The Euro: why it went wrong and how to get on? [1]

Jesper Jespersen (Roskilde University)

Will history repeat itself?

The lesson from the past is tough, but undeniable: All currency unions that were not anchored in state like political structures were wrecked sooner or later. Most likely sooner rather than later. This became the outcome when the economic development of participating countries began to drift apart, and the internal contradictions between the different countries tightened. The weaker countries experienced that the rising balance of payments deficits caused the rate of interest to rise and jobs in the export industries to vanish. The pressure on these deficit countries to abandon the common currency and to gain at least some freedom in pursuing its own exchange rate and monetary policy is enforced. The longer the deficit countries stay within the monetary union and have to accept growing foreign indebtedness the more they feel that the monetary union represents a straitjacket, which eventually will develop into a financial crisis. A prolonged period with a deficit on the current account is usually characterized by a continuous loss of jobs and rising unemployment. Purchasing power is leaking out of deficit countries towards surplus countries. Therefore, surplus countries do not see any reason to accept changes within the monetary union. They are quite happy with the currency arrangement and do not see any urgent reason to change the rules of the game. But, this attitude of complacency oversees the mutual dependency which is a part of a monetary union, where the balance of payment surplus of one (or more) countries must by necessity and due to book keeping identities be equivalent to one or more member countries' balance of payments deficit.

That the sum of surpluses is equal to the sum of deficits is not a theoretical conclusion which can be disputed, since we are dealing with a simple bookkeeping relationship. The euro-zone has by and large equilibrium at the current account with other countries due to its floating euro-exchange rate. In the present case one, therefore, has to be aware that the mounting current account surpluses in Northern

Europe, primarily represented by the German surplus (of a size roughly equivalent to the entire EU budget), accounting wise has to be matched by corresponding deficits in Southern Europe. Against this background of mutual dependence it makes hardly sense to ask EMU-countries to put their national current account into balance, because one country cannot reduce its balance of payments deficit without, at least, one surplus country agrees to reduce its surplus.

To make a monetary union to function it is a requirement that the economic structures and the priorities in the overall policy are quite similar among the participating countries. A harmonious development within the EMU must in particular imply that surplus countries are willing to reduce their surplus – and even for a period of time to accept a balance of payments deficit, which is a necessity for the Southern countries to get rid of at least parts of the foreign debt. So the question to be posed with regard to the future of the EMU is, will Germany, the Netherlands, Austria and Finland be prepared to go into balance of payments deficit for a number of years? If not something else has to give in and history will most likely repeat itself.

Too little focus on balance of payments disequilibria

The Northern European countries have since EMU was launched in 1999 focused on an economic development with price and money wage stability in focus for the national economic policy. In fact, until 2008 the economic performance by Germany was considered disappointing due to poor real economic growth. Her export did well, but domestic demand, especially private consumption, was lacking behind. Anyway, this was a deliberate prioritization by the German government preferring cost stability at the expense of excess growth. Conversely, the countries of Southern Europe were more interested in supporting real growth in an attempt to catch up with the richer countries in the northern part of the region. This catching up policy had the consequence of a faster cost development and rather sluggish structural reforms in Southern European countries. In these countries unit labour cost went up 2-3 percentages quicker per annum than in Northern Europe. Such a difference does not play any role in a single year; but when it stays on year after year for more than 10 years, the difference in cost *levels* becomes significant. Today it is 20-30 percentages more expensive to produce similar goods in the Southern compared with the Northern parts of the EMU. Such a difference cannot avoid being reflected in the overall balance of foreign trade in goods and services creating growing surpluses and deficits i.e. unequal development.

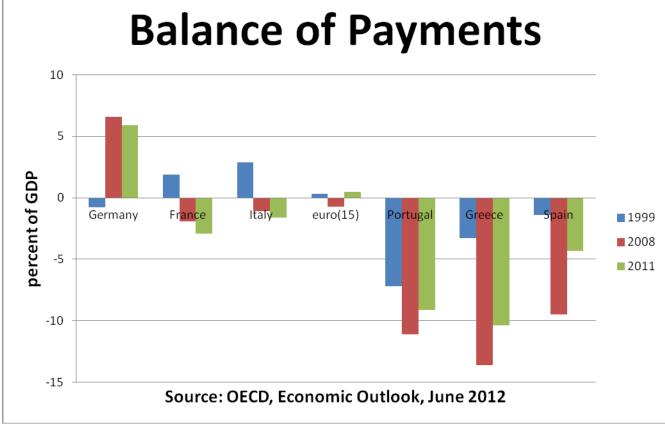
Throughout all the years, where the euro has been in existence the Southern European countries have ran larger and larger current deficits with the consequence of an accelerating foreign debt. The external debt of the South has grown year by year. This growing imbalance was in the beginning considered as temporary and of minor importance, because these deficit and surplus countries had a *common* currency. Economists and politicians were misled by a wrong analogy comparing the situations of sovereign states with regions inside a national state. It was not understood that the easiness (or rather the difficulties) of borrowing a broad does not depend on sharing the same currency, but sharing a mutual responsibility of the economic development. At the end of the day, it is the federal government of the US which has the economic responsibility of the economic performance of the different states. If the Californian state government goes bust, Washington will step in – for sure not unconditionally, but the Federal Government will stabilize the Californian economy and make it possible that profitable Californian firms is able to borrow in dollars at a reasonable rate of interest.

In this case it makes sense to have a common currency. They have a shared political responsibility, a shared cultural back ground, a shared language and a highly integrated labour market. Contrary to the states of the US, countries within the EMU are political sovereign. They do not share a political or economic mutual responsibility. Their labour markets remain highly fragmented, geographically, linguistically, legally and culturally - just to get north and south to integrate within Italy seems still to be a problem after 150 years of political unification. Within the EMU there is no institution which secures automatic convergence of the balance of payments imbalance. On the contrary, the shared monetary and exchange rate policies make the countries drift even further away from each other. The rate of interest and the euro-exchange rate are too low for some countries and too high for other, because it is set to match the 'average' country which does not exist.

But as long as the overall economic development in the EU showed positive growth rates of 2-3 percent in most countries and falling unemployment, politicians (and most economists) were willing to ignore these underlying growing cost imbalances. Equally surprising it was that the often very fearful financial markets continued to provide loans to Southern Europe on terms, which did not differ much from the rate of interest in Northern Europe. Right up until 2007 the rate of interest paid by debtors in Greece was only ½ percentage point higher than the rate on a comparable German loan. In retrospect, it can be seen that the financial markets (and rating agencies) were, to say the least, incompetent in their judgement on country risks. Anyone with insight into macroeconomics could already at that time see that the balance of payments situation was fundamentally untenable, cf. figure 1. Here it is seen, how imbalances grew from the start of EMU in 1999 until 2008 in the North (represented by Germany) and in the South (Spain, Portugal and Greece). And still worse, these countries, although in a deep recession, are still running a deficit at the balance of payments, making them even more dependent on foreign borrowing. Hence, foreign indebtedness continues to grow year by year, which already have caused Greece, Portugal (and Ireland) to demand for financial help from the EFSF. These loans carry a relative high rate of interest (between 5 and 6 percent p.a.) and very, very hard conditions on public finances. I will be back on these conditions which seem to be misplaced as long as the major problem is lack of foreign competitiveness rather than public overspending.

Figure 1 Balance of Payments surpluses and





Note: The balance of payments for the Euro-zone as a whole comes close to zero

Balance of payments, unemployment and budget deficits

The EMU countries with the largest balance of payments deficit were hardest hit by the financial crisis, which developed from 2008. They had to depend on foreign borrowing. When the international capital markets dried up in the wake of the Lehman Brothers' collapse, these countries stood with an acute financial problem. Interest rates soared, especially for those countries that had the highest private foreign debt and also the weakest private banks (and other financial institutions): Ireland, Greece, Portugal and Spain. In these countries the national governments had to support the financial sector to such an extent that it became a debt burden by itself on public finances. Further on the public debt grew as a consequence of rising unemployment. Suddenly the weak Southern European countries found themselves in a double debt squeeze: foreign and public debt. The true understanding of this development requires that the proper causality is unveiled. There are of course several causes; but instabilities of the private sector and private financial sectors seem to be dominant. It quickly became apparent that it was countries with large current account deficits that were most vulnerable. They had to varying degrees based growth in the national economy on domestic private demand, particularly in a fiercely overheated construction sector, which collapsed when interest rates began to rise.

Public sector budget deficits, where do they come from?

The balance of payments deficits and surpluses within the EMU add up to zero; but nearly all EMU-countries have a deficit on the public sector budget. How can that be? Hereby it is demonstrated that there are two different kinds of macroeconomic imbalances marring the EMU-countries: 1. different cost-levels and 2. lack of effective demand. The latter has not developed as a uniform problem until the outbreak of the economic crisis in 2008. The main reason for today's government budget deficit can be attributed to the significant imbalance in the private sector between savings and real investment in all EMU-countries. When private savings exceed private real investments there is a drag on effective demand and unemployment increases. In a closed economy the real activity will go on falling until saving and real invest match each other. A public deficit can counterweigh the lack of private real investment. In modern welfare states the so-called automatic stabilizers will secure increased public social expenditures during a recession. The smaller the size of the automatic stabilizers is the deeper the fall in private income and employment will be. Increased public real investment can also fill in part of the lacking private investments.

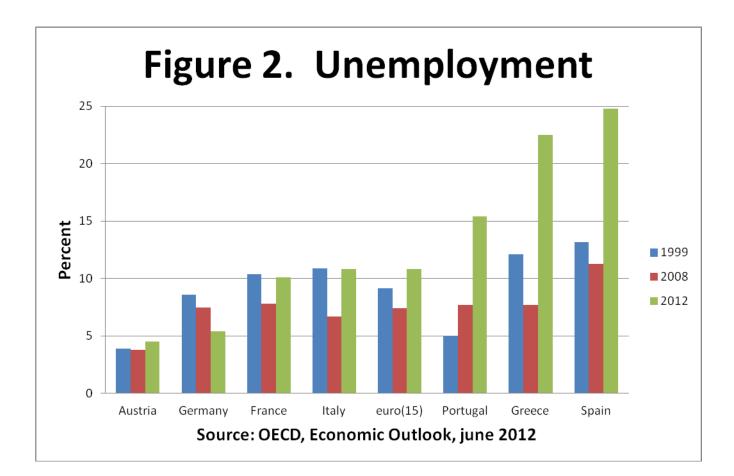
At the end of the adjustment process private financial surplus has to match exactly public sector deficit [2]. Hence, the cause of public deficit will usually be found in the private sector imbalance and increased unemployment. Those EMU countries, which have experienced a particularly large deterioration in government budgets, have, without exception, also had the largest increase in unemployment. This increase can be attributed to a collapse in private (building) investments and partly to large current account deficits. [3]

When these causal relationships are recognized, it is also easier to understand why a one-sided focus on public sector budget deficits particularly in Southern Europe will not be able to overcome the economic crisis. Public savings will primarily have the effect that unemployment rises further. A higher unemployment is a burden on social spending and reduces tax revenues. The automatic budget stabilizers have a size of approximate ½ percent of GDP for each percentage point increase in unemployment. This means that every time the unemployment rate rises by one percentage point public net-spending goes up by ½ percent of GDP. In Spain, unemployment has increased by 14 percentage points since 2007, cf. figure 2, which explains approximate 7 percent of the deterioration of the Spanish public sector budget.

If the ambition of economic policy is to get rid of unemployment, budget deficit and current account deficit (in the south), it is necessarily to analyse these three imbalances at the same time. It is the private over-saving i.e. the lack of private real investment, which is the main cause of unemployment and thus budget deficits. Real investment is held back by weak effective demand in the all EMU-countries¹, by the banking sector's lack of equity capital caused by bad loans, and finally in the South by the loss of competitiveness. The three conditions have jointly established a depressing hand on the European economic prospects and overburdened public budgets to such an extent that it has developed into a public debt crisis.

Once the macroeconomic imbalances have grown so large, as it is the case today - with unemployment exceeding 25 percent, a foreign debt of more than 100 percent of GDP and continued large current account deficits, there is no easy or even quick way out. Any suggested solution requires both an insight into the causes of the crisis and a considerable political ability to act at the national and the European level to change direction away from the abyss. The one-sided focus on reducing the public deficit and public debt ratios contained in Finance Compact seems only to have reinforced the European crisis by increasing the macroeconomic imbalances within and among the EMU-countries.

¹ Due to high trade intergration the economic development is the euro-zone is dependent on effective in all countries. The mutual interdependence is quite high, which means the restrictive fiscal policy in one country has a negative spillover effect on other EMU-countries.



Possible options for the future

The two charts above illustrate together the core of EMU countries' overall balance problems. They have a common currency, but are evolving in macroeconomic sense more and more differently, which cannot be sustained in the longer run.

1. Business as usual

Business as usual means one-sided focus on public sector deficit. Hence, the fiscal compact which is just a tightened version of the Stability Pact may reduce the budget deficit, but will increase unemployment and lower growth prospects, which would obstruct the revitalization of the private investment and make no contribution to an improvement of the competitive position in Southern Europe. In contrast, the continued public spending cuts, which is demanded by Bruxelles because the 3 percent of GDP-rule is violated will weaken the business cycle even further. In fact, any fixed limit on the size of the budget deficit is a cause of instability by itself. There is a risk that such a rule weakens the working of the automatic stabilizers. It therefore easily leads to erroneous policies when a fixed target for the government budget balance is set independently of the general macroeconomic development. The target should, of course, differ from country to country in recognition of the different structures (and welfare states). Further the budget limit should be corrected in cases,

like the recent, for extraordinary high unemployment or low private investment (savings surplus in the private sector). A uniform and fixed budget limit in all countries has a destabilizing effect, because it may force countries to undertake a counter-cyclical fiscal policy. Even more paradoxical, there is not build into the Stability Pact any breaks on booming economies. The Spanish and Irish governments could fuel an already overheated economy in the years before 2008, because they had a surplus on the public sector budget. This too expansionary policy did cause instability. In fact, the surplus in these countries was too little; but Bruxelles did not (and could not) intervene, although it was obvious the macroeconomic imbalance (mainly at the balance of payments) were unsustainable, because the private sector had a much too large saving deficit.

In addition there is in the Fiscal Compact no consideration of cost levels, balance of payments or foreign debt. Hence, business as usual causes increased imbalances among the EMU-countries, increased instability and at the end an unavoidable break up of (parts) of the monetary union. That could be a deliberate German strategy, because she never aspirated for a monetary Union of seventeen (or even more) members. At the end the Germains might get their will with the EMU having a size, which come close to what in theory is called an optimal currency area. Whether this area will contain France is difficult to say in practice.

2. A (more) federal euro-zone

The understanding that the fiscal compact does not offer a solution to the euro crisis has, fortunately, been caught by more and more professional economists, when reality is difficult to deny. Mainstream economic theory has moved in the direction of recommending much stronger coordination of fiscal policy within the EMU to counterweigh the dissolving tendencies. The argument is that Bruxelles must be given more power to ensure that individual countries are complying with the average of the EMU-countries in a number of macroeconomic variables. Unfortunately, one might fear that Bruxelles primarily will be concerned with the size of the budget deficits, but a part of the federal structure may entitled Bruxelles to give a helping hand to member countries, which have run into troubles outside their own command. In that respect larger structural and cohesion funds and increased lending capacity of the European Investment Bank could be useful. These proposals are referred to as project-related financial policy, which to some extent can be a substitute for the lacking private investments. This kind of suggestions are parts of the 'stimulus package' launched by the newly elected French president Francois Hollande and in small parts have been adopted at the EU-summit held in June 2012.

As part of a more centralized decision-making structure and a federalist structure, Eurobonds have been suggested. This proposal would imply that public

deficits in all member-states could be financed by bonds issued on behalf of and guaranteed by the EMU-countries as a whole, but can be used by individual countries to cover (part of) the public debt, if approved by Bruxelles. Eurobonds are anathema to surplus countries, especially Germany. She will experience higher borrowing costs together with a commitment to share part of the risk related to the Southern European countries. Yet, any idea of federalism within the EMU does not go that far. In fact, 'federalism' seems mainly just to be a euphemism for a stronger enforcement of the requirements stated within the fiscal compact. If that is correct interpretation 'federalism' is less a solution that 'business as usual', where member-countries more often than not were exempt from the penalties related to the Stability Pact.

3. Increased national flexibility, more regulated financial markets and back to basic

It remains to be discussed whether it was too early and therefore a failure to establish a common currency among 12 (later 17) countries within the EU. Economic theory operates, as mentioned, with an analytical concept of an 'optimal currency area'. This theory, first presented by Robert Mundell back in 1961, discusses the requirements which have to be fulfilled before the establishment of a common currency gives more benefit to member-countries than costs. This was obviously not the case with regard to the 12 countries counting for as different countries as Greece and Germany. They both fulfilled the convergence criteria, which, we can see now, were much too lenient to make a correct decision on admission. Subsequently, it has in any case been found that even though the originally 12 EMU countries, which subsequently grew to 17 countries, were declared for convergent in 1999 [4], they have ever since been driving away from each other measured by relevant macroeconomic parameters. In addition, it has to be remembered that during the last 2 years there has been held EMU (crisis) summit every 3 months; but the decisions at these summits have not been sufficient to curb the trend towards disintegration. It seems not really to have been understood by the participants that member countries have to experience parallel development especially with regard to competitiveness and unemployment. If they do not, there will be an increasing demand from the countries left behind for greater flexibility and a more national orientation in economic policies - 'one size does seemingly not fit all countries'.

As mentioned in the introduction monetary unions have been tried out many times in history, but without success as soon as the internal tension has reached a certain degree. Then the monetary union has broken down. The Latin Union was dissolved in 1914 leaving the France, Belgium and Switzerland with their own currency, but still named a 'franc'. The gold standard was dissolved during the 1930s. Here Britain took the lead in 1931 followed by the Scandinavian countries and the Netherlands quite quickly. Looking at history one could ask the question, if it was a disaster for the countries to leave a monetary union? It is of course difficult to give a clear answer, it depends on what socio-economic parameters which paramount. With emphasis on a reduction of unemployment, then the lessons of the 1930s would tell that the dissolution gave more national leeway to pursue a more expansionary economic policy, whereby unemployment started to fall. But, the evolvement at the international financial markets was rather chaotic. Each country tried through currency depreciation to obtain an improved competitive position, which developed into a state of competing devaluations and increasing tariffs, which no country could win.

Based on these experiences the British economist John Maynard Keynes suggested in 1942, that after the war more orderly conditions should characterize international currency and capital markets. His proposal was largely followed in 1944 when the Bretton Woods agreement between 44 participating countries was signed. The participating countries accepted to keep exchange rates fixed, but adjustable in accordance with mutually accepted principles. This meant that countries which were lagging behind due to high cost (or other foreign trade impeding conditions) were allowed to change their exchange rate. Keynes had originally suggested that countries running a current account surplus should revalue their currency after specific principles, and if they denied revaluing, they should pay a certain 'surplus-tax' to the International Monetary Fund (IMF). This arrangement would have given the surplus countries an incentive to expand their domestic economy and to import more from abroad and by that to re-establish a better balance between surplus and deficit countries. The US having at that time a huge surplus could, of course, not accept this part of Keynes' international currency plan.

But Keynes was successful in persuading the Americans to accept an international ban on speculative capital flows. Keynes had experienced the negative consequences in the 1930s, where massive speculation against the British pound had forced the British government to undertake a restrictive policy to protect its currency against these speculative flows. Such financial flows are disruptive both when they flow in and out of the country, because they come and go too quickly and create tensions in the currency and financial markets, which disturb the domestic economic development.

The Bretton Woods system worked quite well the first 20-25 years after the war, when Western Europe and US experienced the fastest growth in GDP ever seen before (and after). But after a while the system started to be undermined. The US experienced rising inflation which prevented the dollar to keep its position of an unchallenged anchor of the international monetary system. In addition, finance capital found ways to circumvent the ban on speculative transactions. A euro-dollar market, based in London was building up. As a consequence President Nixon decided in 1971 to release U.S. dollars from its fixed gold value and fixed exchange rates by letting the U.S. dollar get a floating price formation. This decision hit the international markets as a shock, but after a short time it became evident that the greater flexibility also had some advantages with regard to loosen the ties between US, Western Europe and Japan. On the other hand the value of the dollar became quite unstable, which had a destabilizing effect on the current account of the U.S. balance of payments.

After the abandonment of the Bretton Woods agreement the EU-countries should have made a deep thought on what kind of future exchange rate system they would prefer. They should have asked themselves are we ready to go for a common currency – politically it was tempting; but the theory of an optimal currency area would tell quite another story? The experience from the gold standard and Bretton Woods agreement would have conjured for caution. The EU countries were still very different with regard to economic structures and aspirations. It was obvious that not even 'the nine' countries which formed the EU in 1973, came close to an optimal currency area. The step taken in 1991 where the Maastricht-Treaty was signed and the monetary union agreed upon was premature. Everyone knew, but no one dared at that time where German unification was just about to take place to challenge the idea of a common European currency.

Today in the middle of the economic crisis it has been demonstrated that the design of the EMU was flawed from the very beginning. Now, the pro-euro argument runs that the euro is a reality which we have to learn to live with and to adapt to. That conclusion is only valid if the participating countries were willing to pay the price of living with a malfunctioning of the EMU. But no one seems willing to pay this price high price of failed political aspirations. The questions being discussed every three month at the EU-summits is how to minimize these cost, which requires larger and larger financial intervention to prevent a breakdown

I shall make no secret of the fact that to me it is difficult to see how a continuing increase in unemployment, balance of payments deficits and mounting foreign and public debt can go on. Something has to give in sooner rather than later: either the German have to be less restrictive in her attitude to mutual support or the Southern countries will leave one by one.

The third option to solve the EMU-crises has to be more realistic. If no major political initiative is taken market forces or national policies will set the new currency agenda in Europe, but in an unpredictable way. The only thing, which is rather certain, is that something has to happen – a continuation of status quo is very

unlikely. Increased national flexibility is needed. It means that some of the southern countries will change their currency arrangement with the other EMU-countries. This can be done in different ways, but will always be preceded by a temporary closure of the financial borders of the re-arranging country. The large question is in this case how foreign assets and liabilities shall be valuated. Domestic financial contracts can be transferred into the new currency, let us call it euro-drachme. When this issue regarding the foreign value is settled hopefully in a peaceful way with the EU-commission as arbiter, the currency market can reopen. In the case of a Southern European currency the new exchange rate will be considerably lower (here the case of Iceland can be a useful case study).

By the more flexible exchange rate the country can re-gain some of its former international competitiveness; but it will in any case take some time until growth has been resumed. The new and substantially lower exchange value will imply quite large wealth losses - especially for those who had borrowed internationally in euros. These contracts can hardly be re-negotiated, therefore a number of private defaults are probably unavoidable. Conversely, people who have legally or illegally rescued their wealth into foreign bank should be forced to pay a foreign exchange tax – for that purpose the EU can be very helpful. It is important that also in the case of a euro-exit the European institutions should be supportive and cooperative. There is a mutual responsibility for the euro-difficulties; but deficit countries have already born a disproportional part of the adjustment costs. For a certain period the other EMU-countries should accept that the new national currency has to be protected by capital control and taxation of capital gains on foreign exchange contracts.

Of crucial importance for the successful transformation of the euro-zone into an optimal currency area with, say, six member-countries the support of the EU institutions is needed. Fortunately, there are many examples even from recent history that monetary unions have been dissolved in an orderly fashion and with continued mutual respect. For instance the UK and Ireland dissolved in 1979 their monetary union, because Ireland wanted to enter the European Monetary System (EMS). When Czechoslovakia was divided in 1992 each country got their own currency without much fuss. If the split is undertaken by mutual agreement, problems can be overcome quite fairly, but of course not without financial pain.

The difficulties of the EMU is not the fault of ordinary people, but of over-optimistic politicians. In this case there will be a need for a considerable solidarity from the rich EU-countries to support the citizen of the countries which have to leave the EMU after unsuccessfully having fought for several years to conform to the draconic requirements of the Troika (consisting of the EU-Commission, the ECB and the IMF). These countries should be given a helping hand. Furthermore, it should also be

emphasized that withdrawal from the EMU should not imply a farewell to the EU. The benefits for all parties of continued participation in the single goods market is not challenged.

Lastly, the entire EU system should reconsider the dogma of free and largely unregulated financial transactions between countries. Keynes was right, speculative financial capital is an impediment on economic policy and by that on the promotion of 'growth, prosperity and sustainable development'. The speculative capital movements force interest rates in particular in the weaker countries hither and thither. While fears of unpredictable financial markets reaction makes European politicians almost paralyzed and only dare to suggest rather market conform policies.

Concluding reflexions on the EU

The time is ripe for a re-thinking the way the European project has developed. Originally the political and economic foundation of the EU was 'peace and democracy'. Today the project seems to have deteriorated into only economic considerations dominated by the failures of the common currency, uncontrolled financial markets and paralyzed by dogmatic liberal ideology. There is a risk that this constellation could become a matter of not how to save the euro, but of how to save the EU. It could and should be the entire European project (the EU), which were on the agenda at the summits, where participants were reminded that the EU is primarily about peace and democracy, much less about economics. The latter is at best an instrument to secure the primary goals. No one can be in doubt that 'peace and democracy' is much more important than a common European unit of account. And those who claim that the EU will go with a (partial) dissolution of the euro have not understood what Europe is about. Because, there is nothing that could dictate that a withdrawal from the EMU also should mean a farewell to the EU.

Brief CV of Jesper Jespersen:

Dr. scient. adm., Ph.D. (econ.) Jesper Jespersen is professor of economics at Roskilde University.

A member of the EMU committee appointed by the Council for European policy, 2000 submitted a minority opinion concerning the Danish membership of the EMU. He has in particular made research into *Danish exchange rate policy* in relation to the EMU. He has contributed at several Parliamentary hearings on EMU respectively in Januar 2009 and Februar 2012

Together with Dr. Bruno Amoroso published *L'Europa oltre l'Euro*, by RX-CastelVecchi, Roma, Settembre 2012, info@castelvecchieditore.com

[1] A book with the same title in Danish is published by Publishing Company, DEO, +45 70263666, <u>info@deo.dk</u> 2012, 168,- Dkr. 120 pages.

[2] This bookkeeping identity counts for a closed economy without foreign trade. In this case a surplus in the private sector is by definition equal to a similar deficit in the public sector - this cannot be discussed. If foreign trade is integrated into the accounting identity, the private sector's saving surplus may be used to finance net exports abroad - ie. a balance of payments surplus. The point is that the sum of the public sector deficit and balance of payment surplus adds up to a *financial surplus* in the private sector, ie. financial saving in excess of real private investment. This is the situation in Northern Europe. In these countries the saving surplus in the private sector is so large that it not only can cover the public sector deficit, but also the current account deficit in Southern Europe.

[3] Greece, however, is a somewhat exception, because there were a significant deficit in public finances even before the financial and economic crisis manifested itself in 2008.

[4] All the 15 'old' EU countries could have been a member of EMU in 1999, but the UK, Sweden and Denmark chose to stand outside, although they fulfilled the convergence criteria. These three countries had concerns whether the common currency would be a beneficial institution for Europe and in particular for the individual countries.