership. Some politicians have placed their woes solely on their EZ membership, which is far too simplistic. The global recession popped these bubbles, and the governments were left to pick up the pieces, which sent their debt skyrocketing. When the crisis hit, these

governments quickly ran up and surpassed the 3 percent deficit ceiling due to how badly their markets tanked, which in turn made their debt increasingly costly to support. Ireland and Spain are also somewhat indirect victims of the sovereign debt crisis caused by the irresponsibility of Portugal and Greece, as their debt was seen as equally toxic by association.

In Spain, despite its strength there were underlying chronic problems with its economy; namely, its labor market. A majority of economists agree that the Spanish labor market is exceptionally dysfunctional and characteristically pro-cyclical. Although able to create a large number of jobs in boom times it also shows the opposite in slumps (Ferreiro & Serrano, 2012, p. 248). Any pro-cyclical behavior makes the economy more sensitive to shocks, whether internal or external. Spain has also been criticized for mismanaging fiscal policy, which has proven to be pro-cyclical as well (Ferreiro & Serrano, 2012, p. 264). Thus, when Spain's housing bubble popped the economy was thrown into a severe recession.

Prior to its EZ membership Ireland had be coined 'the Celtic tiger' because of the strength and dynamism of its economy. It had implemented fiscal restraint in 1987 and achieved economic success, mostly through exports, from that point up until the crisis. However, Ireland's economy became unsustainable when interest rates dropped with EZ membership. EZ membership and its subsequent housing boom marked the second, and markedly different period of Ireland's 'Celtic tiger' boom. Ireland's economy plunged because of a 'plain vanilla' banking crisis. It is estimated to have "experience[d] one of the most severe downturns forecast anywhere in the world, with peak-to-trough fall in output expected to reach or exceed 15%" (Honohan, 2010, p. 134). The banks investments were mainly fueled by heavy foreign borrowing, which is further testament to the interconnectedness of global financial systems (Honohan, 2010, p. 136). However, this crisis did not involve complex financial instruments such as the US. The

instruments were not new, but the scale certainly was. To give an example of just how fast Ireland's growth exploded, the average property price increased 300 percent between 1994 and 2006 (Honohan, 2010, p. 138). Like the rest of the world, regulation was very poor during this time. This buildup could have been stopped and the crisis could have been averted. Since receiving a bailout, possibly relating to its earlier dynamism and wage flexibility, Ireland has performed better than its fellow debtor countries (Buch, 2012, p. 13).

It must be noted that housing bubbles happened in areas outside the EZ as well. Iceland, whose currency is completely independent from the euro, saw its banks grow to roughly ten times the size of its GDP at the height of its bubble (Honohan, 2010, p. 153). So EZ membership is certainly not the be-all-end-all cause of these crises as some politicians have claimed it is. Furthermore, other EZ members such as Portugal and Greece that experienced sudden drops in interest rates upon joining did not go through anything like the Irish or Spanish housing bubbles. Going forward with the knowledge of how EZ divergence occurred, both overall and in specific countries, possible solutions to the current quagmire can be considered.

Possible Reforms

Clearly a host of structural reforms could be enacted to achieve the EZ's goal of economic convergence. There is no quick fix to the problems, and because of their complexity there is no easy decision to make. "Clearly, the crisis is not simply a global downturn from which Europe will recover swiftly, but rather a structural adjustment process that will lead to a reorientation of economic activity for a long period to come" (Zuleeg, n.d., 3). During the run-up to the EZ, two groups of opinions regarding its size formed: "big and broad" and "small is beautiful." Big and broad advocates argued that allowing a larger number of countries to join

would help the euro compete as an international reserve currency, as it has done. They also argued on political grounds that the enlargement of the EZ would benefit European integration the most. Although this view won out, the smaller EZ concerns are eerily accurate. They argued “the euro’s long-term viability was more readily achievable in a smaller zone consisting of a more limited group of nations with a more cohesive set of economic and political philosophies ... pooled national sovereignty, greater monetary and fiscal coordination, were surely more feasible where the countries involved had comparable political and economic structures and similar social outlooks. A large expansion of the Eurozone among a larger group of heterogeneous nations with substantially different ideological and historical traditions substantially [complicates] the drive to converge” (Auerback, 2011, pg. 91).

In deciding which path the EZ should now take, narrowing the group of countries seems logical. Despite this, there has been little done in the EZ to achieve its goal of convergence outside of implementing austerity. Why would Germany vow to not cut “irresponsible” members loose but instead agree to bail them out when its populace despises doing so? While the desire for an integrated Europe is indeed a factor, a look at Germany’s international investment position provides further answers. As mentioned earlier, Germany invested heavily in the EZ. An IMF study argued “it is through these heightened financial exposures that Germany’s overall vulnerabilities to euro crisis countries and the euro’s fate arises ... it is clear ... that Germany is highly vulnerable to debt problems in the financially deeply integrated EU and Euroland” (Bibow, 2012, p. 27). Germany is thus stuck between two options: Prop up indebted countries through bailouts and keep its banks alive; or directly bail out its banks if countries leave the EZ or default. Figure 8 depicts just how massive EZ domestic banks are compared to their countries, highlighting how important their health is to the economy. Many observers have thus stated that

bailout packages are merely “a covert bailout of banks” (EIU, 2011, p. 5). Germany and the core still call the shots because of their creditor status and have so far indirectly saved their banks from experiencing a periphery default. Letting a EZ member default would also directly affect every other member due to the associated severe contagion effects, although that analysis is beyond the scope of this paper. Despite the benefit gained from propping up its banks, public outrage over bailouts could grow if periphery countries do not rise from austerity in a timely manner. If this happens Germany will have to eventually come to a reckoning as political feasibility outweighs economic theory.

Figure 8. Country GDP in Comparison with Domestic Bank Asset Value

	Portugal	Spain	Ireland	France	Germany	Italy	Greece
Real GDP (Billions of 2012 Euros)	167	1,064	159	2,036	2,630	1,590	203
Domestic Bank Assets (Billions of 2012 Euros)	319	2,220	452	4,433	4,930	2,487	282
Domestic Bank Asset Size as Percent of GDP	191.02	208.65	284.28	217.73	187.45	156.42	138.92

(Source: New York Times)

A number of possible ways exist whereby the EZ could be politically reformatted without compromising sound economics. A number of economists argue that for a monetary union to survive it must be coupled with a fiscal union as well. “A fiscal/monetary halfway house divided cannot stand” (Auerback, 2012, p. 88). A fiscal union would set up transfer payments among EZ members, as it does among states in the US. Transfer payments occur in the US without regard because there is a common culture. Many economists have argued a European fiscal union could

quickly cure the crisis. Periphery countries would have a dramatically lower risk of defaulting, which would soothe many market worries. A transfer union would also increase moral hazard for periphery countries, and thereby increase the likelihood of fiscal irresponsibility, the same fear that drove the 'no bailout' clause in the Maastricht treaty. Obviously since Portugal and Greece's misallocation of resources was partially responsible for this mess authoritative supervision of their newfound flow of money would be necessary.

However, if German citizens are upset about occasional bailouts, they would be livid if the bailouts transformed into permanent flows. Germany has experience with the sudden creation of transfer payments. When it reunified after the fall of the Berlin Wall a tax was set up to improve its eastern states after half a century under the Iron Curtain. This tax still exists today because economic imbalances continue to persist. Many in western Germany are becoming increasingly upset about it as more time passes. All this suggests that the German populace would likely not accept a EZ fiscal union. Flaring tensions rising from a fiscal union would increase nationalistic anger, which is completely contrary to the goal of the EZ itself. In this context Yugoslavia provides a more likely scenario than German reunification or the United States, where there are at least homogenous cultures. "The relatively rich republics ... resented policies that transferred wealth to the poorer republics ... Once Tito's organizing genius disappeared, the linkages stitching the country together became frayed and eventually snapped as old grievances manifested themselves in newer forms" (Auerback, 2011, p. 88). It is clear that many EZ members will not tolerate this sort of infringement on their sovereignty.

A EZ banking union has been proposed as well. Union-wide banking framework and monitoring would help ensure a healthy banking system since banking regulation is currently administered only at the national level. The interconnectedness of the banking system is more

than enough warrant for this type of reform. Banks played a major part in this crisis, and EZ-wide reform would increase transparency and oversight, which would in turn stop any unhealthy exposures and imbalances to develop and affect the health of member banks. The banking crises in Ireland and Spain led to their divergence, which further emphasizes the need for a EZ banking union to create convergence. Another facet of EZ finance restructuring on the table is how future debt is created, namely through Eurobonds. Although there are a number of variations of the idea, many are more or less the same. Instead of having debt issued at the national level, it would be issued at a EZ level and allocated through this supranational tier for each country up to an certain level for each nation. This would effectively stop high interest rate spreads on periphery countries because their debt would in reality be as good as German debt, but evokes free-rider fears from core countries. Because of current indecision over Eurobonds this option does not appear to be a likely way to circumvent the current high interest rates afflicting periphery countries.

Many economists and politicians agree that reforms augmenting the current Maastricht guidelines need to be made, which they see as an insufficient set of rules. They argue the current ‘one-size-fits-all’ does not work given its heterogeneous members. Therefore, reforms could be made that tailor criteria for each individual member. Further reforms would include adding mandatory counter-cyclical national policies for EZ members. The coordination of fiscal policies would further alleviate the burden of economic slumps and work to create more homogeneity among members. A possible constitutional requirement for balanced budgets or a debt cap could be considered. Poland, for example, which did not suffer any output loss during the crisis, currently has a 55 percent debt limit in its constitution. Any rise above this limit automatically provokes pension payment and public sector cuts (Welfens, 2011, p. 22). Also a clear penalty

and reward system, which does not currently exist in the EMU, could be developed for closely adhering to criteria and stepping out of bounds. This would help increase the validity of EZ legislation and increase overall transparency. Furthermore, heightened aggressive actions by ECB and EZ officials, something many economists have recommended, would help stave off the crisis and increase investor confidence. To develop a cohesive monetary union without unhealthy imbalances current account position and ULC criteria could be implemented as well.

Instead of forced austerity the core could meet them halfway. While the periphery experience internal devaluation, the core would pursue the opposite: internal ‘appreciation’ consisting of higher inflation. Although Ireland’s internal depreciation is on track to achieve competitiveness, Portugal still needs to depreciate by 35 percent, Greece roughly 30 percent, Spain and France 20 percent, and Italy 10-15 percent. Germany needs a corresponding appreciation of nearly 25 percent (Bibow, 2012, p. 33). Appreciating in any way makes Germany lose competitiveness, something it sees as being hard-won. This path is therefore not politically feasible. Germany is unwilling to meet halfway and is forcing other members of the EZ to suffer because of it. Some observers have speculated the possibility of Germany leaving the EZ to tone down the demands for austerity. This may work out economically for Germany because of its institutional strength and reputation, despite how expensive the new Deutschmark would be. However, it seems to go against one of the main reasons for European integration in the first place: to deal with a too-powerful independent Germany. Also, since Germany is the EZ’s largest creditor, its absence would create a serious drain on its lending ability.

A Case for a “Small is Beautiful” EZ

There is a plethora of possible ways to reformat the EZ because of the complexity of the issue. In comparison with the current reform process, decisive reforms would be a very welcome progression in handling the current crisis. “The inherent messiness involved in proposing and implementing incremental multicountry crisis management responses on the fly has been an important destabilizing factor throughout the crisis” (Lane, 2012, p. 65). The central point of contention in much of the reform ideas discussed seems to be a balancing act between stability and moral hazard. Clearly Germany, which ultimately controls policy, does not seem capable of moving its opinion demanding forced austerity despite plenty of contrary valid evidence that links its actions to the periphery’s problems. Acknowledging that Germany needs to be a part of the EMU, it therefore seems the only politically feasible and economically healthy middle ground solution would be for Greece and Portugal to leave the EZ. Some observers have argued that because of a legal technicality an exit from the EZ would force an exit from the EU as well (Leao & Alfonso, 2012, p. 217). This does not seem likely to happen though, based on the precedent set from how many other rules were broken since the creation of the EZ. European integration must be damaged as lightly as possible, and therefore it would be important for them to remain members of the EU. Although markets would react poorly, out of fear of contagion, over the long-run this would send a message warning potential and current members of the repercussions for breaking the rules.

Since Greece and Portugal’s debt would be denominated in euros, which would dwarf their new currencies in value it would then be much harder to pay back and could induce a default. This is a serious risk and is one of the main reasons why policymakers are reluctant to take this action. Therefore the EZ should give them a final “farewell” package to ensure they do

not immediately default on their debt. This also seems to be the appropriate and fair thing to do, since Germany benefited at their expense. This package would benefit all parties involved, especially since German banks wouldn't have to bear the initial brunt of a complete default. Portugal and Greece are clearly outliers, and the remaining EZ would be a more homogeneous, and thus better functioning monetary union. Although Ireland has needed a bailout and Spain might need one in the near future it has been clearly illustrated that their dire straits were primarily caused by housing bubbles, which were certainly not endemic to the EZ. Nor were their situations caused by direct fiscal mismanagement of finances like Greece and Portugal. Therefore Ireland and Spain seem to be suitable EZ members. However, regardless of the EZ's future, banking regulatory rules must be monitored and enforced to ensure divergence does not occur. The breaking of those rules was directly responsible for Ireland and Spain's divergence. If the rules are not vigorously enforced moral hazard will continue to be a major problem. Despite not being a fiscal union, the new EZ would still need to institute a number of other reforms, including current account and ULC criteria, as well as further abided-by convergence measures to ensure homogeneity. Hopefully these reforms would provide enough structure to support a sustainable monetary union made up of homogeneous members that facilitates trade, which in turn would fulfill the EZ's goal of economic convergence.

Conclusion

European integration has been a key factor in subduing nationalistic opinions that fueled centuries of devastating wars. The EZ has come to epitomize Europe's commitment to closer bonds between nations. However, the current crisis has put the whole process into question. After examining how and why the crisis developed, it is clear there was not enough oversight in the setup and governance of the EZ. European integration depends on the success of the EZ, and

therefore new rules must be put in place to work effectively against the inherent problems. Interestingly, despite agreeing to set meet criteria members strayed and pursued their own self-interests, which ultimately came back to hurt their own economies. Reformatting the EZ will not be easy, since economic theory often runs against political reality. Effective new rules must be created decisively to restore market confidence and set up a sustainable, homogeneous monetary union. The stakes are high, and prolonging the process is only exacerbating the problems. It is becoming increasingly evident there will be huge losses experienced regardless of the ultimate outcome. The future of the European project is not doomed, but much must be done in order to make success happen.

Reference List

- Alves, A. A. (2011). The Portuguese Malaise: Structural Causes of the Crisis and Lessons for the Eurozone. *Economic Affairs*, 47-52.
- Arestis, P., & Sawyer, M. (2012). Can the Euro Survive after the European Crisis? In P. Arestis, & M. Sawyer, *The Euro Crisis* (pp. 1-34). New York: Palgrave Macmillan.
- Auerback, M. (2011). A 'United States of Europe' or a Full Exit from the Euro? *International Journal of Political Economy*, 87-201.
- Bibow, J. (2012). The Euro Debt Crisis and Germany's Euro Trilemma. Levy Economics Institute.
- Bowyer, J. (2012). Happy Birthday, Milton Friedman, The European Crisis Is Your Latest Vindication. *Forbes*.
- Buch, C. M. (2012). From Stability Pact to ESM- What Next? German Council of Economic Experts.
- Calmfors, L. (2012). Can the Eurozone Develop into a Well-Functioning Fiscal Union? CESifo Forum, 10-16.
- Därnstadt, T., Mahler, A., Müller, P., Pauly, C., Reiermann, C., Sauga, M., et al. (2011, June 20). How the Euro Became Europe's Greatest Threat. *Spiegel Online*.

- Economic Intelligence Unit. (2011). State of the Union: Can the Euro Zone Survive Its Debt Crisis?
- Ferreiro, J., & Serrano, F. (2012). The Economic Crisis in Spain: Contagion Effects and Distinctive Factors. In P. Arestis, & M. Sawyer, *The Euro Crisis* (pp. 235-268). New York: Palgrave Macmillan.
- Gordon, Robert R. *Macroeconomics: 12th Edition*. Boston: Addison-Wesley.
- Honohan, P. (2010). Euro Membership and Bank Stability- Friends or Foes? Lessons from Ireland. *Comparative Economic Studies*, 133-157.
- International Monetary Fund World Database 2012. Online.
- Lacina, L., & Rusek, A. (2012). Financial Crisis and Its Asymmetric Macroeconomic Impact of Eurozone Member Countries. *International Advanced Economic Research*, 63-73.
- Lane, P. R. (2012). The European Sovereign Debt Crisis. *Journal of Economic Perspectives*, 49-68.
- Leao, P., & Palacio-Vera, A. (2012). Portugal's Best Way out of Economic Stagnation: Institutional Reform of the Eurozone. In P. Arestis, & M. Sawyer, *The Euro Crisis* (pp. 195-234). New York: Palgrave Macmillan.
- McClain, D. L. (2012, June 14). Understand the European Crisis Now. *The New York Times*.
- Meadway, J. (2012). The Euro: Crisis and Collapse? *Competition and Change*, 150-159.
- Organization for Economic Cooperation and Development World Database 2012. Online.
- Schnabl, G., & Wollmershäuser. (2012). Fiscal Divergence and Current Account Imbalances in Europe.
- Smith, J. (n.d.). The European Union: United in Diversity; or Disunited in Adversity? *Europa World Online*.
- Surowieki, J. (2011, July 11). Dodger Mania. *The New Yorker*.
- Welfens, P. J. (2011). From the Transatlantic Banking Crisis to the Euro Crisis? *International Advanced Economic Policy*, 15-29.
- Zuleeg, F. (n.d.). The Euro Crisis and Beyond: Turmoil at the Centre of the European Union. *Europa World Online*.