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Wood, richard

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EUROZONE MACROECONOMIC FRAMEWORK: REDUCING INTERNAL AND EXTERNAL IMBALANCES

Richard Wood

This article reviews internal and external balance policy issues in the Eurozone. The Swan diagram is used as a framework for assessing the policy actions needed to simultaneously restore both internal and external balance of selected Eurozone countries. A critical assessment is provided of using unit labour costs as an indicator of external competitiveness. It is argued that current macroeconomic policy settings are contributing to declining incomes, rising unemployment, high public debt and deflation, while failing to correct intra-Eurozone balance of payments disequilibria. A new macroeconomic policy plan is outlined for restoring economic growth and reducing external imbalances without raising public debt.

EUROZONE MACROECONOMIC FRAMEWORK: REDUCING INTERNAL AND EXTERNAL IMBALANCES

Richard Wood¹

The range of macroeconomic problems afflicting many Eurozone countries is profound.

Currently, individual countries within the Eurozone are seriously afflicted by both internal and external imbalances. In this paper *internal imbalances* are reflected in various degrees in different Eurozone countries by high unemployment and high public debt. *External imbalances* are reflected in trade imbalances (which are in large part driven by competitiveness differences and difference in absorption), current account imbalances and external debts.

Over the past 80 years, a number of prestigious Australian economists — Roland Wilson (1931), Trevor Swan (1953 and 1955), Wilfred Salter (1959) and Max Corden (1960) — contributed to the development of the macroeconomic analysis of internal and external balance in the dependent economy². It is suggested in this article that Swan's internal and external balance diagram provides a relatively simple, but meaningful, framework for illustrating Eurozone problems and for identifying macroeconomic policy solutions.

¹ I wish to thank Max Corden for helpful comments on an earlier draft.

² See 'Australia's Contribution to International Trade Theory: The Dependent Economy Model', Philip Metaxas and Ernst Weber, Business School, University of Western Australia, May 2013.

The periphery Eurozone countries are arguably examples of the 'small dependent' economies³ that Swan directed his analysis toward although, unlike countries such as Australia, and being in a monetary/currency union, they have no independent control over their monetary policies, or exchange rates.

This paper argues that macroeconomic policies in the Eurozone countries must be coordinated domestically and across the Eurozone, and that an economic strategy needs to be developed aimed at simultaneously restoring greater internal and external balance. The current problems are long-term in nature, and the ideal path leading to sustainable economic growth, without further raising public debt burdens or moving further away from external balance, is very narrow.

Internal Imbalances

The Eurozone countries are far from internal balance.

a) Unemployment

Unemployment rates provide an important indicator of internal imbalance. Unemployment rates for selected Eurozone countries are shown in Column 1 of Table 1 below. Country rankings of unemployment rates are provided in Column 2.

b) The public debt burden

A second indicator of internal imbalance used in this paper is the public debt burden (net public debt as a percentage of GDP). Public

³ These small dependent economies are economies where the prices of exports and imports are determined on world markets and cannot be influenced by domestic conditions of supply and demand.

debt ratios are provided in Column 2 of Table 1 below. Country rankings of the public debt burdens are provided in Column 4.

c) *The overall measure of internal imbalance*

The estimate of the overall degree of internal imbalance is provided in Column 5 of Table 1. Column 5 is derived as the simple average of the rankings provided in Columns 2 and 4. The implicit simplifying assumption here is that, from the policy maker's viewpoint, high unemployment and high public debt are of broadly equal concern.

As can be observed from Column 5 of Table 1, Germany is relatively close to internal balance, whereas Greece and Portugal have the largest internal imbalances.

Table 1: Internal Imbalances (2012)

	<u>Unemployment Rates</u>		<u>Public debt/ GDP</u>		<u>Average</u>
		<u>Rank</u>		<u>Rank</u>	<u>Rank</u>
Germany	5.5	1	57	1	1
France	10.3	2	83	3	2.5
Ireland	14.7	4	92	4	4
Spain	25.0	7	73	2	4.5
Portugal	15.6	5	112	6	5.5
Greece	24.2	6	154	7	6.5
Italy	10.7	3	106	5	4

External Imbalances

In respect of illustrating external imbalances in the Eurozone, this article focusses on periphery countries with balance of payments deficits in juxtaposition to Germany which has a large balance of payments surplus.

a) Current account imbalances

A common measure of external imbalance is provided by the size of the current account deficit relative to GDP. For the purposes of this paper, each country's current account/GDP imbalance and their ranking are provided in Columns 1 and 2 of Table 2⁴. Because the current account imbalances are heavily influenced by the compression in absorption and imports occasioned by the deepening recessions in periphery countries, it was decided to use the 8 year (2005 to 2012) average estimate as the basis for calculating Columns 1 and 2 in Table 2. The estimates in columns 1 and 2 are likely to be somewhat closer to the underlying structural current account deficits.

b) External debt

Another element of external imbalance used in this analysis is the level of external debt relative to a country's GDP. See Columns 3 and 4 of Table 2.

c) The overall measure of external imbalance

The overall measure of external imbalance (Column 5 of Table 2) is obtained by averaging the rankings reported in columns 2 and 4. Again, the implied assumption is that policy maker's view high

⁴ Ideally only intra-Eurozone current account imbalance should be used in this calculation, but that data is not readily available to the author.

current account deficits and high external debt as all of equal importance. Greece and Portugal are furthest from external balance.

Table 2: External Imbalances (2012)

	<u>CAD*</u>		<u>External</u>		<u>Average</u>
			<u>Debt **</u>		<u>Rank</u>
		<u>Rank</u>		<u>Rank</u>	
Germany	+6.3	5	168	2	3.5
France	-1.3	1	198	4	2.5
Ireland	-1.6	2	1028	7	4.5
Spain	-6.2	4	171	3	3.5
Portugal	-9.2	6	299	6	6
Greece	-10.4	7	231	5	6
Italy	-1.9	3	122	1	2

** Percentage of GDP based on average values over period 2005 to 2012.*

*** Percentage of GDP*

The Swan Diagram for Eurozone Countries

Chart 3 illustrates the Swan Diagram as applied to selected Eurozone countries. The relative locations of each country on the diagram are determined by the average rankings recorded in Tables 1 and 2. The

vertical axis reports the cost ratio, defined as R/W , where R is the international price level and W is the domestic money wages.

Germany with its very large current account surplus (which should, in reality, attract a relatively high weighting among policy objectives), and significant under-full employment, is located in Zone II of the Swan Diagram. It is suggested in this article, and by the IMF and other commentators, that Germany could usefully raise real wage levels to stimulate demand, and to facilitate an adjustment aimed at lowering the current account surplus and contributing to the internal devaluations needed by the periphery countries. Generally, therefore, Germany would seem to be located in the North-West quadrant of the Swan diagram.

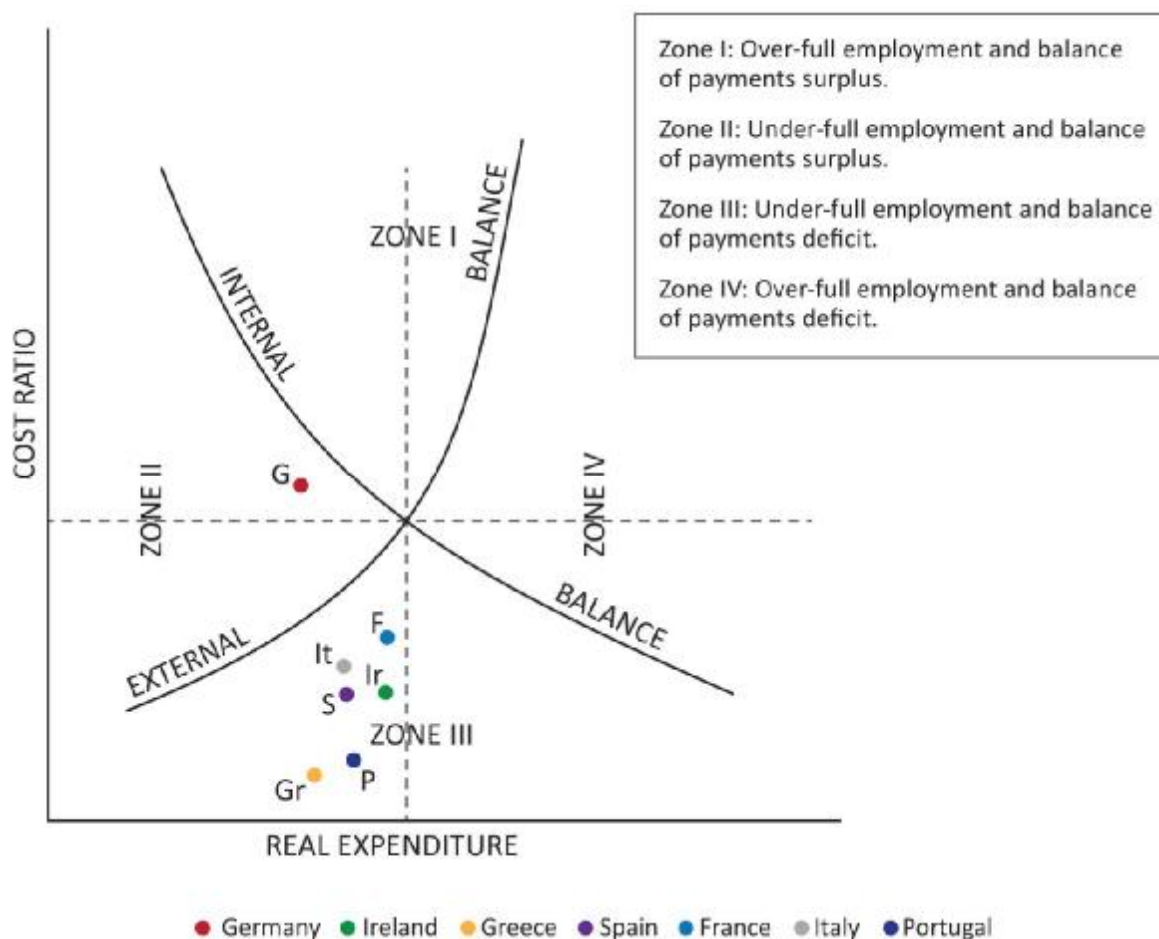
The periphery countries are very far from both internal and external balance and, with high under-full employment and significant underlying balance of payments deficits, are located in Zone III of the Swan diagram. For the periphery countries with high and rising debt burdens and high and rising unemployment, it seems clear — given the contractionary consequences to date of Eurozone fiscal austerity policies — that real expenditures would need to be boosted if their economies were to be able to move in the direction of greater internal balance. All other things equal, this requirement, and the fact that periphery countries need to lower money wages and export prices, would locate these countries in the South-West quadrant of the Swan diagram.

The above reasoning underpins the location, by quadrant, of the relative average ranking on the diagram below. The presentation is illustrative only.

The use by Swan of R/W as the cost ratio is, of course, an approximation in the intra-Eurozone case. As the earlier analysis in

this article suggests, while reductions in the money wage are necessary, it is the prices of exported goods and services in the Zone III countries that need to fall relative to the prices of German exports.

Chart 3: The Swan Diagram — Selected Eurozone Countries



To be successful going forward, the highly indebted periphery countries must now adopt macroeconomic policy strategies that will steer them from their current locations onto a path leading toward the intersection of the internal balance and external balance

isoquants. Arguably, the shortest and most effective route is a straight line.

It is crucial that the macroeconomic policies assembled to reduce external and internal imbalance be fully coordinated, and applied simultaneously, so that the economy can move in the desired direction, and so that progress on one objective (say, greater internal balance) is not offset by a slippage with the other objective (greater external balance).

The difficulties should not be underestimated. The individual Eurozone countries have no control over their monetary policies. This greatly limits their ability to increase real expenditures. However, insofar as individual Eurozone countries still have independent fiscal policies they are still able, via that route, to affect real expenditures (absorption).

If only 'real expenditure' is increased (and the 'cost ratio' is not simultaneously increased) the periphery countries would move further away from external balance, as absorption and imports would increase when expenditure is raised. If only the 'cost ratio' was increased by reducing wages (and 'real expenditure' was not increased simultaneously) then the economy would move further away from internal balance, as the reduction in wage incomes would result in lower level of domestic expenditure and demand.

Competitiveness and the Failure of Internal Devaluation

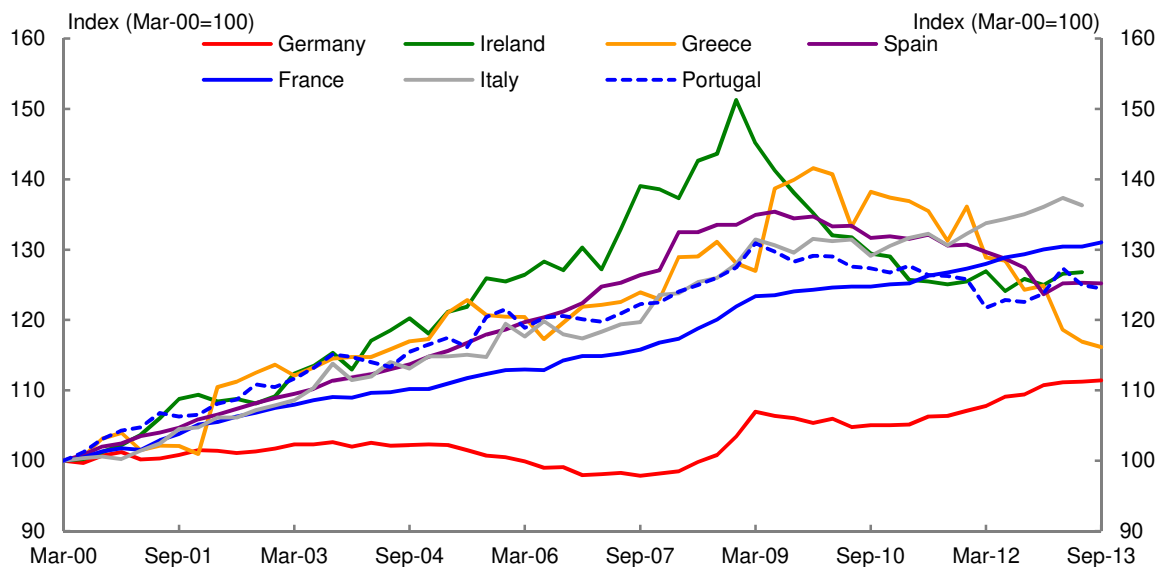
The cost ratio in the Swan diagram is intended to be representative of the policy parameter needed to change competitiveness.

The most commonly used indicator of competitiveness in the Eurozone is the unit labour cost comparison (see Chart 1). By

observing the movements over time in relative unit labour costs one gains the impression that substantial favourable adjustments are taking place in relative price competitiveness differences within the Eurozone. Unfortunately this is not the case.

The two main important weaknesses of the unit labour cost comparison is that it represents *labour* costs only and it is calculated for the *whole* economy rather than for the *traded goods sector*.

Chart 1: Nominal Unit Labour Cost-Based Competitiveness Comparison



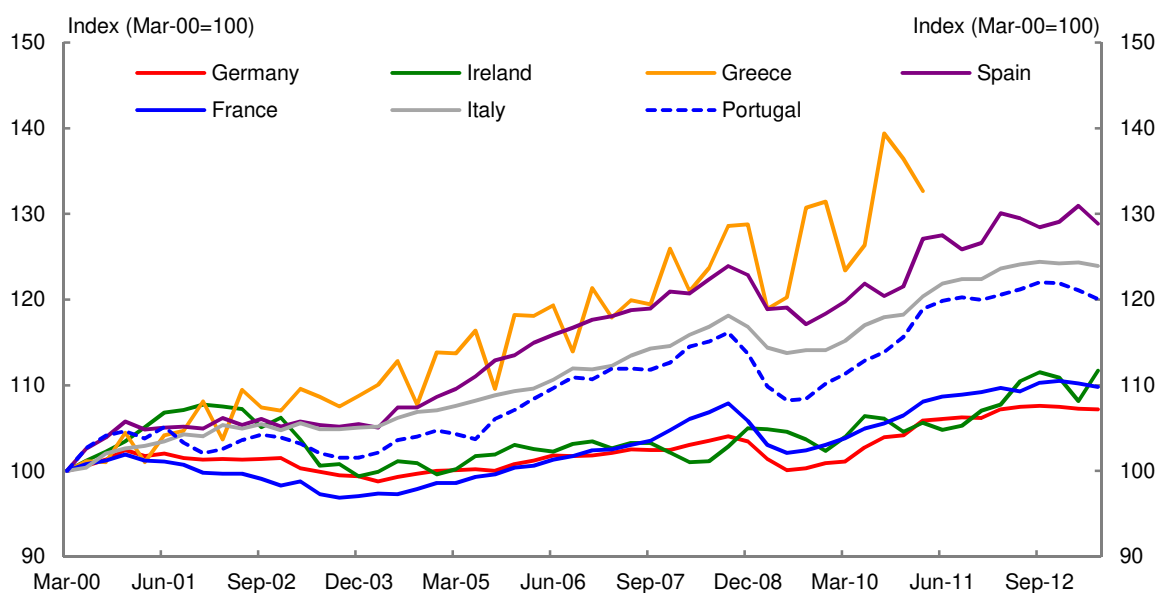
A more accurate reflection of international price competitiveness differences is provided by Chart 2. On this basis there has been no effective internal devaluation⁵ in the selected Eurozone countries

⁵ Eurozone countries have no independent control over their exchange rates. They cannot devalue by adjusting the exchange rate and can only do so by

since the beginning of the global financial crisis. This is so despite years of attempting to devalue internally, and the fact that there have been, as Chart 1 demonstrates, some improvements in some countries in unit labour costs movements relative to those in Germany.

For a more complete analysis of the limitations of the unit labour costs indicator of competitiveness see the Appendix.

Chart 2: Export Price-Based Competitiveness Indicator



Austerity, internal devaluation and the effects on real wages

deflating domestic wages and prices relative to trading partner countries. The process of deflating internal wages and prices to improve one's external competitiveness is called 'internal devaluation'. In this process it is not necessary that all wage rates and all domestic prices be deflated, but those in the traded goods sector must be deflated for the policy to be effective. In the deflation process it is not a requirement that real wage levels should fall. All that is required is that traded goods prices fall relative to those in trading partner countries.

The architects of austerity and internal devaluation policies believe that those policies can bring about needed reductions in wages and prices. According to the theory, austerity reduces aggregate demand and pushes-up unemployment. In turn, the higher unemployment is expected to moderate wage claims, and lead to the required reductions in nominal wages. Prices are then expected to fall down in line with wages. The intended result is that national price levels decline in trade deficit countries (relative to those in surplus countries), and competitiveness in the deficit countries is improved.

Austerity and internal devaluation policies in Eurozone countries are failing because rigidities in labour markets preclude market forces — high unemployment — from driving down nominal wages sufficiently in some countries. As well, and probably more importantly, there appears to be insufficient competition in product markets in some deficit countries, and, consequently, prices of domestically produced goods do not always fall, *pari passu*, in line with nominal wages.

Because nominal wages have weakened more than prices in some periphery countries, one important consequence of internal devaluation is that real wages will have fallen between 2009 and 2014 as follows: in Greece (around 22 %), Spain (7 %), Portugal (6 %), Ireland (4 %) and Italy (2 %) ⁶. Between 2008 and 2012, real wages fell by 10 % in the United Kingdom (IMF Article IV Report, United Kingdom, 2013). Between 2008 and 2011, real wages fell by 2 % in Estonia and by 5 % in Lithuania.

Real wage cuts are a double-edged sword: they have both income and cost effects. When nominal and real wages have fallen, and when the labour income share in National Income and consumer

⁶ See Ronald Janssen ' *Real Wages in the Eurozone: Not a Double but a Continuing Dip* ', 2013.

demand have also fallen, and profitability is high, further cuts in nominal and real wage costs would have minimal effects in terms of reducing unemployment. In such circumstances, further cuts in nominal and real wage incomes would lead to further stagnation in consumer demand and economic activity and add to unemployment. In such cases, increased nominal and real wages⁷ could lift consumer and aggregate demand, and hence employment⁸.

A Deepening Eurozone Crisis?

Not only are falling real wage incomes dragging down aggregate demand in some periphery countries, but there are now many other reasons why one might expect that the Eurozone crisis could deepen further. For example:

⁷ In its latest Article IV Report on Germany the IMF has said that it would not be inappropriate for Germany to increase real wages in order to raise domestic demand and to offset external shocks (that is, the weakening demand for German exports).

⁸ All else equal, countries with large trade surpluses, an undervalued real effective exchange rate and depressed internal demand (such as Germany) could also possibly benefit from increased real wages. After a decade or more of pursuing wage restraint policies, real wages in Germany are arguably lower than the real wage levels that would be consistent with full employment and external balance. Such policy action by Germany would also contribute to stronger economic growth and greater external balance within the Eurozone. If Germany relied on an appreciation of the Euro (rather than increased wages) to contribute toward a reduction in its current account surplus then the periphery countries would suffer as a consequence of a lower level of competitiveness against non-Eurozone countries.

- i) Based on data available at the time of writing, real wage incomes in Germany are projected to fall in 2013 and retail sales have weakened further;
- ii) Unemployment is still rising in many Eurozone countries;
- iii) The paradigm, prevalent in Europe, that asserts that unemployment can be resolved by supply-side reforms and further real wage cutting, rather than by increasing aggregate demand, is misplaced;
- iv) Producer prices in the Eurozone fell by 1.2 percent in the year to November 2013. German inflation is now also dangerously low — requiring deeper deflation and income contraction in the periphery countries as they try to achieve internal devaluations;
- v) The financial system in the Eurozone is still characterised by fragmentation in credit markets, and the presence of relatively high underlying real longer-term borrowing interest rates charged by banks in periphery countries;
- vi) High, and still rising, public debt burdens in periphery countries continue to confound the return to financial stability. The Northern authorities have turned their backs on debt mutualisation or forgiveness;
- vii) The high German savings rate;
- viii) The massive German current account surplus (at 7 per cent, three times that of China, relative to GDP in 2012);
- ix) The continuing Euro appreciation, which lowers import prices, adding to the deflationary tendency;
- x) The ECB is continuing to focus on price stability, and contracting the balance sheet of the Euro-system. The pace of credit

contraction in the Euro-system is now greater than ever before. The ECB continues to drain funds from banks to offset its government bond holdings;

xi) Deleveraging is far from complete among impaired sovereigns and among the private banks, there is limited bank intermediation, and available bank credit for small and medium enterprises is in short supply (due, in part, to bank deleveraging and under-capitalisation, increasing non-performing loans, higher capital requirements, cross-border capital flows shrinking as banks withdraw behind national borders, and compressed interest rate margins). The banking system in Germany is particularly exposed;

xii) Fiscal policy conservatism is still very deeply entrenched at the highest levels in Germany, and there is no common budget in the Eurozone or effective fiscal transfer mechanism;

xiii) 'Uncertainty' is at an elevated level in Germany and elsewhere in the Eurozone, economic policy action is constrained by outdated laws and treaties, and there is currently no comprehensive, coordinated plan to revive economic growth, create employment and reduce underlying external account imbalances.

The Potential Importance of Policy Failings in the Eurozone

The importance of all the issues raised above cannot be overestimated. They bear on, and support, the US Treasury's analysis in its Report to the Congress on International Economic and Exchange Rate Policies (October 2013)⁹.

⁹ In one fundamental paragraph, the important US Treasury Report states: 'To ease the adjustment process within the euro area, countries with large and persistent surpluses need to take action to boost domestic demand growth and

In that report, the US Treasury is highly critical of the lack of adjustment in the Eurozone, Germany's constrained demand and Germany's large current account surplus; developments that the US Treasury rightly claims are creating a deflationary bias in the Eurozone area.

The resolution of the intra-Eurozone competitiveness mismatches (via *internal devaluation* in the South and *internal appreciation* in the North), the resolution of recessions/depressions and the resolution of the excessive debt burdens (via debt forgiveness, debt restructuring and economic growth), form three central macroeconomic solutions to the on-going European crisis.

With German inflation falling to current low levels, the only way that internal devaluation could possibly work under the current 'Berlin' orthodoxy — within a meaningful time frame, and without a major German wage-fiscal-demand-price-reflation — would be by much deeper austerity and substantial wage and price deflations in periphery countries, and in other countries as well. The costs of that approach — in terms of demand contraction, higher unemployment and increased debt burdens in periphery countries in particular — could be catastrophic, particularly if austerity, indiscriminately-

shrink their surpluses. Germany has maintained a large current account surplus throughout the euro area financial crisis, and in 2012, Germany's nominal current account surplus was larger than that of China. Germany's anaemic pace of domestic demand growth and dependence on exports have hampered rebalancing at a time when many other euro area countries have been under severe pressure to curb demand and compress imports in order to promote adjustment. The net result has been a deflationary bias for the euro area, as well as for the world economy. Stronger domestic demand growth in surplus European economies, particularly in Germany, would help to facilitate a durable rebalancing of imbalances in the euro area'. See Report to Congress on International Economic and Exchange Rate Policies, US Department of the Treasury, Office of International Affairs, 30 October 2013.

operating market forces, and deflationary-wage-and-price-reducing-structural-reforms are relied upon to drive the adjustment.

In a liquidity trap real interest rates are likely to be already too high. The faster the pace of wage and price deflation in a liquidity trap environment (where interest rates are kept at or near zero bound), the higher becomes the real interest rate and the public debt burden. The higher real interest rates encourage additional savings at the expense of consumption, particularly if uncertainty increases, leading to an even deeper collapse in aggregate demand. The rising public debt burden risks higher internal and external borrowing costs, credit shortfalls, capital flight, demands for new foreign loans, and an ultimate financial crisis. Without substantial debt rescheduling/forgiveness, interest payments to foreign creditors mount further. The downward spiral accelerates.

One central element of the German orthodoxy — reliance on ‘market forces’ — is a mixture of older Marshallian-type economic philosophy and modern neo-liberalism. Many countries have had direct experience with the reliance on ‘market forces’ to bring about major adjustments in wage and price levels. For instance, in Australia an austere policy of relying on high unemployment and market forces was adopted between 1975 and 1982, and was persevered with, as a means to defeat inflation, to reduce real wages and to increase employment, and it failed. Austerity, and a similar reliance on market forces, are policies that are now failing in the Eurozone.

The current Eurozone-Maastricht policy framework is profoundly flawed, and is increasingly untenable. The presence of the liquidity trap continues to confound economic recovery in the Eurozone. Public debt burdens continue to rise, aided by fiscal austerity

policies, and are projected by the IMF to be much higher in 2016 than in 2012 in periphery countries. Unemployment rates will be higher in most of them as well. Internal devaluation has failed. Under present macroeconomic policy settings, economic fundamentals in the currency zone are getting worse, not better, and long-term economic stagnation is likely, as was the case with those countries that clung onto the Gold Standard in the 1930s. Sustained under-consumption is a current threat in number of periphery countries.

- The IMF now regards it essential to boost aggregate demand in Eurozone countries (see Christine Lagarde, '*Re-empowering the global economy*', Economia, 27 December 2013).
- However, Chancellor Merkel's New Year speech calling for a 'balanced budget' was very disappointing, and counterproductive to required expansion and adjustment within the Eurozone. Furthermore, one of the latest papers published by the Deutsche Bundesbank denies that there is any risk of deflation in the Eurozone area.
- On January 7, 2014, following the *Eurostat* release showing that Eurozone inflation fell to 0.8 per cent in December 2013, US Treasury Secretary, Jack Lew, issued a clear call for Germany to boost growth to avoid deflation.

Unfortunately, misplaced orthodoxies, misinterpretations about the progress being made with internal devaluation, and the support for contractionary fiscal policy and even lower wage incomes in periphery countries, remain as strong as ever in Germany¹⁰. The conflict facing Eurozone policy-makers in following the German

¹⁰ To simultaneously move toward greater internal and external balance Germany must simultaneously increase real expenditure and real wages.

monetary, fiscal and wages policy prescriptions is simply ignored. That conflict is simply between i) seeking greater internal balance (*increasing wages, consumer spending and public expenditure in Eurozone countries, avoiding deflation and reducing unemployment*), and ii) seeking greater external balance (*reducing wages in periphery countries in an attempt to induce competitiveness adjustments within the Eurozone rather than also expanding demand and raising wages and prices in surplus countries*). The Germans and the EU support ii), to the exclusion of i). Very unfortunately for all, the German/EU policy is not working.

The period ahead

Without a political commitment to boost aggregate demand — and a preparedness to adjust and radically reverse current economic policies — economic conditions in the Eurozone could well deteriorate further as 2014 unfolds. The timing of events remains uncertain of course, and there is a something of a ‘false dawn’ at the moment, as periphery countries are benefitting from the consequences of demand-contractionary-induced improvements in trade and current account deficits. This is taking pressure off the need for capital inflow, possibly contributing to lower interest rate risk premia and superficially suggesting that intra-zone external imbalances have been very substantially reduced. However, this will all unwind if ever aggregate demand starts to pick up. In such circumstances, if there is not an adequate increase in the cost ratio (reduction in money wages) and a reduction in the prices of exportables produced in the periphery countries, then some form of import constraints —higher tariffs or quantitative import controls —

may be necessary to head off the likely increase in external imbalances.

As 2014 unfolds the fragility of the Eurozone, and surrounding countries, is still likely to present a continuing serious threat to global financial stability and ongoing global expansion. Conceivably, if the United States Fed tapering can be achieved without financial stress in 2014; if Japan's incipient recovery continues; if emerging economies can maintain economic stability; and if exchange rates don't become grossly misaligned as a result of QE policies in various countries, tapering in the United States and currency wars, then the Eurozone crisis may well represent the major threat to global stability in late 2014.

It is in the interests of all countries that outdated and inappropriate orthodoxies and related macroeconomic policies are changed before a new European crisis erupts, as the Eurozone economy is relatively large (at around 75% of the size of the US economy).

It is also in the longer-term interest of all that internal devaluation and convergence in Eurozone countries is achieved: otherwise the Eurozone will never be able to issue bond with multiple and joint liability, and the international financial system will remain unbalanced.

Macroeconomic Policy

Based on the above analysis the following agenda would represent a comprehensive macroeconomic policy response to the on-going European crisis, aimed at achieving greater internal and external balance. Taking into account the different problems of each country, the proposed overarching strategy would be designed to operate in a

number of countries simultaneously in a mutually re-enforcing manner.

i) Debt rescheduling or partial debt forgiveness for countries at or near insolvency.

ii) Coordinated formal centralised tripartite wage and price policies, aimed at restoring greater underlying external balance by lowering labour cost and export prices and restoring competitiveness in deficit countries, raising wages and prices in surplus countries, countering the tendency toward deflation, avoiding unnecessary reductions in real wage incomes, and ensuring adequate business profitability. New, or re-invigorated, 'internal competition' policies will need to be developed to ensure appropriate internal price responses follow in the wake of the further lowering of nominal wages. Price and wage behaviour will need to be closely monitored by Governments.

iii) Avoidance of fiscal austerity policies, and related unnecessary reductions in real after-tax wage incomes; and avoidance of further 'bail-outs' which only add further to the debt burdens of periphery countries.

iv) Avoidance of 'quantitative easing' policies which are unproven and have major risks and adverse side-effects, such as asset price bubbles, currency devaluation, the distortion of risk assumption and resource allocation, and the creation of destabilising international capital movements. Quantitative easing does not deliver new money to the unemployed, the disadvantaged or to other citizens who have a relatively high propensity to consume ordinary goods and services. Rather, the new money created by quantitative easing flows to the banks, the speculators, the financial engineers, to bank reserve accounts and to hedge funds. Because new money is a precious

resource it should not be expended, via quantitative easing, in an unlimited, open-ended operation with little impact on real activity. At some point the new money may need to be withdrawn: bond prices could then fall sharply and market instability could be substantial.

v) Policies need to be pro-active, not just designed to buy more time. They also need to be tailor-made to some degree to address the particular problems faced by different countries.

vi) Overall, there needs to be an over-riding strategy involving the adoption of highly-coordinated medium-term monetary and fiscal policies aimed at restoring internal balance by stimulating internal expenditure and domestic demand. Countries with large current account surpluses and relatively low levels of public debt are particularly well placed to expand demand, but they alone cannot be relied upon to provide adequate demand in periphery countries.

vii) Wide-spread stimulatory fiscal policies (which would work to lower unemployment) are required but these policies cannot be permitted to increase public debt in already highly-indebted nations. This rules out the use of new bond financed budget deficits. Monetary and fiscal policies must be functionally coordinated and work simultaneously, and in tandem, to increase expenditures without increasing public debt. This could be achieved by overt money financing of budget deficits¹¹. This relatively powerful

¹¹ See Richard Wood, 'A Strong Case for Monetisation of On-going Budget Deficits in European Periphery Countries', Roubini EconoMonitor: June 15, 2013. Also see How to Solve the European Economic Crisis, Amazon Book, 11 December 2012 and 'The Economic Crisis: How to Stimulate Economies Without Increasing Public Debt', CEPR Policy Insight Paper, Vox Economics, September 2012.

monetary and fiscal policy combination is not precluded by Article 123 of the Lisbon Treaty¹². Strict legislative limits could be invoked in relation to the magnitude of the overt money financing operation. There would be little risk of inflation given the high levels of unemployment and underutilised capacity. Should demand-pull or cost-push inflation threaten in the future, as the economies reach much higher levels of capacity utilisation, then any excess liquidity could be sterilized or bank reserve ratios increased.

¹² See Biagio Bassone and Richard Wood, '*Overt Money Financing of Fiscal Deficits: Navigating Article 123 of the Lisbon Treaty*', Roubini EconoMonitor, 22 July 2013. Also see Cattaneo, M and Zibordi, G (2013), '*Una soluzione per l'euro: gli strumenti per rimettere in moto l'economia italiana*', Hoepli Editore, forthcoming.

APPENDIX: Weaknesses in Unit Labour Cost Comparisons

Measures of ‘international competitiveness’, for example those based on broad wage, unit labour cost and price parameters are approximations only¹³. Some are more relevant than others.

Unit labour cost-based measures of competitiveness are commonplace in the literature. Those estimates show that German unit labour costs remained broadly unchanged between 2000 and 2009, while they rose by about one third in the rest of the Eurozone¹⁴.

Since 2008, Ireland, Greece, Portugal and Spain have made some progress in reducing their unit labour cost gaps with Germany (see Chart 1), with the decline in unit labour costs in those countries often being larger in the tradable sector than in the non-tradable sector¹⁵. Greece and Ireland have recorded the largest improvements in relative unit labour costs since end-2008 (a fall of around 19 and 17 per cent in their relative unit labour costs vis-a-vis Germany, respectively). In the case of Ireland this substantial adjustment partly reflects the relatively high degree of labour-employer cooperation in that country¹⁶.

¹³ The Global Competitiveness Report 2013/14 (World Economic Forum, 2013) takes into account 12 different parameters to develop its overall measure of international competitiveness, including institutions, infrastructure, technology, labour market efficiency and product market efficiency, etc.

¹⁴ See Martin Lueck, ‘European Economic Focus: Germany’s current account surplus and Europe’s rebalancing’, UBS, November 2013.

¹⁵ See Euro Area Policies, 2013 Article IV Consultation Report, IMF, July 2013.

¹⁶ According to the World Economic Forum’s Global Competitiveness Report, 2013-14, Ireland is highly ranked in ‘cooperation in labour-employee relations’ at rank 13, and above Germany (with the rank of 18). Dickens et al. found that in his sample of 16 countries Ireland had the highest degree of nominal wage flexibility and was among those countries with the lowest incidence of employment protection legislation and the highest degree of coordination in

It seems clear that reducing unit labour costs in uncompetitive countries is a *sine qua non* for internal devaluation to be successful. Unit labour costs can be reduced either by reducing wage and/or non-wage labour costs, or by increasing labour productivity.

However, there are at least six analytical qualifications attaching to the use of unit labour cost-based measures as the sole basis for competitiveness comparisons:

a) First, if there are different evolutions of labour costs and productivity in the traded and non-traded goods sectors, it is possible that an overall increase in relative unit labour costs could be due to relatively high unit labour cost growth in the non-traded goods sector, with little direct impact on competitiveness. The IMF¹⁷ concludes that this was the case between 2000 and 2007 in Greece and Ireland, and to a much lesser extent in Portugal and Spain.

b) Second, if production structures and the degree of mechanisation and technological development are broadly the same as between two countries then unit labour costs may be meaningfully compared. But if the production, specialisation, product quality and technology structures, and export compositions are radically different, say as between Germany and Greece, or change through time, then one would need to be cautious when using unit labour cost index changes alone to draw strong inferences about changing competitiveness differences between Germany and Greece. Spain has been relatively successful in restructuring toward export activities,

bargaining at a high level. See 'How Wages Change: Micro Evidence from the International Wage Flexibility Project', William T. Dickens et al., *Journal of Economic Perspectives*, Vol 21, Number 2, Spring, 2007.

¹⁷ See International Monetary Fund, World Economic Outlook, April 2013.

for example, whereas this may not have been the case for Greece.

c) Third, another reason why prices may not always move in-tandem with unit labour costs (across Eurozone countries in the short to medium terms) is because internal price competition policies may differ: the intensity of price competition may vary across countries, and through time.

d) Fourth, profit margins can be subject to substantial volatility, particularly in the traded-goods sector of the economy. Changing profit margins could cause competitiveness to vary from that suggested by relative movements in unit labour costs.

e) Fifth, unit labour costs relate to 'labour' costs alone. Capital, land, energy and finance combine with labour to create exports or domestic production to replace imports. A country could rate poorly on unit labour costs, but more than make-up for that through relatively low unit capital costs, energy, land and borrowing costs.

f) Finally, when countries experience recessions and depressions there is a natural weeding-out of relatively high cost business operations. It would be expected, therefore, that firms paying relatively high wages or experiencing relatively low productivity growth — that is, relatively high unit labour cost firms — would close. The closure of such firms would work to lower measured unit labour costs. However, the observed recorded reduction in unit labour costs does not, in this case, imply improved competitiveness.

Importantly, the unit labour cost chart is, of course, not a measure of the ‘price competitiveness’ of traded goods and services. Even so, the unit labour cost chart is used almost universally as an indicator of intra-Eurozone competitiveness. This partly reflects the fact that the President of the European Council (Hermann Van Rompuy) uses it repeatedly for that purpose. The unit labour cost chart is also a key indicator in the European Union’s Macroeconomic Imbalances Procedure. Almost all economists, particularly those in Europe, are addicted to it (possibly because it appears to suggest a much needed ‘good news’ story).

The unit labour cost (ULC) chart is, however, without very heavily qualified interpretation, grossly misleading when used in the Intra-Eurozone trade competitiveness context. Apart from the disparate trade imbalances existing at the base year, one of the main problems with it (alluded to earlier) is that it measures ULC for the whole economy, and not just for the traded goods sector. The traded goods sector is usually the most competitive sector in any economy, and this is particularly the case for competing contiguous periphery countries in Europe.

To illustrate just how misleading ULC comparisons can be, the unit labour cost comparison (Chart 1, shown in the main text) suggests that Ireland experienced the worst competitiveness conditions of all periphery countries up until 2009. This view is totally mistaken. The mistake can be easily confirmed by observing the export price trade competitiveness comparison (Chart 2, shown in the main text)¹⁸. That comparison shows that Ireland never had a significant price

¹⁸ The export price competitiveness indicator does not suffer the many problems of the economy-wide unit labour cost indicator, and represents competitiveness based on the price of traded goods and estimated prices of services at the border.

competitiveness imbalance vis-à-vis Germany. That view is confirmed in studies which suggest that Ireland was unsustainably super-competitive in 1999 (at the formation of the Eurozone) when its trade surplus stood at a massive 25 per cent of GDP, rising to 30 per cent a few years later.

Furthermore, between 2000 and 2007, whereas NULC measured for the whole Irish economy rose by around 30 per cent or so relative to NULC measured for the whole Germany economy, relative NULCs measured for the manufacturing sectors for both Ireland and Germany were relatively stable (that is to say, there was no loss of trend competitiveness in the sector of the Irish economy most linked to intra-Eurozone trade — the manufacturing sector)¹⁹. This observation supports, and is consistent with, the message in the export price indicator (see Chart 2, later), and the fact that Ireland's trade surplus remained relatively very high, standing at around 20 per cent of GDP in 2009.

¹⁹ An analysis of Irish competitiveness conducted by the Irish Central Bank finds that '*the deterioration in manufacturing price competitiveness was due almost entirely to [Euro] exchange rate movements*', not to unit labour cost movements. It also states that '*In 2008 in the internationally traded goods industrial sector wage compensation per hour was lower in Ireland than the Eurozone average*'. See '*Measuring Price and Labour Cost Competitiveness*', Central Bank of Ireland, Quarterly Bulletin, January 2010.