

PRODUCTIVITY DIFFERENCES AND CURRENT ACCOUNT IMBALANCES IN THE EURO AREA

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ABSTRACT

Although the current account imbalances within the Euro Area are significant, they did not draw enough attention until the debt problems of some Euro Area countries surfaced as a result of the global financial collapse in 2008. This study descriptively relates the current account imbalances within the Euro Area to the productivity disparities between the member states. Some countries geographically located in the South of the Euro Area seem to lag behind others in increasing their productivities. This study stresses the importance of this fact as an underlying cause of the current account imbalances within the Euro Area.

Keywords: The Euro Area, total factor productivity, current account imbalances.

Jel Code: F15, F20, F32.

EURO ALANINDA ÜRETKENLİK FARKLARI VE CARI HESAP DENGESİZLİKLERİ

ÖZ

Euro Alanı'nda cari hesap dengesizlikleri büyük olsa da, 2008 yılında küresel finansal çöküşün bir sonucu olarak bazı Euro Alanı ülkelerinde borç sorunlarının ortaya çıkmasına değin yeterince ilgi çekmemişlerdir. Bu çalışma betimsel olarak Euro Alanı'ndaki cari hesap dengesizliklerini Euro Alanı'ndaki üretkenlik farklılıkları ile ilişkilendirmektedir. Euro Alanı'nın coğrafi konum itibarıyla güneyinde yerleşmiş bulunan bazı ülkeler üretkenliklerini artırma noktasında diğerlerinin gerisinde kalmış görünmektedir. Bu çalışma söz konusu gerçeğin Euro Alanı'ndaki cari hesap dengesizliklerinin altında yatan bir neden olarak önemine vurgu yapmaktadır.

Anahtar Kelimeler: Euro Alanı, toplam faktör verimliliği, cari hesap dengesizlikleri.

Jel Kodu: F15, F20, F32.

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INTRODUCTION

Since early 2000s, the current account imbalances between the United States and China attracted the attention of economists and policy makers for the understandable reason that the current account imbalances between these two countries made up a sizable portion of the global current account imbalances. On the other hand, rising current account imbalances within the Euro Area since the adoption of Euro as the single currency in 1999 were much less noticed. In fact, the current account imbalances within the Euro Area were enormous by any measure as well.* After the global financial turmoil in 2008 erupted and the Euro Area sovereign debt problems surfaced, the intra-Euro Area current account imbalances duly began to draw attention. Although this interest is new for the Euro Area, a vast literature on the US current account deficit exists for almost 30 years (Bussiere et al., 2005; Devereux and Lahiri, 2006; Chakraborty and Dekle, 2008).

The literature on US current account deficits documented mixed results regarding the cause of the rising US current account deficits. In mid 1980s, both the current account deficits and the budget deficit had reached record high levels in the USA. Therefore, the early literature tried to establish a relationship between the budget deficits and current account deficits. According to this literature, reductions in public savings caused increases in budget deficits. Everything else the same, budget deficits led to a reduction of net savings of the economy causing current account deficits (Bussiere et al., 2005). However, the budget balance and current account balance moved in opposite directions in the USA during the 1990s. That is why later papers identified another driver - the productivity gains in the USA during the 1990s - as the primary cause of growing US current account deficits. According to Glick and Rogoff (1995), the productivity in the USA increased faster than the rest of the world beginning in 1990s and foreign capital began to inflow since investors elsewhere wanted to enjoy the higher returns in the USA resulting from productivity gains. As capital account surplus increased, current account deficit increased as well in an offsetting manner. In Glick and Rogoff's study, there was no role for budget deficits. Since 2002, the fiscal situation of the US deteriorated again in parallel with growing current account deficits. Hence, the 'Twin Deficits' discussions (i.e. budget deficits coupled with current account deficits) came back. The literature that grew since then has become swamped with empirical papers testing for the explanatory power of budget deficits on current account deficits.** Although some evidence in favor of a Twin Deficits relationship could be found in these empirical studies, results indicate that Twin Deficits relationship is either not robust or not stable through time (Bussiere et al., 2005, p.9).

Devereux and Lahiri (2006) tested the validity of budget deficits and productivity gains for the current account deficits together. Although they found explanatory power in both variables, they noted that a big portion of current account deficits could be attributable to the productivity gains. They

* The current account (CA) imbalances between the USA and China alone made up 32.7% and 21.9% of the global CA imbalances at the end of 2010 and 2011, respectively. Here the CA imbalance between the USA and China refers to the sum of the absolute values of the CA deficit and surplus of these two countries and the global CA imbalance refers to the sum of the absolute values of the CA deficits and surpluses (all in USD) of all countries in the world. Similarly, the CA imbalances in the Euro Area in proportion to the global CA imbalances were 17.8% and 19.5% at the end of 2010 and 2011, respectively.

** See Bussiere et al. (2005, p. 8-11) for an excellent literature review.

affirmed the standard relation reported in 1990s between the productivity gains and current account deficits, i.e. current account deficits in the US rise as US productivity increase relatively fast. A related study is Kollman's 1998 paper, where the author investigated the role of fiscal policy and productivity shocks in US trade balance dynamics using a calibrated two-country Real Business Cycle model. However, Kollman's paper focused only on the 1975-1991 period and thus missed the productivity boom of the 1990s. Nevertheless, Kollman's paper is interesting for the fact that it identified for the US productivity shocks as the main source of fluctuations in net exports during 1975-1991, and noted that productivity shocks rather than budget deficits seem to have contributed to the sharp drop in US net exports in the first half of the 1980s.

Inspired from the literature summarized above, this paper focuses on the productivity disparities and current account imbalances in the Euro Area. This study has importance for it descriptively shows that the problematic countries known as the South Euro Area lagged behind the countries in good standing (sometimes called as the North or the Core Euro Area) with respect to the productivity levels. To a large degree these problematic South Euro Area countries are also the countries that run large current account deficits. Hence, the situation in the Euro Area seems to be the opposite of the findings reported in the literature on the US productivity gains and the US current account deficits. The rule of single common currency and substantial cross-border financial transactions possibilities coupled with different productivity levels across the Euro Area seem to have created a loop before the global financial collapse took place in 2008 where North exported to South, South ran current account deficits offset by the capital inflows and then South used inflowing capital (mostly from the financial institutions of North) to import more from the North and the loop continued in this way. In brief, while there are claims that the current account deficits of the US could be attributable to the productivity increases, productivity lags might be the reason for the chronic current account deficits of the South Euro Area countries.

The paper is organized as follows. The Euro and the Euro Area are described in section one. Section two is on the current account imbalances and productivity differences in the Euro Area. Section three presents descriptive evidence on the structural disparities within the Euro Area. Final section concludes.

1. THE EURO AND THE EURO AREA

As defined by the OECD, "The Euro area is the area comprising those European Union (EU) member states in which the euro has been adopted as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the Governing Council of the European Central Bank (ECB). In 2000 the euro area comprised Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain. Greece became a member of the Euro area on 1 January 2001. Slovenia became a member of the Euro area on 1 January 2007." In the following years, the Euro Area expanded in three rounds with Malta and South Cyprus, Slovakia and Estonia as these countries joined the Euro Area on 1 January 2008, 2009 and 2011, respectively. Currently, 17 states out of the 27 members of the EU officially form the Euro Area.

Euro, the single common currency of the Euro Area, was officially adopted on 16 December 1995 in the Madrid European Council Presidency Conclusions. The euro was introduced as an accounting currency on 1 January 1999, replacing the former European Currency Unit (ECU) at a ratio of one-to-one. Thus, 1999 marks the official adoption date of Euro as the common currency unit. However, Eurocoins and banknotes entered into circulation on 1 January 2002.

Table 1 below provides summary information on the membership dates, long-term foreign credit ratings and GDP levels of the Euro Area countries.

Table 1:
Summary Information on The Euro Area

Country	Date of Attendance	Nominal GDP (Billion \$)*	GDP in total (%)	S&P** Credit Rating	Fitch** Credit Rating	Moody's** Credit Rating
Austria	1999	384.9	3.09	AA+	AAA	Aaa
Belgium	1999	468.5	3.76	AA	AA	Aa3
South Cyprus	2008	24.9	0.20	CCC	BB-	Caa3
Estonia	2011	19.1	0.15	AA-	A+	A1
Finland	1999	237.5	1.91	AAA	AAA	Aaa
France	1999	2,649.4	21.26	AA+	AAA	Aa1
Germany	1999	3,330.0	26.73	AAA	AAA	Aaa
Greece	2001	329.9	2.65	B-	CCC	C
Ireland	1999	227.2	1.82	BBB+	BBB+	Ba1
Italy	1999	2,112.8	16.96	BBB+	BBB+	Baa2
Luxembourg	1999	52.4	0.42	AAA	AAA	Aaa
Malta	2008	7.4	0.06	BBB+	A+	A1
Netherlands	1999	792.1	6.36	AAA	AAA	Aaa
Portugal	1999	227.7	1.83	BB	BB+	Ba3
Slovakia	2009	87.6	0.70	A	A+	Baa2
Slovenia	2007	48.5	0.39	A-	A-	A1
Spain	1999	1,460.3	11.72	BBB-	BBB	Baa3
Euro Area	-	331,963	100	-	-	-

Source: World Bank, S&P, Fitch, Moody's.

(*) 2009 GDP figures from the World Bank.

(**) The latest foreign currency ratings for countries as of end of March 2013.

2. CURRENT ACCOUNT BALANCES AND TOTAL FACTOR PRODUCTIVITY DIVERGENCE IN THE EURO AREA

It is possible to divide the Euro Area members into two groups with respect to their creditworthiness as A-level countries and the rest. As presented in Table 1, A-level countries include Austria, Belgium, Estonia, Finland, France, Germany, Luxembourg, Netherlands, Slovakia and Slovenia. The countries

below A-level threshold are South Cyprus, Greece, Ireland, Italy, Malta, Portugal and Spain. In this paper, the countries that joined the Euro Area in recent years and the countries with insignificant contribution to the Euro Area GDP are discarded from the analyses. Only exception is South Cyprus. Although it is a small economy and a late-joiner to the Area, at the time this paper was written South Cyprus had become the last country suffering debt problems in the Euro Area. Therefore, this paper included South Cyprus in the analyses. In sum, the subset of Euro Area countries included in the analyses in this paper are as follows.

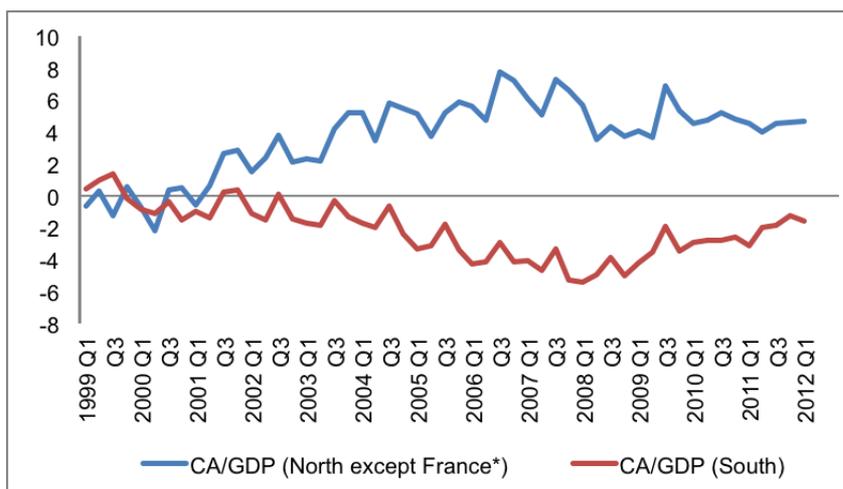
Table 2:
Countries Included in This Study

A-level Countries (Core North Group)	Sub-A-level Countries (Problematic South Group)
Austria	Greece
Belgium	Italy
France	Portugal
Germany	South Cyprus
Netherlands	Spain

Within these two groups, A-level countries seem to constitute the core countries of the Euro Area with their good standing while the sub-A-level countries seem to be the problematic group since all these countries need financial support to avoid sovereign bankruptcy. Portugal, Italy, Greece and Spain (also known as the PIGS, an acronym derived from these countries' initials) were approved to receive Euro 750 billion support from the European Union (EU) on 10 May 2010. As of end of March 2013, South Cyprus is holding negotiations with the Troika (i.e. International Monetary Fund, the EU and the European Central Bank) for a rescue package.* Therefore, these 10 countries roughly make two separate groups as core 'North' and problematic 'South' countries. North countries refer to those five countries in the A-level countries that could maintain their creditworthiness despite the Euro Area debt problems. Although the term 'north' does not reflect the geographical location of France very well and although France has problems in maintaining her creditworthiness due to the French banks' large exposures to the problematic South and runs current account deficits, France is still included in the core North group in this study thanks to her present A-level credit rating and its large economy which is supposed to assist the financial assistance mechanisms in Europe rather than ask for help to those mechanisms. Problematic countries are the remaining five countries known as the PIGS and South Cyprus. North and South group observations in the rest of the paper refer to the aggregations of the data for the respective five countries in each group.

The following figure shows the aggregated current account balances for the North excluding France and the South since 1999, i.e. the year Euro was officially adopted.

* More information can be found at <http://www.investopedia.com/terms/p/piigs.asp> and <http://www.ft.com/intl/cms/s/0/5adf82bc-9201-11e2-851f-00144feabdc0.html#axzz2P7nFbGde>. Eur 750 billion support to PIGS include Ireland as well.



Source: Eurostat, Author's calculations.

(*) France is excluded in this sketch due to its chronic current account deficits.

Figure 1:
Current Account Balance / Nominal GDP (Weighted, %)

Figure 1 clearly shows that the introduction of Euro (or elimination of currency risk) marked the emergence of a pattern between the two groups where the North (excluding France) began running current account surpluses against the South which began running current account deficits with the North in a negatively correlated manner.

Based on the productivity-based discussions summarized in the introduction section regarding the US case, one would predict from such pattern that the productivity gains in the South should be superior to the productivity gains in the North. However in the Euro Area case, this prediction would be just the opposite of truth as the following figure using Eurostat data displays.

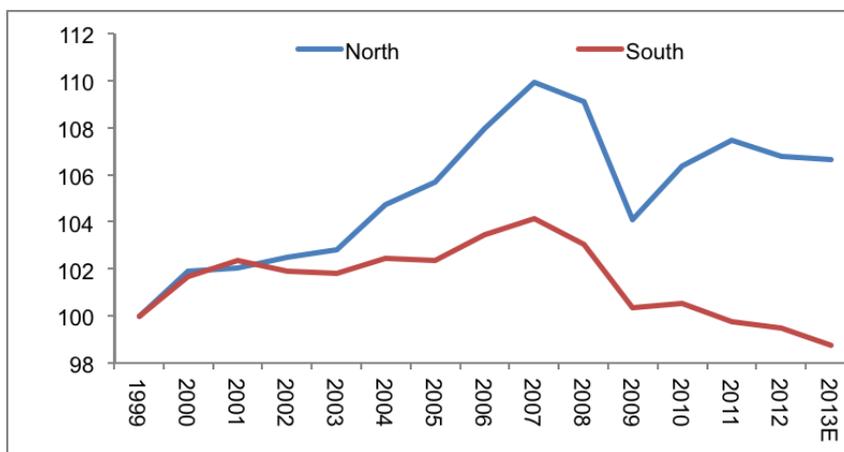


Figure 2:
Cumulated Total Factor Productivity Levels (1999=100)

Source: Eurostat. 2013 figures are Eurostat estimates.

Figure 2 indicates that the South could not attain total factor productivity gains since 1999. Although productivity seems to have risen by 5% until the global financial turmoil in 2008, there has been a sharp decline back to 1999 levels after 2008 and it stood at 1999 levels for all the years following 2009. It is not estimated to recover either in 2013. However, the North has productivity gains over the same years. These observations tell an opposite story of the US case, which might be result of the single common currency. If these countries did not participate in a currency union, South countries could devalue their currencies to balance their competitiveness losses due to productivity lags. However, the Euro Area countries do not have such flexibility since they are tied up by the common currency. In a setting like that, countries with higher productivity levels gain enormous competitive advantage over their trading partners.

3. REAL WAGES, LABOR PRODUCTIVITY, CAPITAL STOCK PER PERSON AND MISUSE OF INFLOWING CAPITAL IN THE SOUTH

The Euro Area countries with lower productivity levels could not adjust the value of their currencies to gain price competitiveness under the single currency regime. Nevertheless, the problematic countries could still benefit from depressing wages to restore back the competitiveness losses due to their stagnating productivity levels. The following figure, though, illustrates quite interestingly that real wages declined in the North since the adoption Euro.

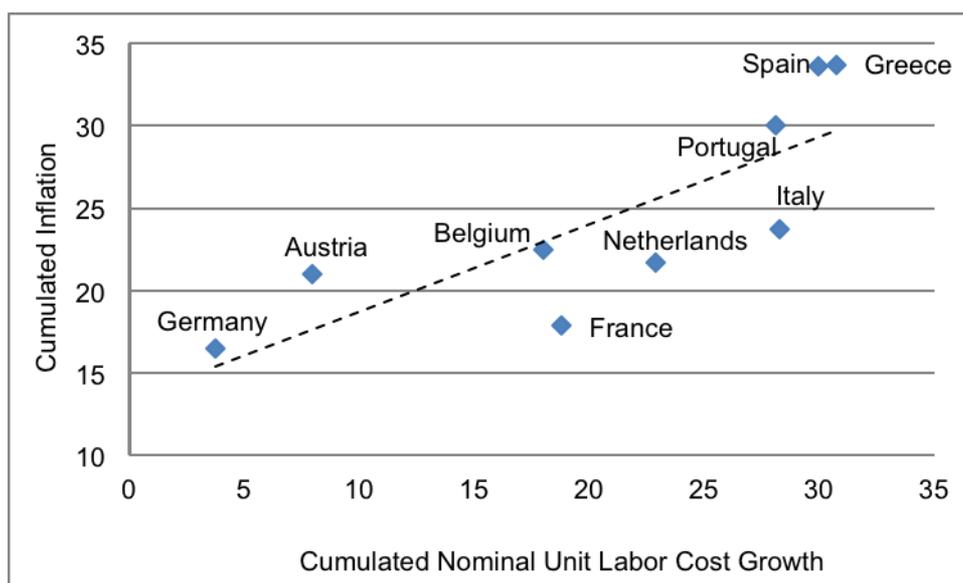


Figure 3:

Inflation and Growth of Unit Labor Cost in Europe (1999 – 2008)*

(*) reproduced from figure 2 in Belke, Ansgar (2009), "Current Account Imbalances and Structural Adjustment in the Euro Area: How to Rebalance Competitiveness", Iza Policy Paper No.7, p.7.

Figure 3 indicates that the South (i.e. PIGS) could not manage to become competitive against the North through the labor cost dynamics. However, this situation did not happen as a result of signifi-

cant labor cost increases in the problematic South. Quite the contrary, the labor costs stayed either the same or even decreased slightly in the South when the nominal changes are compared with the cumulative inflation over the period from the Euro's adoption in 1999 to the global financial turmoil in 2008. However, the real wages declined substantially in more productive core countries such as Germany as a result of the high unemployment - partly a legacy of German unification, and low-wage pressures from Central and Eastern Europe (i.e. two regions closely linked to Germany through history and trade gravity reasons). Figure 3 also shows that the cumulated inflation rate have been higher in PIGS from 1999 to 2008, which would be a hinderance for price-competitiveness of their exports.

Secondly, Figure 4 shows that the South countries were highly distant from the North group with respect to their labor productivity and capital stock per worker levels right before the global financial collapse in 2008.

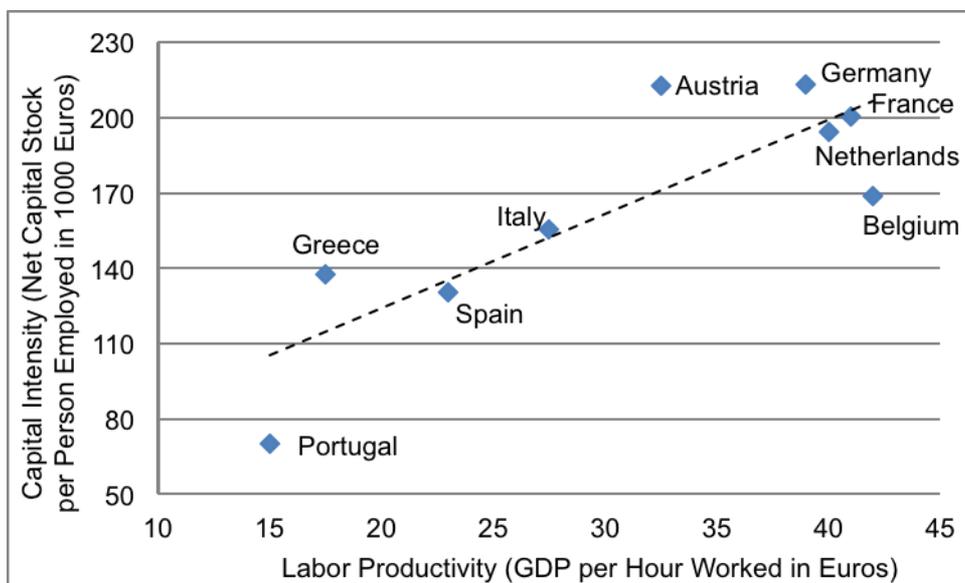


Figure 4:
Capital Intensity versus Labor Productivity in Eurozone (2007)*

(*) reproduced from figure 3 in Belke, Ansgar (2009), "Current Account Imbalances and Structural Adjustment in the Euro Area: How to Rebalance Competitiveness", Iza Policy Paper No.7, p.9.

In sum, the problematic countries in the South Euro Area could not increase their total factor productivity at the pace with the North, had no flexibility to devalue their currency to gain price advantage, could not benefit from stagnant real wages at home as real wages declined in most of the North and had lower capital stock per worker coupled with lower labor productivity. Given these facts, it is not difficult to claim that the South had no alternative but run current account deficits against the North. However, current account deficits have offsetting capital inflows to the problematic countries. Then, one should ask what happened to the inflowing capital. Was it used wisely to make productivity-enhancing investments in the problematic countries?

Lane and Pels (2012) answer this question in a recent paper where they report a striking pattern for the South (over 1995-2007 period) that greater optimism about future growth was associated with lower savings and higher construction investment in these countries, rather than investment in productive capital. Lane and Pels' finding is interesting in the sense that they observed construction booms in the periods of high capital inflows. Therefore, the real estate inflation both in the South and North are plotted below. It is well known that the misused funds (i.e. funds channeled into unproductive loans) typically cause real estate inflation and as Lane and Pels draw attention, if inflowing capital is poured into construction business, there might be speculative demand in this sector driving real estate prices up. Unfortunately, the South had considerable real estate inflation in excess of CPI from 1999 until the global crisis in 2008. Using ECB data, figure 5 shows that the inflation adjusted housing price increase in the problematic countries from 1999 to 2008 was around 40%. Since then almost half of this 40% retreated. The inflation adjusted price movements in housing units market is not that dramatic for the North group.

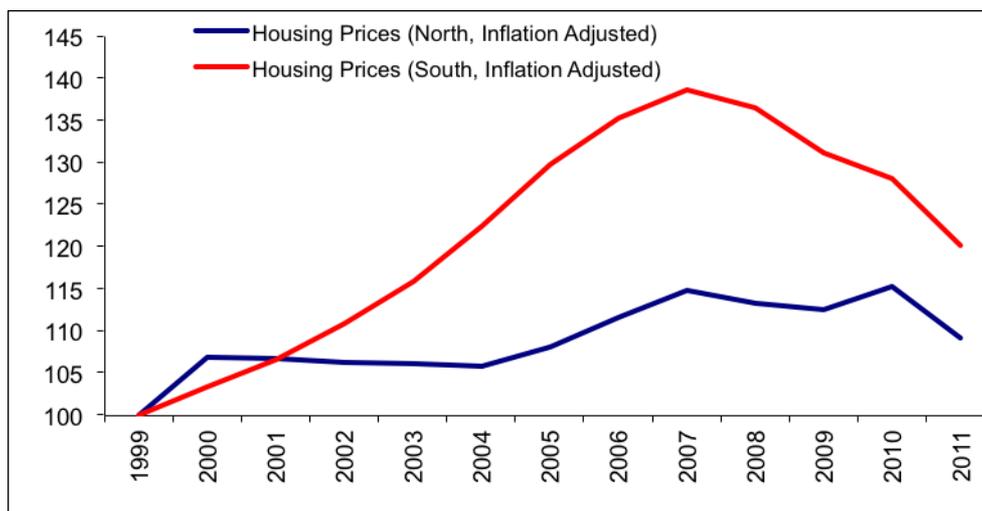


Figure 5: Real Estate Inflation*

(*) Real estate inflation in each country is equally weighted to get regional figures "New and existing dwellings" prices in each country "Existing dwelling prices only in France"

In brief, the South could not increase its competitiveness over the years, labor productivity remained low while labor costs stayed relatively high and the capital inflows resulting from current account deficits could not be directed into productive investments.

As a result, there has been steady divergence between the South and North. As the North became a larger net exporter each year, the South became a larger net importer. However, the accumulated imbalances caused a break-down in the South when the global crisis broke out and the countries in the South could no longer finance their external deficits. The decoupling of these two groups is strikingly reflected in the rising difference between the government bonds' yields (Figure 6).

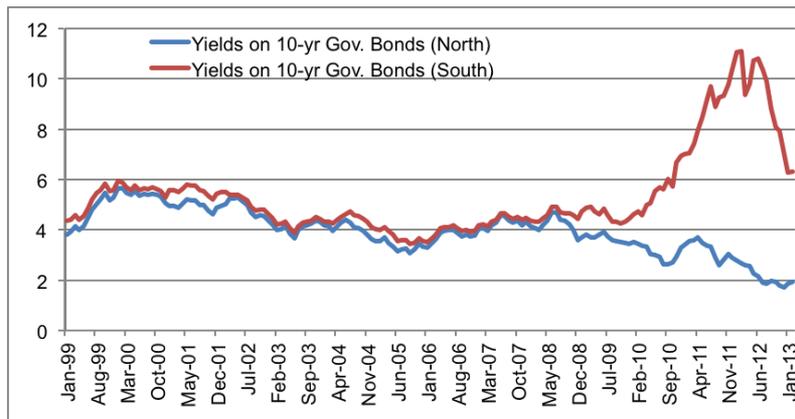


Figure 6: Decoupling of the Problematic South from the Core North

Source: Eurostat.

Country yields are equally weighted to produce group yields.

CONCLUSIONS

At present, the intra-Euro Area current account imbalances are comparable to the current account imbalances between the US and China. Although the current account imbalances in the Euro Area seems to have grown to such magnitude after the introduction of Euro as the single currency in 1999, it did not draw attention as much attention as the US-China imbalance did until the global financial turmoil in 2008. When the global financial system collapsed in 2008, some countries within the Euro Area could no longer continue servicing their debts smoothly and thus the structural problems within the Euro Area surfaced.

First, a pattern seems to have emerged in the aftermath of the adoption of Euro in 1999 as some countries in the South Euro Area became current account deficit countries while others in the North became current account surplus countries. This polarization is attributable to the productivity disparities between these two groups of countries in the Euro Area. The less productive countries in the South Euro Area became importers of goods from more productive countries in the North Euro Area. Since these countries were all using the same single currency, less productive countries could not restore their competitiveness through exchange rate devaluation. They could depress real wage growth at home for gaining cost advantage and in fact the real wages did not increase in most of the less productive countries. Real wages either stayed the same or increased slightly between 1999-2008 in many less productive countries, however the real wages decreased in some of the more productive countries such as Germany and Austria. Therefore, real wage stagnation did not help less productive countries either in gaining competitiveness. Finally, labor productivity and capital stock per worker in less productive countries were significantly lower than those in more productive countries. That is why the less productive countries should be making productivity-enhancing investments to boost labor productivity and accelerate fixed capital formation. However, they created a real estate bubble with the inflowing capital instead. Hence, for the sake of making the Euro currency area healthier in future, the Euro Area countries should seriously try to decrease the productivity differences within the Euro Area.

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