

Proposals for a European Clearing Union: An Application of Keynes to Regional Monetary Systems

Ashley Hess

Department of Political Science and International Relations

Seoul National University

March 2012

AshleyACHess@gmail.com

Abstract

This paper reviews the development of the euro and the recent Eurozone financial issues as well as examines another viable institutionalization option that could be helpful to future monetary unions. In particular, the paper assesses John Maynard Keynes' "Proposals for an International Clearing Union," presented at the 1944 Bretton Woods conference, that would have created a universal currency valid for trade transactions with all member countries via a supranational bank-like clearing union. Keynes' proposal is applied to the euro's development as a counterfactual example to support the argument that an International Clearing Union presents a strong institutional alternative for monetary unions. Though it is likely too late for the euro to reformulate its entire monetary system, the lessons learned from the development and performance of the euro will have a large impact on potential future regional currency association – such as in Northeast Asia or South America. The financial turbulence of the past several years in Europe has perhaps made these countries more skeptical of any sort of monetary union. This paper argues that Keynes' 1944 proposals could potentially provide a more solid alternative to the European monetary system for regional monetary integration.

This draft has been prepared for the 2013 Western Political Science Association Conference in Hollywood, CA. Please do not cite without permission. Comments are welcome.

“I seem to see the elder parrots sitting around and saying: ‘You can *rely* on us. Every day for thirty years, regardless of the weather, we have said “What a lovely morning!” But this is a bad bird. He says one thing one day, and something else the next.’”

- John Maynard Keynes,

On those who denounced him for ‘inconsistently’ diverging from classical free trade (Harris 1960, 319)

I. Introduction¹

The Eurozone remains in recession, with even the bulwark French and German economies shrinking in the last quarter of 2012. Greece’s debt problem has been prolonged, not solved. Spain is likely to remain in recession for 2013 and is caught in a cycle of decline (Hewitt 2012). Italy is similarly stuck in recession, slow to reform, politically unstable, and had its bonds downgraded to BBB- several weeks ago (Zaharia and da Costa 2013; Alderman 2013). The Organization for Economic Cooperation and Development (OECD) estimated that the European Union (EU) economies declined by .6% in 2012, with the Eurozone economies declining by .9%. The European Commission (EC) forecast 2013 EU economic growth of .1%, while the Eurozone would shrink by .3% (Norris 2013), though Spain’s output is expected to shrink by 1.5% and Italy’s by 1%. Because of the single currency, monetary policy can do little to assist the European Monetary Union’s (EMU) weak economies, and political solutions to these issues are widening intra-European differences, alongside increasing resistance to further austerity measures (*Bloomberg* 2013). In June 2012, 49% of Germans wanted Greece to leave the Eurozone; it was reported this month that 26% of Germans would now vote for a party that wants to exit the euro in the September 2013 federal elections (Marsh 2012; Jones 2013).

While many have traced the exact process that created the euro as a monetary union that lacks parallel fiscal or political union, alternative institutionalizations the EMU could have taken are less often assessed. Though it is probably too late for the system to be completely reformatted, the lessons of the euro will have a large impact on any other potential future regional currency association – such as in Northeast Asia or South America. Having seen the recent economic, political, and social issues in Europe, these countries are likely less enamored with the idea of a monetary union; but it should be made clear that the euro system is not the only option. Thus, an investigation into why the euro developed in its current form and if there were and are other viable options could be helpful to future monetary unions. Specifically, the monetary union alternative studied in this paper is that of John Maynard Keynes’ International Clearing Union (ICU), originally proposed at the 1944 Bretton Woods conference as a method to re-order the international financial system after World War II.

Following the breakdown of the Bretton Woods system in 1971 and increasingly since the 2007-8 financial crisis, there have been global calls for a Bretton Woods II² or even a re-worked Keynesian ICU.³ In the past decade, global imbalances have risen substantially, from less than 1% of total world output in 1998 to

¹ Special thanks to Stefan Niederhafner and Jason Roffenbender for their comments and assistance. The remaining mistakes are solely the responsibility of the author.

² For example, see Matoo and Subramanian (2009)

³ Examples will be discussed in more detail in section three of this paper.

3% in 2008 (Piffaretti and Rossi 2010, 4). However, while it has simultaneously been acknowledged that the international system is in need of an overhaul and that the euro was created with inherent weaknesses,⁴ there has been less attention paid to a combination of the two – an ICU as a regional-level organization. Although Keynes' ICU was envisioned as a global system, the economics of the ICU do not necessarily preclude its application to a smaller system.

This paper proceeds as follows: section two provides a detailed overview of Keynes' proposal, followed by an overview of post-Keynesian ICU scholarship. Section four gives a concise review of the EU and Eurozone evolution, while section five summarizes the current issues in the Eurozone and Greece in particular. The sixth section offers a sketch of what Keynes' ICU would have looked like for Europe and a general comparison of such a regime with the current Eurozone format. The paper concludes with implications for future study.

II. An International Clearing Union (ICU)⁵

During World War II, John Maynard Keynes developed a post-war plan for an international financial mechanism that would promote trade and assist war-torn Europe in rebuilding nations and currencies. He had first proposed the idea of an international currency that could facilitate international trade, potentially through the League of Nations, in late 1919 at an unofficial meeting of financial experts in Amsterdam. Because most present at the meeting believed the US would never support the agreement and that it could lead to inflation, the proposal went nowhere, although other economists at the time also supported the idea of an international economic organization⁶ (Markwell 2006, 93, 108-9, 141).

Keynes based his ICU formulation in part on several other plans that had been developed over the previous decade⁷ (Iwamoto 1997). Keynes first drafted his iteration in September 1941 and formally presented it to the UK Parliament in April 1943. A final version was published in April 1944, forming the basis of the British negotiating position at the Bretton Woods conference in July. The plan envisioned the initial set-up of the ICU by the UK and America in order to expedite the process, so that “considerable progress could be made irrespective of the nature of the European political settlement,” with membership open to those countries that agreed to certain standards and principles of international economic conduct (Keynes [1942] 1981, 15).

The ICU was in large part a reaction to the rise of American power and influence, decline of the British sterling, and constantly fluctuating international financial experiences of the 1930s. The Great Depression had been a time when huge swings in currency exchange rates and devaluations were common, compounded by the breakdown of the gold standard. Most of the world's gold ended up in America buried

⁴ For example, see Paus and Troost (2011)

⁵ A copy of both Keynes' final ICU draft and the UK Bretton Woods proposal can be found here: <http://www.imsreform.org/reserve/pdf/keynesplan.pdf>

⁶ Such as Hobson, Zimmern, Brailsford, Garvin, and Angell

⁷ Such as Schumacher's "Pooling Clearance," Schacht's "New Plan," and Funk's "New Order"

under Fort Knox, effectively taking it out of circulation and thus constricting monetary flows around the world (Dillard 1948). This environment made it very difficult for businesses to plan for the future and invest, which in turn negatively affected the growth of production and employment. The international economic system had been cobbled together through a mix of quota systems, exchange controls, barter agreements, and blocked currencies, sacrificing many potential gains through trade. During a 1943 House of Lords debate, one participant recalled a then-famous story of a foreign trader who had sold his goods in Germany, which had implemented a complicated German-centered currency system.⁸ The trader received credit in German marks, but his business had no sure way of using that credit due to the complex trading rules. For example, sometimes he could only gradually use the credit, sometimes he had to draw upon it at a very disadvantageous exchange rate, and sometimes he could only redeem the credit by purchasing German goods or even only the particular German goods allowed by the authorities. Ultimately, “the thing reached its laughable climax... in the case of sale of Bulgarian tobacco, which the new system provided could only be paid for in German-made harmonicas, or in another case by a vast load of aspirins” (House of Lords 1943).

However, by the 1944 Bretton Woods conference, the US was clearly the emerging superpower in the West and controlled all hope of post-war reconstruction in the capitalist countries, resulting in the adoption of the US proposal, Harry Dexter White’s Bank of Reconstruction and Exchange Rate Stability Fund. Many representatives from other nations supported Keynes’ plan over White’s, but were reluctant to back Britain over powerful America. Upon first reading White’s draft, Keynes remarked, “It was a tremendous labour to read and digest in full. It obviously won’t work,” and, “Seldom have I been simultaneously so much bored and so much interested” (Thirwall 1976, 13). The White plan resembled the gold standard in that the primary objective was to ensure stable exchange rates, with the US dollar as a reserve currency instead of gold and all other currencies pegged. The plan also called for an international currency unit called a ‘Unitas,’⁹ which would solely act as a unit of account;¹⁰ however, this was not included in the final version (Mikesell 1994). Other countries, such as China, France, and Norway also proposed competing plans for monetary schemes in 1942 and 1943, while Canada attempted to create a plan that bridged the American and British proposals (Markwell 2006, 234).

Keynes himself, who had worked in the British Treasury during World Wars I and II, was an idealist in that he believed the conflict of international relations could be attenuated through better international economic relations. For him, war had important economic causes;¹¹ as such, economics could contribute to peace. He planned and debated potential reconstruction plans for both the World War I and II post-war periods. Keynes’ thinking evolved over the course of his career; while he initially thought that free trade could

⁸ Schacht’s “New Plan”

⁹ This later became the Special Drawing Rights (SDR) of the IMF.

¹⁰ As opposed to Keynes’ ‘Bancor,’ an international currency, which meant it was both a medium of exchange and a reserve currency.

¹¹ Such as foreign debts and investment, trade relations, poverty, market competitiveness, exchange rate regime, balance of payments issues, economic crises, and Malthusian population pressures.

promote peace, he came to believe in a liberal institutionalist conception of a managed international monetary system that promoted cooperation, emphasized full employment, and did not result in international competition (Markwell 2006 4-5, 140).

In contrast to the highly volatile state of international monetary affairs at the time, the ICU's primary objective was to provide a more stable system in which "money earned by selling goods to one country can best be spent on purchasing the products of any other country... a universal currency valid for trade transactions in all the world" (House of Lords 1943). His proposals in particular emphasized that:

The idea underlying such Union is simple, namely, to generalise the essential principle of banking as it is exhibited within any closed system. This principle is the necessary equality of credits and debits. If no credits can be removed outside the clearing system, but only transferred within it, the Union can never be in any difficulty as regards the honouring of cheques drawn upon it. It can make what advances it wishes to any of its members with the assurance that the proceeds can only be transferred to the clearing account of another member. Its sole task is to see to it that its members keep the rules and that the advances made to each of them are prudent and advisable for the Union as a whole (Keynes [1943] 1981, 22).

By this point in his career, Keynes believed a return to the gold standard and the correspondingly tumultuous international financial system would be particularly abhorrent: gold was unequally distributed, most likely inadequate to meet the needs of the international system, and often was not used properly by governments (Harris 1960, 250). Instead, he proposed creating a new international unit of account, a "bancor" to be defined in terms of a certain weight in gold, and thus able to supplant gold while being much more reliable. In fact, while gold could be freely converted into bancors, this was a one-way convertibility (House of Lords 1943). In his first and second drafts, Keynes noted that each nation's central banks would control provision of foreign exchange, dealing with individual citizens through the domestic banking system, while any foreign transactions would be cleared through the central banks via the ICU (Iwamoto 1997). Private transactions could continue to be undertaken in national currencies or through the central bank's ICU account; the limited role of private financial institutions internationally would decrease exchange rate volatility and speculative flows (D' Arista 2004).

Keynes argued that international financial imbalances are not always due to the profligacy of debtor countries; creditor nations also play their part in that they withdraw money (gold) from circulation and hoard it as reserves. Refusing to spend this income on either domestic consumption or overseas investment reduces the international supply of money, leading to global unemployment and a stagnating industrial system. Under the non-politicized ICU, every member state's central bank would exchange their currency for an initial reserve of Bancor and a corresponding quota of overdraft facilities based on loose calculations of the previous three-five years' trade volume. Upon accession to the ICU, member states would agree on the values of their currencies in terms of bancors, maintaining their national currencies for domestic use. While this value could later be altered with the permission of the Governing Board, Keynes envisioned a system of relatively fixed exchange

rates. International trade between countries would be done in bancors, deposited or debited to a country's ICU account (Keynes [1943] 1981).

If a country has a surplus, parallel to the national banking system, the ICU could loan the money to other countries that needed short-term funds. In this way, even if a country hoards its surplus, this will not remove the money from circulation. This will promote and expand trade and production via a multiplier effect, instead of the usual deflationary and contractionist pressure resulting from stockpiling reserves, when the funds and their corresponding purchasing power are taken out of circulation. Ultimately the ICU would benefit the creditor country as well. Overdraft facilities would be a relief to the deficit country but not a burden to the ICU as a whole, and Keynes stressed that the surplus country could still use its credits whenever it wished. The ICU would simply give these countries a choice between "voluntarily curtailing its exports to the same extent that they would have been involuntarily curtailed in the absence of the Clearing Union, or, alternatively, of allowing its exports to continue and accumulating the excess receipts in the form of bancor balances for the time being" (Keynes [1943] 1981, 26). Countries that did not wish to take part in the ICU could still trade with those who did – the non-member would maintain a bancor account, but not be allowed a deficit or receive voting rights. And, countries could resign from the ICU provided they gave one year's notice and cleared all negative balances (Keynes [1943] 1981).

To promote a reasonable balance of international trade, there were penalties¹² against exorbitant debts or hoarding – Keynes' goal was that each country's account should balance exports and imports. If a creditor country was accumulating too many bancors, the country would be made known internationally as an anti-social hoarder; thus, Keynes believed moral pressures and self-interest would bring the creditor nation to increase imports, raise the value of its currency, introduce inflation, encourage foreign capital investment, or relax restrictions on trade. Debtor countries could be forced to devalue their currencies, undertake domestic measures to restore equilibrium, or pay liquid assets into their ICU account. In extreme cases, the Governing Board could expel deficit countries. Overall, countries would be discouraged from maintaining excessive surplus or debit balances and instead be encouraged to seek equilibrium in their current accounts (Keynes [1943] 1981, 23-4). In particular through the utilization of surpluses, Keynes wanted to promote poorer countries' internal investment and discourage both export-led investment strategies and currency devaluations to gain trade advantage.

¹² Any country with a surplus [or deficit] greater than one-quarter of its quota must pay the ICU 1% per year on the average excess [debit] balance, and a further 1% if the surplus [deficit] exceeds one-half of its quota. In the case of a debtor country, the Governing Board would then consult with the country and could force minor devaluation or require liquid reserves to reduce the deficit, while also recommending other internal measures to restore equilibrium. In the case of a creditor, the Governing Board will discuss with the country ways to restore equilibrium of its trade balances, such as by expanding domestic credit and demand, encouraging an increase in money rates of earnings or appreciating the national currency in terms of bancor, reducing tariffs or other bars to imports, or international development loans. If a country's deficit exceeds three-quarters, it can be declared in default, denied further loans, or even forced to leave the ICU (Keynes 1981 [1943], 23-24).

For Keynes, the ICU was envisioned as a provider of short-term loans so that both creditor and debtor countries could have some time to get their international trade into equilibrium, smoothing out any short-term shocks or disparities. For medium- and long-term loans, Keynes believed that a complementary banking institution would be necessary, such as a Board for International Investment, which could automatically deduct annual loan servicing from a country's ICU account. Other international institutions could also be developed to complement the ICU. For example, a supernational policing body (like the UN) could have an account at the ICU, and countries could pay their assessed contributions through the organization; the institution could also freeze members' ICU accounts as a type of sanction. Various funds, such as an international institution for post-war reconstruction, could also be given accounts at the ICU, receiving contributions and being granted overdraft facilities. A further levy on surplus credit balances could also be used to support various causes. Keynes also envisioned institutions set up to manage a Commodity Control, providing a financial buffer for commodities stocks. The ICU, combined with potential International Economic Board, International Investment Board/Development Corporation, together with a Commodity Control institutionalization, could be able to smooth out the trade cycle through expansionist or contractionist influence on the global trade system or on targeted sections. Keynes hoped that the ICU could become "the pivot of the future economic government of the world" (Keynes [1943] 1981, 33).

In addition, a Governing Board (GB) was envisioned that would be appointed based on quota size – those with quotas greater than a certain amount would each be able to appoint one member, while those with smaller quotas could group geographically or politically to appoint a member. Each representative would have a vote in proportion to his/her state's quota size or the quota size of the coalition the delegate is representing. Furthermore, all members of the ICU can send one delegate as a *liaison* for information exchange and to deal with daily business. These delegates may be present at any GB meetings and participate in discussions. The GB would have the power to ask for and receive statistical or other relevant information from any member State, expel members in breach of ICU agreements, and must make an annual report and convene an annual Assembly (Keynes [1943] 1981, 24-5).

Although the ICU plan envisions countries maintaining fixed exchange rates between their domestic currencies and the *bancor*, it does include a process for adjustments. Other than exchange rate changes and unreasonable debt or surplus situations, the ICU would not interfere in a country's international trading, allowing "absolute freedom of exchange remittance for current trade transactions," as well as freedom for each Central Bank to decide if it wishes to control capital movements or deal directly with other central banks (House of Lords 1943). Ultimately, Keynes visualized a post-war world of "free trade, full employment, and a full life for every citizen in every country" (House of Lords 1943). Domestic economic systems could be integrated into the international economy without sacrificing stability at home, unlike under the gold standard. The ICU retained the positive aspect of the gold standard – foreign exchange rates' short-term stability – while also promoting domestic stability through creating conditions for high employment (Dillard 1948). At heart, it

“embodied short-term fixity and long-term flexibility of exchange rates” (Markwell 2006, 241-2). Each state would still retain significant national sovereignty – “no greater surrender is required than in a commercial treaty” (Keynes [1943] 1981, 36), and the ICU could facilitate trade liberalization while assisting individual countries who were having balance-of-payments problems, especially in the tumultuous post-World War II era (Markwell 2006, 241-2).

The final choice of White’s plan was not due to its superiority (in fact, many hold Keynes’ plan to be technically superior), but was primarily a result of politics (Alessandrini and Pratianni 2009; Piffaretti 2009): in particular, perceived issues with the American public, sovereignty, and financial contributions. Americans were assumed to be un-accepting of the foreign clearing union idea, and public acceptance was necessary to join any potential new international financial institution. While Keynes’ plan involved states giving a piece of sovereignty to the ICU, Whites’ plan retained sovereignty with each country. White’s plan did not see the need to change the traditional process of a debtor country undergoing the burden of adjustment, thus not providing mechanisms for creditor countries to encourage adjustments. While White’s proposal made loans in national currencies, it did not have the ability to act as a lender of last resort. Though White’s plan was based on a multilateral agreement, similar to Keynes’, the institutional design utilized bilateral payments arrangements (Piffaretti 2009).

Furthermore, Keynes’ ICU required a system-wide total quota of \$38 billion,¹³ of which the US could theoretically be responsible for up to \$27 billion, given the likely excessive American surpluses in the post-World War I II reconstruction context. In contrast, the White plan envisioned a much smaller \$1.27 billion quota for the US in a system total of \$5 billion (Robinson 1943). The final adoption of White’s plan, with a few tweaks by Keynes, led to the institutionalization of the International Monetary Fund (IMF) and the World Bank, which were ultimately unable to assist countries to any significant degree in the post-World War II reconstruction period or provide a long-term, stable Bretton Woods system. The lack of any bilateral balance-clearing mechanism in White’s plan, which would have been a key part of the ICU, led to the formation of the European Payments Union (EPU) in 1950, which will be further discussed in section four (Mikesell 1994).

¹³ This is based on calculations that the average of world trade for the 3 years before World War II was \$48 billion; if the whole world joined, quotas would be equal to \$36 billion – each country receives 75% of its trade average as a quota. In the extreme case in which all countries besides the US draw down their quotas, America’s initial \$3 billion quota, after surplus trade flows, could become a maximum \$24 billion in deficits that other countries could conceivably withdraw (Robinson 1943). Alternatively, the US government calculated that the US quota was \$8 billion, with the US responsible for \$30 billion in system credits; and it was estimated that over the following 10 years the US would need to provide \$75 billion or more of credits (Mikesell 1994). Yet Keynes claimed, “There is no foundation whatever for the idea that the object of the proposals is to make the United States the milch cow of the world” (House of Lords 1943): America can raise imports to equal exports, lend the equivalent of surplus exports to debtor countries long-term, or accept gold from the ICU in return for reducing her bancor surplus (Robinson 1943). Moreover, there were both American and ICU policy instruments that could be utilized to stop this extreme situation long before the US portion grew too large, and it was further unlikely that the US would be the only creditor in the world (Mikesell 1994).

III. Post-Keynesian Plans

An increasing number of post-Keynesian economists have written on the applicability of Keynes' ICU in a post-Bretton Woods system. They propose frameworks that are international, regional, or sub-regional, with some variations in the specific details. Overall, the authors advocate versions of Keynes' plan in order to change the international financial architecture and monetary system to prevent any further currency crises and the subsequent losses in employment and output (Rossi 2004). A brief, though by no means exhaustive, review of some of these contributors is provided here.

IMF Special Drawing Rights (SDRs), set up in 1967, were based on the idea of an international monetary institution issuing supranational bank money to settle foreign trade transactions between each country's central banks. However, SDRs were seen as a basket of currencies instead of a new supranational means of payment, and their introduction has not been accompanied with a set of incentives aimed at both debtor and creditor countries for rebalancing trading imbalances. SDRs were visualized as a means to supplement the global stock of international liquidity, not as a system of payment settlement between countries. Even so, by the first allocation in 1970, the Bretton Woods System was already breaking down; thus, the forecasted global reserves shortage never happened. SDRs have expanded international reserve currency, but the international monetary system remained vulnerable to commercial bank failures. SDRs were unable to provide assistance with the main issues that Keynes' plan would have addressed: "Preventing the build-up of balance of payments imbalances and possible consecutive deflationary adjustments, and providing for the absence of the lender of a last resort function at the international level" (Piffaretti 2009, 20; Piffaretti and Rossi 2010).

Many scholars argue that an ICU in the current financial context would be extremely beneficial. Triffin (1960, 1963) proposed international reserves of the foreign exchange portion of countries' monetary reserves under the aegis of the IMF as a supranational central bank and based on Keynesian ideas, though less politically ambitious. These reserves were similar to the reserve asset function of the *bancor*. Stiglitz (2003) argues that the current financial system has forced countries to undergo contractionary policies, exacerbating economic declines. The global reserve system is central to the failure of the international financial architecture because countries commit a significant amount of funds into reserves to be prepared for a variety of contingencies, an estimated \$2.4 trillion in 2003. Stiglitz promotes the expansion of the IMF SDRs in his "global greenback" plan, which can provide liquidity to a country in distress in order to purchase goods and services, finance global public goods, supplement reserves to free up funds for development, or be provided as grants. However, his ideas have been criticized as not fixing fundamental flaws in the international financial architecture, being too vague on the institutionalization necessary for success, and lacking in references to Keynes (Gnos 2004).

Davidson (1992; 2002) proposes a "Keynes-Post Keynesian" method of a closed, double-entry bookkeeping clearing union along with rules to maintain liquidity of the system. His plan institutionalizes

exchange rate stability and thus limits destabilizing, speculative currency flows. Like Keynes' ICU, each country would maintain its domestic currency, central bank, and monetary policy of choice. However, Davidson emphasizes the role of surplus nations in providing the brunt of any payments adjustments, as they are better equipped to do so than deficit countries. He wrote, "Conventional adjustment policies for deficit nations are inherently employment and output depressing. The result is stagnation and a slowing progress in the improvement of average standards of living throughout the globe" (Davidson 1992, 250).

As an easier way to institutionalize an ICU, Alessandrini and Fratianni (2009) argue that an ICU could be created by several of the larger world powers – in particular, the EU and the US could agree to establish an ICU between themselves. The framework could operate as a multilateral settlement of debits and credits among the central banks of the countries and currency blocks involved, temporarily extend credit to countries with deficits, issue a supranational currency, and stabilize exchange rate fluctuations via monetary policy coordination. The strategy would maintain the five fundamental principles of Keynes' ICU: multilateralism, complementarity, gradualism, symmetry of adjustment, and a banking approach, and could later be expanded to include other large trading partners, such as China.

Arestis and Sawyer (1997), as an alternative to the EMU, propose a European Clearing Agency (ECA) that would issue a European Clearing Unit (ECU) as a medium of exchange and reserve asset, emphasizing the Keynesian principle of a double-entry bookkeeping clearing institution that could provide overdraft facilities and loans with unused surplus balances. A European Investment Agency would also be created for finance and assistance in long-term lending and industrialization. The plan also includes fixed-but-adjustable exchange rates, anti-speculation measures, and promotion of industrialization. A different proposal looks at creating a sub-regional ICU for the countries that are joining the EMU. This would eliminate foreign exchange rate instability and allow countries to slowly accustom themselves to joining the Eurozone (Rossi 2004).

Ecuador proposed in 2008 the creation of the Bank of the South and the new Regional Financial Architecture in Latin America with a Central Clearing Union to balance the assets and liabilities from regional transactions, through a currency unit called a "sucre." This system would help with currency flows and transaction costs. The union could hold member reserves in non-member currencies, such as the US dollar, in order to behave as a single unit in transactions with non-member countries (Gnos et al 2009). Piffaretti and Rossi (2010) propose another non-global version of the ICU, looking at creating a bilateral settlement facility based on Keynes' ICU between the US and China to contribute institutionally to the structural rebalancing of global trade disparities, with other major international trading partners joining at a later date. Paus and Troost (2011) also argue for institutional change in the EMU, implementing a Keynesian ICU system that holds both surplus and debtor countries responsible for trade imbalances while maintaining the use of the euro throughout the bloc: an "EMU 2.0" (Paus and Troost 2011, 10).

There have been several criticisms of Keynes' ICU plan, such as the requirement that surplus countries take responsibility for action, the lack of adjustment mechanism, the potentially large loss of sovereignty, and

the lack of safeguards against inflation. However, many economists since Keynes, including those summarized above, have proposed ways to mitigate these issues in ways that could be integrated into an updated ICU today. For instance, Triffin's Clearing House provided a way to safeguard against potential inflation threats by institutional limitations of the rate at which liquidity could increase (Grubel 1963, 7). Triffin also suggested that such a plan could be more easily established at the regional level, with Western Europe and Latin America as potential candidates (Triffin 1960; 1963, 50-53).

IV. The Development of the Euro

Political History

European history has seen many attempts to create European political and economic unions, influenced by the liberal and democratic ideas of the European Enlightenment. The concepts of European integration can be seen in Jeremy Bentham's European Assembly, Jean-Jacques Rousseau's European Federation, and Victor Hugo's United States of Europe (Eichengreen 1997). Since the mid-nineteenth century there have been various forms of monetary and economic integration, usually involving supra-regional monetary unions imposed due to political unification,¹⁴ or inter-European monetary unions based on agreements between nations about exchange rates.¹⁵ After World War I, there were several movements promoting the unification of Europe in order to ensure no further continental wars, as well as specific plans for a European currency and central bank. After World War II, Churchill advocated a United States of Europe, while the Americans made the disbursement of Marshall Plan funds dependent on European cooperation, leading to institutional frameworks for economic and political cooperation such as the Organization for European Economic Cooperation in 1948 and the Council of Europe in 1949 (Vanthoor 1996).

These preliminary moves towards cooperation were furthered with the establishment of the European Payments Union (EPU) in 1950, the European Coal and Steel Community (ECSC) in 1951, the European Economic Community (EEC) in 1957, and the decision to establish a Common Market in 1958. These measures created a mechanism for binding Germany and France together, increasing their economic interdependence and decreasing their motivation to go to war. Even at this early time, many of the leaders driving the foundation of these policies, such as Jean Monnet and Robert Schuman, believed that the eventual outcome would be monetary and political union. After the customs union was completed by the late 1960s, the next step was exchange rate stability and monetary unification. In 1969, the European Council reaffirmed that the EEC should move forward to full Economic and Monetary Union (EMU) (Eichengreen 2008, 150-165).

Introduced by the Werner Report in 1970, the first attempt was called the 'currency snake,' a set of fluctuation bands for intra-European exchange rates in the aftermath of the Bretton Woods collapse. While the snake worked for almost ten years, it was ultimately abandoned by the end of the decade (Eichengreen 2008).

¹⁴ i.e., Switzerland in 1848 and Germany in 1871

¹⁵ i.e., the German-Austrian Monetary Union of 1857 and the Scandinavian Monetary Union of 1872

A second attempt was the 1979 European Monetary System (EMS), based on an Exchange Rate Mechanism (ERM), with exchange rates between participating countries set in a narrow band (McCormick 2011). However, again there were many issues with countries staying within the bands. Though the EMS did not ultimately achieve currency stability or convergence, it was judged successful enough to warrant continued integration (Mills 1998).

Due to its stability, the German Deutschmark was adopted as the basis of the European monetary system; all EMS countries agreed to keep their currencies valued within limits, linked to the German mark. Thus, the eurozone-bound countries adopted the strict anti-inflation policies of the German Bundesbank. However, in the early 1990s, increased government spending on German reunification led to the Bundesbank setting high interest rates to counteract inflation. This resulted in stress across the EMS-area, and foreign exchange traders put increased pressure on those countries that were close to the bottom of their EMS bands. In September 1992, the UK, which had three times the inflation of Germany and high interest rates, attempted to prop up the pound so it did not fall lower than the EMS band. Instead of devaluing, the government spent billions of pounds of currency reserves to buy the pound in foreign exchange markets in an effort to restrain inflation. The turmoil in the markets forced other EMS countries outside their currency bands and the UK dropped out of the EMS after the pound crashed. In the aftermath, the EMS bands were widened significantly, resulting in only minor constraints on domestic monetary policies and less convergence amongst the EMS countries (BBC 1992).

After the 1989 Delors Commission plan that foresaw a monetary union to be accomplished in three stages by the end of the following decade, the EEC (renamed the European Union (EU) after the 1993 Maastricht Treaty's entry into force) forged ahead. Maastricht enshrined a set of convergence criteria that attempted to promote fiscal discipline. Despite speculation, currency attacks, devaluation, and the ERM's bands being widened to 15%, the EU countries met in Madrid in 1995 and agreed on a timetable for EMU implementation (Mills 1998). In 1998, the list of 11 participating countries was finalized¹⁶ despite most countries lacking achievement of one or more of the convergence criteria;¹⁷ the early years of the EMU saw repeated failure to achieve the targeted 3% budget deficit as a percentage of GDP, a fiscal measure instituted by the 1997 Stability and Growth Pact (Cohen 2007). The euro was introduced electronically in January 1999

¹⁶ Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain

¹⁷ *Maastricht Convergence Criteria* (from Pollard 1995)

1. Each member state's currency must have remained within the ERM bands for at least two years prior, and must not have devalued its currency willingly
2. The average inflation rate must be no more than 1.5 points above the average inflation rate of the three best-performing countries over the preceding two year period
3. The long-term interest rate on government bonds should be no more than 2 points above the average long-term interest rate of the three best-performing countries over the preceding two year period
4. The state's government deficit cannot exceed 3% of GDP
5. The state's government debt-to-GDP ratio should not exceed 60%

along with a permanent fixing of countries' exchange rates, and in January 2002 the euro replaced each individual nation's currency (McCormick 2011).

As can be understood from this brief historical overview, the reasons behind a common currency were not entirely, or even primarily, economic. This is not to say that there were not economic benefits: a single currency would "ban strife, promote social progress, control the Germans, increase growth, trade, wealth, investment and employment, quell inflation, counter the pre-eminence of the dollar, and buoy Europe's standing in the world" (Marsh 2009, 11). Though a monetary union and common currency can be beneficial given certain conditions, "careful analysis as to whether the states comprising the Community and later the EU met these criteria, and were likely to continue doing so, was, however, almost entirely absent from any of the major pronouncements made by Community leaders about the need for moves toward monetary union" (Mills 1998, 51). Indeed, actual economic analyses were given a subordinate role; Helmut Kohl and Francois Mitterrand, two significant political catalysts for the introduction of the EMU, viewed economists as mere technicians (Mills 1998). What was good politically was assumed to be good economically. Thus, EU leaders have often worked to use economic data to support the political rationale of the EMU, instead of analyzing the economic merits of integration without attention to political considerations. While it was often argued that the EEC's customs union needed a monetary union for full effectiveness through exchange rate stabilization, there was little proof, and even contradictory evidence, to support this assertion (Mills 1998). Instead, it was hoped that a monetary union would drive increased economic integration, resulting in a stronger political union (Paus and Troost 2011).

As a more concrete example of the political motivation behind the EMU, recently released internal German government documents from 1994-1998 revealed that, based on economic requirements, Italy should not have been accepted into the EMU; one newspaper article reported, "The decision to invite Rome to join was based almost exclusively on political considerations at the expense of economic criteria. It also created a precedent for a much bigger mistake two years later, namely Greece's acceptance into the euro zone" (Boll et al, 2012). As a founding member of the EU, EMU officials ignored data that showed Italy had almost twice the maximum allowed GDP debt of 60%. Germany itself, with debt levels slightly above 60% of GDP and increasing due to reunification costs, was not in a position to judge Italy without proof of violations. Due to creative accounting and one-off measures on Italy's part, the deficit criteria of Maastricht were 'satisfied' despite many EU officials knowing that the figures were massaged and did not represent any real reductions in debt (Boll et al, 2012).

In the aftermath of two World Wars in less than a full generation, the political importance of the national state for many Europeans had been decreased; instead, many Europeans supported increased cooperation on the continent (Vanthoor 1996, 109). Creating a European polity to counterbalance the US and the USSR was one rationale, as was the general argument for freer trade. Germany wanted to subsume its national identity in a wider European federation, while France and the neighboring Benelux countries wanted

to permanently bind Germany into a peaceful relationship. Italy, like Germany, not only had amends to make for World War II, but wanted to associate itself with the richer and democratic Northern European countries (Mills 1998). Although moves towards monetary integration had been attempted from the 1960s in a context of increasing political integration, the real impetus did not come until the end of the Cold War and impending German reunification. France, fearing German dominance, secured Germany's promise to participate in an EMU, while Germany in return received acceptance of its reunification, the basing of the EMS on the Deutschmark, and promises of further European political integration (Rachman 2010).

Economics

The economic theory underlying the EMU was in large part a reaction to the international financial turbulence of the 1970s. With the breakdown of the Bretton Woods system and Keynesian demand-driven central bank policies failing to promote growth and keep inflation down, many European leaders turned to monetarism. The theory of monetarism holds that increases in output, wages, and prices could be controlled by managing the amount of money in circulation over both the short and long term. The central bank should look primarily at preserving price stability by maintaining the inflation rate at or below 2%, as opposed to focusing on other indicators, such as interest rates, reserves, or credit flows, and promotion of growth, which was a much less important secondary goal. Despite the weak performance of this theory's actual implementation for the EMU, it was widely accepted and integrated into the Eurozone's monetary structure; this has been one of the reasons behind Europe's low growth and high unemployment (Mills 1998). The snake, the EMS, and the Maastricht convergence criteria were all formed based partially on the Keynesian belief that economic convergence was necessary for monetary union, combined with the monetarist belief that union should be created as fast as possible with convergence following naturally. One scholar has since noted that the latter has been shown to be a "gargantuan misreading of the laws of economics" (Marsh 2009, 7). Despite the problems encountered and lackluster results of these three attempts, the EEC and EU continued with further integration because anything less would have been a step backward. The builders of the Eurozone thought that differences in balances of payments would have little effect on the euro as a whole and that individual countries' deficits could be self-financing.

It was further argued by European leaders that the Eurozone would constitute an optimum currency union. Robert Mundell proposed this theory in 1961, arguing that an optimum currency union needs, though these conditions are not necessarily sufficient, to have rare asymmetric shocks, single monetary policy affecting all in the same way, a system of stabilizing transfers, and no cultural, legal, or linguistic barriers to labor mobility (Mundell 1961; *Economist* 1998b). Gains from a common currency and monetary unification would be based on the elimination of variability in the exchange rate, lower transaction costs, price convergence and parity, trade and investment increases, and macroeconomic stability. However, not being able to use the exchange rate as a means of adjustment or pursue independent monetary policies would result in losses. The relative balance of gains and losses depends on how often there are economic disturbances and

how quickly the economy adjusts. Asymmetrically-distributed disturbances or dissimilar adjustment speeds would result in monetary union as a net negative (Bayoumi and Eichengreen 1994). In particular, the so-called “Rose effect” was posited in that that optimal currency unions could increase bilateral trade by more than 300%, later revised to 50% (Lane 2005). Yet, others have found that, controlling for other variables, the EMU has increased intra-Eurozone trade by 8-16% (Micco et al 2003). More recent work concluded that the euro’s trade-promoting effects are actually statistically insignificant (Havranek 2010).

The EMU was also conceived as a solution to “end monetary turmoil and mitigate the effects of dollar dominance,” as a strong single currency would allow the free flow of capital within the bloc and between the bloc and the rest of the world while protecting against speculative attacks. In short, the euro could challenge the dollar’s position as both a reserve and transaction currency. However, the late 1990s brought new types of speculative strategies that were designed to profit based on interest rate differences instead of exchange rate changes, affecting the performance of the euro area (D’Arista 2004). In the post-2007 financial crisis context, the US is slowly recovering while the EU is not. Compared with the US, “Europe has suffered a worse decline in output, a sharper rise in unemployment, a milder monetary-policy response, a counterproductive fiscal-policy response and severe country-specific setbacks;” national borders disrupt supply-side demand from pulling the economy out of recession (*Bloomberg* 2013).

Critiques

There were significant disadvantages to the economic structure of the EMU, highlighted in particular by economists in the US and Britain. The most important objection was that a monetary union (control of interest rates and monetary supply) without financial (centralized treasury and budget management) or political union was inherently unstable and unable to respond well to crises (McCormick 2011). States also lost policy independence to deal with domestic economic problems, and without a fiscal union, there would be no central budget in any future asymmetrical shock to transfer funds to states in crisis (McCormick 2011). The European Central Bank (ECB) would follow policies that benefited the majority, further damaging an asymmetrically hit country (Issing 2008). The ECB’s concentration on price stability at the expense of growth was further emphasized as another potential downside (Cohen 2007). The countries most likely to be negatively affected by the EMU policies in country-specific shocks were the ‘southern tier’ of the EU, such as Greece, Spain, and Portugal (Eichengreen 1990). Psychological and social barriers to movement would not allow domestic markets to adjust to imbalances in currency valuation; without each state in control of its own monetary policy, this was the only safety valve that could allow states with different real rates of inflation to coexist (McCormick 2011).

Critics have repeatedly argued that “the primary motivation for the creation of the euro was political, not economic.... The economic case for EMU was very weak or non-existent” (Feldstein 2009), with a significant potential for increased unemployment and lower growth (Arestis and Sawyer 2001). US-based economists emphasized that the EU did not constitute an optimum currency union because European

asymmetric shocks were large, there was limited labor mobility due to language, cultural, and social differences, and an attempt to form a currency union without fiscal union would be highly inadvisable (Krugman 1992). Moreover, a European study on whether the EU was an optimum currency union found that the Eurozone as created in 1999 “fell quite a long way short of meeting the conditions for an optimum currency union” (Issing 2008, 49). As one scholar reported in 2005,

... the euro area is still some distance from the definition of an optimum currency area: market-based risk sharing arrangements are likely not an adequate substitute for a US-style federal fiscal transfer system; although increasing, labor mobility remains low; structural rigidities still permeate product and labor markets; and the likelihood that national fiscal policies will contribute much to stabilization remains unproven. Moreover, there is little sign that political integration among the member countries will increase any time soon (Lane 2005, 17).

Furthermore, it was reported above that the beneficial effects on intra-Eurozone trade have been statistically shown to be negligible (Havranek 2010). Feldstein (1999) argued that a single monetary policy for a diverse group of countries that experience different types and timings of shocks could not be optimal. The EMU would likely weaken the member economies, because “the economic advantages of a single currency in promoting trade and competition would be outweighed by a higher rate of unemployment and by the risk of higher long-term inflation,” resulting in increased trade deficits and economic isolation, as export demand would be reduced due to a lack of natural exchange rate adjustment (Feldstein 2009). The EMU would further result in political conflicts both within the EU and with the EU’s important trading partners – such as the US. The lack of any exit option meant that the EMU was a “marriage made in heaven with no possibility of divorce” (Feldstein 2000).

In their analysis of the EU convergence criteria, Arestis and Sawyer (1997) argue that the convergence process would have a significantly impact on employment, especially in the periphery. The many national-level differences¹⁸ of countries in the EU mean that the ECB’s pursuit of price stability instead of output or employment would not allow for the different inflationary tendencies in the member-states. The length of adjustment lags and disparities in economic performance would also likely be different, reinforcing any economic problems. The peripheral countries already had higher inflationary tendencies, tax evasion, underground economies, and inefficient public sectors. In their attempts to meet the convergence criteria, the high costs of convergence would result in these countries’ economies “plunging into deep economic crises and diverging even more from those of the core countries” (Arestis and Sawyer 1997, 359). Monetary policy will be unable to fight inflation and will result in decreases in output and increases in inflation. A lack of recourse to exchange rate variations as an adjustment mechanism would result in countries responding to differential economic performance and shocks in other ways, such as lowered standards of living, emigration, or reduced economic activity. The EU budget would also be too small to provide significant fiscal redistribution from richer to poorer countries or stabilize the eurozone in the case of a crisis. An ECB focus on controlling

¹⁸ For example, “wage- and price-setting arrangements, the nature of the financial system, [and] past experience of inflation, none of which will change rapidly just because of monetary union” (Arestis and Sawyer 1997, 358).

inflation through controlling the stock of money could lead to higher interest rates, exacerbating budget deficit issues. Furthermore, this focus detracts attention from the issue of creating institutional arrangements that promote both high employment and low inflation (Arestis and Sawyer 1997; Arestis, McCauley, and Sawyer 2001).

In response, pro-EMU Europeans argued that the decision was not a choice “between EMU and heaven. It is between EMU and freely-floating exchange rates, with possibly poorly coordinated monetary policies, within an area gradually becoming as tightly integrated as the United States” (Wyplosz 1997). Grudging American proponents pointed to sunk costs in the integration project (see Frieden 1998; Eichengreen 1990; 1996; 2007): “In Europe, where there is a commitment to political as well as economic integration, monetary union is the best option available.... The commitment to political integration allows the creation of institutions of shared governance, in turn enabling each member to have a voice in the common monetary policy” (Eichengreen 2002). Yet, Eichengreen co-authored an assessment of geographical areas that would likely benefit from a monetary union based on Mundell’s specifications, resulting in three potential country sets: Northeast Asia,¹⁹ Southeast Asia,²⁰ and a Northern European group.²¹ The authors did not recommend the EU as a whole in their analysis, supporting other scholars who called for a two-speed EMU (Bayoumi and Eichengreen, 1994).

V. Greek Crisis and Contagion

Joining the EMU was a larger shock for peripheral than core states, especially as long-term interest rates in the peripheral countries had been relatively higher prior to the nominal rate convergence process that was part of the EMU (*Economist* 1998a). Ongoing disparities in national inflation rates lead to real interest rate differences across the Eurozone, resulting in the EMU acting as an asymmetric shock amplification mechanism. The EMU did not eliminate nominal exchange rate volatility problems. Shifts in the real exchange rate, either due to endogenous cost shocks or exogenous factors, indicate that some member countries had unsustainable wage growth levels. This was especially problematic in the EMU because the traditional adjustment solution was depreciation of a nation’s currency. Some of the EU’s slower-growing countries thus had significant inflation – for example, although Italy did not grow faster than Germany over the 1999-2004 period, Italy’s consumer price level increased by a cumulative 6.8% above the German level, while unit labor costs increased 17% relative to Germany (Lane 2005). Wages in Germany were only allowed to grow slowly, giving Germany lower labor costs and a competitive advantage. Since 2000, Germany has had comparatively mid-ranking labor productivity, with unit labor costs declining since 2003. In 2011, unit labor costs had risen only 6% over the prior decade, while the average increase in the rest of the Eurozone was 20% (Paus and Troost 2011).

¹⁹ Korea, Japan, and Taiwan

²⁰ Indonesia, Hong Kong, Singapore, Malaysia, and possibly Thailand

²¹ Germany, Austria, Denmark, Belgium, the Netherlands, France, and possibly Switzerland

One key advantage that these peripheral countries gained was that their long-term credit rates dropped dramatically. At the same time, this also led to significant increases in lending and borrowing, local housing booms, and growth in demand that all resulted in inflationary pressures. Membership in the EMU has allowed several member states such as Greece, Spain, and Portugal to have larger external imbalances than before; these three countries had average current account deficits that increased by 3.5% of GDP over 1995-2004 and a 36.4% of GDP average increase in the stock of net external liabilities from 1998-2004. As members of the Eurozone, their currencies are insulated from pressures they would have had before – investors would have required larger risk premiums in order to fund such deficits previously, increasing the risk of a speculative attack (Lane 2005).

Greece

Despite joining the EU in 1981, Greece was the only EU member country that wanted to but was unable to join the Eurozone when exchange rates were finalized leading up to 1999. Greece did show some significant reductions in debt, inflation, and other convergence criteria in the mid-to-late 1990s. Even though it was still far from meeting several of the benchmarks and there were doubts about the validity of its statistical reporting, for a variety of political reasons²² Greece was allowed to enter the Eurozone in 2001 (Hochreiter and Tavlas 2004).

After Greece became democratic in 1974, in 1981 the socialist government began a program of highly expansionary economic policies, increasing public consumption through government deficit spending, and leading to significant stagflation. This trend was curtailed in the 1990s when Greece realized both that it would have to bring its budgets under control in order to accede to the EMU and also that its economic policies had not been successful (Hochreiter and Tavlas 2004). To come closer to meeting the convergence criteria, the Greek government was required to significantly reduce inflation, needing close to a 2% rate prior to entry. Greece was able to accomplish this in part due to temporary factors;²³ combined with lying and false bookkeeping, the drachma was able to stay within the EMS bands. The 1999 government deficit ratio was reported as 1.6%, considerably below the 3% Maastricht target, while debt-to-GDP ratio was 104.4%, significantly above the 60% criterion, and had grown by 24.7% over the 1990s. At Greece's accession, there were serious questions as to whether Greece could sustain these generally positive macroeconomic trends (Dinopoulos and Petsas 2000).

²² As one author puts it, Greece was “benefiting from strong sympathies around Europe on account of its antique glories, its long and painful history of foreign intrusion ranging from the Ottomans to the Nazis, and its more recent struggles to restore democracy” (Marsh 2009, 245).

²³ These temporary factors included cuts in indirect taxes with effects that would disappear after one year, negotiating a number of agreements with service providers and commercial and industrial enterprises to increase price stability by reducing the retail prices of a group of goods equal to 1/10 of the Consumer Price Index basket, fiscal policy adjustments that led to lower public deficit ratios and long-term interest rates, and an overall tight monetary stance during the 1990s (Dinopoulos and Petsas 2000).

After the introduction of the euro, the market assumed an implicit bailout guarantee²⁴ despite Maastricht provisions to the contrary, and thus valued all euro-denominated debt as having a similar risk status. As a result, all European governments could sell their debt for approximately the same low interest rate in bond markets. Because Eurozone nations could now borrow at German-like rates, Greece was able to access capital markets significantly more cheaply than previously, encouraging a rapid increase in ‘easy’ borrowing, the interest payments of which could be covered through further loans; in such a windfall situation, governments had few incentives to undertake imperative domestic structural reforms. Thus, “a large increase in debts built up as the result of low interest rates and faulty supervision after monetary union started” (Marsh 2009, 4). The monetarist policies at the heart of the Eurozone directly led to governments, consumers, and businesses in countries like Greece overspending, overborrowing, and receiving no punishment in financial markets. At the same time, Greeks reduced their savings rate considerably,²⁵ meaning that most of the financing for the debt was external, not domestic (Rossi and Aguilera 2010). Greek negative net foreign assets as a proportion of GDP rose from 3% in 1997 to 86% in 2009, while the public debt-to-GDP ratio rose from 102% to 115% over the same period and public sector wages increased 50% between 1999 and 2007 (Katsimi and Moutos 2010; *BBC* 2012e).

At the same time, Germany did not increase wages and maintained exchange rates that were effectively too low, leading to increased German competitiveness and a huge current account surplus which was then lent to the peripheral EU states. Conversely, the periphery had higher inflation, higher wages, and lower productivity, and thus effective exchange rates that were too high. This priced their goods and services out of international trade and subsequently provided little income with which to repay loans, contributing to further deficits.²⁶ Moreover, the borrowing undertaken by Greece in particular was not used to build up productive capacity or reform the economy to become more industrialized and modernized. Instead, the money was used for wasteful consumption and speculative financial and real estate assets; these bubbles burst during the global financial crisis, resulting in an economy-wide shock (Marsh 2009). Greece and the other southern tier countries, left with huge debts and contracting economies in the financial crisis, were forced to borrow at increasingly higher rates to keep their governments functioning.

The recent financial instability in many industrial countries has four primary causes: pro-cyclical behavior by financial authorities from 2000-2007, financial costs of the 2007-8 crisis and bailout, worldwide recession from 2008-9, and the popping of various bubbles which lead to a longer-term reduction in government revenues (Featherstone 2011). However, Greece also had several country-specific factors that increased instability. The most important was the revelation in October 2009 by newly-elected Prime minister

²⁴ This will be discussed in detail in later in the paper

²⁵ Between 1990-2010, the national Greek savings rate was an average of 11%, compared with 20% for Portugal, Italy, and Spain; in 2009 the Greek rate was 2.6% (Eurostat)

²⁶ In 2006, Greece had a deficit of 11%; Germany had a surplus of 6.5% and the Netherlands 9%. While Germany improved overall competitiveness against all countries by 9% from 1999-2010, Italy’s competitiveness decreased 29% (Marsh 2009).

George Papandreou that the budget deficit for 2008 had been revised from 5% to 7.7% of GDP, while the planned deficit for 2009 was actually 12.7% of GDP, rather than the 6% claimed by the previous government, and far from the 3.7% promised to the European Commission in early 2009 (Featherstone 2011).

Eurostat had noted problems with the quality of Greek fiscal and macroeconomic statistics since 2004,²⁷ officially questioning the data provided five times; in fact, there had been credibility issues with Greek statistics since Greece had combined cheating with temporary measures to ‘meet’ the EMU convergence criteria. Eurostat blamed the 2009 statistics revision on Greek statistical weaknesses in methodology and technical procedures as well as broad failures of Greek institutions, especially in their lack of cooperation, clear division of responsibilities, and tendency for statistical quality to be subject to political pressures and elections (European Commission 2010).

Greece has not had a budget surplus since 1973 and since 1981 had consistently maintained deficits that were more than 3% of GDP (European Commission 2010; OECD 2012). Greece’s excessive underlying budget deficits were due in large part to poor tax administration,²⁸ a huge informal economy estimated to be almost 30% of GDP (Featherstone 2011), abnormally high special interest influence over the government, growing industrial uncompetitiveness, a bloated public sector, expenses due to the 2004 Summer Olympics, and high age-related and entitlement spending (Buiter and Rahbari 2010). In explaining the negative economic situation, the Greek Ministry of Finance cited an “economic cycle effect due to the economic downturn and a bigger than expected fall in real GDP... an electoral and political cycle effect due to the laxness of the revenue collection mechanisms and the expenditure overruns,” and a “deficiency or structural” effect, because of “endemic structural deficiencies on collecting taxes, controlling expenditures and recording data” (Greek Ministry of Finance 2010, 15). Alone among the PIIGS,²⁹ Greece has both fiscal budget deficits and external current account deficits (a ‘twin deficits’ problem) that led to the balance of payment crisis, along with an external debt stock, severely low savings rate, and a large portion of debt due in the near term (Rossi and Aguilera 2010).

After the revelation of fudged statistics, Greece committed to significant financial adjustments in return for external aid.³⁰ Greece has been caught in a ‘debt deflation’ trap for the past five years, in which the austerity policies imposed by the rescue packages force cuts in spending, increases in taxes, and more borrowing to cover deficits; meanwhile, the economy continues to stagnate and real incomes decline, while an ageing population increases the burden on public finances (Jones 2009). Therefore, there are even fewer resources with which to pay the onerous debt burden, especially as interest rates in the bond markets rose so

²⁷ At that time, the government of Costas Karamanlis disclosed that the previous administration, led by Prime Minister Costas Simitis, had cheated on its bookkeeping, claiming that its deficit was less than 1% of GDP (Wienberg 2011).

²⁸ In 2006, uncollected tax revenue was estimated to be about 30%, or 3.4% of GDP (Featherstone 2011)

²⁹ Portugal, Italy, Ireland, Greece, and Spain

³⁰ Greece implemented measures such as raising indirect taxes like VAT, luxury, and consumption taxes; public sector pension, employment, and wage cuts; an increase in the minimum retirement age; reform of the labor market and tax administration; and privatization of several state enterprises (Kouretas and Vlamis 2010).

high that refinancing was basically impossible. Greek bonds were downgraded to junk status in 2010, while Greece has been forced to continue austerity measures in order to receive bailout funds as it can no longer afford to sell bonds with the market-demanded interest spread reaching a high of over 38.5% for long-term bonds in early 2012 and almost 200% for two year bonds (a 40% yield). However, Standard and Poor's upgraded Greece's credit rating in December 2012 to a B- (*New York Times* 2012), meaning that Greece has been able to return to the bond market, selling €2.6 billion in short-term bonds in early January 2013 (Fontevicchia 2013). Furthermore, 10-year government bonds currently yield approximately 10.5%, down from a high of 30% prior to the June 2012 elections (*Reuters/CNBC* 2013).

At German insistence, the Maastricht Treaty enshrined a 'no bailout' clause.³¹ Maastricht rules technically forbid other countries from assuming liability for commitments and debts of other EU members, which is not quite the same as an inability to provide aid (*Economist* 2010). Other EU rules do allow for financial aid to countries in exceptional crises. Article 122 of the 2009 Lisbon Treaty has two pertinent clauses; the first is that EU governments can help each other if there are severe product supply difficulties. The second clause declares that when a member-state "is in difficulties or is seriously threatened with severe difficulties caused by natural disasters or exceptional occurrences beyond its control, the Council [of national governments], on a proposal from the Commission, may grant, under certain conditions, Union financial assistance to the member-state concerned" (Barber 2010).

In order to deal with these issues, the EU and IMF provided Greece an initial €110 billion rescue package in May 2010, followed quickly by a €750 billion European Financial Stability Facility (EFSF) to guarantee loans to member states in financial difficulties, further increased to €1 trillion in 2011. A second, €130 billion bailout was agreed to in early 2012, and a permanent bailout fund called the European Stability Mechanism (ESM) was also set up with a reintroduction of the 'no bailout' clause. Stricter debt rules and structural borrowing rules were also developed (*BBC* 2012b). As of late 2012, international assistance loans to Greece had reached €148.6 billion. Delays in the implementation of the economic adjustment program, a worse-than-forecast macroeconomic environment, and continued statistical revisions to GDP have resulted in a deeper- and longer-than-expected recession and adjustment process; at the same time, the EC acknowledges that implementation risks to the adjustment program remain significant (European Commission 2012).

Since the beginning of the Greek crisis, European solidarity has plummeted, with northern countries unwilling to send more money to the profligate south and southerners unwilling to continue the painful austerity measures. Meanwhile, Greece has been in recession for more than five years and its economy shrunk approximately by a fifth between 2008 and 2012.³² A potential 'Grexit' would involve government debt

³¹ Maastricht Treaty Article 125: "The Union shall not be liable for or assume the commitments of central governments."

³² The Greek deficit reached 15.4% of GDP in 2010, and the economy contracted 2% of GDP in 2009, 4.8% in 2010, 6.4% in 2011, and 6.5% in 2012 (Alderman 2012; Garside 2012). The debt-to-GDP ratio is forecast to reach 190% of GDP in 2013, shrinking to approximately 124% in 2020 (*BBC* 2012e). The turning point in the recession is expected in late 2013, with moderate GDP growth in 2014 of .6%, 2.9% in 2015, and 3.7% in 2016, at which time the government

default, meltdown of the country, bank runs, business bankruptcies, a sovereign debt crisis, market turmoil, political backlash, and a deep recession which the Institute of International Finance estimated to likely exceed €1 trillion (*BBC* 2012a; Davis and Christie 2012).

Bond markets calmed in 2012 due in significant measure to ECB President Mario Draghi's promise that the ECB would do whatever it took to defend the currency, resulting in more reasonable borrowing costs for crisis-stricken EU countries. The ECB has propped up the EU's banks with cheap credit, in the process loaning more than €1 trillion and providing further liquidity through national central banks. To do so, the ECB has had to lower standards on the security it accepts, taking on many loan types with a credit rating just above 'junk' (O'Donnell and Kuehnen 2013). The EFSF had an incentive to obtain seniority in loans and ask for maturity extension of government bonds, leading to a worsening of the Greek solvency crisis. Thus, the institutional response of addressing only liquidity, not solvency, created the unintended consequences of worsening Greece's solvency and increasing the chance of contagion. With the ESM, debt sustainability became the primary consideration in the provision of financial assistance. The ESM will take over the EFSF's role in providing financial assistance to EU member states in mid-2013 (Corno 2011).

Furthermore, in late 2012, Eurozone finance ministers agreed to a banking union that would increase policing of the EMU's banks and stop them from embroiling states in a banking crisis.³³ The plan is forecast to come into effect in 2014, though many details remain unclear. Yet by early February 2013, the political impetus to complete the union was declining, with the economically-strong countries remaining wary of potentially signing up to be responsible for bad loans. Moreover, the possible losses to be covered by the Eurozone – and ultimately, European taxpayers – could be enormous: the total bank debt of the six countries most affected by the crisis is €9.4 trillion, plus a combined government debt of €3.5 trillion. Even taking on a small fraction of this debt would be a huge burden (Sinn and Hau 2013).

Contagion?

With bond yields rising in other Eurozone countries and ratings agencies announcing downgrades, the risks of contagion from Greece have presented significant problems for the EMU, in particular potentially implicating countries such as Italy, Spain, Portugal, and Cyprus. Even France lost its top credit rating in November 2012, has had negligible economic growth in 2012, and has received pessimistic 2013 growth projections. Competitiveness has not improved, with average wages among the highest in the Eurozone. The

budget deficit would be less than 3% of GDP, down from the 5.2% projected for 2013 (European Commission 2012; Becatoros 2012).

³³ The banking union will consist of a common banking supervisor ("single supervisory mechanism"), the ECB, which will have the power to monitor the health of and risks taken by major Eurozone banks with the ability to intervene. Specifically, the ECB will take direct responsibility for those with balance sheets that comprise 20% or more of a nation's GDP or more than €30 billion in assets, approximately 200 banks. Smaller banks will remain under the aegis of national supervisors, but the ECB will be able to intervene if necessary. There will also be a common resolution framework, in that if a bank anywhere in the EMU is in trouble, the Eurozone countries would collectively bear the costs of bailing it out or letting it fail. The process would be managed by a "common resolution authority." There would also be a common Eurozone-wide deposit guarantee (*Economist* 2012c; *BBC* 2012f; O'donnell and Kuehnen 2013).

current government's plans for tax increases could result in top earning businesses and individuals leaving the country, further depressing the economy (*BBC* 2012d).

Italy was pulled into the crisis in July 2011, leading to an untenable bond market situation. A technocratic government led by Mario Monti was able to push through some reforms, resulting in lower borrowing costs (Spiro 2012).³⁴ Yet, Italy still has one of the largest public debt burdens in the Eurozone, currently at €2 trillion or almost 130% of GDP. An average of 1,000 businesses went bankrupt every day during 2012. Real GDP per capita has fallen since joining the Euro, unit labor costs remain high, there is little job creation, there are too many protected economic interests and layers of government, the judicial system is costly and delayed, unemployment (currently at 11.7% with youth unemployment at 38.7%) is too taxed, and public spending promotes transfers instead of investment (*Economist* 2013; Alderman 2013). In the recent election, 25% of the voters supported a candidate who ran on a platform of anti-budget cuts, anti-austerity, and a promise to hold a referendum on continued euro membership, while more than half supported parties that had openly criticized Germany's European austerity policies. The election resulted in political deadlock and a firm rejection of Mario Monti's austerity (Hewitt 2013). Kenneth Rogoff points out that the new, weak government will be unlikely to pass reforms that increase growth: "This underscores the likelihood of Italy having a Japan-like decade with phenomenally slow growth... and it raises painful questions about the long-run stability of growth in the euro zone overall" (Alderman 2013).

Although the central Spanish government had sound financials before the 2007 crisis, the housing bubble bursting, large regional government debts, and central government borrowing to deal with the crisis have threatened the stability of the banking sector and increased social unrest due to high unemployment (more than 25%), especially in the semi-autonomous regions. Falling incomes, credit scarcity, fiscal contraction, and business uncertainty are contributing to shrinking the economy. Spain may borrow up to €100 billion from the ESFS and the ESM for its financial sector and is in the midst of restructuring the banking sector, which is assessed to need an injection of €59.3 billion to retain adequate stability (*BBC* 2012c; *Economist* 2012b). Seven months ago, Spanish 10-year bonds yielded over 7%; the rate in late February was 5.1% (*Bloomberg* 2013).

On the positive side, there has not been a 'Grexit': Greece has managed to stay in the EU and the bailout is progressing slowly.³⁵ Yet, the harsh austerity measures, including large spending cuts, tax rises, and pension and labor market reforms, mean that the economy retains many problems and the citizens are increasingly unhappy with austerity. The economy shrank by 6.5% in 2012 and is projected to shrink by a further 4.5% in 2013. Many believe that the combined €240 billion of debt write-off and loans will still not be

³⁴ Italy's 10-year bonds have fallen from 6.5% to 4.2% over the past seven months, though in early March the yields rose to just under 5% after the Fitch downgrading. Italy also sold €8.5 billion of six-month bills at .731%, the lowest rate in almost three years, at the end of February 2013 (*Bloomberg* 2013; Zaharia and da Costa 2013).

³⁵ The bailout includes measures such as the write off of approximately three-fourths of Greece's private sector debt, the replacement of high-interest loans with lower-rate ones, and further debt forgiveness (*BBC* 2012e).

enough (*BBC* 2012e). The average unemployment rate is more than 26%, while unemployment for those aged 15-24 is at 58% (*Economist* 2012a), with spending cuts and tax rises resulting in lower pay and pensions. Violent protests and strikes have become increasingly common, including more than 20 general strikes since the beginning of the crisis. Prime Minister Antonis Samaras's government, in power for less than a year, has been tough on the strikers, already initiating emergency law several times this year to keep the transportation system functioning (*BBC* 2013).

VI. A Better Way

This paper holds that a regional system, based on Keynes' International Clearing Union, could have provided a better framework for European monetary integration. The ICU addresses key issues regarding the inherent instability of the international monetary architecture and the development of global imbalances, due to multilateral imbalances in trade, which have been increasing in the past several decades, and have been linked with growing financial vulnerability (Piffaretti 2009). Both of these issues have been key in the Eurozone's recent troubles. This section details what an ICU for Europe would have looked like and provides a counterfactual example, juxtaposing the results of the EMU with the likely outcome of an ICU-based Eurozone.

In an ICU system, the euro would be the unit of international account – only used in Eurozone countries' international trade. The idea of a two-tier banking system, as in national systems with local and national central banks, would be expanded to an European exchange, with the supranational and national banks in an analogous relationship. Each country would continue to use its own currency domestically, meaning that each would still have fiscal and monetary control, allowing it to devalue or adjust exchange rates when needed. The lack of national of fiscal and monetary policy control is one of the current problems in the Eurozone; thus, in asymmetrical crises, the ECB chooses a monetary course that is best for the EU as a whole, often worsening the crisis-hit country's situation. The EU-ICU (renamed the Euro Currency Union, or ECU³⁶) would sidestep the monetary union requirement for a concurrent fiscal union because each country would maintain its own domestic currency, and thus monetary and fiscal control. If a country such as Greece had large current account imbalances, it would be allowed to devalue its currency in consultation with the ECU, without having to endure many years of painful austerity measures or declining economic health and worsened financial markets for other Eurozone countries. Similarly, Germany would be held responsible for balancing its current account surpluses, such as by increasing imports or providing loans – both of which could in turn help Greece. The framework of the ECU would also give a deficit country such as Greece or a surplus country such as Germany breathing space in which it could work on domestic measures to reduce the imbalances.

³⁶ As detailed in the third section of this paper, several other scholars have proposed similar institutions on a regional scale. For example, Triffin (1960) proposed the idea of an ECU or similar mechanism as an internationalized payments framework that could eventually lead to currency merger in Europe.

The first phase of the ECU would be to convert all Eurozone reserve currency holdings by national central banks into euro credits at the ECU, which would then be available for lending to deficit countries and therefore multilateralize those surpluses not invested in foreign obligations. The ECU would manage both the settling of international transactions among central banks as well as the disposition of any imbalances. Unlike in the current EMU and international financial structure, surpluses could not transfer into another country's internal financial market and thus be used to finance internal imbalances that dampen international trade and encourage imbalances like the situation in Greece in the 2000s. Instead, surpluses could be used for the country's own international trade and as loans to deficit countries to use in such trade. Because there would no longer be a need to accumulate significant reserves in case of a drop in exports or financial crisis, these balances could be used as loans, increasing the money stock and resulting in a continuous stimulus of the global economy. Also, in a situation in which a domestic central bank does not have the ability to provide emergency liquidity assistance or to encourage recovery, the ECU could grant overdraft facilities through credit balances at the ECU (Piffaretti 2009). Double-entry bookkeeping would be carried out through each country's central bank's account at the ECU, allowing a clearance of balances without money leaving the system. Greece could have much more easily received regional institutional help without the political cost and time spent in EMU deliberations over assistance. In addition, Greece would have been unable to borrow so much money at low rates during the 2000s as it did, because under an ECU it would have maintained its own currency and thus the bond markets would have more correctly evaluated Greek default risk. Moreover, because the ECU is a closed system, any borrowing would not have been able to finance the internal spending that extensively damaged Greece when the global financial crisis hit (see section five).

The ECB would become the ECU's Governing Board (ECU-GB), with membership based on current ECB procedures or a format based on Keynes' original formulation – each Eurozone member could have one representative, with voting power based on trade quota percentages, tweaked by political concessions. The ECU-GB would be tasked with overseeing the system and ensuring that no country built up too much of a surplus or deficit. In those cases, as explained previously, the ECU-GB could take legal action against the country based on Keynes' detailed rules to limit imbalances and facilitate adjustment. Every member would have a maximum allowable debit, determined by a quota based on its volume of trade. Countries could carry debits up to a certain amount, giving them time to stabilize their international position.

Specific rules regarding these issues could be decided before the implementation of the ECU; using Keynes' formulation as a basis, any country with a surplus or deficit more than one-quarter of its quota must pay the ECU 1% per year on the average excess or debit balance and a further 1% if that amount exceeds one-half of its quota. Thus, both Germany and Greece would have been penalized for large account imbalances and encouraged, with the help of the ECU-GB, to redress these imbalances through internal and external measures. In the case of a debtor country, the Governing Board would consult with the country and could force devaluation or require the exchange of liquid reserves. If a country's deficit exceeds three-quarters, it could be

declared in default, denied further loans, or forced to leave the ECU. Therefore, in the case of an ECU country with persistent deficits and profligate borrowing or spending behavior such as Greece, the ECU-GB would have the legal authority to devalue the currency or expel the country from the ECU. Alternatively, any country would be able to leave of its own free will, as long as it had paid off its deficits and given appropriate advance notice. And, it would be able to leave without causing a Eurozone-wide shock, like the estimated €1 trillion and resulting insolvency of the ECB in the case of a 'Grexit' (Davis and Christie 2012).

As Keynes recognized, states in the international financial system with low domestic growth that export excessively (i.e., Germany, China) are basically forcing other countries to have complementary unbalanced imports and domestic overconsumption. This is what happened in Europe: with the German euro in particular undervalued, Germany built up a large current account surplus through exports, meaning that others had to run deficits to even out the imbalance. From 1995 to 2008, Germany was the second largest capital exporter in the world, after China (Corno 2011). Germany had a current account deficit of -1.7% in 2000 and a surplus of over 7% over the following decade; at the same time, these surpluses were balanced by deficits in other countries, such as Spain, Greece, and Italy (Paus and Troost 2011). By December 2009, German banks had lent \$704 billion to Greece, Ireland, Italy, Portugal, and Spain; this was more than the German banks' aggregate capital. The Eurozone bailouts also bailed out Germany's banks and taxpayers (*Bloomberg* 2012). Germany has essentially followed a beggar-thy-neighbor policy, with a major role in creating "imbalance in the Euro area, the present euro crisis and the threat of deflationary stagnation" around Europe (Hein and Truger 2010; 2011). Under the ECU, these situations would be penalized and Eurozone trade would be brought into better balance, leading to increased economic stability.

In Keynes' ICU, the burden of adjustment is not solely on the already-weakened debtor country, as is the case in the current international financial system and generally in the EMU, as well. As Keynes wrote, "Excessive credit balances necessarily create excessive debit balances for some other party. In recognizing that the creditor as well as the debtor may be responsible for a want of balance, the proposed institution would be breaking new ground" (Keynes [1943] 1981, 20). In an ECU, a Greece with significant trade imbalances would have needed to undertake domestic measures likely in the mid-2000s in order to balance its ECU account, restructuring its economy to become more sustainable and balanced. At the same time, Germany would also have needed to introduce long-term structural changes that would reduce its current account surplus, moving away from an excessive focus on exports in addition to expanding domestic demand, such as by increasing wages and social security in the service sector while deemphasizing the industrial sector (Paus and Troost 2011). Under the EMU, Greece alone has had to undergo extensive rebalancing measures.

Furthermore, the system of relatively fixed exchange rates between the euro, held only by the ECU and national banks, and domestic currencies would lead to better-stabilized foreign exchange markets. Exchange rates would generally only be changed to reflect permanent increases in efficiency wages, which would offset domestic inflation. In this context, nations such as Germany would be prevented from

implementing beggar-thy-neighbor policies because the exchange rate between the Deutschmark and the euro would have been adjusted due to the increase in German efficiency wages, an increase that in the EMU was not translated into actual wage or price increases over the past decade. Also, exchange rate variability would not have resulted in a loss of competitiveness because of an overvalued currency for Greece as has occurred under the EMU. In an ECU the drachma could be devalued in relation to the euro to reflect the declining competitiveness seen over the course of the 2000s (Davidson 2002).

When countries in the Eurozone trade with each other, they would do so based on euro balances in their ECU bank accounts – therefore, retaining important advantages of the euro for the currency union, in that transparency is increased and costs of business are decreased. As the ECU would still be a regional institution with a special currency, a sense of European identity would also be promoted. Furthermore, when trading with Eurozone nations, non-European countries could set up accounts at the ECU, exchanging their currencies for euros to be used in trade with the ECU.

If the Eurozone had implemented an ECU instead of the EMU, the results would likely have been quite different. Each country would have retained its national currency, along with fiscal and monetary control. If Greece's economy had heated up, the nation's leaders would be able to devalue the currency, decrease interest rates, or impose capital controls. Likewise, if Greece had an excessive deficit or if Germany had an excessive surplus in their respective ECU accounts, the ECU-GB could institute fines and procedures against these countries to reduce these imbalances. In the Greek case, the country could choose to leave the ECU without any unplanned exit procedures or ECU-wide pain, as opposed to the complexity of any potential 'Grexit' in the current Eurozone framework. Other countries wishing to trade with the ECU, such as America or China, could easily set up an account, exchange their domestic currencies into euros, and continue trading as they do now. The possibilities for trade between the ECU and non-ECU countries remain just as likely as they are now; only the specific mechanisms are slightly different.

The advantages of an European Clearing Union are many. Many current economic and political benefits of the EMU are retained in this system:

- Transparency and stability for businesses;
- Binding Germany to an economic union;
- Promotion of trade through a single currency;
- Exchange rate stability;
- Increases in social progress via income from the fees charged to those countries which exceed their deficit and surplus quota limits, as well as interest from the loans made to those with deficit accounts;
- Moderate loans that could be made at lower-than-market rates to member countries who wish to modernize or build up industrial capacity, and because the ECU-GB would be closely monitoring deficit amounts, the loans would have the desired multiplier effect without the attendant moral hazard of a Greek-style spending spree; and
- A currency that can improve European status and sense of unity while challenging the US dollar.

At the same time, many deficiencies of the EMU, primarily the lack of fiscal or political union, are avoided due to nations maintaining their fiscal and monetary control. Thus, there are added benefits to an ECU as well: at the very least,

- Discouragement of exorbitant surpluses or deficits which imbalance the union;
- National control over fiscal and monetary policy and thus no need for a supranational fiscal union or Eurobonds (both of which are politically sensitive);
- Built-in procedures for expulsion or peaceful exit from the union; and
- Through a rejection of monetarism, potentially increased employment and higher growth rates throughout the ECU.

Therefore, an ICU-type system has distinct advantages over the EMU as it exists today. It could also be seen as a way to more slowly ease into a tight monetary union, which requires conditions approximating those of Mundell's optimum currency union. If a regional ICU was able to achieve more convergence in terms of rarity of asymmetric shocks, a single monetary policy affecting all in similar ways, a system of stabilizing transfers, and reduced cultural, legal, and linguistic barriers to labor mobility, the ICU could transition into a stronger and more stable monetary union. Regions that are considering further financial union in the future, such as South America or Northeast Asia, would do well to carefully consider the ICU as a significant improvement over the current EMU experiment and a way to enjoy many benefits of a monetary union without a giving up a large part of their sovereignty.

VII. Conclusion

In developing the concept of a European Clearing Union, this paper has explained the mechanisms of Keynes' International Clearing Union, the evolution of the euro and EU, and the basics of the current Greek predicament. In particular, the paper has argued for the idea of a Keynesian ICU as a format for regional currency integration. When juxtaposed with the current complicated Eurozone situation, it would appear the Keynes' framework could have been significantly more successful than the EMU's monetarist foundations. And as is important in the European project, Keynes' union would have furthered not just economic goals, which have often been secondary in Europe, but also political goals, the primary rationale for many EEC and EU integration moves. While it is likely too late for the Eurozone to take advantage of the ICU format, other regional organizations considering further monetary union would be well advised to investigate the matter more thoroughly, as the ICU provides the advantages of international monetary unification while maintaining domestic fiscal and monetary control. As such, further research should be undertaken to construct detailed proposals for specific regional ICUs, along with analyses of areas that could likely benefit, and projections of how much, from such an institution.

The EU was "built by a process of piecemeal social engineering," and the EMU was no different – it is a "patently flawed construct, which its architects knew at the time of its creation. They expected its defects to be corrected, if and when they became acute, by the same process that brought the European Union into

existence,” in which politicians set deadlines for limited objectives and gathered political support for a small step forward, knowing that when this step was accomplished its inadequacy would require further integrative movement (Soros 2010). Although this process has may have had a number of positive outcomes, the Eurozone crisis is certainly not among them. In what Krugman (2010) terms “hubris” and the “arrogance of elites,” the EMU was an economically flawed construction from the beginning. And, while the global financial crisis of 2007-8 was certainly a catalyst, under the EMU Greece had become “a disaster waiting to happen” (Katsimi and Moutos 2010).

The 1997 Asian currency crisis should have served as a warning: by the time the EMU’s crisis struck, the euro had built up current account imbalances approximately twice as large and for twice as long as the Asian countries afflicted a decade earlier (Marsh 2009). The Eurozone has two basic choices – significant further fiscal and political integration, or general disintegration. The former is politically and publically unpopular, but much of the integration agenda has been over the past 60 years. The latter would be “tantamount to declaring the entire European integration project a failure,” which is even more unlikely, given the time, effort, and significant sunk costs already invested (Eichengreen 2010b) – not to mention the multiple and complex negative economic consequences that the collapse of the euro would unleash on both the Eurozone and global financial markets. Eichengreen writes that it can only be hoped “the Greek crisis could be the Trojan horse that leads Europe toward deeper political integration” (Eichengreen 2010c). While an ICU could likely have avoided the euro crisis, given the current alternatives, further political integration seems to be the best solution.

Bibliography

- Alderman, Liz. "On the Brink in Italy." *The New York Times*, March 11, 2013.
- . "Troubled Greek Economy Is Being Left to Fend for Itself." *The New York Times*, June 15, 2012.
- Alessandrini, Pietro and Michele Fratianni. "Resurrecting Keynes to Stabilize the International Monetary System." *Open Economies Review* 20 (2009): 339-58.
- Arestis, Philip and Malcolm Sawyer. "Unemployment and the Independent European System of Central Banks: Prospects and Some Alternative Arrangements." *American Journal of Economics and Sociology* 56, no. 3 (1997): 353-67.
- . "Will the Euro Bring Economic Crisis to Europe?" 2001.
- Arestis, Philip, Kevin McCauley, and Malcolm Sawyer. "Commentary: An Alternative Stability Pact for the European Union." *Cambridge Journal of Economics* 25 (2001): 113-30.
- Barber, Tony. "Brussels Blog: EU Possesses the Legal Power to Rescue Greece If Necessary." *Financial Times*, January 26, 2010.
- Bayoumi, Tamim and Barry Eichengreen. "One Money or Many? Analyzing the Prospects for Monetary Unification in Various Parts of the World." In *Princeton Studies in International Finance*, edited by Peter B. Kenen. Princeton: Princeton Department of Economics, 1994.
- Becatoros, Elena. "Greece Outlines New Austerity as Debt Load Rises." *Ekathimerini*, November 1, 2012.
- Boll, Sven, Christian Reiermann, Michael Sauga, and Klaus Wiegrefe. "Operation Self-Deceit: New Documents Shine Light on Euro Birth Defects." *Spiegel*, May 8, 2012.
- Buiter, Willem H and Ebrahim Rahbari. "Greece and the Fiscal Crisis in the EMU." Citigroup, 2010.
- Cohen, Benjamin J. "Enlargement and the International Role of the Euro." *Review of International Political Economy* 14, no. 4 (2007): 746-73.
- Corno, Cristiana. "EFSF vs. ESM: The "Quantum Leap" in the Euro Area Debt Crisis Management?" In *The Debt Crisis: Different Rules for a Different World*. New York, 2011.
- Correa, Romar. "For an International Clearing Union." *Journal of Economic Studies* 39, no. 4 (2012): 398-409.
- Davidson, Paul. *Financial Markets, Money and the Real World*. Cheltenham: Edward Elgar, 2002.
- . *International Money and the Real World*. 2nd ed. New York: St Martin's Press, 1992.
- Davis, Andrew and Rebecca Christie. "Dallar Says Greek Euro Exit May Exceed 1 Trillion Euros." *Bloomberg*, May 26, 2012.
- Dillard, Dudley. *The Economics of John Maynard Keynes*. Englewood Cliffs: Prentice-Hall, 1948.
- Dinopoulos, Elias and Jordanis Petsas. "Greece and the Euro." *7th International Conference of the Economic Society of Thessaloniki*. Greece, 2000.
- Eichengreen, Barry. "Costs and Benefits of European Monetary Union." *French Ministry of Economy and Finance Conference on Stage 2 of the Delors Plan*. Paris, 1990.
- . "EMU: An Outsider's Perspective." *Finlay-O'Brien Lecture*, University College, Dublin, 1996.
- . "The Euro: Love It or Leave It?" *VOX.eu*, November 17, 2007.
- . "Europe's Historic Gamble." *Project Syndicate*, May 15, 2010b.
- . "Europe's Trojan Horse." *Project Syndicate*, February 15, 2010c.
- . *Globalizing Capital: A History of the International Monetary System*. Princeton: Princeton University Press, 2008.
- . "Imbalances in the Euro Area." 2010a
- . "International Monetary Arrangements: Is There a Monetary Union in Asia's Future?" *The Brookings Review* 15, no. 2 (1997): 33-35.

- . "International Monetary Options for the Twenty-First Century." *Annals of the American Academy of Political and Social Science* 571 (2002): 11-25.
- "EMU: A Bank Is Born." *The Economist*, April 9, 1998a.
- "EMU: A Primer in Economics." *The Economist*, April 9, 1998b.
- "The Euro Crisis - Greece, the Skids." *The Economist*, November 19, 2012a.
- "Europe's Banking Union: A Measly Triumph." *The Economist*, December 13, 2012c.
- "European Economy: The Second Economic Adjustment Programme for Greece, First Review." European Commission, December 2012.
- Eurostat. "Europe in Figures: Eurostat Yearbook 2011." edited by Walter Radermacher: European Union, 2011.
- "Eurozone Crisis Explained: Causes." *BBC*, June 19, 2012b.
- "Eurozone Crisis Explained: Greece." *BBC*, November 27, 2012e.
- "Eurozone Crisis Explained: Spain Q&A." *BBC*, September 28, 2012c.
- Featherstone, Kevin. "A Greek Sovereign Debt Crisis and the EMU: A Failing State in a Skewed Regime." *Journal of Common Market Studies* 49, no. 2 (2011): 193-217.
- Feldstein, Martin. "The Euro Risk." *TIME Magazine*, January 15, 1999.
- . "Europe Can't Handle the Euro." *The Wall Street Journal*, February 8, 2000.
- . "Let Greece Take a Holiday from the Eurozone." *The Financial Times*, February 16, 2010.
- . "Reflections on Americans' Views of the Euro Ex Ante." 2009.
- Ferguson, Niall. "The End of the Euro: How the Crisis in Greece Could Lead to the Demise of Europe's Most Ambitious Project." *The Daily Beast*, May 6, 2010.
- Fontevicchia, Agustino. "Spain, Italy, and Even Greece Sell Bonds, but Europe's Crisis Is Far from Over." *Forbes*, January 10, 2013.
- Frieden, Jeffrey. "The Euro: Who Wins? Who Loses?" *Foreign Policy* 112 (1998): 24-40.
- Garside, Juliette. "Business Blog - Eurozone Crisis Live: Obama Warns Europe Headed for Downwards Spiral." *The Guardian*, June 8, 2012.
- Glick, Reuven. "European Monetary Union: Costs and Benefits." Edited by Judith Goth: Federal Reserve Bank of San Francisco, 1991.
- Gnos, Claud, et al. "Regional Currencies and Regional Monetary Zones in Latin America: What Prospects?" *Journal of Post Keynesian Economics* 32, no. 2 (2009): 173-84.
- Gnos, Claude and Louis-Philippe Rochon. "Reforming the International Financial and Monetary System: From Keynes to Davidson and Stiglitz." *Journal of Post Keynesian Economics* 26, no. 4 (2004): 613-30.
- "A Greek Bailout, and Soon?" *The Economist*, January 28, 2010.
- "Greek Debt Rally May Fade as Exit Fears Linger." *Reuters/CNBC*, January 29, 2013.
- "Greeks in Fresh General Strike against Austerity." *BBC*, February 20, 2013.
- Grubel, Herbert G. "Introduction: Plans and Issues." In *World Monetary Reform: Plans and Issues*, edited by Herbert G Grubel. Stanford: Stanford University, 1963.
- Harris, Seymour E (ed). *The New Economics: Keynes' Influence on Theory and Public Policy*. London: Dennis Dobson, 1960.
- Hau, Hans-Werner Sinn and Harald. "Eurozone Banking Union Is Deeply Flawed." *Financial Times*, January 28, 2013.
- Havranek, Tomas. "Rose Effect and the Euro: Is the Magic Gone?" *Review of World Economics* 146, no. 2 (2010): 241-61.

- Hein, Eckhard and Achim Truger. "Finance-Dominated Capitalism in Crisis - the Case for a Keynesian New Deal at the European and the Global Level." *7th International Conference, Developments in Economic Theory and Policy*. Bilbao, 2010.
- Hewitt, Gavin. "Eurozone Crisis: Troubling Year Ahead." *BBC*, December 10, 2012.
- . "Stalemate in 'Ungovernable' Italy after Elections." *BBC*, February 26, 2013.
- "Hey, Germany: You Got a Bailout, Too." *Bloomberg*, May 23, 2012.
- Hochreiter, Eduard and George S. Tavlas. "Two Roads to the Euro: The Monetary Experiences of Austria and Greece." In *Euro Adoption in the Accession Countries - Opportunities and Challenges*, 1-26: IMF, 2004.
- Issing, Otmar. *The Birth of the Euro*. Translated by Nigel Hulbert. Cambridge: Cambridge University Press, 2008.
- "The Italian Election - Who Can Save Italy?". *The Economist*, February 16, 2013.
- Iwamoto, Takekazu. "Keynes Plan for an International Clearing Union Reconsidered." Kyoto University, 1997.
- Jones, Erik. "The Euro and the Financial Crisis." *Survival: Global Politics and Strategy* 51, no. 2 (2009): 41-54.
- Jones, Gareth. "One in Four Germans Would Back Anti-Euro Party." *Reuters*, March 11, 2013.
- Jonung, Lars and Eoin Drea. "It Can't Happen, It's a Bad Idea, It Won't Last: Us Economists on the EMU and the Euro, 1989-2002." *Econ Journal Watch* 7, no. 1 (2010): 4-52.
- Katsimi, Margarita and Thomas Moutos. "EMU and the Greek Crisis: The Political-Economy Perspective." *European Journal of Political Economy* 26 (2010): 568-76.
- Keynes, John Maynard. "International Clearing Union." Paper presented at the House of Lords, London, England, May 18, 1943.
- . "Proposals for an International Clearing Union." In *The International Monetary Fund 1945-1965*. Washington, DC: IMF, 1981 [1943].
- . "Proposals for an International Clearing Union." In *The New Economics: Keynes' Influence on Theory and Public Policy*, edited by Seymour E Harris. London: Dennis Dobson, 1943.
- . "Proposals for an International Currency (or Clearing) Union." In *The International Monetary Fund 1945-1965*, edited by J. Keith Horsefield. Washington, DC: IMF, 1981 [1942].
- Kouretas, Georgios P. and Prodromos Vlamis. "The Greek Crisis: Causes and Implications." *Panaeconomicus* 4 (2010): 391-404.
- Lane, Philip R. "The Real Effects of EMU." 2005.
- Markwell, Donald. *John Maynard Keynes and International Relations: Economic Paths to War and Peace*. Oxford: Oxford University, 2006.
- Marsh, David. *The Euro: The Battle for the New Global Currency*. New Haven: Yale University Press, 2009.
- Marsh, Sarah. "Nearly Half of Germans Want Greece to Leave Euro: Poll." *Reuters*, June 5, 2012.
- Micco Alejandro, Ernesto Stein, and Guillermo Ordonez. "The Currency Union Effect on Trade: Early Evidence from EMU." *Economic Policy* 18, no. 37 (2003): 315-56.
- Mills, John. *Europe's Economic Dilemma*. Houndmills: MacMillan Press, 1998.
- Monbiot, George. "Clearing up This Mess." *The Guardian*, November 18, 2008.
- Mundell, Robert. "A Theory of Optimum Currency Areas." *American Economic Review* 51, no. 4 (1961): 657-65.
- Norris, Floyd. "In the Developed World, Growth Contracts." *The New York Times*, February 22, 2013.

- O'Donnell, John and Eva Kuehnen. "Cracks Appear in European Banking Union Scheme." *Reuters*, February 8, 2013.
- OECD. "Oecd Economic Outlook No. 91." OECD Economic Outlook: Statistics and Projections (database), 2012.
- Paus, Lisa and Axel Troost. "A European Clearing Union - the Monetary Union 2.0." Finance Committee, German Parliament, 2011.
- "Q&A: Are Concerns About the French Economy Overblown?" *BBC*, November 26, 2012d.
- "Q&A: The Eurozone's Banking Union." *BBC*, December 13, 2012f.
- Rachman, Gideon. "Greece Threatens More Than the Euro." *Financial Times*, February 22, 2010.
- "Report on Greek Government Deficit and Debt Statistics." edited by European Commission. Brussels: European Commission, 2010.
- Robinson, Joan. "The International Currency Proposals." In *The New Economics: Keynes' Influence on Theory and Public Policy*, edited by Seymour E Harris. London: Dennis Dobson, 1943.
- Rose, Andrew. "One Money, One Market: Estimating the Effect of Common Currencies on Trade." NBER Working Paper 7432, 1999.
- Rossi, Sergio. "Monetary Integration Strategies and Perspectives of New EU Countries." *International Review of Applied Economics* 18, no. 4 (2004): 443-69.
- Rossi, Vanessa and Rodrigo Delgado Aguilera. "No Painless Solution to Greece's Debt Crisis." Chatham House, 2010.
- "S.&P. Ratchets up Greece's Credit Rating." *The New York Times*, December 18, 2012.
- Sharpe, Mike. "What Keynes Knew." *Challenge* 52, no. 2 (2009): 124-31.
- Soros, George. "The Crisis & the Euro." *The New York Review of Books*, July 8, 2010.
- . "The Euro Will Face Bigger Tests Than Greece." *Financial Times*, February 22, 2010.
- "Sorry, but Europe's Economic Crisis Is Not Over." *Bloomberg*, February 26, 2013.
- Spiro, Nicholas. "Is the Eurozone Crisis Almost Over?" *CNN*, December 10, 2012.
- Thirlwall, AP. *Keynes and International Monetary Relations*. London: Macmillan, 1976.
- Triffin, Robert. "Gold and the Dollar Crisis." In *World Monetary Reform: Plans and Issues*, edited by Herbert G. Grubel. Stanford: Stanford University, 1963.
- . *Gold and the Dollar Crisis: The Future of Convertibility*. New Haven: Yale University, 1960.
- "Uk Crashes out of the ERM." *BBC*, September 16, 1992.
- "Update of the Hellenic Stability and Growth Programme." edited by Ministry of Finance. Athens, January 2010.
- Vanthoor, Wim FV. *European Monetary Union since 1848: A Political and Historical Analysis*. Chenttenham: Edward Elgar, 1996.
- "What Could Happen Next If Greece Leaves the Eurozone?" *BBC*, June 18, 2012a.
- "The World in Figures: Countries - Spain." *The Economist*, November 21, 2012b.
- Wyplosz, Charles. "EMU: Why and How It Might Happen." *Journal of Economic Perspectives* 11, no. 1 (1997): 3-21.
- Zaharia, Marius and Ana Nicolaci da Costa. "Euro Govt-Italian Debt Underperforms after Fitch Downgrade." *Reuters*, March 11, 2013.