"INTEGRATION VS. DISINTEGRATION: DILEMMA FOR THE EUROPEAN UNION," a paper first presented at the 19th Annual NISPAcee Conference, General Session, May 19-22, 2011, Varna, Bulgaria, by Donald E. Fuller, Ph.D., Anglo-American University, Prague, Czech Republic

INTRODUCTION.

The paper addresses the question whether or not the 2007-2011 financial recession is likely to lead to the demise of the European Union's euro zone.. While there are internal and external factors affecting the resolution of the research question, the paper concludes that its resolution will be positive, i.e., there will not be a collapse of the euro zone, but that further intervention in member countries' financial matters will occur as the price for avoiding a complete collapse.

The paper eschews discussing the likelihood of a United States of Europe, a bogeyman that seems absurd to most integration authors. Few would argue that over 200 years of United States of American history augur well for European history. Accordingly, the U.S. resolution of recessionary matters need not present itself as a European model. That does not exclude reference to such deliberations since U.S. subprime mortgages, consolidated debt obligations and credit default swaps lit the fire for financial calamities not only at home but rather deeply into European financial institutions.

We are concentrating on the European experience that, while portions of European debt can be traced to U.S. mortgages, the commanding heights of European debt seem inured in private and public debt, particularly sovereign funds. Naturally there were improvident loans being transacted, yet we focus more on the borrowing appetites of sovereign members of the EU, particularly in the bond markets.

Zielonka has described the integrative symptoms of the EU as more neo-Medieval than neo-Westphalian.[1] This activates the cauldron of feelings toward a "democratic deficit" as well as a fear that EU members are not all similar. That activates the anti-immigration argument that cannot be thoroughly discussed here, nor Nationalism argument that permeates not only immigration but derogatory premises of the old vs. the new EU membership and/or the Mediterranean vs. central and northern Europe dissimilarities. These are factors but they do not dictate our theoretical construct.

THEORY.

One may look at our construct as a paradigm with four components: internal/external, and institutional vs. the European polity. We seek to explain the outcome, notwithstanding Zielonka's contrasting governing models. We do discuss idealism vs. realism, though by

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[1] Zielonka, J. (2006), *Europe as Empire:The Nature of the Enlarged European Union,* Oxford, UK: Oxford University Press.

symbiosis, we narrow the analysis toward real-politik[2]. We do not believe that we can show that integration based on idealism can explain the evidence of both the EU and its members. In fact, it appears, the members are speaking for the EU rather than the converse. It is the tail wagging the dog. The democratic deficit seems to be yielding to France and Germany and everyone else is seeking the best deal it can manage. The bottom line says, the players do not want to give up either the euro or the EU.

INTERNAL.

We have 27 members of the EU; 17 of which are in the euro zone. Thus, we already have an unbalanced membership at the euro decision table. While we cannot discuss the recent importance of the G-20, it is obvious that with the inclusion of Brazil, Russia and China, the internal financial matters in the EU are not similar to those of North Dakota to the U.S. Federal Government. France and Germany are not only powers within the EU financial infrastructure but their economies are partially globalized. The UK has a similar relationship as does the Netherlands and several other EU members such as Italy, Belgium and Austria. This can be verified by observing the trade statistics for imports/exports.

Politically, leaders among the EU membership must face state elections. By and large, these matters will not be settled by EU questions. Yet populism at the state level can surface in the EU. Angela Merkel and Germany contribute the largest revenue to the EU (France second). She will not contemplate bailing out another EU member financially without endangering her electoral prospects as she views it. Germany is not Slovakia (that declined to contribute to the "bailout" fund). Germany speaks as one of the two strongest EU members. That voice will be considered. Therefore, the EU is actively considering a principle that it may monitor the budgetary and financial activities of a member state and "recommend" adjustments as seem prudent. The members may see this as a democratic deficit being proposed by one of their own members. It is. But the paymaster is speaking.

EXTERNAL.

States are still trying to accede to the EU. Turkey may sound betrayed but it has not lost sight. Iceland, that recently instituted a financial haircut, also wants in. Albania is being told to solve its political war of words between government and opposing politicians or it will be EU-sidetracked. Croatia is biding its time and seems to have created stability and democracy, a rare phenomenon in today's world. Serbia, Montenegro and Macedonia may also be on hold. Georgia, Azerbaijan and Armenia constitute another aspiring threesome. Thus, the EU seems confident that it has what people want (more accurately

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[2] See Schimmelfennig, F. and Sedelmeier, U. (2004), "Governance by Condionality: EU Rule Transfer to the Candidate Countries of Centsral and Eastern Europe," *Journal of European Public Policy,* 11: 4 August: 661-679, Routledge, Taylor and Francis Group, accessed on April 3, 2011, at http://www.tandf.co.uk/journals, stressing *conditions.* For a different view, see March, J.G. and Olsen, J.P. (1998), International Organization, 52,4, Autumn, pp. 943-969, I.O. Foundation and the Massachusetts Institute of Technology, stressing *logic of appropriateness* and *logic of consequences.*

what governments want). It can, therefore, create accession *conditions* toward democracy and a market economy that could, under the right circumstances, improve external relations with those particular countries even without EU membership.

ISSUES.

Financial Policy. Much of the world is mired in recession. Secondly, the EU has substantial debt problems. EU economies particularly weak at the nexus of these two phenomena include Greece, Ireland, Portugal, Spain, and, to a lesser extent, Italy. Recession has reduced demand. Loss of demand reduces the economic size of economies. Such reduction impedes generation of tax revenue; without sufficient tax revenue, the aforementioned countries borrowed in private markets in order to sustain social safety nets; depriving governments of sufficient funding for social safety nets causes governments to issue sovereign bonds and treasury bills. In order to borrow in this fashion, bond vigilantes raise the yield (interest) that governments must pay. Bonds are discounted. Thus, a $100 bond can be obtained for paying $90. This would translate into a yield of ten percent, a very high yield. Bonds can be issued for one, three, ten years and longer. The standard benchmark for the Euro zone is the German *bund,* a ten year bond that has yielded 2 ½ to 3 percent. A Greek bond of 6,7,8,9, or ten percent thus far exceeds the European average. Since, by itself, Greece would be unable to ever (or almost never) pay off such a bond; even with an enormous growth rate of 4 percent, (the German growth has only recently reached four percent), the Greeks would require a bailout to sustain discretionary and nondiscretionary budget spending.[3].

While most members of the Euro Zone have exceeded the Maastricht limits (3% for annual budget deficits and 6% for accumulated budget debts), no member has been penalized financially for such subversion of the Treaty. That is because both France and Germany would be included in the penalty. The European Commission has demurred from imposing a financial penalty on its primary sources of EU revenue. Having now bailed out Greece from extraordinary debt repayments, the EU, at the urging of Germany and France, has established a forthcoming Debt Repayment Facility. This entity would, assumedly, join forces with the International Monetary Fund (IMF) to bail out additional members seemingly likely to go into default. A default by Spain, for example, would exhaust the liquidity of the European central Bank, and require additional funds both from the IMF and the EU member states. The Debt Facility would be comprised of such member contributions. Not only Slovakia has refused to contribute but Germany has agreed only on contingency of an EU program of managed finances among its membership.

[3] **Non-discretionary** funding is that required by law or legal agreement. A government must pay, for example, a social safety net (they are statutory, and it must pay off its sovereign debts over agreed upon time periods or lose their debt ratings established by such actors as Moody's and Standard and Poors. **Discretionary** funding includes programs that may be funded out of remaining monies. Unfortunately, most governments have seen their non-discretionary funding grow over time rather consistently. Defense spending is normally (unless at war) discretionary. Even then, a country such as the U.S. cannot reduce its defense budget and fight wars or peacekeeping missions in Iraq and Afghanistan without a certain minimal budget. Fortunately, China's appetite for U.S. bonds has relieved the U.S. defense budget. Yet, it must pay off the bonds purchased by China.

Moral Hazard. The EU faces a decision of **whether *actually* to bail out its members in the future**. A bailout would seem to fuel the appetite of moral hazard.[4] Politically, Germany has seized such an opportunity to introduce *conditions* on euro zone members: that is, accept the principle of EU monitoring of member budgets and financial policies. Further, there are proposals to harmonize such financial aspects as taxes, even construction of social safety nets. *Smaller* member states have protested that such harmonization would deprive them of financial competitive advantage in competing with other states, both EU members and outsiders. *Larger* EU economies have objected to the principle of *race to the bottom*[5] and are now interjecting the argument that low tax rates simply forego a member's responsibility for sustaining an unwieldy social safety net leading to excessive borrowing, leading toward tapping the Debt Facility presumably designed to avoid recessions and temporary shocks such as now occurring in oil markets and food markets.

INSTITUTIONALISM VS. THE POLITY.

EU reforms have concentrated on either changing laws at the EU level, and requiring companion laws at the member state level, or engaging institutions via negotiation and/or persuasion. To an extent, this conforms with utilizing *soft* and *hard* power.[6] The European Court of Justice resolves disputes, largely commercial in content; The European Central Bank sets interest rates to stabilize inflation/deflation in the euro zone; The Council of Europe adjudicates human rights cases in Strasbourg, and various EU administrative agencies attempt to resolve competition, transport and communication matters within the EU. An entire multitude of non-governmental organizations attempts to seek resolution of such trans-border difficulties such as human trafficking, immigration, relief and refugee questions.

The framework within which EU reforms exist centers upon the divergence of policy prescriptions within EU member states vs. those of a trans-national nature. While the resolution of internal questions might have occurred earlier (before the Lisbon Treaty) within national boundaries, the elimination of EU pillars has made more difficult member attacks on the *democratic deficit.* A recent decision by the EU to revise insurance rates to be gender uniform has confounded the European insurance industry. Computation of risk rates has long been justified by insurance analysts as based upon statistical probability (actuarial). Female drivers, for example, have fewer road accidents than men. Rates have reflected this. In health matters, risk increases with age and in certain risky

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[4] Akerlof, G.A. and Shiller, R.J. (2009), *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism,* Princeton and Oxford: Princeton University Press, ISBN; 978-0-691-14233-3. **Moral hazard** surrounds actions that seem morally incorrect that are pursued either believing that they are, at least legal, or that it will be impossible to enforce a punishment. Exceeding the deficit/debt limits of Maastricht is an example. A likely forthcoming Debt Facility would seemingly encourage actors to pursue dangerous financial risk knowing that the Facility would bail them out.

[5] Keeping low labor wages as well as low national tax rates to encourage foreign direct investment.

[6] See Nye, J. (1991), *Bound to Lead: The Changing Nature of American Power,* Basic Books, ISBN: 9780465007448.

professions. Yet the EU argues that individuals should not be penalized for belonging to a class of persons that, *on average,* suggest higher premiums. The Americans, for example, may make it impossible to deny health insurance to an individual having a prior condition (not necessarily debilitating). The EU seems to agree. EU members may well see such trends as *europeanizing* conditions within member states. Such Europeanization is seen as another method for *assimilating* best practices, pragmatic perhaps, but extensions of attempting to *level* values and differences among member states.

PRINCIPAL/AGENT.

Principal/agent can be seen as the dog wags the tail or vice versa. For years, the EU seems to have worked toward Europeanization. In fact, it has had its effect: changes at the margin have been influential. Yet, in central questions such as the Maastricht deficit/debt requirements, the member states have won out. None has been penalized. During the 2007-2011 recession, however, exacerbated by the Greek default and heavily indebted Ireland, Spain, Portugal, and conceivably Italy, the members are gritting their teeth. It is not an ideological argument nor an appeal to idealism nor to carrying out the vision of Jean Monet. It is practical politics: unless the IMF wants to bail out every failing state in the EU, the EU must fabricate a solution. The markings of this are no longer inchoate. There is a range within which a group of countries embracing France, Germany, Netherlands, Belgium, Luxembourg, and possibly Italy, have insisted that the "southern" or "Mediterranean" countries, let alone the EU 12 (most of the latter have repaired or moderated their financial liabilities), must reform or exit the euro zone or undergo substantial monitoring of their financial policies and indicators of financial success or failure.

Though the EU in prior years remonstrated by barking at the heels of member states' indiscretions (Greece winning the negative prize), it is clear that a "revolution" among the "northern" agents of the EU is occurring.

Despite the internal revolt among the key paymasters (led by Germany with France largely following along) one cannot forget the involvement of several of the "northern tier" in obtaining debt not only in Greece (see statistics) but over extending their debt obligations. The German *landesbanks* continue to complicate German financial stability and are likely to undergo reform. Thus, one can talk about democratic deficits, immigration problems, problems of security and differences among "old vs. new members" as well as geographic tags: Mediterranean, east vs. west and profligate vs. due diligence. The nexus of recession and debt spilling over borders has highlighted a structural problem that **politically** can no longer be avoided. The **members** (certain members) are asking for financial discipline as a *condition* of a unified currency or restructuring of the EU membership. Yet no one is asking for the demise of the EU or the euro zone in some form. This is a reverse of the prior democratic deficit and a phenomenon of **agent sponsored action**.

TWO SPEED EUROPEAN UNION.

A critical question is whether, at this state of the EU, the 27 members are sufficiently capable of pursuing a unified union or rather likely to diverge into two components: a *core* and *periphery*.[7] The split would ensue if two groups decided that the price to pay for membership exceeded the benefits in the short or even long run. One group might include the non-Euro members (including Norway that has signed the treaties but has not acceded to membership); the second group would consist of the 17 euro members. A more complicated split would be the northern tier vs. the "Mediterranean" component that centers upon Greece, Ireland, Spain and Portugal (and conceivably Italy) vs. those that consider their economic policies to be prudent. It is not clear where central and eastern Europe would fit. The Visegrad Four plus Romania and Bulgaria need to be considered; Estonia and Slovenia are euro members and need also to be considered. Of those probable new members, Croatia's accession would need to be decided.

The barriers to creating a split are primarily three: **political commitment; attitudes of the participating members; and economic robustness.**[8] In all likelihood, Greece will ultimately have to restructure its debt. Bondholders and other creditors would receive less than 100% of their investment. Such a restructuring could include components from the New Facility, perhaps the IMF, and Greek taxpayers. This is the equivalent of a financial haircut. Those on the periphery include Ireland, Spain, Portugal, and possibly Italy.

Among the euro-skeptics, the UK is likely to resolve its own debt, possibly with the help of the IMF; still other skeptics will wait until the ***conditions*** for continuing membership are set They will decide whether the benefits are worth the cost.

It is clear that a swing factor (potentially the crucial one) lies in the political fallout occurring among the core countries: particularly Germany and France. Here the ***realpolitik*** is rather clear. Germany and France will require conditions that persuade their national political constituencies that the EU will not extract further sacrifices from taxpayers not otherwise shared by the remaining members. Germany, for example, has passed a constitutional amendment that requires within three years that the German budget be in balance or be in deficit no greater than three percent. The key person is the German Chancellor who represents the largest paymaster to the EU. France is a close second. Thus, in forthcoming meetings with the EU 17 and the EU 27, Angela Merkel will need to have succeeded in obtaining an EU political condition that represents an improvement in the present responsibility for implementing the bailout feature. That is, the Competitiveness Pact will be the primary condition for monitoring, if not intruding, on the economic and budget affairs of those members who intend to remain in the Euro

[7] We classify the periphery as Greece, Ireland, Portugal and Spain; the core includes Germany, France, Luxembourg, Netherlands, and possibly Italy and Belgium; the remaining members are Austria, Cyprus, Estonia, Finland, Malta, Slovakia, Slovenia

[8] See Nechio, F. (2011), "Long –Run Impact of the Crisis in Europe: Reforms and Austerity Measures," *Federal Bank of San Francisco (FRBSF) Economic Letter,* Federal Reserve Bank of San Francisco, March 7, accessed on March12, 2011, at www.frbsf.org/publications/economics/letter/2011/el2011-07.html, and Wolf, M. (2011), "Why the Eurozone Will Survive," *Financial Times,* March 8, accessed on March 13, 2011, at http://www.ft.com/cms/s/5030759e-49bd-11e0-acf0-00144feab49a.html.

Zone as well as the EU. The resolution of this feature will determine **whether or not the EU becomes more closely integrated or more acutely, disintegrated.**

THE TEST.

We ground the theory in the hypothesis that integration or disintegration will occur if the key indicators of political commitment, attitudes of participating members, and economic robustness show **convergence** or **divergence**. Our postulate is that if the data show convergence of key indicators that these data will support closer integration. The method by which they converge would be negotiated by agreement with the membership and the EU. Should some of the members object to convergence, they may well exit the eurozone or even the EU. Our hypothesis is that most will remain, accepting conditions that will enforce convergence. We are **not** asserting a **path dependency** argument: that members have agreed to prior treaties and this is just one more treaty negotiation. We *are* asserting that despite possible Vaclav Klausian[9] euro skepticism, those that remain have calculated that the benefits exceed the costs.

EVIDENCE.

We seek evidence of political commitment, positive attitudes of participating members, and economic robustness among EU members. We display this comparison in Figure 1.

Figure1.

Foundation Variables	Evidence
Political commitment	**Single market, ease of euro**
Attitudes of participating members	**Yes, with conditions**
Economic robustness	**From heavy debt to reasonable growth**

Single market; ease of euro:

To a large extent, internal reactions to external forces are determined by economic matters, social change, shifting attitudes, national disasters, and finally, political activity. While corruption continues to exist and moral hazard[10] is ever present, the first decade of the 21st century has experienced a severe financial recession affecting many if not most parts of the world. Severity has been greatest in the west, while falling economic demand continues to affect economic transactions in Asia.

While EU structural funds have been agreeably received by EU members, as well as their agricultural sectors, the recession, having peaked in 2009, has caused havoc in a number of countries. Consequently, members of the euro zone have experienced contracting

[9] President of the Czech Republic.
[10] See fn 2.

economies (excepting Germany), falling GDP/capita, slowing or negative growth rates, significant unemployment, straining current account balances, falling trade, and excessive debt.

Focusing on the euro zone members (17) as of January, 2011, the effects are direct. The central phenomenon of EU anxiety has been a potential division of members according to debt imbalances. The division identifies the core (those in no or less trouble) and the periphery (those in substantial trouble). Moreover, the drop in world economic demand for commodities, products and services has stalled national production (referred to as real economies) forcing many countries, including China, to reassess the fragility of exporting rather than attending to domestic portions of their economies. Subsequently, national and transnational debates have centered upon fiscal consolidation (the tradeoff of revenue vs. fiscal expenditures) versus policy considerations pertaining to growth in the economies. Essentially this debate has revolved around austerity and free market economic theories; essentially stimulus vs. supply side economics or Keynesian vs. neo liberal economics. Accordingly, we review the economic indicators of euro zone members (Appendices A, B, C, D. Our data largely emanate from Eurostat and the Bank for International Settlements. The Federal Reserve of San Francisco is also utilized..

We first examine euro zone members to ascertain whether or not their economic indicators can be said to support the notion that the euro zone consisting of unified market and common currency has been advantageous.

Our **first finding** is related to Appendix A (**GDP Per Capita in Purchasing Power Standards [PPS])[11].** While Eurostat has not run its figures for later than 2009 (the peak of the recession) it does make some forecasts.. GDP/capita for the EU 27, is used as the base for the comparison (=100). The euro area has exceeded the EU 27 (all EU members) in every year since 1995. It has dropped to 109 during the recession, as expected. In fact, the **periphery**.(Greece, Ireland, Spain, Portugal) has compared to the EU 27 as follows:

(EU 27= 100)

Greece [12] 84- 92, with a provisional (estimated) level of 93-94 for 2004-2009

Ireland [13] 103-142, with a provisional 144 for 2005, and recorded levels of 145- 127, for 2005-2009

Portugal [14] 77-80 from 1995-2009

Spain [15] 92-103 from 1995-2009.

[11] *Eurostat* (2010b), GDP per capita in Purchasing Power Standards (PPS) (EU-27=100)
[12] Greece entered the euro zone in 2001.
[13] Ireland entered the euro zone in 1999.
[14] Portugal entered the euro zone in 1999
[15] Spain entered the euro zone in 1999.

Thus, Portugal increased its GDP/capita (though under the EU 27average); Spain did better than the EU 27 average after 2002; Ireland exceeded the EU 27 average in every year including the recent recession and is forecast to continue at that higher rate. Portugal increased its GDP/capita but at a rate lower than the EU 27. For the moment, we can say that GDP/capita has not been negative since joining the euro zone. Portugal has been lower than the EU 27 with or without the euro zone; the same is true of Greece and Estonia.

Our **second** finding pertains to Appendix B (**Growth Rate of GDP Volume: Percentage Change on Previous Year).**[16] [17]Aggregate GDP parallels the pattern of per capita GDP (not surprisingly). Interestingly, Estonia embarked on a severe austerity program, cutting its budget expenditures about 9% of GDP, shrinking the economy by one seventh in 2009 and leading to unemployment now near 4%. As a result, or perhaps for a different reason,[18] Estonia is forecast to continue its positive GDP growth of 3.1 in 2010 and to continue positively in 2011 and 2012. Its 2010 figure is surpassed only by Germany and Luxembourg. (and Poland, not in the Euro zone). Its forecast for 2011 exceeds that of all members of the Euro zone (it is surpassed by Turkey at 5.5, not a member of the EU 27). Thus, its performance leapfrogged over the periphery countries gaining it accession to the Euro zone on January 1, 2011. Its commitment to joining the zone was significant.

Our **third finding pertains** to unemployment, **Appendix C (Harmonised Unemployment Rate by Gender: total)**[19]**.** Again, unemployment has tended to be impervious to joining the Euro zone. European rates have been high, with some exceptions: Austria, 4.3%; Luxembourg, 4.7%; Netherlands, 4.3%. The recession has been unkind to most in the EU27, though rates have been particularly high in Slovakia, 14.5%; Spain, 20.4%Ireland, 13.5%; Portugal, 11.2%. Nevertheless, Germany has managed 6.5%; France, 9.6%; Belgium, 8%. Presence in the Euro zone has not been more punishing than absence: UK is at 7.9%; Denmark is at 8.2%; Poland is at 9.7%, Bulgaria is at 10.2%. We conclude that rather than Euro zone membership, the more likely cause discriminating among members and non-members is their debt situation resulting not only from recession but monetary and fiscal policy. While the European Central Bank controls monetary policy, the involvement of European banks and financial institutions in raising their vulnerability to bad loans and investments as well as spillovers from U.S. securitization of bad debts seem more causative than Euro zone membership. Granted, that Euro zone membership precluded devaluing the currency, debt seems to have joined with moral hazard to choke several of the periphery members. In fact, the

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[16] Real GDP growth rate.

[17] *Eurostat* (2010c), "Growth Rate of GDP Volume- Percentage Change on Previous Year," accessed on April 4, 2011, at http://epp,.eurostat.,ec.europa.eu/tgm/printTable.do?tab=table&plulgin=1&language=en&pcode=tsieb020.

[18] Scandanavia, particularly Finland and Sweden, have been friendly investors. Exports from Estonia increased sharply in 2010. *Economist* (2011), "Estonia Busts Another Stereotype" March 7, accessed on March 20,at http://www.economist.com/blogs/easternapproaches/2011/03/estonias_election.

[19] *Eurostat* (2010d), "Harmonised Unemployment Rate by Gender – Total," accessed on April 4, 2011, at http://eppeurostat.ec.europa.eu/tgm/printTable.do?tab=table&plugin=1&language=en&pcode=teilm020..

EU's decision to bail out Greece and Ireland cannot be entirely laid at the doorstep of moral hazard. It is relatively clear that the recession acted as a swine flu attacking those countries weakly prepared in the need for borrowing particularly at the mercy of the bond vigilantes.

Conclusion regarding political commitment: In view of substantial *austerity* programs by Greece, Ireland, Spain and Portugal**;** and lacking any convincing evidence that the Euro zone has punished its member inordinately vs. those cruising along as non-members (the Scandanavians seem rather immune to debilitating moral hazard though certainly the recession's lowering of demand hurts all boats in the water), it may be said that those now in the Euro zone seem inclined politically to stay in; Iceland, that recently restructured its debt causing creditors to lose equity in their holdings a "financial haircut" as well as an emboldened Estonia that chose a recessionary moment to join the Euro zone. There is no indication that the Balkan countries have tempered their interest in joining nor has Turkey completely extinguished its interest, therefore weighting the evidence in favor of political commitment.

We turn now to the actions of the euro zone members and whether or not they show evidence wanting to **keep the euro zone** or bifurcate it into a core and periphery or the strong and the weak.

Yes, with Conditions

We first examine trade statistics for the EU, with focus upon **intra EU trade.** Our presumption is that if EU members have significant trade with each other or have increased that trade since joining the euro zone, we may say that the other members are not predisposed to reject their entrance to the zone.

Appendix D shows intra EU trade: **Breakdown By Member State of Goods Traded; intra – EU 25.**[20] It is clear from the Appendix that euro zone countries have sustained or increased their *intra* EU trade. We are not arguing a causative effect bit rather showing a correlation among the members. That is, they now have a reason to want to continue trading with EU members on the basis of a continuing trading relationship.

Germany's trade inside the EU25 is as follows:

Exports /Inside: 2002, 408.3 mln euros; 2003, 426.3 mln euros; 2004, 466.3 mln euros; 2005, 494.5 mln euros, 2006. 555.4 mln euros

Belgium; exports/inside

2002, 171.9 mln euros; 2003, 173.8 mln euros; 2004, 189.4 mln euros; 2005, 205.4 mln euros; 2006, 223.0 mln euros

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[20] *Eurostat* (2010a), "Breakdown by Member State of Goods Traded: Intra-EU25," data for 1958-2009, accessed on April 4, 2011, at http:epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KC-GI-10-002/EN/KS-GI-10-002-EN-PDF.

Ireland; export/inside

2002, 61.5 mln euros; 2003, 51.1 mln euros; 2004 52.9 mln euros; 2005 56.1 mln euros; 2006, 54.8 mln euros

Estonia: exports/inside

2002, 3.0 mln euros; 2003, 3.3 mln euros; 2004, 3.8 mln euros; 2005, 4.8 mln euros; 2006, 5.1 mln euros

We add primary trading partners for the four periphery countries: Greece, Ireland, Portugal and Spain (the countries carrying the largest debt)[21]:

Greece (exports): Germany, 11.1%; Italy, 11.05%; Cyprus, 7.26%, U.K. 4.25%
(**imports**): Germany, 13.73%; Italy, 12.71%; China, 7.08%; France, 6.1%; Netherlands, 6.02%; S. Korea, 5.68%; Belgium, 4.34%; Spain, 4.08% (2009)

Ireland (exports): U.S., 20.52%; Belgium, 17.78%; UK, 16.31; Germany, 5.6%; France, 5.56%; Spain, 4.19%
(imports): UK, 35.28%; U.S. 16.87%; Germany, 6.76%; France, 4.76% (2009)

Portugal (exports): Spain, 26.25%; Germany, 12.99%; France, 12.04%; Angola, 7.21%; UK, 5.54% (2009)
(imports): Spain, 31.58%; Germany, 12.41%; France, 8.58%;. Italy, 5.55%; Netherlands, 5.31% (2009)

Spain (exports): France, 19.27%l Germany, 11.11%; Portugal, 9.21%; Italy, 8.24%; UK, 6.18% (2009)
(imports): Germany, 15.02; France, 12.82; Italy, 7.17; China, 5.8%; Netherlands, 5.22%; UK 4.7% (2009)

We conclude from Appendix D, that substantial trade flows exist (only exports are shown here among euro zone members except for the periphery countries).. While trade certainly exists outside of the zone, the advantage within the zone consists of a free trade area utilizing the same currency. Thus, the benefits are not insignificant. Secondly, the data support the idea that euro zone members have a continuing link to bilateral trade even among the highly indebted periphery.

We examine the last variable: economic robustness:

From heavy debt to reasonable growth

[21] *CIAFactbook* (2011).

The last variable is the most perilous antecedent of the euro zone failing or succeeding. We have examined the GDPs for the euro zone and found them not entirely poor. Growth rates have been tolerable. In fact, many of the Central/East European members have lower per capita incomes than the indexes show for the EU 15, among which we find the periphery group. However, the **gini coefficients** in Central/Eastern Europe are more egalitarian than in the EU 15. Thus, the former seem to manage with lower per capita incomes while holding their unemployment rates below the EU 15. Holding a job in an egalitarian society can surpass living on unemployment pay in the EU 15, particularly in view of higher consumer prices, particularly at unemployment rates:[22] such as Greece, 14.8%; Spain, 20.4%; Belgium, 11.5%; Italy, 8.6%; France, 9.5%.

The real problem is debt. We may suggest that there is nothing totally wrong with the market economies in the periphery countries and that they coexist with the rest of the EU 27 in the production and service economy. However their debts are astronomical. Moreover, each peripheral member: Greece, Ireland, Portugal and Spain, must deal with mounting debt payments that debilitate the provision of government services and in most cases, have leveraged the private banks to inordinately high debt some of which is problematic. Thus, such governments have two problems: (1) how to finance current operations, some of which are non-discretionary such as the social safety net (entitlements), and debt, (2) discretionary payments: everything else, including schools, health care programs, roads, highways, bridges, defense and public works (e.g., maintenance and improvements).

Government services are normally provided by fiscal policy: revenues and expenditures. Since the recession has significantly reduced demand, less work is being performed. Economies then contract. Revenues are forthcoming in smaller amounts. Interest payments may increase. This, of course, is the dilemma of sovereign bonds.: how to borrow funds among investors at increasing yields or interest rates while not generating sufficient revenues to manage a positive current account and attempting to create at least a minimal amount of economic growth. We look now at this conundrum.

Apprendix E shows "Foreign Exposures to Greece, Ireland, Portugal and Spain.[23]

Total Exposures were as follows (third quarter, 2010 in bln USDollars:

Greece, 277.9 $bln
Ireland, 813.7 $bln
Portugal, 321.8 $bln
Spain, 1,098.8 $bln

German public and private sectors have the greatest exposure to the four countries;

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22 *Economist* (2011), "Economic and Financial Indicators," March 26, p., 101.

23 Bank for International Settlements (2011), *BIS Quarterly Review,* March, p. 15, accessed on April 4, 2011, at http://www.bis.org/publ/qtrpdf/r_qt1103b.pdf.

France is second.

France had the highest exposure to Greece: 92.0 $bln

Germany had the second highest exposure to Greece: 69.4 $bln

Others in the euro area had exposure of 302.3 $bln for the four countries.

Thus, we can conclude that the periphery countries have substantial debt and that the two leading paymasters for the EU (Germany and France) have a continuing interest in resolving such debts. Casting the periphery countries out of the euro zone would increase the "arm's length" of the creditors from the debtors and make more likely the imposition of a financial "haircut."[24]

Current Account Deficits for Greece, Ireland, Spain and Portugal[25]

Greece, (-) 37.6 $bln (January, latest 12months)
Spain (-) 66.4 $bln (January, latest 12 months)
Ireland (-) 3.3 $bln (third quarter, 2010, latest 12 months)[26]
Portugal (-) 22.2 $bln (January, latest 12months)[27]

Fiscal condition: Eurostat reported revenue and expenditure figures for 2009/4th quarter to 2010, 3rd quarter for the EU 27and the EU 16 (euro zone less Estonia that joined in January, 2011). **Revenues** for both the EU 27 and the euro zone reached the equivalent of **43.9% of GDP**; for **expenditures** both the EU 27 and the euro zone leveled off in 2010, 1st quarter at 51.0% of GDP,, while finally dropping to 50.5% in 2010, 3rd quarter.[28]

Deficits: austerity has had a decreasing effect upon EU 27 and euro zone budgets that had climbed for ten quarters from a low of 3% (Maastricht requirement) to a leveling of 6.6% and 6.2% of GDP in 2010, third quarter. While still exceeding Maastricht, the reduction has been welcome despite the concomitant effect of increasing unemployment and shrinking demand. Naturally, the highest deficits were recorded by the periphery countries:

Ireland, 25.8%

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24 A financial haircut is a reduction in the debtor's payment to the creditor. If one receives a 70% reduction in the principal, one feels as though a "haircut" has occurred. This could well occur in a debt *restructuring* program.

25 *Economist* (2011), March 26, p. 102.

26 *Economist* (2011c), accessed on March 29, at http://www.economist.com/node/18443372/print.

27 Ibid.

28 Kostadinova, I, Stanislav Eminescu, J. and Tokofai, A. (2011), "EU27 and Euro Area Government Expenditure-to-GDP Ratios Falling after 10 Quarters of Growth," Eurostat, Statistics in Focus, 13/2011, accessed on April 3,2011, at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-GK-10-001/EN/KS-GK-10-001-EN.PDF.

Greece, 12.1%
UK, 10.4%**
Latvia, 10.3%**
Spain, 10.2%

** not euro zone members

Those within Maastricht were:

Luxembourg, 0.8%*
Austria, 2.6%*
Finland, 2.9%*
Malta, 2.9%*

* all euro zone members.

Table 1, below shows the dilemma of the EU 27, including the euro zone:

Table 1.

EU 27

Billions of euros	2010Q3	2009Q3
Revenue	1312	1243
Expenditure	1500	1448
Net lending (+)/net borrowing (+)	-188 (deficit)	-205 (deficit)
Statistical discrepancy*	-4	-3
Net financial transactions	-184	-202
Debt stock increase	90	141
Stock flow adjustment	98	64

*different data sources
Source: Eurostat (online data codes: gov_q_qqnfa, gov_q_qqfa_gov_q_qqdebt)

Expenditures in the EU 27 exceed revenues causing a deficit requiring governments to borrow to fill the gap. The debt increases by less than the deficit, particularly because of positive stock flow adjustment (governments' acquisition of financial assets such as shares and other equity of financial institutions, e.g., bonds.

General government consolidated gross debt as a percentage of GDP (4 quarter moving averages), 2005, first quarter-2010, 3rd quarter:

- Both the EU 27 and the euro zone have reached high debt figures
- General government prefers securities rather than shares
- From the 1st quarter of 2005 to the 3rd quarter of 2010, the results are:

  Euro zone: 82.7 of GDP, 2010Q3
  EU 27: 77.8% of GDP, 2010Q2

Thus,, **the euro zone exceeds the debt of the EU 27**, presumably because of the debt of periphery members (Appendix E).

Findings with respect to Robustness of the Economies (our last input variable):

- When we consider GDP per capita (at purchasing power parity); growth rates; unemployment, deficits; debt; trade, we have to conclude that the periphery countries (Greece, Ireland, Portugal and Spain) are unlikely to survive their debt burdens without help;
- Greece and Ireland have already been bailed out yet they have introduced severe austerity programs in order to lower their deficits. These programs are unlikely to permit their economies to increase GDP growth at such a rate that debt may be retired at the same time as governments attempt to provide services;
- While it is the debt that is retarding economic robustness the periphery countries need significant economic reform particularly within fiscal policy (revenues and expenditures);
- While periphery countries are in weakened financial positions, the EU 15 has exposed its banks and governments to substantial credit positions in the periphery countries; their vulnerability to debt restructuring becomes not without significance; debt restructuring involves rescheduling the debt over longer time periods (as happened in Greece) with some arithmetic that would either reduce ultimate payment of debit liabilities or other conditions that would change the economies of he periphery such as raising the corporate tax rate for Ireland from 12.5%.

Summary of the Three Input Variables:

The paper has argued to this point, the following: **political commitment** toward continuance of the euro zone has been demonstrated by substantial determination of the **periphery countries** to resolve their debt situations with drastic austerity programs even at the expense of political loss; both the Irish and Portuguese prime ministers are now no longer in office; the reverse happened in Estonia: a severe austerity program rewarded political success to the existing prime minister. The Greek prime minister remains in place.

On the EU side, substantial financial packages[29] have been negotiated by the EU involving first, a **European Financial Stability Facility,** a **temporary** bail-out fund created by the 17euro zone states in June 2010. It would contain 440 bln euros, having a triple-A credit rating by Standard & Poor's and Fitch Ratings, that cannot be used to buy sovereign bonds on the primary or secondary market. A permanent bail-out mechanism, the European Stability Mechanism, would replace the temporary facility in mid-2013, and would contain 500 bln euros, adding 16 bln euros of cash every year for five years, starting in 2013. Funds could be used to buy bonds on the primary market, when a borrower agrees to a bail-out and an austerity program.

The attitudes of participating **members** have been positive particularly with the strong support of France and Germany, the largest contributors to EU funding. Support has been contingent upon **conditions** of the various bail-outs that are so constructed to gain approval of investors (particularly bond investors) while considering the economic probability that the debtors will negotiate with the EU an overall package of reforms, particularly fiscal reforms, that will establish he foundation for emerging solvency for the periphery countries. Public statements have continually averred that "Europe will do whatever it has to do to protect the euro zone."

The robustness of the periphery members raises serious questions. It is quite likely that Greece and Ireland will need to restructure their debt; Portugal and Spain are problematic, Portugal seems more vulnerable. EU, particularly France and Germany have argued in favor of financial reform, even economic reform. Financial reform can include either macro measures or micro measures. Economic reform could include raising of retirement ages (to strengthen pension funding); reduction or modification of entitlements; restructuring health care servicing; and contracting out government services. Several such reforms could lead toward more **convergence** of economic matters. The EU has discussed the desirability of monitoring financial indicators among member countries in order to adjust or change fiscal or monetary policies of member countries, particularly the periphery countries. Such financial/economic management of members' activities is likely to produce negative reactions in the public and private sectors.

The paper argues that it is not necessarily the production or real economy that is struggling, though the recession, highlighted by decreased demand, shrinking economies and declining governmental revenues, exacerbates economic conditions. It is the debt situation, brought about by government fiscal policies as well as private financial institutions, that requires remedial reform. Bail-outs will cure the symptoms. Reform is necessary to cure **moral hazard.**

DISCUSSION

We turn now to the impact of our independent or input variables upon the output variable: **whether or not the euro zone will survive**. The paper asserts that the three

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[29] Referred to as a 'Grand Bargain Package,' "EU Agrees 'Grand Bargain' Package, *Financial Times* 2011, March 26-27, page 4.

independent variables are reasonably sound to sustain damage. Events can, of course, become transformative. The Japanese earthquake and tsunami, coupled with a nuclear reactor leakage and potential radiation catastrophe, added to a crisis in the Middle East, can shake the foundations of our hypothesis. Chancellor Merkel of Germany suffered a political defeat that threatens her tenure as chancellor. It is hardly certain that were she to lose her chancellorship, a new chancellor would fail to act in Germany's best interests. Our data suggest that Germany has an important political and economic relationship to the euro zone, and that German banks are not independent of that relationship. France has a similar if not identical relationship toward a successful euro zone.

What is very clear is that the solutions for each periphery country will vary according to the vulnerability of their economic indicators. The solution package for each will need to incorporate sufficient change to satisfy the probability of success. In the cases of Greece, Ireland, and perhaps Portugal, this may involve debt restructuring. Civil society and publics will be unhappy. These Westphalian states will sense a loss of sovereignty. Worst, perhaps, is the realization that fellow member states are supporting such changes as the price of continuing membership. What will matter, in the long run, is whether or not the man or woman in the street will be better off. Says the Peterson Institute,

> By playing for time and offering liquidity (cash) support for troubled countries now, Europeans are counting on a return of growth leading to higher general bank capital levels, improved government fiscal positions and less need of (such) haircuts.[30]

CONCLUSION

The paper concludes that considering political commitments, attitudes of participating members; tolerable robustness in the real economy and willingness to restructure debt of the EU periphery members, buttressed by draconian budget austerity programs; substantial exposure of key EU powers Germany and France and most other members in periphery debt; continuing trading relationships and willingness to impose financial ***conditions*** upon the periphery; the euro zone will survive.

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[30] Kirkegaard, J.F. (2010), "How Europe Can Muddle Through Its Crisis," *Policy Brief,* Peterson Institute for International Economics, December, number PB10-27, accessed on April 3, 2011, at www.piie.com. See fn 22 for a definition of a financial haircut.

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APPENDIX A. GDP PER CAPITA IN PURCHASING POWER STANDARDS (PPS)
EU 27=100 (Selected)

	1995	1996	1997	1998	1999	2000	2001
EU 27	100	100	100	100	100	100	100
EU 15	116	116	115	115	115	115	115
EURO AREA(17)	114	113	113	113	113	112	112
ESTONIA	36	38	42	42	42	45	46
IRELAND	103	108	114	121	125	131	132
GREECE	84	84	84	83	83	84	86
SPAIN	92	92	93	95	96	97	98
PORTUGAL	77	77	78	79	81	81	80

	2002	2003	2004	2005b	2006	2007	2008	2009
EU27	100	100	100	10	100	100	100	100
EU15	114	114	113	113	112	111	111	110
EURO AREA (17)	111	110	109	109	109	109	109	109
ESTONIA	50	54	57	61	66	69	68	64
IRELAND	138	141	142	144	145	147	133	127
GREECE	90	92	94	91	93p	92p	94p	94p
SPAIN	100	101	101	102	104	105	103	103
PORTUGAL	80	79	77	79	79	78	78	80

Note: p = provisional; b = break in series.
Comparisons are indexed to the EU 27 as 100 (the EU 27 average).

Source: Eurostat (2010).

APPENDIX B. GROWTH RATE OF GDP VOLUME: PERCENTAGE CHANGE ON PREVIOUS YEARS (Selected)

	1996	1997	1998	1999	2000	2001	2002	2003	2004
EU 27	1.8	2.7	3.0	3.1	3.9	2.0	1.3	1.4	2.5
EU 15	1.7	2.7	3.0	3.1	3.9	1.9	1.2	1.2	2.3
EURO AREA (17)	1.6	2.6	2.8	2.9	3.9	1.9	0.9	0.8	2.2
Estonia	5.7	11.7	6.7	-0.3	10.0	7.5	7.9	7.6	7.2
Ireland	7.8	11.5	8.4	10.9	9.7	5.7	6.5	4.4	4.6
Greece	2.4	3.6	3.4	3.4	4.5	4.2	3.4	5.9	4.4p
Spain	2.4	3.9	4.5	4.7	5.0	3.6	2.7	3.1	3.3
Portugal	3.7	4.4	5.0	4.1	3.9	2.0	0.7	-0.9	1.6

APPENDIX B (CONTINUED)

	2005	2006	2007	2008	2009	2010	2011f	2012f

EU27	2.0	3.2	3.0	0.5	-4.2	1.8	1.7	2.0
EU15	1.8	3.0	2.8	0.2	-4.3	1.8	1.6	1.9
EURO AREA (17)	1.7	3.1	2.9	0.4	-4.1	1.7	1.5	1.8
Estonia	9.4	10.6	6.9	-5.1	-13.9	3.1	4.4	3.5
Ireland	6.0	5.3	5.6	-3.5	-7.6	0.2	0.9	1.9
Greece	2.3p	5.2p	4.3p	1.0p	-2.0p	-4.5p	-3.0	1.1
Spain	3.6	4.0	3.6	0.9	-3.7	-0.1	0.7	1.7
Portugal	0.8	1.4	2.4	0.0	2.5	1.4	-1.0	0.8

Note: f = forecast; p = provisional

Source: Eurostat (2010).

APPENDIX C, HARMONISED UNEMPLOYMENT RATE BY GENDER – TOTAL (SELECTED)

	2010M03	2010M06	2010M09	2010M12	2011M01
EU27	9.6	9.6	9.6	9.6	9.5
EU15	9.9	9.9	9.9	9.9	9.8
EURO AREA (17)	10.0	10.0	10.0	10.0	9.9
Estonia	18.9	18.0	15.9	14.3	n.a.
Ireland	13.0	13.6	13.9	13.7	13.5
Greece	11.0	12.2	12.9	n.a.	n.a.
Spain	19.6	20.2	20.6	20.4	20.4
Portugal	10.7	11.1	11.2	11.2	11.2

Note: 2010M03 = 2010, month 3 (March).

Source: Eurostat (2010).

APPENDIX D, BREAKDOWN BY MEMBER STATE OF GOODS TRADED, INTRA – EU 25; mln euros; exports; (SELECTED)

	2002	2003	2004	2005	2006
Belgium	171.9	173.8	189.4	205.4	223.0
Germany	408.3	426.3	466.3	494.5	555.4
Estonia	3.0	3.3	3.8	4.8	5.1
Ireland	61.5	51.1	52.9	56.1	54.8

APPENDIX E, FOREIGN EXPOSURES TO GREECE, IRELAND, PORTUGAL AND SPAIN, BY BANK NATIONALITY (End Q3 2010; billions of U.S. dollars)

To:	Type	DE	ES	FR	IT	OEA	GB	JP	US	ROW	TOTAL
Greece	Public Sector	26.3	0.6	20	2.5	15.7	3.2	0.5	1.8	1.5	72.0
	+banks	3.9	0.0	1.4	0.3	1.3	4.3	0.5	0.5	1.3	13.6
	+non-bank private	10.1	0.5	42	1.9	13.3	7.5	0.9	4.7	4.2	85.0
	+other exposur	29.2	0.4	29	1.7	3.1	5.3	0.1	36.2	2.4	107.2
	=total exposure	69.4	1.5	92	6.5	33.5	20.4	2.0	43.1	9.5	277.9
Ireland	Public Sector	3.4	0.3	6.6	0.8	3.7	6.6	1.5	1.5	0.7	25.1
	+banks	57.8	3.3	17	3.3	7.3	37.4	1.8	17.8	10.6	156.3
	+non-bank private	92.8	9.4	21	10.9	47.4	116	18	40.3	25.0	381.0
	+other exposure	54.3	4.5	33.	9.1	8.6	64.4	1.5	54.2	20.2	250.1
	=total exposure	208.	18	78.	24.4	67.2	225	23	114	57.3	813.7
Portugal	Public Sector	8.4	8.8	16	0.9	7.8	2.6	1.3	1.6	1.5	49.0
	+banks	18.1	6.1	6.5	2.3	4.6	6.2	0.3	1.4	0.9	46.2
	+non-bank private	13.6	70.	15	1.5	7.5	16.5	0.8	1.5	1.8	128.3
	+other exposure	8.5	23	8.1	3.2	2.1	8.5	0.4	42.6	1.5	98.3
	=total exposure	48.5	109	46	7.9	22	34	2.8	47.1	5.8	321.8

APPENDIX E (CONTINUED)

SPAIN	Public Sector	29.4	n.a.	46.0	3.3	16.9	10.0	9.7	4.7	3.0	123.0
	+banks	85.8	n.a.	55.8	9.0	49.1	34.0	4.5	20.6	11.0	269.7
	+non-bank private	85.7	n.a.	81.3	16.2	98.5	72.4	10.2	26.3	14.7	405.3
	+other exposure	41.4	n.a.	41.6	13.1	15.0	36.1	4.8	136.0	12.4	300.3
	=total exposures	242.4	n.a.	224.7	41.8	180	152.	29.2	187.5	41.3	1,099

Source: BIS consolidated banking statistics (ultimate risk basis).

Notes:

DE=Germany; ES=Spain; FR=France; IT=Italy; OEA=other euro area; GB=United Kingdom; JP=Japan; US=United States.
n.a. = not applicable. (Spain).

1. Claims of German banks on the four countries are on an immediate borrower basis;
2. Exposures of banks headquartered in the respective country are not included, as these are not foreign exposures;
3. Claims of French banks on the four countries are currently under review and are subject to revisions.
4. Other exposures = positive market value of derivatives contracts, guarantees extended and credit commitments