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GLOBAL FINANCIAL CRISIS AND GREEK DEBT CRISIS

INTRODUCTION

This paper presents the causes of the global financial crisis and critically discusses the Greek debt crisis. We argue that the crisis is the result of deterioration of Greek macroeconomic characteristics to levels inconsistent with longterm EMU participation. We also argue that without extensive structural reforms the sustainability of the European Monetary Union is in question. We suggest that the European leaders should take initiatives to create mechanisms to address the debt crisis, to improve surveillance for the implementation of fiscal rules and to strengthen economic cooperation between countries in order to raise funds that may cover the short-termneeds of countries facing sovereign debt crisis.

1. THE CAUSES OF THE GLOBAL FINANCIAL CRISIS

The global financial crisis, which started in August 2007 caused great damages and reversed the economic situation of the largest financial institutions (FI) worldwide by the summer of 2008, but took too large dimensions and has become a deep global economic crisis since September 2008. The impact of the financial crisis, which manifested as the problematic functioning of the financial system (FS) and the intense "credit crunch" in all economies, surged hazardously after the bankruptcy of Lehman Brothers (LB) on 15 September 2008. It was the bankruptcy of a major investment bank with assets over \$ 700 billion, with extensive trade with FI in all countries of the world that had catalytic negative effects on the global economy, which, apparently, were not assessed satisfactorily by the economic policy authorities in the U.S.A.

Generally, the causes of the crisis are undoubtedly related to the liberalization of financial markets (Kaminsky & Rainhart, 1999, pp. 473-500), the

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inadequacy of institutional – regulatory and organizational framework of financial markets, and the functioning of supervisory authorities as well as the corporate governance of financial institutions in each country and worldwide. Regarding the factors that led to the crisis, much emphasis has been given on: a) the current regulatory framework of the FI and implementation procedures b) the unsatisfactory business management and the virtual absence of self-regulation incentives on the part of FI c) the poor supervision of FI, particularly in the U.S.d) the unsatisfactory functioning of the free market in the globalized economy e) the unsatisfactory application of International Financial Reporting Standards (IFRS) in periods of market disturbance.

On the other hand, the majority of macroeconomic analysts place considerable blame for the crisis on the monetary policy followed by the FED in the period 2001–2007. In some of the analyses, this policy is linked to the global macroeconomic imbalances that existed in that period and, in particular, the monetary and exchange rate policies of China, Japan and other countries of SE Asia (Obstfeld & Rogoff, 2009; Caballero & Krishnamurthy, 2009, pp. 584-588). However, in most analyses, the root of global macroeconomic imbalances is the lack of oversight of the financial system (Krugman, 2009). Therefore, protection of the banking system from crises is important for the smooth and proper functioning of economies globally. As regards the institutional framework of the FI, a factor that led to the crisis is thought to be the deregulation policy of FS, applied in the decades of 1980 and 1990. In particular, special emphasis is given to: a) the repeal of Glass-Steagall Act¹ in the U.S. in late 1990, which forbade commercial banks to control brokerage firms and investment banks and to use depositors' money for investment risk b) the weak supervision of investment banks by the FED, although they were largely funded by commercial banks, while the use of Structured Investment Vehicles (SIVs) and other financial instruments also attracted retail savings c) the need for tighter regulatory standards in the operation of Hedge Funds and derivatives markets. Also, particular emphasis has been placed in the incomplete implementation of Basel II, which could have determined the capital needs of FIs before the crisis in a safer way, according to the actual credit and other risks faced by these institutions. But even the full implementation of Basel II could not have prevented the crisis, as the rapid decline of markets and the large amount of damage of the FIs was beyond predictability. Generally, the regulatory framework, particularly in the U.S. appears to have had significant gaps and was not able to prevent the current crisis, which, however, is mainly due to the unbalanced development of world economy after 2000.

¹ The Glass-Steagall Act established the relationship between investment and commercial banking in the U.S. since it was voted in 1933, until the early 70's, with virtually no interest in amending it. The pressure started in the 70's and the reasons were: the securitization of banking and the loss of market share by commercial banks to the benefit of investment banks.

The accession of China to the WTO took place without ensuring the necessary conditions and obligations of the contractors for smooth functioning of the global economy. Thus, the imbalances that were created consist in very large surpluses during the recent years in the balance of payments of China, Japan and other countries in SE Asia, as well as Germany, Holland, Switzerland, Sweden and the Middle Eastern countries, reflected in respectively large balance of payments deficits in the U.S., the Eurozone except for Germany and the Netherlands, the United Kingdom, the countries of SE Europe, the Baltic countries, etc. The factors that have contributed to these imbalances are related to the policy of keeping at excessively undervalued levels the real exchange rates of the Yuan (China), the Yen (Japan), the real effective euro exchange rate for Germany, and the currencies of many other countries of SE Asia and Latin America, as well as oil-producing countries. The result of this policy was not only the rapid rise in the surpluses of the external balances of goods and services of the reserves of these countries, but also the rapid increase in global liquidity.

Specifically with regard to Germany, the restrictive fiscal and income policy followed in its economy makes the Euro a significantly devalued currency for this country, while at the same time it is a significantly overvalued currency for most other countries of the EZ. For example, the average annual wage growth per capita in the period 2002–2008 was limited to 1.7% in Germany, against 2.8% in EZ as a whole. Also, the average annual increase in domestic private consumption expenditure in real terms over the same period stood at –0.13% in Germany, compared with 1.4% in EZ. Such are the developments also in the field of government consumption expenditure. In order to achieve the containment of domestic demand, Germany has raised the VAT rate. As a result, the country's growth in recent years has been based primarily on boosting domestic demand not in its own economy, but of its economic partners. A policy similar to Germany's is also followed by the Netherlands.

In China's case, the constant intervention of the Bank of China in foreign exchange markets to prevent appreciation of the Yuan (CNY) resulted in the impressive increase of its reserves due to excessive surpluses both in its current account balance (CAB) and capital account (CA).

Any continuation of these trends places an even greater burden on the negative growth of the global economy.

2. DEBT CRISIS AND COMPETITIVENESS OF THE GREEK ECONOMY

The international financial crisis caused a sharp deterioration in the fiscal position of the vast majority of developed countries and the debt crisis in the "periphery" of the euro zone. Developed countries, in their effort to rescue their financial systems have undertaken significant liabilities, which greatly increased their annual deficits and led to a rapid accumulation of debt to levels not seen in peacetime. The fiscal position of many developed countries, within and outside the European Union, remains precarious and the achievement of a strong and sustainable fiscal position is a challenge for every country. In this environment, there is an increased interest in strengthening the financial institutional framework and adopting numerical fiscal rules governing fiscal governance (OECD, 2010, pp.256–260; Cottarelli et.al.; 2009; Garcia et.al., 2011).

The sovereign debt crisis of Greece is not of course due to the attempt to rescue the financial system of the country, but to a reassessment of credit risk from the markets as a result of the international financial crisis, coupled with the chronic fiscal imbalances that during the past three decades led to the accumulation of very high debt. These imbalances resulted, inter alia, from the lack of even a basic financial framework, which would ensure the sustainability of public finances in Greece (European Commission, 2009, p.88).

The high deficits and rising external debt contributed to reducing the creditworthiness of Greece, resulting in an increase in borrowing costs (Blanchard and Giavacci, 2002, pp.152–153), because of the increase in the interest rate risk premium, with adverse effects on economic growth and the potential to refinance debt, most of which is held by residents of other countries.

The high fiscal deficit is a major cause of the chronically high deficit of the current account (Cafiso, 2009). At the same time, however, the magnitude and persistence of the external imbalance may also imply the existence of significant structural problems. From 1960 until late 1990, the current account deficit in Greece was, according to national accounts data, between 0% and 5% of GDP. Notably, a surplus was recorded in some years. Although the data are not entirely comparable, from 2000 onwards the situation changed dramatically for the worse and the deficit peaked at 14% of GDP in 2008. This trend indicates weak competitiveness (Kazakos, 2010). The competitiveness of the economy depends on the application of the following two principles: first, the real wage growth needs to be closely related to productivity growth, so as not to increase labor costs per unit, and secondly, the production of goods and services has to adapt and respond to domestic and external demand. By applying these two principles, the production has passed the test of competition internationally, the balance of foreign trade is in equilibrium and citizens enjoy a steadily rising standard of living. Thus, the economic policy actors are not forced to resort to policies that reduce real wages or policies that drive the economy to operate at activity levels lower than its potential in order to reduce inflation and improve competitiveness of production, something that brings slowdown in economic expansion and rising unemployment.

Competitiveness can be examined from various angles (Provopoulos, 2010). One approach is the microeconomic, which focuses on the evolution of prices and costs in comparison with the quality of traded goods. Alternatively, based on a macroeconomic approach, external imbalances reflect imbalances that characterize domestic households, businesses and the public sector. Finally, based on a developmental approach, the focus is on long-term potential output and total factor productivity.

It is often assumed that the deficits in current account within a monetary union do not matter, partly because the possibility of speculative attacks on national currencies is eliminated. Indeed, it is possible to argue that the deficits/surpluses recorded in individual countries or regions within a monetary union are due to the ordinary process of real convergence, in which capital flows out of the most advanced to the least developed countries or areas of the monetary union which have higher efficiency and attract more capital investment. These capital flows are a reflection of similar imbalances in the current account. Along with the process of real convergence, these flows tend to decrease and investments that support the process of real convergence begin to bear fruit.

The experience of Greece, however, like other Southern European countries has shown that this view is too optimistic. The deficits of the current account were usually accompanied in these countries by an accumulation of foreign debt. In some cases, there is the possibility of funding continuous and large deficits with flows of funds that do not create debt, e.g. from foreign direct investments (in Greece, the inflow of foreign direct investment has averaged less than 1% of GDP). The debts, however, could not continue to accumulate indefinitely, since they have to be serviced along the way and to be repaid at maturity. Smooth external debt servicing is possible if and when capital inflows are channeled into productive investments, whose returns are sufficient to cover the cost of borrowing. Servicing will not be possible, however, if the accumulated debt is channeled into consumption. Because the existence of current account deficit reflects the fact that the country spends more than it produces, the normal repayment capacity of external debt presupposes that there will be a period during which the total cost will be lower than the total output of the economy.

This approach of the current account deficit reveals a compelling truth: the external deficits cannot be kept large forever, if they reflect an exaggerated total domestic consumption. The high and sustained deficits create foreign debt, which can develop an unstable dynamic – that is, increasing as a percentage of GDP or, in other words, as a percentage of the country's capacity. It is this dynamic, coupled with the dynamics of public debt (whether domestic or foreign), that definitively refutes the view that speculative attacks can be eliminated by participation in a monetary union. Although speculative attacks on national currencies cease to exist by default, because in a monetary union there are no individual national currencies, speculative attacks against countries with high debt are still possible and can be triggered by unsustainable deficits in the current account, i.e. deficits that add unstable dynamics to external debt. In countries of a monetary union, such speculative attacks occur through the credit

risk, in the form of widening credit spreads in interest rates in bond markets. A typical case is the recent experience of Greece. It is not only the budget deficit that has contributed to the current funding problem the country is facing, but also the current account deficit, which reflects the excess of consumption in relation to income, both in the private and public sector. Moreover, the current account deficit led to an increase in external debt as a percentage of GDP from just over 40% in 2001 to about 165% in 2011 (Bank of Greece, 2011). Additionally, during this period, interest payments on external debt are increasing and today represent more than 5% of GDP.

This situation is not sustainable. Policies must be implemented to improve the competitiveness of the Greek economy and, by extension, to improve the current account deficit to sustainable levels.

For a detailed examination of the deficits of the current account or the problem of competitiveness (Gikas, 2004, pp. 183–187) it is possible to follow alternative approaches (Provopoulos, 2010). At the micro level, one can distinguish between competitive price/cost (European Commission, 2010) and structural competitiveness. The first relates to factors such as changes in labor costs per unit and profit margins compared to competing countries, in juxtaposition with developments in the nominal exchange rate (Ruscher and Wolff, 2009, pp. 5–8). Indicators of this kind have recorded for Greece, since its accession to the Eurozone, a cumulative loss of price/cost competitiveness in the range of 20– 25%. The social partners, apparently either do not consider the factor "competitiveness" in the process of wage bargaining or have not adapted to the data of a monetary union, in the framework of which there is no longer the possibility to use the nominal exchange rate as a tool to offset the deficit competitiveness.

One feature of international trade transactions today is the importance of intra-industry trade, which stems from the high product differentiation. The consequence of this difference is that demand is not determined only by price but also by other factors such as product quality, prestige of the brand name, etc. With this background, the issue of competitiveness is also connected with parameters such as the particular characteristics of the products being produced. This raises the central question of whether production is oriented towards sectors with high added value.

Studies² investigating the determinants of Greek exports and imports confirm that the comparative performance of local products and services to their

² The ECB services utilize estimates of a recent survey, which makes the separation of the share of exports to the main components for the euro area countries over the period 1996–2007. For Greece, these estimates show that the decrease in the share of exports due to the deterioration in competitiveness in a broad sense (competitiveness in relation to the prices and quality factors) is greater than the increase in the share due to the influence of market development (market orientation of exports and specialization of production) to which the exports of the country are directed, and this is why the portion of Greek exports to international markets is reduced. In

respective foreign is linked to competitiveness not only in prices (Cafiso, 2009) but also in relation to other parameters (Hyz, 2001, pp. 434–446) which are extremely important, especially for two key export sectors of the Greek economy: tourism and shipping.

The sustainability of current account balance can also be seen in macroeconomic terms, according to which external imbalances reflect internal imbalances of the public and/or the private sector. As an accounting identity, the current account deficit coincides with the sum of the deficits of the public and private sector (the amount by which the investments of each sector exceed the savings). After its integration in the euro area, the Greek economy has been characterized by growing fiscal deficits. At the same time, the private sector (households, to be exact) has also had deficits, mainly due to a significant decrease in the propensity to save, marked in this sector already in the 1990's, before joining the euro area. The mounting deficits in both the private and public sector cannot be attributed to a permanent increase in the propensity to invest. This fact is essential. In contrast to consumption spending financed with borrowed funds, investments undertaken are expected to result in future returns, from which a part may be available to repay the original loan. Therefore, when long-term foreign borrowing finances consumer spending, a future period will inevitably follow during which the consumption will need to be below the income, so as to enable the servicing of foreign debt repayments and interest.

According to the macroeconomic approach, the deficit of current account can be attributed to the fact that the development was mainly driven by demand (Maravalle, Aless. and Peter Claeys, 2009), so the total domestic demand for goods and services exceeded for many years the potential proceeds from the Greek economy. Both the public and the private sector contributed to the large external deficits and foreign debt accumulation. Therefore, both sectors are now required to adapt their structures and behavior in ways that will make it possible to reverse the momentum of the country's total external debt.

Finally, another approach to the current account balance is based on the analysis of the potential output and sources or factors that determine the long-term rate of economic growth. The concept of competitiveness has been criticized for showing trade as the scene of conflicts between countries – something that contrasts with the prevailing economic theory, which concludes that international trade benefits all countries involved in it. The improvement of

particular, the estimates show a decrease of the total market share of 0.37% per year, due to the negative impact of a total (price and non-price) competitiveness by 2.24%, the positive effects of higher market by 2.0%, driven by specialization in geographic markets that have made a high degree of expansion, the negative effect of product differentiation by 0.45% and a positive balance of 0.32% due to other factors. See Cafiso, G., "The Export Performance of the Euro Area countries in the period 1996–2007", University of Catania, Economics Department, July 2009, Table All 9. CMSA-Greece, 27.

alternative and macroeconomic performance of a country by strengthening competitiveness ultimately goes back to the issue of improving total factor productivity, i.e. the productivity of both labor and capital. The stable and sustainable growth requires primarily a boost of the potential growth rate, which for small economies is only possible with a central channeling of production mainly to tradable, instead of non-tradable, goods.

From the above approaches to competitiveness some policy proposals could arise. The macroeconomic approach, as mentioned above, leads to clear conclusions. The policies that improve the fiscal position contribute to a deficit of current account. At the same time, the policies that encourage private sector savings and tame consumption by borrowing contribute to bridging the investment/savings gap of the private sector. Such policies attempt to deal with the current account deficit primarily from the demand side and are aimed at realigning the growth rate of total demand in the economy with the growth rates of its productive capacities.

On the other hand, the microeconomic approach emphasizes the need to improve the performance of the Greek economy from the supply side and to promote the openness and flexibility to cope with external shocks which may occur in the monetary union. For this purpose, reforms are needed in the labor market (including education and vocational training) and product markets, in addition to upgrading the quality of institutions.

Greater flexibility facilitates adjustment in a monetary union, in which by definition improvement of the price/cost competitiveness cannot come from a unilateral devaluation of the currency, but only by improving the relevant cost and the relevant profit margins in comparison with the rest of the union.

3. EUROBONDS AND PUBLIC DEBT

Large deficits in the current account in Greece and some other member countries of EMU, reflecting loss of competitiveness and excess domestic demand, could not exist and be maintained in countries outside a monetary union. The countries entering a monetary union lose more than an instrument of economic policy such as interest rates or the exchange rate. They also lose the opportunity to borrow in currencies which they fully control. Thus they become more vulnerable to changes in trends in financial markets, "which can lead to a sudden cessation of public debt financing, setting in motion a devilish interaction between liquidity crisis and crisis concerning public debt servicing capability" (De Grauwe, 2011).

In a monetary union, the lack of exchange rate changes requires the use of other instruments and to improve coordination of economic policy so as to reduce external imbalances (Bank of Greece, 2010). The current situation creates

competitive advantage and accumulation of surpluses in current account balance in Germany and some other member countries.

Issuing collective sovereign bonds, as part of a system with the correct incentives and rules, could act as a defense system against the state of euphoria and panic that often plagues the financial markets. This does not mean that there is no need for deep structural changes and reforms in both national economies that are experiencing serious difficulties and the economic governance of EMU.

In principle, it should be noted that Eurobonds are no substitute for the necessary fiscal adjustment and structural reforms on the economies of the euro area characterized by high fiscal deficits and debts and low competitiveness. First, because the fiscal adjustment and reforms are needed to ensure employment and prosperity in any economy; second, because fiscal consolidation, or even a significant progress in this direction, is according to many European governments a precondition to the Eurobonds.

It should also be understood that the issue of Eurobonds is not a technical issue, as often portrayed, but purely political, since its adoption would be tantamount to fiscal integration of the Eurozone countries. This implies the transfer of national rights on important economic and financial policies to a central institution in Brussels.

Bearing in mind the above, the adoption of Eurobonds could, under certain conditions, operate as a stabilizer, given that it would eliminate a major factor of uncertainty: the inaccessibility of some countries of the Eurozone in the capital markets on terms that will not endanger debt sustainability.

The conditions are mainly the correct design of the project in order to limit concerns about moral hazard, i.e. the absence of incentives for sound public finances, and to ensure that there will be improvement or at least no deterioration of the relative position of all member countries (e.g. to persuade countries with a high credit rating that their low borrowing costs will not be threatened or to find effective ways of balancing this risk).

The focus of discussions on public debt crisis, on support mechanisms and related issues should not obscure the fact that the major challenge for the EMU is not financing of the deficits and debts but economic adjustment. Even the most advanced and powerful financial scheme cannot save the EMU without an effective economic adjustment model, able to function smoothly in order to create growth and employment and to absorb external deficits and surpluses without particular intensity. Even a fiscal union, although it would be an important step towards the economic integration of Europe compared with the present situation, would not suffice to make the present system function. No system is sustainable if it depends on a permanent basis on financial support mechanisms, at least over a large area (Wolf, 2011).

Although the degree of real convergence, the mobility of production factors and the adjustment capacity of economies existed on the basis of the theory of "optimum currency areas", the convergence criteria for EMU membership focused mainly on nominal indicators such as inflation, interest rates, exchange rates and public finances, and much less on the adaptability of economies (Sapir, 2009). Various interpretations have been given for that choice, as for example that it was chosen to give priority to monetary stability and robustness of public finances, and that there was an expectation that real convergence will occur gradually under the pressure of events in an analytical framework of "optimum currency areas" ex post.

In order to correct these weaknesses, initiatives must be taken to strengthen economic governance, to address the "reform inertia" in EMU and to facilitate structural changes aiming to improve competitiveness, adaptability and, finally, real convergence.

CONCLUSIONS

The excessive public debt of Greece combined with the deteriorating competitiveness of the economy, raised doubts in the international money and capital markets on the country's medium-term ability to service its debt. Subsequently, the accelerated reaction of rating agencies to downgrade the country's credit rating on the one hand, and the untimely deterioration of the Greek economy on the other, caused panic in the market for Greek government bonds. The excessive cost of borrowing of the Greek government with a risk premium, which was the natural consequence of these developments, limited the potential to refinance public debt even in the short term.

The transmission of the "pathogenesis" of the Greek economy to vulnerable economies of the southern countries of the euro area, which face the same problems with Greece but to a lesser extent, is evident. Moreover, the concerns of member countries on the ability of the Eurozone to deal with sovereign debt crisis undermine the stability of the euro exchange rate. European leaders, under pressure from financial markets, should take initiatives to create mechanisms to address the debt crisis, to improve surveillance for the implementation of fiscal rules and to strengthen economic cooperation between countries in order to raise funds that may cover the short-term needs of countries facing sovereign debt crisis. The issue of Eurobonds is at least a good medium-term solution, provided that the countries that will draw the necessary capital will carry out the fiscal adjustment and the required structural reforms.

Greece is today at an extremely difficult juncture. It has a borrowing problem, but it also has high public debt, serious lack of competitiveness, unsustainable social security system, particularly poor public administration and a large and wasteful public sector. So even if the borrowing problem were solved, the solution to the other problems is urgent and pressing. The exit of the economy from the crisis does not ensure stability and sustainable growth unless accompanied by reforms. The current situation provides, paradoxically, the best opportunity for structural reforms.

BIBLIOGRAPHY

Bank of Greece (2011) Monetary Policy – Interim Report 2011, November.

- Blanchard, Ol. and Fr. Giavazzi (2002) "Current Account Deficits in the Euro Area. The End of the Feldstein-Horioka Puzzle?". Brookings Papers on Economic Activity, 33, No 2.
- Caballero, Ricardo and Arvind Krishnamurthy (2009) "Global Imbalances and Financial Fragility". American Economic Review Papers and Proceedings, May.
- Cottarelli, C., M. Kumar et al. (2009) "Fiscal Rules: Anchoring Expectations for Sustainable Public Finances". IMF, Policy Paper.
- De Grauwe, P. (2011) "The governance of a fragile eurozone", CEPS, April.
- European Commission (2009) European Economy: Public Finances in EMU 2009.
- European Commission, Special Issue: "The impact of the global crisis on competitiveness and current account divergences in the euro area", Quarterly report on the euro area, 9, No 1, 2010.
- Garcia, C., J. Restrepo and E. Janner (2011) "Fiscal Rules in a Volatile World: A Welfare-Based Approach". IMF, Working Paper, WP/11/56.
- Gikas, Gr. (2004) "Competitiveness problems of less developed Member Countries of the European Union by joining the Euro Zone", 2º International Scientific Conference "Enlarged Europe and Regional Disparities", Preveza, June 3–4, 2004.
- Hyz, A. (2001) Research and Technological Development as Factors for Improving the Competitiveness of Regions. Proceedings of the 1st International Conference "The growth prospects of the less developed regions of Europe". T.E.I. of Epirus, Preveza, 24–25 May 2001.
- Kaminsky, Graciela L. and Carmen M. Reinhart. (1999) "The Twin Crises: The Causes of Banking and Balance of Payments Problems", American Economic Review, Vol. 89.
- Kazakos, P. (2010) From the unfinished modernization to the crisis, 1993–2010. Athens, Patakis.
- Krugman, P., (2009) The 2008 crisis and the return of the economic recession. Kastaniotis, Athens.
- Maravalle, Aless. and Peter Claeys, "Variable Tax Policy and Current Account Volatility in EMU", Paper presented in the Workshop of "External Imbalances and Public Finances in the EU", organised by the European Commission, Brussels 27.11.2009
- Obstfeld, Maurice and Kenneth Rogoff (2009) "Global Imbalances and the Financial Crisis: Products of Common Causes". Federal Reserve Bank of San Francisco Asia Economic Policy Conference, Santa Barbara, October 2.
- OECD (2010), Economic Outlook, 2010/2.
- Provopoulos, G., Bank of Greece Governor. A Preface to "Current Account of Greece: Causes of Imbalances and policy proposals", edited by Economou, G., Sabethai, I., Symigiannis, G., Bank of Greece, July 2010, Athens.
- Ruscher, E. and G.B. Wolff (2009) "External rebalancing is not just an exporters' story: real exchange rates, the non-tradable sector and the euro". European Economy, Economic Papers 375.
- Sapir, A. (2009) "The Optimal Currency Area Theory", Panel statement in ECB's "The euro at ten lessons and challenges". September.
- Wolf, M. (2011) "There is no sunlit future for the euro", Financial Times, 19 October.

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