Eckhard Hein

Berlin School of Economics and Law;
Institute for International Political
Economy,
Berlin,
Germany

✉ eckhard.hein@hwr-berlin.de

Daniel Detzer

Berlin School of Economics and Law;
Institute for International Political
Economy,
Berlin,
Germany

✉ daniel.detzer@hwr-berlin.de

Post-Keynesian Alternative Policies to Curb Macroeconomic Imbalances in the Euro Area

Summary: In this paper we outline alternative post-Keynesian policy recommendations addressing the problems of differential inflation, divergence in competitiveness and associated current account imbalances within the Euro area. We provide a basic framework in order to systematically address the related issues making use of Anthony P. Thirlwall's (1979, 2002) model of a "balance-of-payments-constrained growth rate" (BPCGR). Based on this framework, we outline the required stance for alternative economic policies and then we discuss the implications for alternative monetary, wage/incomes and fiscal policies in the Euro area as a whole, as well as the consequences for structural and regional policies in the Euro area periphery, in particular.

Key words: Differential inflation rates, Current account imbalances, Competitiveness, Euro area economic policies.

JEL: E61, E62, E63, E64.

In this paper we outline alternative policy recommendations addressing the problems of differential inflation, divergence in competitiveness and associated current account imbalances within the Euro area based on a post-Keynesian macroeconomic approach. The major purpose of these alternative policy proposals is to generate sustainably high demand and output growth in the Euro area, providing high levels of non-inflationary employment, as well as preventing "export-led mercantilist" and "debt-led consumption boom" types of development, both within the Euro area and with respect to the role of the Euro area in the world economy. These types of development, generated by "finance dominated capitalism", have shaped the global and Euro area economies before the crisis, and they have each proven to be unsustainable (Eckhard Hein 2012, 2013a, b; Hein and Nina Dodig 2014).

In Section 1 we will start by presenting the theoretical framework, Thirlwall's (1979, 2002) model of a BPCGR. In Section 2 we will then outline the broad economic policy implications deriving from this framework. Section 3 will then be devoted to a more precise discussion of an alternative coordinated macroeconomic pol-

icy mix for the Euro area, which is understood as a policy package that would have to be jointly implemented. First, we will discuss the role of monetary policies and of the European Central Bank (ECB); second, we will turn to wage and incomes policies; and third, we will outline the role of fiscal policies. Against this background, we will then in, Section 4, turn to the discussion of some ideas to re-structure the economies of the periphery and the crisis countries, in particular, in order to facilitate medium- to long-run catching-up with the more mature countries of the Euro area core. Section 5 will summarise and conclude. The focus of this paper is on the presentation of a coherent alternative to current economic policies in the Euro area. This alternative is based on a post-Keynesian perspective on macroeconomics and macroeconomic policies and on recent contributions from this perspective to different areas of European economic policies. Constraints of space prevent a comprehensive critique of the current economic policy architecture and economic policies which caused and deepened the euro crisis, as well as a systematic comparison of our approach with several other alternatives presented in the literature. We have dealt with these issues in Hein (2013b) and, in particular, in Hein and Daniel Detzer (2014), which provides a more extensive background for the current paper. The interested reader is referred to these publications.

1. Theoretical Framework

We chose Thirlwall's (1979, 2002) model of a BPCGR as a starting point for the presentation of post-Keynesian alternatives to curb macroeconomic imbalances in the Euro area, because this model allows for a systematic and consistent discussion of the interrelationships between current account balances, inflation differentials and non-price competitiveness. However, for our purposes this approach will have to be modified, as we will explain below. Applying the BPCGR model to a currency area yields the following determinants of the BPCGR for a single member country:

$$\hat{Y}_d^b = \frac{(1+\eta+\psi)(\hat{p}_d - \hat{p}_f) + \varepsilon\hat{Y}_f}{\pi}, \qquad \eta, \psi < 0, \quad \varepsilon, \pi > 0, \tag{1}$$

where $\hat{Y}_d^b$ is the BPCGR for the domestic economy, $\hat{Y}_f$ is the foreign real GDP growth rate, i.e. the growth rate of the rest of the Euro area since its current account with the rest of the world was roughly balanced before the financial, economic and euro crises and should remain in balance in the future, $\hat{p}_d$ is domestic inflation, $\hat{p}_f$ is foreign inflation, i.e. inflation in the rest of the Euro area, η is the price elasticity of the demand for exports, ψ is the price elasticity of demand for imports, ε is the income elasticity of the demand for exports and π is the income elasticity of the demand for imports. Disparities in ε and π among countries are considered to reflect differences in non-price competitiveness. With given foreign GDP growth and given foreign inflation, the BPCGR of a single economy can be improved by lower domestic inflation, provided that $1+\eta+\psi < 0$, i.e. the Marshall-Lerner condition holds, a higher income elasticity of domestic exports, or a lower income elasticity of domestic imports.

Applying the model to the member countries of the Euro area means that each of the member countries should grow at its BPCGR, i.e. avoid current account surpluses and current account deficits. In principle, each of the countries should also target the same rate of inflation and thus equalise domestic and foreign inflation. This is so because a rate of inflation below the foreign rate will mean a higher BPCGR of the country under consideration; it implies, however, a lower BPCGR of the other countries of the Euro area, provided that its current account with the rest of the world is roughly balanced. Following the rule of equal inflation rates across the member countries of the currency union, therefore, implies that the BPCGR for each of the member countries would become:

$$\hat{Y}_d^b = \frac{\varepsilon \hat{Y}_f}{\pi} = \frac{\hat{X}}{\pi}. \tag{2}$$

Since, according to Equation (1), Thirlwall's BPCGR, applied to a currency union (without any internal nominal exchange rates), is determined by inflation differentials (provided that the Marshall-Lerner condition can be assumed to hold) by the income elasticities of the demand for imports and exports, and by the rate of real GDP growth of the trading partners, we can identify several causes for current account imbalances in a currency union.

The first, and general one, is, of course, GDP growth differentials between the different Euro area member countries exceeding those implied by their respective BPCGRs. These will be associated with a deterioration of the current account position in the countries growing "too fast", and an improvement in the countries growing "too slow". From an economic policy perspective, we can distinguish two different causes for countries growing "too fast" relative to their BPCGR - catch-up processes associated with high investment in productive capital, on the one hand, and bubble-induced growth associated with asset and/or housing price booms and high investment in real estate and/or high debt-financed consumption, on the other hand. Whereas the former should be welcomed from an economic policy perspective aiming at "promot(ing) economic, social and territorial cohesion, and solidarity among Member States" (Treaty on European Union 2010, Article 3.3), the latter should be avoided by appropriate economic policies and institutions.

From another angle we could also argue that the BPCGR are "too low" or "too high" given the actual growth rates of the respective economies. The first reason for this could be too high inflation differentials, which cause a "too low" or "too high" BPCGR for the respective countries, given their actual growth differentials. A major cause for inappropriate inflation differentials is, of course, differentials in unit labour cost growth, but changes in mark-ups in firms' pricing, as well as differentials in the development of other input costs, must also to be taken into account. A second cause is related to quality competitiveness and hence income elasticities of exports and imports. For given growth differentials within a currency union, we will observe current account imbalances if income elasticities of demand for exports of rapidly growing catching-up countries are "too low" and income elasticities of demand for imports are "too high", thus reducing the BPCGR below the actual growth rate. Slowly growing mature economies will contribute to imbalances if the reverse holds true, that is

"too high" income elasticities of the demand for their exports and "too low" income elasticities of their demand for imports, hence lifting the BPCGR above the actual growth rate.

2. The General Stance Required for Policy Alternatives

From this perspective, economic policies would generally have to focus on generating high, non-inflationary, demand growth in the Euro area, as close as possible to the Euro area BPCGR, on the one hand, and to improve non-price competitiveness with respect to the rest of the world, in order to lift the Euro area BPCGR, on the other hand. Furthermore, preventing "export-led mercantilist" and "debt-led consumption boom" types of development, which have dominated the Euro area before the crisis (Hein 2013b), is of utmost importance, both within the Euro area but also with respect to the role of the Euro area as a whole in the world economy. In order to internally rebalance the Euro area, economic policies would have to focus on the mutual adjustment of actual growth rates of member countries and the respective BPCGRs. In the short-run, this means stimulating aggregate demand and growth in the current account surplus countries relative to the Euro area average trend, and dampening aggregate demand and growth relative to the Euro area average trend in the current account deficit countries. Lowering unit labour cost growth and inflation relative to the Euro area average trend in current account deficit countries and increasing unit labour cost growth and inflation in current account surplus countries will contribute to this effort - lifting the respective BPCGRs for current account deficit countries and lowering it for current account surplus countries. Deflation and demand depressing effects of redistribution at the expense of the labour income share and low income households in the current account deficit countries would have to be avoided. Improving non-price competitiveness of current account deficit countries relative to current account surplus countries will have the same effect *via* the respective income elasticities of demand for imports and exports. However, these are rather medium- to long-run economic policy targets, because they involve process and product innovations as well as structural change in the respective economies.

Finally, even if the Euro area were successful in developing and applying appropriate policies in line with these targets, we should not expect perfectly balanced current accounts of all member countries, neither in the short-run, nor in the long-run, because of necessary catching-up processes, in particular. This will imply that the catching-up countries will have a tendency to grow above their BPCGRs, whereas the mature countries will tend to grow below their respective BPCGRs. For this reason, the Euro area will have to develop a stable financing mechanism for the associated current account deficits of catching-up member countries. As shown in Hein, Achim Truger, and Till van Treeck (2012), as long as the current account deficit country, the catching-up country in the Euro area, is growing sustainably faster than the mature current account surplus country, there is no risk of exploding net foreign debt-GDP ratios in the current account deficit country. And provided that the growth rate of GDP in the current account deficit country exceeds the rate of interest on net foreign debt, the stabilisation of the net foreign debt-GDP ratio is perfectly compatible with a trade deficit of the current account deficit country (for a derivation see Appendix B in Hein and Detzer 2014).

If we include a constant and sustainable net inflow of long-term capital (C), the BPCGR from Equation (1) turns to (see Appendix A in Hein and Detzer 2014):

$$\hat{Y}_d^b = \frac{(1+\theta\eta+\psi)(\hat{p}_d - \hat{p}_f) + \theta\varepsilon\hat{Y}_f + (1-\theta)(\hat{C} - \hat{p}_d)}{\pi},$$

(3)

with θ as the share of export revenues in total receipts to pay for imports, (1-θ) as the share or net capital inflows, and $\hat{C}$ as the growth rate of net capital inflows, measured in domestic currency, required to finance persistent current account deficits. With equal rates of inflation across the currency area, this would become:

$$\hat{Y}_d^b = \frac{\theta\varepsilon\hat{Y}_f + (1-\theta)(\hat{C} - \hat{p}_d)}{\pi} = \frac{\theta\hat{X} + (1-\theta)(\hat{C} - \hat{p}_d)}{\pi}.$$

(4)

Comparing Equation (4) with Equation (2) shows that net capital inflows lift the BPCGR of the current account deficit country if the growth rate of these inflows in real terms, taking into account domestic inflation, exceeds the growth rate of exports, or the growth rate of foreign GDP multiplied by the income elasticity of exports.

3. More Concrete Post-Keynesian Policy Proposals for the Euro Area

It is obvious - and developed extensively in Hein (2013b) and Dodig and Hansjörg Herr (2015), for example - that the current economic policy framework of the Euro area is inappropriate to deal with the requirements outlined above (see also Philip Arestis and Malcolm Sawyer 2011; Paul de Grauwe 2011a, 2013; Hein and Truger 2011, 2014; Jorge Uxó, Jesús Paúl, and Eladio Febrero 2011; Hein, Truger, and van Treeck 2012; among several others). In fact, the current policy framework and the stance of the applied policies have even reinforced current account imbalances through different channels. First, they were unable to prevent significant inflation differentials to emerge within the Euro area, mainly by undermining the conditions for effective wage bargaining conditions as a main tool for this. Second, they did not provide the appropriate tools for domestic demand management in order to adjust the actual rate of growth of each country towards the BPCGR, mainly through applying a "one size fits all" policy with respect government budget balances and government debt in the context of the Stability and Growth Pact (SGP). Third, they did not provide any effective policy tools to adjust the BPCGR of the high growth current account deficit countries towards the respective growth rates, because of the lack of any consistent industrial and development strategy for the Euro area as a whole and for the catching-up countries, in particular, making sure that capital inflows into these countries support long-run sustainable growth.

Therefore, alternative policy proposals would have to remedy these deficiencies, aiming at non-inflationary full-employment growth in the Euro area, as well as in each of its member countries, with sustainable current account deficits/surpluses in the member countries - and a roughly balanced current account for the Euro area as a

whole in order to contribute to balanced growth of the world economy. Preliminary outlines have been presented in Hein and Truger (2007, 2011), Hein (2012, Chapter 8, 2013a, b), and Hein, Truger, and van Treeck (2012), among several others, based on general post-Keynesian macroeconomic models with the respective implications for the macroeconomic policy mix (Hein and Engelbert Stockhammer 2010; Arestis 2013). We will build on these approaches. Before we start, it should be pointed out that the suggestions for monetary, wage/incomes, fiscal and industrial/regional policies outlined below should be understood as a policy package, which would have to be implemented in a coordinated way.

3.1 Monetary Policy

First, central bank's interest rate policies should abstain from attempting to fine-tune unemployment in the short-run and inflation in the long-run, as suggested by New Consensus Macroeconomics (NCM), (for the NCM see, for example, Richard Clarida, Jordi Galí, and Mark Gertler 1999, and for detailed critiques of the NCM, see Arestis 2009, and Hein and Stockhammer 2010). Varying interest rates have cost and distribution effects on the business sector, which may be effective in achieving inflation targets in the short-run, in particular if the economy is facing accelerating inflation. With accelerating inflation, increasing the base rate of interest under the control of the central bank will finally also make credit and financial market rates increase and will be able to choke off an investment boom. But if accelerating disinflation, and finally deflation, prevail, interest rate policies will be ineffective due to the zero lower bound of the nominal interest rate, due to rising mark-ups in the setting of interest rates in credit and financial markets by banks and financial intermediaries, because of increasing risk and uncertainty premia, and due to interest rate inelasticities of real investment of firms in a disinflationary or deflationary climate. Further on, in the long-run, rising interest rates, applied successfully in order to stop accelerating inflation in the short-run, will feed conflicting-claims inflation again, because price setting of surviving firms will have to cover higher interest costs.

      Therefore, central banks, and hence the ECB, should focus on targeting low real interest rates in credit and financial markets, as it is included in the mandate for the US Federal Reserve, in order to avoid unfavourable cost and distribution effects on firms and workers. A slightly positive long-term real rate of interest, below the long-run rate of productivity growth, seems to be a reasonable target (see Louis-Philippe Rochon and Mark Setterfield 2007 for a review of post-Keynesian suggestions regarding the "parking it" approach towards interest rate policies of central banks and the rate of interest central banks should target). Rentiers' real financial wealth will be protected against inflation, but redistribution of income in favour of the productive sector and at the expense of the rentiers will take place, which should be favourable for real investment, employment and growth. Furthermore, central banks have to act as a "lender of last resort" in periods of liquidity crisis and should be involved in the regulation and the supervision of financial markets. This includes the definition of credit standards for refinancing operations with commercial banks, the implementation of compulsory reserve requirements for different types of assets to be held with the central bank, and even credit controls in order to channel credit

into desirable areas and to avoid credit-financed bubbles in certain markets (Thomas I. Palley 2010; de Grauwe 2011b; Detzer 2012).

Most importantly, in the present situation, the ECB should not only act as a lender of last resort for the banking system, it should also guarantee public debt of the Euro area member countries in a convincing and unconditional way, acting as a lender of last resort to the governments, too. The ECB, as a lender of last resort for member country governments, would allow member countries to issue debt in their "own currency", and it would immediately reduce the pressure imposed by financial markets on those countries presently in crisis, allowing them to regain fiscal sovereignty. It would thus provide the conditions for a long-run oriented solution to the current account imbalances within the Euro area, as we will explain in the following sections.

In July 2012 the ECB took a major step in this direction when the President of the ECB, Mario Draghi (2012), announced: "within our mandate, the ECB is ready to do whatever it takes to preserve the euro". However, this was later on qualified such that the ECB's willingness to intervene into secondary government bond markets, in the context of Outright Monetary Transactions (OMT), was made conditional on the respective country applying EFSF/ESM macroeconomic adjustment programmes (ECB 2012). This link is detrimental to recovery in the crisis countries and to rebalancing the Euro area at high levels of economic activity, because imposing fiscal austerity policies on the countries in question will make the downswing worse (as it did in 2012/2013), lead to the (threat of) deflationary stagnation and will not bring government debt-GDP ratios down (as has been observed in the course of the euro crisis), (de Grauwe 2011a; Hein 2013b).

Therefore, Hein (2013b) has argued that the ECB could simply announce that it will intervene unconditionally into secondary government bond markets as soon as the nominal rate of interest on government bonds (i) exceeds the long-run nominal rate of growth of the respective country j, i.e. the sum of real GDP growth ($\hat{Y}_j$) plus the rate of inflation ($\hat{p}_j$):

$$i_j \leq \hat{p}_j + \hat{Y}_j. \tag{5}$$

This would imply country-specific caps on nominal interest rates on government bonds (and to the extent that government bond yields are a benchmark also for long-term interest rates in the respective countries in general), making sure that long-term real interest rates do not exceed real GDP growth trends (see de Grauwe 2011b for a similar rule, arguing that the ECB should commit itself to providing unlimited liquidity as soon as the government bond rate of a specific country exceeds the risk-free rate - which is considered to be the rate on German government bonds - by 200 basis points, in order to prevent moral hazard). If government deficits or debt were inflationary - which would have to be prevented by fiscal policies, as will be addressed further below - governments would be automatically punished by the ECB tolerating a higher nominal long-term interest rate, according to this rule. However, this is not and should not be regarded as an inflation targeting strategy.

3.2 Wage and Incomes Policy

In an alternative macroeconomic policy mix, incomes and wage policies should take responsibility for nominal stabilisation in particular, that is, for stable inflation rates. If distribution claims of firms, rentiers, government and the external sector are constant, nominal wages should rise according to the sum of long-run average growth of labour productivity in the national economy plus the target rate of inflation for the Euro area as a whole:

$$\hat{w}_j = \hat{y}_j + p^T, \qquad (6)$$

with $\hat{w}, \hat{y}$ and p^T denoting nominal wage growth and labour productivity growth in country j and the inflation target for the Euro area as a whole. Following such a wage norm would contribute to equal inflation rates across the Euro area, assuming mark-ups and unit non-wage costs in pricing to be roughly constant. It would prevent improving the BPCGR of a single country at the expense of the rest of the Euro area and it would thus prevent mercantilist strategies based on nominal wage moderation in general.

In order to contribute to the rebalancing of the current accounts within the Euro area at high levels of economic activity by means of re-adjusting relative price competitiveness, wage policies for an intermediate period of time would have to deviate from the norm outlined above. Nominal wage growth in current account surplus countries would have to exceed the norm, whereas nominal wage growth in the current account deficit countries would have to fall short of this norm. Stockhammer and Özlem Onaran (2012) have suggested a simple macroeconomic wage rule for the EU, which we adapt for the Euro area:

$$\hat{w}_j = \hat{y}_j + p^T + \alpha \left(ULC_{EA} - ULC_j \right), \qquad (7)$$

where ULC denotes nominal unit labour costs in the Euro area (EA) and in country j. The inflation target would have to be set such as to avoid deflation in all countries, which means it would have to be raised above the current level of "below, but close to two per cent".

To achieve the nominal wage growth targets, a high degree of wage bargaining co-ordination at the macroeconomic level, and organised labour markets with strong labour unions and employer associations seem to be necessary conditions. Government involvement in wage bargaining may be required, too. In particular, minimum wage legislation, especially in countries with highly deregulated labour markets and increasing dispersion of wages, will be helpful for nominal stabilisation at the macroeconomic level, apart from its usefulness in terms of containing wage inequality. Furthermore, legal extensions of wage bargaining results throughout the whole industry or sector and other extension mechanisms, as well as public sector bargaining setting the pattern for private sectors, could be helpful.

For the Euro area and the EU this implies that the prevalent and dominating orientation of labour market and social policies towards deregulation and flexibilisation of labour markets, nominal and real wage restraint and falling wage shares, as

previously enshrined in the Employment Guidelines, the Broad Economic Policy Guidelines and now in the Country Specific Recommendations of the European Semester and the Memoranda of Understanding with the crisis countries will have to be abandoned (see Thorsten Schulten and Thorsten Müller 2013 and European Trade Union Institute (ETUI) 2014, Chapters 2-5 for accounts of the most recent developments of wage bargaining, employment and inequality in the EU). Instead re-organising labour markets, stabilising labour unions and employer associations, legal extensions of collective wage bargaining results, Euro area-wide minimum wage legislation, and so on should be favoured. This could provide the institutional requirements for the effective implementation of wage policies stabilising inflation at the target rate as well as stabilising functional income shares, *ceteris paribus*. On the one hand, this would imply supporting and encouraging attempts of European trade unions (and employer associations) at cross-border coordination of wage bargaining along these lines. On the other hand, this could be supported by coordinated minimum wage policies in the EU and in the Euro area. The European Trade Union Confederation (ETUC 2012) had recommended setting the minimum wage at a level of at least 50 per cent of the average wage or 60 per cent of the median wage in the respective member countries (on a European minimum wage policy see also Schulten 2012). Following this idea, OFCE, IMK, and ECLM (2013, Chapter 3) suggest that statutory minimum wages should be introduced in those countries where they do not exist, unless collective wage-setting institutions are strong and coverage is high (as for example in Austria). These minimum wages should then be adjusted by reflecting the inflation target, country-wide productivity growth and the current account balance - assuming that the latter is relevantly affected by price competitiveness.

Although wage bargaining coordination along the lines outlined above will have some merits in terms of reducing inequality within member countries, preventing further downwards pressures on labour income shares exerted by competitive wage policies and beggar-thy-neighbour strategies, and harmonising inflation rates across the Euro area, we would not expect too much in terms of rebalancing the current accounts within the Euro area. Empirical studies by Michael G. Arghyrou and Georgios Chortareas (2008), European Commission (EC 2010) and Carlos Carrasco and Patricia Peinado (2014) on Euro area member countries in general, and by Robert Kollmann et al. (2014) and Servaas Storm and C.W.M. Naastepad (2014) on Germany, in particular, have found that current account imbalances are mainly driven by non-price competitiveness and growth differences, and only to a lesser degree by diverging price competitiveness. This implies that the major burden for internally rebalancing the Euro area should fall on fiscal policies, adjusting the actual growth rate towards the BPCGR in the short-run, and on structural and regional policies, raising the BPCGR in the periphery in the medium to long-run.

3.3 Fiscal Policy

In a coordinated policy mix, fiscal policies should take over responsibility for real stabilisation, full employment and also a more equal distribution of disposable income. This has several aspects. By definition the excess of private saving (S) over private nominal investment ($p_d I$) at a given level of economic activity and employ-

ment has to be absorbed by the excess of nominal exports ($p_d X$) over nominal imports ($p_f eM$) (including the balance of primary income and the balance of income transfers, thus the current account balance) plus the excess of government spending (G) over tax revenues (T):

$$S - p_d I = p_d X - p_f eM + G - T.$$ (8)

Therefore, with balanced current accounts ($p_d X - p_f eM = 0$), government deficits in the long-run perspective (D) have to permanently take up the excess of private saving over private investment in order to assure a desired high level of employment (this is, of course, the "functional finance" view, pioneered by Abba P. Lerner 1943; see also Arestis and Sawyer 2004):

$$D = G - T = S - p_d I.$$ (9)

As is well known from Evsey D. Domar (1944), a constant government deficit-GDP ratio (D/Y^n) with a constant long-run nominal GDP growth rate ($\hat{Y}^n$) will make the government debt-GDP ratio (B/Y^n) converge towards a definite value in the long-run:

$$\frac{B}{Y^n} = \frac{\dfrac{D}{Y^n}}{\hat{Y}^n}.$$ (10)

Furthermore, nominal interest rates falling short of nominal GDP growth and hence of tax revenue growth (or low real interest rates falling short of real GDP growth) will prevent that government debt services redistribute income in favour of rentiers, which would be detrimental to aggregate demand and growth (see Appendix C in Hein and Detzer 2014 for a derivation). That is why targeting low interest rates on government bonds by the central bank is so important for our policy package.

Permanent government deficits should be directed towards public investment in a wider sense (including increasing public employment), providing the economy with public infrastructure, and public education at all levels (Kindergartens, schools, high schools, universities) in order to promote structural change towards an environmentally sustainable long-run growth path. Apart from this permanent role of government debt, which also supplies a safe haven for private saving and thus stabilises financial markets, counter-cyclical fiscal policies - together with automatic stabilisers - should stabilise the economy in the face of aggregate demand shocks. From these considerations we get the following requirements for fiscal policies:

$$D = D_L + D_S (Y^T - Y), \qquad D_S > 0,$$ (11)

with D_L as permanent government deficit (or surplus), which is required to keep output at non-inflationary full employment target (Y^T) in the long-run, the government deficit (surplus) balancing the private sector surplus (deficit) with a roughly balanced current account, and D_S as the reaction in the case of short-run deviations of output from target. It has to be added that the non-inflationary full employment level of out-

put itself is not independent of government expenditures, and of government investment in a broader sense in particular, because of labour market persistent/hysteresis mechanisms and because of the effects of government investment on productivity growth (Hein and Stockhammer 2010).

Furthermore, governments should apply progressive income taxes, relevant wealth, property and inheritance taxes, as well as social transfers, which aim at redistribution of income and wealth in favour of low income and low wealth households. On the one hand, this will reduce excess saving at non-inflationary full employment and thus stabilise aggregate demand - without generating problems of unsustainable indebtedness for private households or the foreign sector. Progressive income taxation and relevant taxes on wealth, property and inheritance thus also reduce the requirements for government deficits. On the other hand, redistributive taxes and social policies will improve automatic stabilisers and thus reduce fluctuations in economic activity and the required size of short-run discretionary stabilising fiscal policies.

Applying this approach to the Euro area would require the SGP and its further "developments" in the course of the crisis to be abandoned: the "Six-Pack", the Euro-Plus Pact, the Fiscal Compact, and the austerity policies imposed on the crisis countries. Instead, Hein and Truger (2007), Hein (2012, Chapter 8, 2013b), and Hein, Truger, and van Treeck (2012) have suggested replacing these means of coordinating national fiscal policies by a different method, which focusses on variables governments can control and which allows coordinated fiscal policies to be implemented along the requirements for short- and long-run real stabilisation at non-inflationary full employment and roughly balanced current accounts outlined above. They have suggested the coordination of long-run expenditure paths for non-cyclical government spending, i.e. those components of spending, which are under control of the government. The sum of these expenditure paths should be geared towards stabilising aggregate demand in the Euro area at non-inflationary full employment levels, and automatic stabilisers plus discretionary counter-cyclical fiscal policies could be applied to fight demand shocks. For each member country this would mean that, on average over the cycle and the average net tax rate in each member country given, as a first approximation, the path for non-cyclical government expenditure should generate a "structural" government deficit/surplus, balancing the "structural" private sector surplus/deficit at high levels of non-inflationary employment and a roughly balanced current account. This would make sure that, on average over the cycle, GDP growth is close to the BPCGR of each individual country. Cyclical deviations would be dampened by automatic stabilisers and, if required, by discretionary fiscal expansion/contraction. As shown above, the government debt-GDP ratios associated with such a strategy will not explode, and the ECB keeping nominal interest rates in each country below trend nominal GDP growth of the respective country, will make sure that debt services will not have restrictive distributional effects. The expenditure paths for non-cyclical public sector spending of each member country should be coordinated and monitored by the EC and the unwillingness to correct deviations should ultimately be sanctioned.

Following these recommendations would mean a significant contribution towards internally rebalancing the Euro area and prevention of increasing current ac-

count imbalances for the future. The current account surplus countries would have to apply more expansionary fiscal policies than they have, both before the crisis and since, in order to increase domestic demand growth. Together with the temporary acceptance of higher than Euro area average inflation rates, this would adjust their actual growth to their BPCGRs. This would also lift foreign growth for all the current account deficit countries, as well as foreign inflation, and therefore raise their BPCGR towards their actual rate of growth, and would thus contribute to allowing the current account deficit countries to reduce their deficits. Current account deficit countries have two options. They can make use of highly restrictive fiscal policies in order to adjust their actual rate of growth towards their BPCGR - in fact, the austerity policies, which the crisis countries were particularly forced to implement as a pre-condition for the financial rescue measures, can be considered a version of this. Alternatively, and more favourably, current account deficit countries should aim atactively improving their BPCGR. This means, on the one hand, contributing to a reduction of the inflation differentials with respect to the surplus countries, by means of unit labour cost growth below the sum of national trend productivity growth plus the inflation target, as we have argued above, avoiding deflation and redistribution at the expense of the wage share and of low income households. On the other hand, current account deficit countries would have to increase the income elasticity of demand for their exports and to reduce the income elasticity of demand for imports by means of industrial, structural and regional policies; this means they have to improve their non-price competitiveness. We will address the related issues of this strategy, which should be the most promising in the long-run, in the next section.

As already mentioned in Section 2, we would not expect perfectly balanced current accounts of Euro area member countries in the medium to long-run, because of necessary catching-up processes in a still quite heterogeneous currency area with respect to *per capita* income, in particular. This means that the catching-up countries will have a persistent tendency to grow above their BPCGRs, whereas the mature countries will tend to grow below their respective BPCGRs. Coordinating fiscal policies by means of expenditure paths for non-cyclical government spending and target "structural" public sector deficits should therefore take tolerable current account deficits associated with catching-up processes into account. On the one hand, this means to allow for more expansionary/less restrictive fiscal policies than described in Equation (9) for high growth catching-up countries, taking into account acceptable current account deficits. On the other hand, this implies that fiscal policies in the slow growth mature economies could be less expansionary/more restrictive than described by Equation (9).

Coordination of fiscal policies in the Euro area would thus not have to require or target perfectly balanced current accounts and would not have to strictly follow Equation (9). Sustainably higher growth in the respective current account deficit country than in the surplus countries on Euro area average should therefore be the ultimate criterion for tolerable current account deficits in the coordination process of fiscal policies. The direction and use of the related net capital imports should be part of an industrial and regional development strategy aiming at facilitating catching-up, as will be discussed in the next section.

4. Industrial Restructuring and Sustainable Catching-Up of the Periphery

As we have argued above, it is likely that the catching-up countries, due to their higher growth potential, will be exceeding their BPCGRs as determined in Equations (1) and (2) and will run into current account deficits, which then need to be financed by capital imports - thus lifting the BPCGR in line with Equations (3) and (4). In order to finance a smooth catching-up process by capital inflows, several prerequisites will have to be met. On the one hand, the capital inflows should be long-term and stable in order to contribute to financing a catching-up process, which will not be disrupted or undermined by the instabilities of financial markets and financial flows. However, the stabilisation of capital inflows as such may not be sufficient. As became clear during the recent crisis, the sustainability of a growth process financed by capital inflows hinges largely on the type of domestic expenditure that is financed. For the future, bubble growth financed by capital imports should be prevented, capital inflows should be focused on productivity enhancing investment and the development of export capacities, and they should be integrated into a European regional and industrial development strategy. We will briefly touch on each of these issues in what follows.

Efficient Regulation of and Selective Interventions into Capital Flows

First, there is a case for strict financial regulation in order to avoid unsustainable housing, constructions and consumption booms, which have caused the recent crisis. Measures should address demand and supply side factors of unsustainable booms. Access to credit for consumptive purposes should be restricted so that only sustainable debt relations are incurred. Micro-prudential measures need to be complemented by appropriate macro-prudential tools. With the recent EU capital requirements regulations, new instruments in form of the flexibility package have been introduced (Detzer and Herr 2014, Chapter 6.4). A systemic risk board at the EU level has been established, which monitors and analyses the build-up of systemic risk, however, it has no capacities to intervene. Furthermore, national measures are mostly based on capital requirements. However, the effectiveness of these in containing bubbles is not well known and may vary over time (Detzer 2012). Alternative or further instruments to be applied areas set-based reserve requirements. Their effect is relatively easy to determine and they can drive up credit interest rates in specific markets without changing the rest of the interest rate structure (Palley 2010; Detzer 2012). In addition to this, direct credit controls could be applied to keep a credit driven bubble in check, when price based measures are not sufficiently effective.

Industrial and Regional Policy Strategy

Second, in order to achieve a sustainable catching-up process lifting the respective BPCGRs the crisis countries need to develop their productive capacities, increase productivity and improve export capacities. This does not imply to turn to an "export-led mercantilist" strategy. On the contrary, increasing the BPCGR through improving export capacities aims at a higher rate of growth associated with a balanced

current account at which exports and imports then grow in step, as John McCombie (2011) has explained. An "export-led mercantilist strategy", however, aims at export and current account surpluses and hence at stimulating exports and constraining imports.

Following Alberto Botta (2014), an industrial policy strategy should have a strong regional character, because the conditions in the catching-up countries widely differ (for reviews of the state of development of industry structures, productivity and trade relationships within the EU and the Euro area, as well as the implications for industrial policies see the different perspectives in Karl Aiginger (2013, 2014), Annamaria Simonazzi, Andrea Ginzburg, and Gianluigi Nocella (2013), Botta (2014) and Mario Pianta (2014) for example). Generally, EU industrial and regional policies should promote "high road competitiveness" based on high-quality manufacturing production as the driver of growth, instead of relying on a low wage, labour intensive development strategy (Simonazzi, Ginzburg, and Nocella 2013; Aiginger 2014). A "high road" industrial policy strategy requires private and public investment in infrastructure, education, basic and applied research and development, etc. aiming at "new environmentally sustainable, knowledge intensive, high skill and high wage economic activities". Several proposals to revive investment in the Euro area suggest improving energy efficiency and the role of renewable energies, in particular (Confederation of German Trade Unions (DGB) 2012; OFCE, IMK, and ECLM 2013).

According to Thirlwall and Penélope Pacheco-López (2008, Chapter 5), for manufacturing sectors to develop, certain forms of protection, such as selective credits, subsidies to output, as well as selective taxes on imports, may be necessary. Several of these instruments of trade protection are not available to EU and Euro area member countries. However, Ricardo Hausmann and Dani Rodrik (2002) argue that trade protection or export subsidies are both just second-best solutions, since they cannot discriminate between successful innovators and unproductive imitators. Therefore, as a first-best policy, they argue for public sector credit and guarantees. Here government development banks, such as the KFW in Germany, which closely cooperates with the commercial banking system, could be a good example, and is in line with the rules of the single market. Additionally, the European Investment Bank (EIB) could be used and support this process in the periphery countries. Likewise, the EU Structural Funds could be redesigned to support infant industries in catching-up countries (Pianta 2014).

Stable Long-Term Financing of Current Account Deficits Related to Successful Catching-Up

Third, successful catching-up will most likely be associated with current account deficits in the catching-up countries. This is not a principal problem, as long as growth is sustainably higher in the catching-up countries than in the mature current account surplus countries, and as long as the deficits are financed in ways that do not expose the respective countries to sudden stops or reversal of capital flows. Therefore, FDI or long-term loans should be preferred over short-term financial investments. Banking regulation should incentivise banks to use more stable sources of finance. The first step in this direction has already been taken in the EU, with the new liquidity regulation (Detzer and Herr 2014, Chapter 15.6). A financial transac-

tion tax may also be helpful to discourage short-term financial investments and make long-term real investments more attractive, while also generating financial resources for public investment (Stephan Schulmeister 2010). Increasing and pooling a large part of public investment spending at the EU level with a focus on the catching-up countries would also decrease the need for potentially volatile private capital flows. Putting some investment responsibilities at the EU level is sensible, since many of the major future challenges can be more easily tackled if the solutions are jointly crafted at the EU level (e.g. climate change, development of EU-wide transport network, etc.). Here, an EU institution would raise its own funds raising contributions from member countries and/or issuing debt and then provide the necessary capital flows to the countries in question by either directly investing in the relevant projects or by providing long-term loans to the investors. Several proposals rely on such a mechanism (DGB 2012; Jörg Bibow 2013; Yanis Varoufakis, Stuart Holland, and James K. Galbraith 2013).

5. Conclusions

In this paper we have provided alternative post-Keynesian policy recommendations addressing the problems of differential inflation, divergence in competitiveness and associated current account imbalances within the Euro area. We have argued that the major purpose of these alternative policy proposals should be to generate sustainably high demand and output growth in the Euro area as a whole, providing high levels of non-inflationary employment, as well as preventing "export-led mercantilist" and "debt-led consumption boom" types of development, both within the Euro area and with respect to the role of the Euro area in the world economy. We have provided a basic framework in order to systematically address the related issues, making use of Thirlwall's (1979, 2002) model of a BPCGR. Based on this framework, we have outlined the required stance for alternative economic policies and have discussed the implications for monetary, wage/incomes and fiscal policies in the Euro area as a whole, as well as the consequences for structural and regional policies, particularly in the Euro area periphery.

We have argued that monetary policies of the ECB should refrain from fine-tuning output and inflation but should target low real interest rates, focus on financial stability and should convincingly act as lender of last resort, both for the banking system and for the Euro area member country governments. For the latter, we have suggested that the ECB should target country specific caps on government bond yields given by the long-run nominal GDP growth rate of the respective country. Wage policies should aim at stabilising income shares and contribute to stable inflation rates at the target rate for the Euro area as a whole. Wage policies should also contribute to rebalancing price competitiveness within the Euro area, but we would not expect large effects on the prevailing current account imbalances. Therefore, the major burden for internally rebalancing the Euro area, as well as for stabilising aggregate demand at non-inflationary full employment levels, falls on fiscal policies. We have suggested that functional finance fiscal policies should be applied and to make use of long-run government deficits/surpluses in order to take up the excess of private saving over private investment at non-inflationary full employment output

levels in each country, thus also preventing current account surpluses and deficits. In order to implement such a policy, we have proposed the coordination of expenditure paths for non-cyclical government spending of member countries as a strategy, accepting the present political preferences, which seem to exclude a United States of Europe with a federal government budget for the near future.

Finally, we have argued that perfectly balanced current accounts within the Euro area should not be expected as long as the periphery is catching-up with respect to the centre. Successful catching-up will be associated with current account deficits in the periphery and current account surpluses in the centre. These should be accepted and taken into account when coordinating fiscal policies, provided that the periphery grows at a sustainably higher rate than the centre. For this purpose, industrial restructuring and catching-up should prevent unsustainable credit-driven bubbles and consumption booms, improve existing industries and develop new export industries in order to lift the BPCGR of the periphery countries. Furthermore, the prevailing and remaining current account deficits require stable capital inflows and we have sketched a few variants for this, too.

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