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## GREECE: BAIL-OUT PACKAGES, CURRENT ACCOUNT AND FOREIGN DEBT

KARLHANS SAUERNHEIMER\*

### 1. A chronology of events

*Period from 1 January 2001 to 2009*

(a) Greece joined the eurozone (EZ) on 1 January 2001. It was the only of the 15 EU countries not to be included in the introduction of the euro on 1 January 1999 due to its failure to meet convergence criteria. 3 EU member states, namely Britain, Sweden and Denmark, had decided not to introduce the euro, meaning that the EZ started with 11 countries. The fact that Greece was allowed to join the EZ just two years later, despite not having met any of the 5 convergence criteria in 1998, shows that the criteria were taken even less seriously in the case of Greece than they were for those countries that joined the eurozone in 1999. The widely expressed view that Greece should never have been allowed to join in the first place certainly seems banal from today's perspective. In preparation for monetary union Greece had reduced its budget deficit from 14 percent to 3 percent between 1992 and 1999. At the time of its accession Greece's government debt ratio was lower than that of Belgium or Italy respectively on their accession. After allowing both of these countries to join in 1999, it was no longer possible to refuse Greece membership on the basis of these criteria. Politicians would have been able to ascertain that Greece most certainly falsified these figures had they wished to do so.

(b) Greece's initial years in the eurozone were highly successful: the country boasted the highest growth rates in the eurozone after Ireland between 2000 and 2005. Its current account deficit as a percentage of GDP dropped. The risk of both inflation and devaluation seemed to disappear upon Greece's accession to

monetary union, meaning that the significant drop in the risk premium on debt instruments issued by the Greek government did not seem unsubstantiated at the time. The argument that the disappearance of risk premiums on Greek securities between 2000 and 2005 constitutes early documentation of the no bail-out clause's lack of credibility is therefore not a compelling one. Warning signals were certainly conspicuous: the exceptionally high growth during the first 5 years of eurozone membership was fired by the drastic drop in nominal interest rates on accession. This process could not be halted. Despite the budget relief ensuing from the fall in interest rates, the budget deficit did not drop, but rose and the government debt ratio along with it. The GDP share of current account deficit almost doubled between 2004 and 2006, only to increase substantially in the following year.

(c) The end of the honeymoon period came in two waves. Firstly, the bankruptcy of Lehman in 2008 increased the awareness of capital market players that not only large, internationally active investment banks could go bankrupt, but that this could happen to industrialised countries too. The newly-elected Greek government of autumn 2009 then made the surprising announcement in October that the budgetary figures submitted to Brussels by the previous government were completely unrealistic. The forecast budgetary deficit for 2009 was not 3.7 percent as reported, but 12.5 percent. In the wake of this announcement spreads between Greek and German government bonds increased surprisingly slowly at first and subsequently at an increasing speed. Half a year later by April 2010, after the rating agencies had downgraded Greek government bonds to junk status, the spread had reached 755 basis points. However, it became increasingly clear that Greece would not be able to refinance its government bonds due in 2010 at these interest rates. State bankruptcy seemed inevitable.

*Period from 1 February 2010 to 2011*

(a) At the EU summit on 1–2 May 2010 the euro countries decided to support Greece with bilateral, pooled assistance loans. A 1–3 year agreement was reached between Greece and the euro countries



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together with the IMF, whereby the euro countries would provide funds of 80 million euros and the IMF would provide 30 million euros. The fiscal adjustment plan that Greece committed to was supposed to guarantee Greece's return to the capital markets in three years. This agreement effectively annulled the no-bail-out clause of the Maastricht Treaty, which, with the active participation of the German government, constituted the basis of Germany's agreement to abolish the DM and introduce the euro. The European Central Bank subsequently announced that it would henceforth accept Greek government bonds as collateral regardless of their rating. In addition, it began to purchase Greek government bonds in the secondary market. The ECB thereby took over fiscal functions for which it has no mandate. According to their country's share in the bank's basic capital, this move gives the taxpayers of euro countries a share in the losses arising from the amortization of Greek government bonds that have become worthless. Growing spreads for Irish and Portuguese government bonds forced the governments of the euro countries to take further action. A week after the Greece package an agreement was reached on a 750-billion-euro comprehensive rescue fund called the European Financial Stability Fund (EFSF) for all of the other potentially threatened euro countries. The EU contributed 500 billion euros, while the IMF paid in 250 million euros. The sum of 60 billion euros came from the EU budget and the remaining sum of 440 billion euros was provided by euro member states in the form of guarantees. Ireland and Portugal are now receiving payments from these funds.

(b) At the EU summit on 29 October 2011 politicians reflected on the causes of the critical worsening of the situation back in the spring, as well as on the consequences of the bail-out package agreed upon at the time. The German government had called for a sharpening of the stability pact. To this end sanctions were to be made automatic should the rules be broken and violations were to be penalised with a loss of voting rights. Furthermore, provision was made for private creditors to participate in the financing of the bail-out programs and changes to the Treaty were to be made possible. The majority of these demands made by Germany were unsuccessful due to opposition from France and the ECB. Only a minor amendment to the treaty was agreed upon. Article 104 b of the Maastricht Treaty was subsequently changed to enable states to guarantee mutual assistance if the stability of the eurozone were to be threatened without it. The amendment was primarily motivated by domestic pol-

itics, but nevertheless served to safeguard the agreements made in May against which cases were pending in the German Federal Constitutional Court.

(c) At the EU summit of 24 March 2011 in Brussels the expectation that assistance to Greece and the bail-out fund would no longer be required after three years was acknowledged to be erroneous. Follow-up financing for the program of May 2010 due to expire by the middle of 2013 was therefore agreed upon. Instead of another program for a limited time period, however, a permanent bail-out fund was put forward, namely the European Stability Mechanism (ESM). It totals 700 billion euros, of which member states pay in 80 billion euros and make 620 billion euros available as guarantees. Hence the breach of the stability pact's no bail-out clause was not reversed, but perpetuated.

(d) At the EU summit of 21 July 2011 the question of the participation of private creditors, which had been previously requested but refused, was then raised. With the banks as the biggest group of private creditors, 'voluntary' debt relief for Greece totalling 21 percent of outstanding claims was agreed upon.

(e) The last euro crisis summit to date was held on 26 October 2011. Prior to the summit rising spreads on Italian and Spanish government bonds led the ECB to resume its purchase of these bonds, which had ceased in the interim. The crisis now obviously threatened to spread to the large Southern European countries. Furthermore, Greece's attempts at reform were still progressing very slowly, forcing representatives of the 'troika' of the IMF, ECB and EU, whose positive vote was a condition for the payment of successive tranches of credit, to abandon a visit to Greece with no results. This resulted in a renewed need for action. Two groups of decisions were taken to meet this need. *Firstly* the bail-out package was enlarged. This was implemented *via* an increase in the guarantees provided by member states from 440 billion euros previously to 780 billion euros. On the one hand, Germany's total liability *via* the fund thereby increased from 146 billion euros to 211 billion euros; and on the other hand the bail-out package was enlarged *via* 'leveraging'. In line with this leveraging, the bail-out package can collateralise fresh lending to euro countries by third-parties at a rate of 20 percent, which represents a fivefold increase in resources in the worst case. *Secondly*, an agreement was reached with creditor banks on a second round of 'voluntary' debt relief for Greek sovereigns. This debt relief no longer

covers just 21 percent of the country's debts, but now accounts for 50 percent. For Greece this represents total relief of around 100 billion euros. This relief should shore up the sustainability of the debt burden for Greece. According to the Troika's forecasts, the debt ratio should fall from 180 percent to just 120 percent as a result. To safeguard the banks that are holding Greek bonds the latter should be capitalized. Firstly, they should try to obtain the equity required on the capital market. In cases where this is not possible, states should capitalise 'their' banks with budget resources. If this is not possible either, the EFSF has a fund of up to 30 billion euros at its disposal. France's efforts to involve the ECB in the leveraging and debt relief failed in the face of opposition from Germany.

## 2. Greece's external achilles' heel

Political reactions to events in Greece can be criticised – or praised – from many points of view. I will focus on the country's external trade imbalances. My message is that I see no chance of addressing this imbalance without an exchange rate adjustment and thus without Greece temporarily leaving the eurozone.

### 2.1 Data

After joining the monetary union Greece's current account developed as shown in Table 1. The first row of this table shows the current account balance in billion euros and the row 2 demonstrates it as a share of GDP, while the third row shows the real growth rate of GDP. The table highlights a dramatic deterioration in the current account between 2006 and 2008, both absolutely and as a share of GDP based on an already high deficit between 2001 and 2005. So the decline began long before the financial crisis and cannot be deemed to result from it. The slight reduction in the deficit between 2009 and 2010 can be attributed to the growth slump between 2009 and 2010. The sum of the

deficits over the entire decade of eurozone membership totals 197 billion euros, which equals an 85 percent share of GDP for 2010 (230 billion euros). Almost the entire year's social product would be required to pay off the country's net external debt run up over 10 years. Just over half of Greece's public debt totalling around 350 billion euros (2010) is thus held by foreigners and the remainder by Greeks. Greece's net external debt of 210 billion euros according to the Bank of Greece at the end of 2010 is only a little higher than this figure,<sup>1</sup> meaning that today's external debt did effectively accumulate over the last decade for the most part.

### 2.2 Current account, capital account and Target balances

The figure of 197 billion euros is also of interest with regard to the Target debate which Hans-Werner Sinn initiated (Sinn and Wollmershäuser 2011). The Target balances that national central banks have with the ECB reflect the equivalent of changes in currency reserves in the previous par value system. The central bank of a country with a balance of payments surplus i.e. a surplus in the aggregated current account plus capital account experienced an increase in currency reserves, while the central bank of a deficit country experienced a drop in currency reserves. Sinn rightly points to the extremely problematic situation that, in the old system, a country with dwindling currency reserves was forced to correct the situation or take loans in foreign currencies. In the euro system the banks of a deficit country can run up debts with their own country's central bank, which lowers the inclination to make any adjustments. The government of a surplus country could block the purchase of foreign currency by using the flexibility of the exchange rate or appreciating the value of its own currency and thus called the shots. In the monetary union the surplus country does not

<sup>1</sup> See <http://Bank of Greece, Statistics, External Sector, International Investment Position>.

**Table 1**

#### Development of Greece's current account (CA), 2001–2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CA in billion euros	-10.5	-10.2	-11.2	-10.7	-14.7	-23.7	-32.6	-34.7	-25.8	-22.9
CA as % of GDP	7.2	6.5	6.6	5.8	7.5	11.3	14.3	14.7	11.0	10.4
Real GDP growth rate (%)	4.2	3.4	5.9	4.4	2.3	5.2	4.3	1.0	-2.0	-4.5

Sources: <http://Bank of Greece/Statistics/External Sector/Balance of Payments>;  
<http://OECD.StatExtracts/General Statistics/Key Short Term Indicators/Current Account% of GDP>;  
<http://epp.eurostat.ec.europa.eu/statistics/National Accounts/Real GDP Growth>.

determine whether to finance deficit countries; on the contrary deficit countries decide to what extent the central banks in surplus countries are to accept claims on the central banks of deficit countries. Article 107 of the Maastricht Treaty, which establishes the independence of ECB bodies from political directives, is untenable in this respect. The Target system provides the ESCB, and especially the ECB Council, resources that are leading to the redistribution of income and wealth between the euro countries. Politicians, not the ECB, should take such decisions. Moreover, the source of Target balances needs to be examined very closely: given that a Target claim can result from a current account surplus or a capital account surplus, but net external claims can only result from current account surpluses, current account and capital balances must be drawn up separately.

If the size of the Greek central bank's Target balance is known, it is possible to deduce from the table above how the Greek net external debt resulting from the aggregation of current account deficits is distributed between the Greek central bank on the one hand and the rest of the Greeks on the other. The latter group is often incorrectly referred to as the private sector. However, this group refers to all nationals, private and public, who must be compared with the central bank.

For Greece Mayer *et al.* (2011) cite a negative Target balance totalling 87 billion euros of the end of 2010. That means that Greece has financed around half of its current account deficit (87/197), the 'currency balance' in other words, *via* its central bank and the ECB, and the rest, or just over half of the total sum, at the gates of the central bank or on the capital market *via* the capital balance. By comparison: since the beginning of monetary union Germany has accumulated a total sum of 1,330 billion US dollars, which converted at the current rate of 1.40 US dollars per euro, totals 950 billion euros. Its positive Target balance recently amounted to 450 billion euros. In this case it is also true that around half of the total net income from trading was accumulated in the form of central bank claims, while the other half represented the increase in net income from trading by all other nationals.

### 2.3 Relief to date

(a) The measures taken to date to rescue Greece using funds from the EU and IMF fund have mainly target-

ed the public sector. The funds served to enable the repayment of maturing Greek sovereign bonds. The banks were encouraged to write off an initial 21 percent, followed by a further 29 percent of the bonds that they held. Tax increases and spending cuts in the public sector were demanded of Greece itself, to curb the budget deficit and thus the pace of fresh public borrowing. Excise duties were raised, public sector wages were cut and public pension entitlements were capped. All this primarily offers relief for the national budget; the current account is only indirectly and insufficiently affected. A specifically external component is missing from the programmes. What should this look like?

To improve the current account, exports need to be boosted and imports must be curbed. To this end, the level of structure of aggregate demand in Greece needs to be changed in the mid term. Curbing the level of demand reduced domestic demand and imports. A relative price reduction of domestic goods changes the structure of demand and channels demand towards Greek produce, which boosts exports and shrinks imports. Curbing consumption and investment, combined with enforced saving, is part of the first concept, while improved competitiveness is part of the second concept. The corresponding economic instruments are increases in taxation, public expenditure cuts on the one hand and overall economic real wage reductions on the other. In the long-term improvements in supply-side conditions are expedient: productivity increases through human and physical capital enable decreases in unit labour costs even without nominal wage caps, and product innovation *via* direct foreign investment can open up new export markets. Supply-side measures give rise to less social resistance than the use of demand-side instruments. Yet, they take a long time to bear fruits. In the meantime the existing current account deficit has to be financed *via* the external granting of credit. However, as pressure to adapt falls, the chance of a fresh start is being wasted, which is making lenders hesitate. This is the true dilemma of the situation, which requires the use of demand-side instruments with a short-term impact.

(b) It is widely recognized that the instruments used to date are mostly limited to reducing the level of demand and that any improvement in competitiveness under such conditions is unthinkable. The public sector wage cuts decreed may have a beneficial effect in terms of cost reductions, but the public sector does not create any goods that are subject to international



export and import substitution and competition. Companies derive little benefit from these cost reductions. An overall economic wage cut imposed by the state is not compatible with the freedom to set prices. Pressure on wages arising from growing unemployment clashes with social welfare terms and is meeting political opposition. So it is impossible to see where the requisite improvement in Greece's competitiveness could come from. This qualitative argument gains even more weight when quantitative factors are taken into consideration. Sinn (2010) shows that, measured by the GDP deflator, Greece lost 31 percent of its competitiveness versus other euro countries between 1995 and 2009 and 48 percent versus Germany. These dimensions show that wage moderation for a year or two is not enough to restore competitiveness, but that a zero-increase wage policy would be required for decades, not years, to achieve this. Believing that this could be possible is tantamount to indulging in political illusion.

Demand is taking a downturn in Greece, as it did in other countries in a comparable position in the past, for political reasons and more thanks to a downturn in investment than to one in consumption. According to Eurostat figures,<sup>2</sup> consumption by private households as a share of GDP remained almost constant from 2005 (75.5 percent) to 2010 (75.4 percent), investments as a share of GDP, on the other hand, fell from 20.0 percent to 14.7 percent in the same period. Since today's investments are tomorrow's growth, problems are clearly being postponed. Ultimately, less hope can be placed a growth-based solution to the debt problem in the case of Greece than in that of other countries. Economic growth may indeed decrease public sector debt because growing income leads to higher tax revenues, which reduce budget deficits. However, growing revenues do not have the same beneficial effects on current account deficits. The latter may become smaller with rising income, but can also become larger. The effect depends on the source of the growth. In the case of export-driven growth, the current account will improve, but in the case of internally stimulated growth it will worsen.

In both cases rising national income entails growing imports. In the first scenario export surpluses decrease, while in the second scenario there are import surpluses from the outset. Based on past experience,

the problems financing the current account deficit arising in the second scenario paralyse growth in the short and long-term. However, because Greece – trapped in the monetary union – no longer disposes of the instruments to strengthen its price competitiveness, export-driven growth will not arise and current account deficits will persist as a result. In short, there is no chance of a sufficient improvement in Greece's competitiveness while it remains within the monetary union.

### 3. The exit option

Leaving the monetary union would give Greece the option of achieving economic recovery with rising instead of shrinking employment. The mechanisms are well-known and will therefore only be discussed very briefly here.

#### 3.1 *The real balance effect*

In the simplest case we model the economy with three simple assumptions: (1) all of relative prices of the goods observed in the model are constant, which is referred to as a one-good world. (2) The country under observation is small on a global scale, meaning that the world market price of the goods produced and consumed is constant. (3) The offer of goods is constant.

Initially the country shows a current account deficit: it consumes more than it produces. Devaluation produces relief: at a given nominal money supply the real money supply drops, because of the devaluation of the local currency which raises the price of goods measured in the local currency. Real demand drops and at a given money supply excess demand and the current account deficit drops. Constant production presupposes that nominal wages comprehensively follow the price increase owing to devaluation, so that real wages remain constant. If the nominal wage were to be fixed, the fall in demand would be compensated for by a short-term expansion of supply with regard to the targeted improvement in the current account. This current account model manages without substitution effects.

#### 3.2 *Substitution effects: tradeables and non-tradeables*

Substitution effects complete the picture, if we are looking at a two-good world. With tradeable goods (tradeables T), and non-tradeable goods (non-trade-

<sup>2</sup> [http://epp.eurostat.ec.europa.eu/statistics/Consumption\\_expenditure\\_of\\_households\\_2010](http://epp.eurostat.ec.europa.eu/statistics/Consumption_expenditure_of_households_2010) and [http://epp.eurostat.ec.europa.eu/statistics/investment1\\_2010\\_\(%\\_share\\_of\\_GDP\)](http://epp.eurostat.ec.europa.eu/statistics/investment1_2010_(%_share_of_GDP)).

ables  $N$ ), a devaluation induced price increase at a given world market price leads to an increase in the local price of tradeables. Demand shifts to the non-tradeables sector, supply shifts to the tradeables sector. Both on the demand and on the supply side the current account therefore improves.

### 3.3 Substitution effects, exportables and importables

Excluding non-tradeables, tradeables are split in the model of section 3.1 into the exportable and importable goods types, and new substitution effects take place, albeit of a different nature. If countries specialise in the production of their respective exportables, a devaluation of the local currency at given wage levels and a given money supply should lead to a shift in demand both on the part of nationals and foreigners to domestic goods, with the result that production and employment usually increase as the current account improves.

For a country already in debt in terms of foreign currency, high price elasticity of supply and demand may not suffice to guarantee the normal reaction of the central bank. The improvement in the trade and services balance must be big enough owing to devaluation to over-compensate for the worsening in the balance of income from earnings and investment.

### 3.4 The formalized form

The simplest Keynesian fixed-price variant of model 3.3 arises from the definitional identity of the open economy:

$$(1) Y = C + I + X - M \text{ and/or}$$

$$(2) H = X - M$$

It is easy to derive that this means:

$$(3) H(Y, A) = X(w) - M(w, Y).$$

In the balance of the goods market stockpiling  $H$ , i.e. the excess domestic supply, and net exports  $X - M$ , i.e. excess demand from abroad, must be equal. Stockpiling depends on national income  $Y$  and autonomous expenditure  $A$ , while exports  $X$  depend on the exchange rate  $w$ , and imports  $M$  depend on the exchange rate as well as on national income  $Y$ . The following applies for the partial derivatives:

$$H_Y > 0, H_A = -1, X_w > 0, M_w < 0 \text{ and } M_Y > 0.$$

With both exogenous variables  $A$  and  $w$  the reaction of the endogenous variables  $Y$  and net exports is affected by changes in data:

$$(4) (dY/dA) = (1/D) > 0$$

$$(5) (dY/dw) = (B_w/D) > 0$$

$$(6) (d(X-M)/dA) = (-M_Y/D) < 0, \\ \text{where } D = H_Y + M_Y > 0$$

$$(7) (d(X-M)/dw) = (B_w H_Y/D) > 0, \\ \text{where } B_w = X_w - M_w > 0.$$

It can be seen that the policy on the level of expenditure, in a contractionary direction in this case in a policy of 'cuts', improves the current account (6), at the expense, however, of downturns in production and employment (4). Devaluation, or expenditure structure policy, on the other hand, directs economic demand towards domestic products and leads to both an improvement in the current account (7) and an increase in production and employment (6).

For this reason IMF packages for countries that are experiencing balance of payments difficulties always include depreciation recommendations. The South-East Asian countries so quickly found their feet again after the financial crisis 1997 for the same reason and this is also precisely why such success will not happen in Greece.

### 3.5 Stein's contribution

A much more sophisticated model to explain financial crises in general and more strongly geared towards long-term effects, which can be applied to the eurozone and Greece is offered by Stein in this issue (Stein 2011). In a NATREX model (Stein 1990 and 2006) with stock-flow-interactions he shows the roots of the external debts of countries that are unsustainable in the long-term. He proves that, in the cases of Greece, Portugal and Italy, the public sector caused the crisis with rising government spending; while in the case of Spain and Ireland the private sector must be seen as responsible for triggering the crisis with its soaring expenditure on real-estate. Against this backdrop, he believes that the constraints of the stability pact rules on the public sector are in need of revision.

### 3.6 Objections

In the context of the demand for Greece to leave the monetary union and a subsequent depreciation of its

currency, it is often argued that the wage increase which usually follows a depreciation tends to make the latter worthless. However, insofar as a real depreciation actually takes place, this could be equally as well achieved within a monetary union with a nominal wage decrease at a given price as *via* devaluation-based rising prices at nominal wages outside the monetary union.

The first argument is to point to experiences in Italy, which, by avoiding wage compensation following the devaluation of 1992 generated the growth in production and exports that finally enabled it to fulfil the Maastricht criteria and secured its acceptance into the monetary union of 1999. There is also the argument that there is no improvement in the current account at the same rate of increasing wages and prices, because the real balance effect still has an impact at a given money supply.

The second argument is to say that a decrease in real wages is more likely to succeed and at a significantly faster pace with a devaluation than with nominal wage adjustments. Devaluation increases the price of tradeables ‘overnight’ and reduces real wages immediately. A real wage reduction, which can be mandated by politicians, is certainly easier for the unions to accept than having to go to their members with lower nominal wage agreements following negotiations with employers. Finally, the old argument of Keynes should also be cited whereby it is not clear with wage negotiations in a specific sector whether other sectors will follow with lower nominal wage agreements, meaning that the sector-based wage reduction can be accompanied by a loss in the macro-economic wage hierarchy. This risk is far smaller with a devaluation-based reduction in real wages. This argument weighs all the more heavily the smaller and more open the economy in question is.

Ultimately, it is argued that devaluation is not a helpful instrument in the case of Greece, because the country does not have sufficient opportunities to diversify either on the export or import side, so that price-induced shifts in demand are not to be expected. This argument is not convincing. Greece has, for example, a broad tourism sector with significant opportunities for growth. In this sector, however, Greece faces stiff competition from Turkey. As a non-member of the monetary union, Turkey always has the option of strengthening the competitiveness of its industries, including tourism, by devaluing its currency. It is therefore not enough for Greece to win back its competitiveness within the eurozone, it has to compete with countries that can devalue – and which have

done so in the past and will do so again. The Turkish Lira has devalued by around 30 percent against the euro since October 2011. Against this backdrop, how can Greece’s tourism sector hope to hold on to its eurozone customers?

#### 4. Conclusion

Ken Rogoff, co-author of the book *This Time Is Different* (Princeton, 2009) which features comments on debt, banking and currency crises from eight centuries, and who must be considered today’s top expert in debt crises, has long-since recommended that Greece take a ‘temporary time-out’ from the eurozone (Rogoff 2011). Otmar Issing, who was a vehement opponent of Greece leaving the eurozone for a long time, is also arguing for Greece to take time-out as a result of the debt relief that has been given, or the change in the rules of play that give other debtor countries false incentives (Issing 2011). It presumably won’t help. The political will of the Euro countries to keep Greece in the monetary union ‘cost what it may’ in the words of EU Commission President Barroso, will not allow Greece to leave. Greece’s interest in leaving the eurozone is being undermined by fear that the financial assistance provided by the euro countries will disappear. The whole situation should it continue will thus lead to growing foreign debt with subsequent debt relief, in other words to a transfer union.

#### References

- Issing, O. (2011), “Sollen die Griechen raus aus dem Euro? Ein Streitgespräch”, *Frankfurter Allgemeine Zeitung*, 9 October.
- Mayer, T., J. Möbert and Weistroffer, C., (2011), “Makro-ökonomische Ungleichgewichte in der EWU und das Eurosystem”, *ifo Schnelldienst* 16/34–35, 31–38.
- Rogoff, K.S. (2011), “Einige Länder sollten eine Euro Auszeit nehmen”, *Frankfurter Allgemeine Zeitung*, 11 February.
- Rogoff, K.S. and Reinhart, C.M. (2009), *This Time Is Different, Eight Centuries of Financial Folly*, Princeton: Princeton University Press.
- Rose, K. and Sauernheimer, K. (2006), *Theorie der Außenwirtschaft, Chapter 3: Die Zahlungsbilanz in der Währungsunion*, 14 Edition, Munich: Verlag Vahlen.
- Sinn, H.-W. (2010), “Rescuing Europe”, *CESifo Forum 11*, Special Issue.
- Sinn, H.-W. and Wollmershäuser, T. (2011), *Target-Kredite, Leistungsbilanzsalden und Kapitalverkehr. Der Rettungsschirm der EZB*, Ifo Working Paper 105.
- Stein, J.L. (2011), “The Diversity of Debt Crises in Europe,” *CESifo Forum* (in this issue).
- Stein, J.L. (2006), *Stochastic Optimal Control, International Finance and Debt Crises*, Oxford: Oxford University Press.
- Stein, J.L. (1990), “The Real Exchange Rate”, *Journal of Banking and Finance*, Special Issue on Real and Nominal Exchange Rates 14, 1045–1078.