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INEQUALITY, FINANCIALIZATION AND STAGNATION

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ABSTRACT

The failure of exceptional monetary measures pursued in response to the financial crisis in advanced economies to achieve a strong recovery has created a widespread concern that these economies suffer from a chronic demand gap and face the prospect of stagnation. This paper reviews and discusses the alternative views on the causes of the slowdown in accumulation and growth and the policies implemented and proposed to deal with it. It is argued that growing inequality, notably the secular decline in the share of wages and financialization are the main factors. Neither spending booms driven by financial bubbles, nor exporting unemployment through trade provide sustainable solutions. It is necessary to rebalance capital and labour, restrain finance and assign a greater role to the public sector in aggregate demand management and income and wealth distribution. However, the dominant neoliberal ideology rules out such socially progressive and economically effective solutions. Consequently, stagnation is likely to remain the new normal in the years to come with governments attempting to reignite growth by creating credit and asset bubbles and/or trying to export unemployment through beggar-thy-neighbour macroeconomic, labour market, trade and exchange rate policies, thereby generating financial and economic instability and tensions in international economic relations with significant repercussions for emerging and developing economies.

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I. GREAT MODERATION, GREAT RECESSION AND STAGNATION

The global economic crisis that began in the US in 2008 and spilled over first to Europe and then in a third wave to the South has had a far reaching impact on mainstream economic thinking and expectations about longer-term growth prospects. In the US the beginning of the new millennium was marked by optimism elicited by Great Moderation – almost two decades of tranquillity marked by reduced volatility of business cycle fluctuations, increased macroeconomic stability, low inflation and mild recessions with better monetary policy seen as the driving factor. Europe moved to monetary union without a major hiccup, promising greater stability and faster growth. Led by China, emerging and developing economies started to surge ahead, many recovering from virulent financial crises and growing at rates that would secure rapid convergence towards the levels of advanced economies, and ready to play the role of locomotives for the world economy.

The picture changed dramatically with the onset of the most severe post-war crisis in the North. In the US the Great Moderation came to be displaced by Great Recession. Severe difficulties faced in securing and sustaining a decent pace of economic recovery despite large bailout operations and unusual monetary measures including zero-bound interest rates and rapid expansion of liquidity and the inability of monetary authorities to exit from these measures even after a decade of their introduction have created serious concerns about the future of the US economy. Using very much the same instruments, the Eurozone has failed to resolve its financial crisis let alone economic and social crises and faced a serious risk of disintegration within a decade of its establishment. Finally, after an initial resilience to the crisis, growth in emerging and developing countries converged downwards towards the severely depressed levels of advanced economies. The vulnerabilities resulting from their deepened global financial integration in the new millennium have become visible even before a significant tightening of international monetary and financial conditions. Their potential growth has been falling even more rapidly and their medium-term prospects are bleaker than advanced economies.

The failure of rapid monetary expansion and historically low interest rates to achieve a strong recovery in spending and growth has bewildered many mainstream economists, triggering a search for *ex post facto* explanations within the conventional macroeconomic framework. Much of the debate revolved around the secular stagnation thesis first evoked by Larry Summers in a speech at the IMF (Summers 2013), and picked up by many others in the same school of thought.[2] According to this thesis, the subprime crisis uncovered the chronic demand gap that has existed in the US since the 1980s and the risk of secular stagnation. Because of vanishing investment opportunities, the real rate of interest that equates savings

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[2] See also Summers (2014) and a collection of subsequent articles and speeches, Summers (2016). For the state of the debate, see a collection of articles in Teulings and Baldwin (2014) and papers discussed in a session on "The Economics of Secular Stagnation" of the American Economic Association's January 2015 meeting, published in American Economic Review: Vol. 105 No. 5, May 2015; and Fischer (2016).

and investment at the full employment level of income (the so-called Wicksellian "natural" rate of interest or the "equilibrium" rate of interest) has declined significantly and even become negative. Thus to generate adequate demand to reach full employment, the policy interest rate has to be very low. However, since nominal interest rates cannot be pushed below zero and monetary authorities cannot create inflation, investment remains below the level needed for full employment and income remains below potential.[3] The gap between actual and potential output creates hysteresis, resulting in a decline of potential output and growth.

However, it is argued, until the subprime crisis the chronic demand gap was masked by private spending driven by financial bubbles: Savings and Loans in the 1980s, dot-com in the 1990s and the subprime in the 2000s. These bubbles take place largely because low interest rates in search of faster growth boost asset values and drive investors to take greater risks.[4] Unless the underlying causes of chronic deflationary gap are addressed, credit and asset bubbles would constantly be needed to avert secular stagnation. Since these bubbles eventually bust and can culminate in crises, this chronic demand gap creates a trade-off between financial stability and growth.

The concept of secular stagnation was elucidated by American Keynesian economist Alvin Hansen during the great depression of the 1930s. Noting the important role that investment plays in attaining full employment Hansen argued that investment opportunities could vanish with a slowdown of population growth and technical progress, leading to stagnation. Summers also refers to these as the causes of diminishing investment opportunities but at the same time throws in a number of other factors responsible for the decline in the equilibrium rate of interest, noting in particular that growing income and wealth inequality increased the supply of loanable funds and hence raised the level of investment needed to achieve full employment.

The first line of response to secular stagnation, according to this view, is to reduce real interest rates as much as possible by operating with a higher inflation target. But this also creates the risk of financial instability by leading to asset and credit bubbles. A more effective way would be to raise aggregate demand by increasing public investment, removing structural barriers to private investment, and promoting exports through trade agreements and resistance to protectionism in trading partners.

The Hicksian liquidity trap hypothesis is also invoked to reach similar conclusions regarding the ineffectiveness of monetary policy in stimulating demand (Krugman 2013a and 2013b). According to this view, the deleveraging resulting from the subprime crisis reduced the overall level of demand at any given interest rate and made the natural rate negative, making it impossible for monetary policy to stabilize the economy. To avoid such an outcome, we should not have had debt-driven bubbles in the first place. But if there were no

[3] Negative interest rates on free reserves of banks in the central bank, as practiced in the Eurozone and Japan, are no more successful in stimulating lending and spending (Bech and Malkhozov 2016). In fact they can make matters worse. Since commercial banks are not willing to impose negative rates on depositors, they tend to pass the cost of excess reserves to their borrowers (Turner 2016).

[4] There is, however, no mention of the role of financial deregulation in the emergence of bubbles, "the last two of which [Summers] played a huge role in fueling" (Wray 2013: 1).

bubbles, aggregate demand and employment would have remained depressed. Once the current deleveraging is over, demand will shift up, but without renewed bubbles income and employment levels would be subdued. There is also the possibility that the economy may be trapped in a liquidity trap permanently even after the current deleveraging is over and there may be a need for ever growing debt to stay out of the liquidity trap. Sufficiently large and permanent fiscal deficit would be needed to avoid this trap. It is argued that this should not be a cause for concern since debt sustainability would be secured as long as the real rate of interest on government debt remains below the rate of growth of the economy (Krugman 2015).

Another attempt to explain inadequate demand and low real interest rates in the US within the conventional macroeconomic framework is the global savings glut hypothesis espoused by the former chairman of the US Federal reserve Ben Bernanke – a hypothesis which in fact predates the crisis. Bernanke (2015a and 2015b) is sceptical that the US faces secular stagnation due to vanishing investment opportunities since at a real interest rate of –2 per cent there would be no dearth of private investment. He also takes issue with the contribution of bubbles to previous recoveries and attributes low interest rates and demand gap in the US to the global savings glut. On this view, in the run up to the crisis, excess savings from China and major oil exporters spilled over to the US through capital flows, depressing long-term rates even as the US Federal Reserve was raising short-term rates, thereby helping sustain the subprime bubble. By appreciating the dollar they also weakened US exports, created a large trade deficit and reduced US growth. The savings glut persisted after the crisis as the decline in excess savings of Asian emerging and developing economies and oil producers was offset by a significant increase in the combined current account surplus of the Eurozone, with Germany increasing its surplus while the periphery countries in crisis were reducing their deficits (Bernanke 2015c).

In the context of the Loanable Funds Model the savings glut has the same effect on economic activity as reduced domestic investment.[5] However, on this view, here the problem arises from policies pursued in surplus countries rather than structural factors emphasized by the secular stagnation hypothesis. Accordingly, the appropriate response would be to reverse policies that generate the savings glut. With the moderation of global imbalances in trade and financial flows, global real interest rates can thus be expected to rise and the US would be able to grow without bubbles.[6]

Pulling all these together, the mainstream story of secular stagnation runs as follows: the combination of increased supply of foreign savings to the US through capital inflows encouraged by the safety of dollar-denominated US assets and vanishing investment opportunities and reduced demand for savings resulting from the slowdown in population growth and innovation, has brought the “natural rate” (the full-employment real interest rate) to negative levels, thereby impairing the ability of monetary policy to provide adequate

[5] In terms of the underlying Loanable Funds model it signifies an outward shift in the savings curve rather than an inward shift in the investment curve; see Keen (2015).

[6] Summers (2015: 3) concedes the importance of global dimensions of the problem and agrees that during 2003-07 the savings glut abroad was an important impediment to demand in the US, arguing that “the lower level of interest rates, the greater tendency towards deflation, and inferior output performance in Europe and Japan suggests that the spectre of secular stagnation is greater for them than for the United States.”

demand stimulus to raise employment and income. As investment stays below the levels needed to secure full employment, potential output and growth decline and the economy remains in stagnation. Overcoming this dilemma requires repeated bubbles, permanent government stimulus and fiscal deficits or penetration of markets abroad.

II. MARXIAN AND KEYNESIAN VIEWS OF STAGNATION

The debate among the mainstream economists about secular stagnation has elicited strong interest among heterodox economists, including both in the Marxian and Keynesian traditions. A main reason is that it came from the very same people who had entertained considerable optimism about the prospects of modern capitalism under the rubric of Great Moderation (Wray 2013; Palley 2014a). Another is that until they changed heart, secular stagnation remained a heretical idea for the mainstream (Backhouse and Boianovsky 2015). However, while shifting their view, the mainstream now rarely makes any reference to the history of economic thought, not only to the Marxian analysis of accumulation crisis and stagnation but also the more recent work done by Keynesian economists (e.g., Foster and Magdoff 2009 and Palley 2012).

While there is little dispute about the deceleration of accumulation and growth in advanced economies, its causes and the appropriate policy response are highly contentious. There are important differences in these respects both within and across the mainstream, Marxian and Keynesian analyses of stagnation.[7] In the Marxian analysis, stagnation is the outcome of inherent contradictions in the accumulation process in a capitalist economy. Profits constitute both the motive and source of capitalist accumulation. Permanent unemployment and underemployment (reserve army of labour) are needed to suppress the claims of labour over capital. This produces a pattern of accumulation which leads to declines in profits which, in turn, hinder accumulation and growth. This perspective has subsequently been elucidated by several economists such as Paul Baran, Paul Sweezy, Michael Kalecki and Joseph Steindl by incorporating the role of monopoly capital, underconsumption and financialization in the accumulation crisis and stagnation.[8] The mainstream fails to allow for such influences or offer a plausible theoretical or a historical explanation of structural changes deemed responsible for the shift of the balance between savings and investment and the relation of secular stagnation "to the contemporary expansion of finance" (Magdoff and Foster 2014: 2).

In Keynesian thinking stagnation is seen not as an inevitable consequence of internal contradictions of capitalist accumulation process, but as the outcome of neo-liberal policies pursued since the 1970s (Palley 2014a). The mainstream hypothesis of secular stagnation is criticised, among other things, for its neglect of the role of these policies in slowing investment and growth, notably those encouraging financial bubbles and financialization as a remedy to stagnation. This criticism also comes from more conservative circles, notably the BIS economists.[9]

While focussing on inadequate demand, a main tenet of the Keynesian economics, the secular stagnation and savings glut hypotheses are criticised by Keynesian economists

[7] For differences within and between mainstream and Marxian analyses of stagnation, see Despain (2015).

[8] For the Marxian analysis of underconsumption and stagnation, see Baran and Sweezy (1966), and financialization and stagnation, see Magdoff and Sweezy (1987).

[9] See former BIS chief economist, White (2016); Borio *et al.* (2015); and Cecchetti and Kharroubi (2015).

because they do not conform to the Keynesian theory of income and interest rates (see, e.g., Wray 2013; Keen 2014, 2015; Hein 2015; and Palley 2016). These hypotheses are formulated in terms of the pre-Keynesian Flows of Funds theory where money, finance and debt have effectively no macroeconomic role to play in determining the equilibrium level of income and the real interest rate.[10] The theory fails to differentiate between savings and financing and ignores that in a modern monetary economy loans do not come from pre-existing stocks of deposits, and investments do not come from pre-existing stocks of savings. Credit mechanisms delink investment from pre-existing savings and modern banking delinks credits from pre-existing deposits. Indeed it is credits that generate deposits and it is investment that generates savings.[11] Excess of savings over investment implies excess supply of goods or services. This sets off a process of adjustment through changes in the level and functional distribution of income rather than the interest rate. Since savings adjust to investment, an "investment dearth would be matched by a savings dearth" (Wray 2013: 4). Investment is governed by demand and profit expectations and made and financed independently of savings. These expectations have indeed played a greater role in the behaviour of investment during the global financial crisis than financial conditions (Banerjee *et al.* 2015). In a modern economy the interest rate is a monetary phenomenon and there is no such thing as a stable "natural" rate of interest that is compatible with full employment: "Contrary to ZLB [zero lower bound] economics, not only does a laissez-faire monetary economy lack a mechanism for delivering the natural rate of interest, it may also lack such an interest rate."[12]

The savings glut argument is "little more than a tautology for slow demand growth" (White 2016). Sluggish demand in surplus countries would depress income, employment and savings in the absence of exports to foreign markets. Thus, excess savings in surplus countries cannot exist prior to imports by deficit countries to finance those deficits (Wray 2013). Furthermore, the analysis of international influences over credit and spending booms in deficit countries needs to take into account all kinds of gross financial flows not just net capital flows (current account balances). In these respects there is "increasing stylised evidence that appears *prima facie* inconsistent" with the savings glut argument: "the link between current account balances and long-term interest rates looks tenuous"; "the depreciation of the US dollar for most of the past decade sits uncomfortably with the presumed attractiveness of US assets"; and "the link between the US current account deficit and global savings appears to be weak (Borio and Disyatat 2011: 4-5).

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[10] However, the secular stagnation thesis runs into a problem of inconsistency in recognizing that debt-financed spending has been instrumental in avoiding stagnation. It is suggested that the level of debt can matter only in conditions of liquidity trap; that is, since the mid-1980s when the "natural rate" is presumed to have been negative. However, Keen (2014) shows that there is a relatively strong correlation between changes in aggregate private non-financial sector debt and unemployment, and between the acceleration of aggregate private non-financial sector debt and the change in unemployment since 1890, implying that the change in debt has macroeconomic significance at all times.

[11] On money and deposit creation in the modern economy, see McLeay *et al*. (2014).

[12] Palley (2016:1). See also Borio and Disyatat (2011 and 2014) for a similar critique of the concept of the natural rate of interest.

III. WAGE SUPPRESSION AND FINANCIALIZATION

The main contention regarding stagnation relates to its causes. In this respect there is considerable agreement among heterodox economists, both in Marxian and Keynesian traditions, on the role of two interdependent factors. First, the growing income and wealth inequality, particularly the relative decline in the purchasing power of labour over the goods and services they produce. Second, financialization – that is, the significant increase in the size, scope and influence of finance in the economy. Declining share of wages in GDP and increasing concentration of wealth and asset income in the hands of a very small minority lead to underconsumption and a structural demand gap – a phenomenon that the mainstream describes as excess savings. Thus, these trends in income and wealth distribution imply that inequality is not only a social problem but has increasingly become a macroeconomic problem. Financialization plays a major role in the concentration of income and wealth. The financial boom-bust cycles generated to reignite growth exacerbate the stagnation problem by redistributing to the top and widening the structural demand gap, and by creating waste and distortions on the supply side and reducing potential growth.

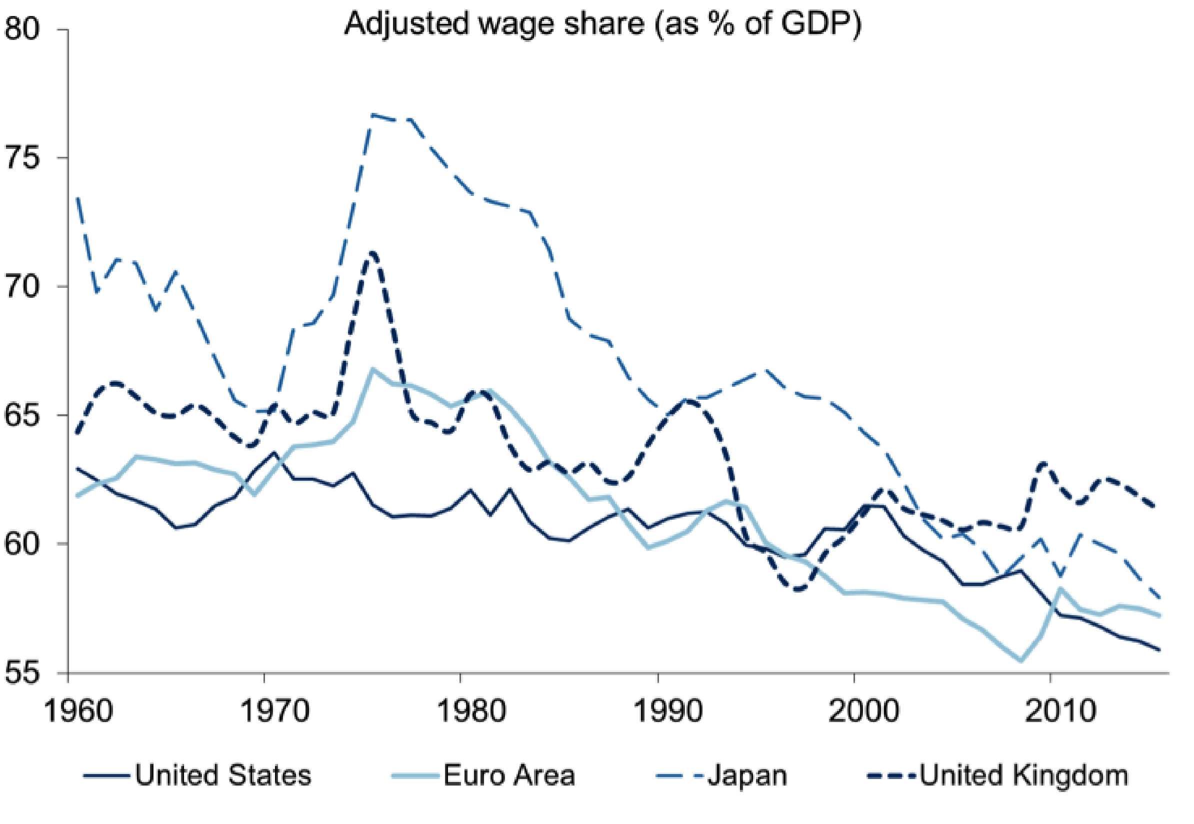
In both Marxian and Keynesian traditions wages are the most important component of both the cost of production and effective demand. A generalized and sustained decline in wages tends to generate two counteracting influences on profits. On the one hand, it would increase profitability by reducing the cost of production. On the other hand, it would limit the extent of the market and create the classical-Marxian problem of *realization* of profits by leading to underconsumption. This demand gap cannot permanently be filled by investment since that would ultimately lead to overcapacity. If investment is raised beyond a certain point, demand constraint would start to bite and profitability would fall, and this would in turn deter investment. This implies that there is no inconsistency but causality between falling share of wages and vanishing investment opportunities.

Sluggish wages also reduce inflationary pressures and allow and encourage central banks to pursue expansionary monetary policy. This is all the more so because, with unrelenting fiscal orthodoxy, monetary policy has become the only instrument left for achieving the objective of full employment. In the US, for instance, over the past three cycles the Federal Reserve has been quite restrained in raising policy rates at times of expansion while cutting them drastically during contractions, creating a downward bias in interest rates (Palley 2016). Thus, the "coincidence of a declining wage share and declining real interest rates is not … accidental" (Goodhart and Erfurth 2014).

This process creates destabilizing interfaces between debt and interest rates. Lower wages and reduced inflationary pressures lead to lower interest rates which, together with financial deregulation, encourage rapid accumulation of debt. This, in turn, makes it difficult for central banks to raise policy interest rates without causing disruptions in financial markets, thereby making low interest rates self-reinforcing. Indeed, in major advanced economies, the downward bias in real interest rates has been associated with a strong upward bias in debt as a proportion of GDP since the mid-1980s, suggesting that aggressive monetary policies made possible by sluggish wages and low inflation have created a debt trap (Borio and Disyatat 2014).

In most advanced economies the tendency for wages to lag behind productivity growth started in the 1970s and early 1980s and continued with full force in the new millennium. According to ILO/OECD (2015), in 10 advanced economies for which data are available, between 2000 and 2013 labour productivity rose by 17 per cent while real wage index rose by some 6 per cent. Consequently, in sharp contrast with a long-standing belief that income shares stay relatively stable in the course of economic growth, there has been a secular downward trend in the share of wages in GDP (Chart 1).[13] It is more pronounced in the US and Japan than other major advanced economies. According to estimates by the International Labour Organization (ILO), between 1970 and 2014 the labour share declined by around 10 percentage points in the US and Japan and around 6-7 percentage points in Germany and the UK.

Chart 1: Wage Share in Major Advanced Economies



Source: Goodhart and Erfurth (2014)

[13] In Chart 1 the labour share is defined as the share of net national income that is received by workers in the form of labour compensation, adjusted by the ratio of self-employed.

Evidence from emerging and developing economies is more nuanced, but there is a pronounced downward trend in the share of wages in Asian countries (ILO 2015; Lim 2014). A notable example is China where the share of wages in GDP has shown a downward trend since the early 1990s with its growing integration into the global economic system (Akyüz 2012; chapter 2). The wage share in China is also much lower than that in major advanced economies, about 50 per cent compared to 60 per cent or more in the latter. However, the downward trend in China appears to have been reversed since 2011 as a result of efforts to establish a strong domestic consumer market (Huang and Lardy 2016).

Some studies undertaken in the OECD, IMF and the European Commission suggest that technological changes are the main reason for the decline in the share of labour in income. However, this is highly contentious since the measurement of this effect is fraught with difficulties (Goodhart and Erfurth 2014). Indeed, closer examination reveals that many of these findings are not robust (Stockhammer 2009). Rather, policies promoting financialization and globalization and affecting the bargaining power of labour appear to have played a much greater role in the downward trend in the share of wages in advanced economies (Palley 2007; Stockhammer 2009 and 2012; ILO 2011; Hein 2013; Dünhaupt 2013; Furceri and Loungani 2015; Soons 2016).

There is a close relation between the increased size, scope and influence of finance and growing inequality, notably in the US. On various measures the US financial sector expanded rapidly from the late 1970s and the early 1980s relative to the rest of the economy, strongly helped by deregulation, more or less the same time as inequality started rising.[14] On the eve of the 2008 crisis, financial services accounted for over 8 per cent of GDP compared to less than 5 per cent in 1980, and the financial sector's total financial assets as a proportion of GDP and the share of the financial sector's profits in total corporate profits stood at more than double the levels in 1980. Although the growth of the financial sector was interrupted by the crisis, it recovered rapidly thanks to bailout operations and easy money. In 2015, the financial sector's profits as a percentage of GDP were twice as high as that in 1980. An important part of these profits comes from asset management fees and lending to households. Rapid growth of assets and profits of the financial sector has also coincided with increased concentration as the number of financial institutions declined. The share of the financial sector in total employment has barely changed since the 1980s but the average compensation paid to employees, including executives, has increased significantly (by some 70 per cent) relative to other sectors in the economy in large part because of high performance pay, linking remuneration to profits.

A financialization index combining various measures including the financial sector's total financial assets as a percent of GDP, the shares of the financial sector in total corporate profits, total employment and employee compensation shows a 3.5 fold increase between the early 1980s and 2015. This index is highly correlated with the increase in the shares of the top 10 per cent, the top 1 per cent and the top 0.1 per cent in total income (Soons 2016).

The literature has identified various channels through which financialization aggravates inequality. Financial markets and institutions exert a strong influence on policy making in a wide range of areas including financial regulations, conduct and organization of

[14] For the evolution of indicators of financialization, see Greenwood and Scharfstein (2013), Soons (2016) and Smith (2016).

corporations, taxation and labour market institutions, thereby promoting the interest of capital vis-à-vis labour. Capital account liberalization widens the options of corporations in investment decisions, enhances their bargaining power and reduces the labour share of income, particularly when it culminates in crises. The increased share of the financial sector in the economy reduces the share of wages in aggregate income because finance is less labour intensive and profits per employee are higher in the financial sector than in the rest of the economy. It also widens wage inequality because of high performance pay relative to other sectors. Together with the growing importance of capital markets relative to banks in financial intermediation, financialization has led to short-termism and "shareholder value maximization" model of corporate governance. A large proportion of corporate profits are now used for dividend payments and stock buybacks rather than reinvestment and job creation, and improvements in working conditions, productivity and wages.

Globalization has also played an important role in shifting the balance between labour and capital. China's and India's integration into the global economic system and the collapse of the Soviet Union have added to economically active persons competing in world trade by almost 1.5 billion workers, doubling the global labour force. It is argued that as the new entrants brought little useful capital with them, the global capital-labour ratio has fallen by more than 50 per cent (Freeman 2010). This works against labour not only because labour productivity and pay tend to increase with the capital-labour ratio, but also because it shifts the balance of power towards capital as too many workers chase too few jobs or too little capital to employ them. The emergence of cheaper offshore locations has also raised the bargaining power of corporations, making capital a lot more mobile than labour.

It is also argued that the glut in the labour market is aggravated by the entry of baby boomers in advanced economies into the workforce after 1970. On this view, the greying population in the advanced economies and demographic shifts in emerging and developing economies, notably China, would reverse the downward trend in labour income over the next three decades (Goodhart *et al*. 2015). However, the glut in the labour market depends on the pace of accumulation which continues to be depressed by underconsumption. Besides, demography is not the only factor influencing distributive trends. Unless financialization and the neoliberal policies affecting the bargaining power of labour vis-à-vis capital are reversed, it is difficult to see how demographic changes alone could restore the balance.

While technology and globalization tend to have similar effects on countries, the extent of inequality differs significantly in different advanced economies. In terms of the Gini coefficient, the US and the UK come at the top of the list of major OECD countries. This is partly because financialization has gone much further in the Anglo-American world than in major economies in continental Europe. On the other hand, while all major advanced economies have adopted policies that weakened the bargaining power of labour, there are still important differences in the erosion of labour markets institutions such as declines in union density and collective bargaining coverage as well as in employment protection and minimum wage legislation, with the US and the UK again coming at the top of the list of countries in terms of market orientation (Freeman 2008; Jaumotte and Buitron 2015; ILO 2015). These differences in financial and labour market policies and institutions and tax treatment of earned and unearned income and wealth explain much of the intercountry variations in income and wealth distribution.

IV. FINANCIAL BUBBLES: THE PROBLEM OR THE SOLUTION?

So far there have been two main responses to the structural demand gap. First, create spending booms driven by debt and asset market bubbles, as in the US during the subprime expansion and in China in the aftermath of the Great Recession. This may provide a partial and temporary solution to underconsumption, but it extends and deepens financialization, aggravates the structural demand gap and lowers potential output. Second, rely on foreign markets to fill the demand gap and export unemployment through macroeconomic, exchange rate or incomes policies as done by China and Japan before the global crisis and Germany throughout the new millennium. This is no more sustainable than financial bubbles, particularly for large economies which account for an important part of the world trade.

Financial bubbles do not always raise aggregate demand sufficiently to reduce unemployment. When wages are sluggish and demand and profit expectations are subdued, liquidity expansion and low interest rates cannot be expected to generate a significant amount of new investment in productive capacity for goods and services. But they may encourage borrowing for consumption and/or investment with prospects of large capital gains such as property. Generally credit booms tend to have greater impact on spending than stock market booms because capital gains generated by the latter are reaped mainly by the rich. Indeed the contribution of the dot-com bubble to growth in spending was limited in large part because the bubble was in the stock market, benefiting mainly high income classes with lower spending propensities (Wray 2013). This is also true for the stock market bubble created by historically low interest rates and rapid expansion of liquidity since 2008.

Credit bubbles are more effective when they involve lending to low and middle income classes with higher propensities to spend. But this also would heighten financial fragility, rendering much of the debt so accumulated unpayable. This was seen during the subprime bubble-bust cycle when much of the borrowing was for the purchase of property. Similarly consumption bubbles supported by credit card or auto lending can be effective in reducing unemployment, but they also end up with widespread default. In the US, rising household debt and spending was the main factor driving growth until the Great Recession. Credit expansion since the crisis has not had much impact on consumer spending or corporate investment because increased risk aversion made the banks unwilling to lend to households and small businesses while big businesses have mainly borrowed to finance mergers and acquisitions and stock buybacks, pushing the stock market to record highs.

A related issue is whether inequality leads to excessive credit expansion and financial crises. This may be the case in certain circumstances. On the one hand, as declining and sluggish wages make it difficult for the less wealthy to maintain or increase their living standards, they can create an urge to borrow beyond their means, particularly in modern consumer societies. On the other hand, financial deregulation may ease their access to credits and implicit government guarantees create incentives for banks to lend to sub-prime borrowers. Thus, rising inequality can lead the less wealthy households to increase their leverage, increasing financial fragility and susceptibility to crises. It is indeed shown that the two major crises in the US, the Great Depression starting in 1929 and the Great Recession starting in 2007, were both preceded by a sharp increase in inequality and a similarly sharp increase in household debt leverage (Kumhof and Rancière 2010). It is also argued that in the run-up to the subprime crisis, growing inequality in the US created political pressure to foster easy credit to assuage the less wealthy and reduce consumption inequality despite rising income inequality (Rajan 2010).[15]

While providing a partial and temporary solution to demand deficiency, financial bubbles can make the problem even more chronic. They create supply-side distortions, impeding productivity and slowing growth. During booms, cheap credit diverts resources to low-productivity sectors such as construction and real estate services at the expense of more productive ones such as manufacturing. The financial sector also crowds out real economic activity and more productive sectors (Cecchetti and Kharroubi 2015). Viable companies are held down by zombie companies sustained by artificially favourable financial conditions. Misallocations created by the booms are exposed during the ensuing crises when the economy would have to make a shift back to viable sectors and companies, but this is impeded by credit crunch and deflation. Such adverse supply-side effects of debt-driven booms are revealed by a BIS study. Examining the link between credit booms, productivity growth, labour reallocations and financial crises Borio *et al.* (2015) conclude that labour misallocations that occur during a boom have a much larger effect on subsequent productivity if a crisis follows – when economic conditions become more hostile, misallocations beget misallocations. It is estimated that the cumulative hysteresis effect of lost productivity over a decade-long boom-bust cycle amounts to several per cent of GDP.

Second, boom-bust cycles aggravate the underconsumption problem by increasing inequality. Booms favour asset holders, while crises tend to reinforce the long term trend in inequality. In the US, the crisis has impoverished the poor, particularly those subject to foreclosures, while policy interventions have benefitted the rich, and growing inequality has been a major factor holding back the recovery (Stiglitz 2013). In the recovery period 2009-2014, the top one per cent captured 58 per cent of total growth as their income grew by 27 per cent against 4.3 per cent growth of the income of the remaining 99 per cent (Saez 2015). In every year from 2008 onwards real hourly wages stayed behind hourly labour productivity and the share of wages fell both during the contraction and subsequent recovery (Dufour and Orhangazi 2016). According to a recent study on income distribution since the onset of the global crisis, the real incomes of about two-thirds of households in 25 advanced economies were flat or fell between 2005 and 2014 and this proportion was over 80 per cent in the US. It is noted that while long-term factors such as demographic trends played a role, the recession and slow recovery after the 2008 global financial crisis were significant contributors to the lack of income advancement (Dobbs *et al.* 2016).

[15] See also Reich (2010) and Stiglitz (2009) for the link between inequality, household debt and crisis in the US. Studying 14 advanced economies between 1920 and 2008, Bordo and Meissner (2012) maintain that these relationships between rising inequality, household consumption and debt do not generally hold. Clearly, lending conditions and banking regulations play an important role in the effect of inequality on household debt and these differ significantly across countries.

V. EXPORTING UNEMPLOYMENT

Relying on exports to overcome underconsumption is a common practice among major economies. Until the Great Recession, China, Germany and Japan all relied on foreign markets in different degrees to fill the demand gap, with GDP growing faster than domestic demand thanks to growth in exports (Table 1). During 2004-2007, exports accounted for about one third of Chinese GDP growth thanks to their phenomenal expansion.[16] In Japan and Germany export growth was more moderate but their contribution to GDP growth was greater because domestic demand was sluggish. The Chinese export push was accompanied by a much stronger growth in domestic demand than in Japan and Germany, creating an expanding market for exporters of both commodities and manufactured parts and components.

Table 1: GDP, Domestic Demand and Current Account in Main Surplus Countries

(Annual per cent change unless otherwise indicated)

	2004-07	2010	2011	2012	2013	2014	2015
Germany							
GDP growth	2.2	4.0	3.7	0.7	0.6	1.6	1.5
Domestic demand	1.1	2.9	3.0	-0.6	1.0	1.5	1.4
CA (% of GDP)	5.9	5.6	6.1	7.0	6.7	7.3	8.4
Japan							
GDP	1.9	4.7	-0.5	1.7	1.4	0.0	0.5
Domestic demand	1.1	2.9	0.4	2.6	1.7	0.0	0.1
CA (% of GDP)	4.0	4.0	2.2	1.0	0.9	0.8	3.3
China							
GDP	12.1	10.6	9.5	7.9	7.8	7.3	6.9
Consumption (total)	8.8*	9.4	11.4	8.2	6.9	6.9	7.1
CA (% of GDP)	7.1	3.9	1.8	2.5	1.5	2.6	3.0

Source: South Centre estimates based on IMF WEO database; IMF Article IV Consultation Reports with the People's Republic of China.
* 2005-2007 average.

In all three countries, in the period until the global crisis, the shares of wages and private consumption in GDP declined. However, in China the decline in the wage share was associated with a strong growth in real wages because of relatively rapid growth in productivity. Germany was engaged in "competitive disinflation"– internal devaluation of the real effective exchange rate of the euro by cutting productivity-adjusted real wages and

[16] In these estimates, imports are allocated between exports and domestic absorption according to their direct and indirect import contents. They thus differ from the conventional estimates of contribution of trade to growth based on net exports– see Akyüz (2012, chapters 2 and 3).

prices to improve competitiveness, particularly vis-à-vis other Eurozone countries, increasingly relying on exports for growth (Akyüz 2012 Chapter 2; Palley 2013). Wage suppression rather than productivity growth played a central role in improved German competitiveness. For instance, the Eurostat Labour Productivity data show that between 2000 and 2007 real labour productivity per hour worked and per person employed grew much faster in Greece and Ireland than in Germany. In Japan too, the gap between productivity and wage growth widened during that period as competition from low-cost emerging and developing economies intensified.

Growth in China fell sharply with the onset of the global crisis and the collapse of exports to main markets in advanced economies. This in effect gave an opportunity to design a stimulus package so as to address the underconsumption problem. However, rather than boosting household incomes and private consumption, China chose to create a debt-driven boom in investment in infrastructure, property and industry, pushing its investment ratio towards 50 percent of GDP and credit growth well ahead of GDP. It thus unbalanced domestic investment and consumption while rebalancing external and domestic sources of demand, creating excess capacity in several sectors and a large stock of debt in public enterprises and local governments. The ratio of debt to GDP reached 250 per cent of GDP in 2015.

Chinese policy response to fallouts from the global crisis has made the economy financially highly fragile since an important part of this debt can become unpayable with a sharp slowdown in economic activity. Although China gradually turned its attention to rebalancing consumption and investment, the progress made so far is quite modest, with the share of private consumption rising from around 35 per cent of GDP in 2009 to 37 per cent in 2014, compared to 47 per cent at the turn of the century. The jury is still out on whether and how fast the domestic rebalancing can be done and a large and vibrant domestic consumer market can be created without facing financial turmoil and/or a sharp slowdown of growth. If progress remains slow, a significant slowdown in growth can lead to a temptation to generate a renewed investment bubble, aggravating the imbalances and fragility.

After the global financial crisis Germany replaced China as a major surplus country with its exports almost rising constantly relative to imports, also helped by the weakening euro. In almost every year since the crisis growth of domestic demand in Germany continued to remain below that of GDP (Table 1). The contribution of the public sector to aggregate demand remained below the levels seen before the crisis while stagnant real wages resulted in a decline in private consumption as a percent of GDP. As a result between the mid-2000s and 2016, the German surplus rose from some 5 per cent of GDP to more than 8 per cent while China's current account surplus dropped from a peak of 10 per cent to 2-3 per cent. Before the onset of the Eurozone crisis, the region's current account with the rest of the world was in balance and an important part of German surplus was with other Eurozone countries, notably the periphery countries with large current account deficits. Since the crisis, the German surplus increased while the region as a whole moved to a surplus with the rest of the world, by 3 per cent of its combined GDP, as crisis-hit periphery countries were forced to make a swift payments adjustment, mainly through cuts in imports and growth (Atoyan *et al.,* 2013).

It is not clear if Germany can keep relying on foreign demand to fill the domestic demand gap at a time when global growth is depressed and the rest of the Eurozone is still trying to complete its recovery from the crisis. German surplus is unsustainable because it is a problem almost for everybody (Bernanke 2015c; Tilford 2015). It is sucking demand from the rest of the world while imposing deflationary adjustment on the Eurozone periphery. Given its size and role in Europe, the attempt by Germany to overcome underconsumption by exporting unemployment is no more sustainable than the export-led growth of China. It is incompatible with economic and political stability in the Eurozone.

More generally, for underconsumption economies in the North and China, export surpluses cannot provide a sustainable solution because they face the problem of fallacy of composition and breed trade conflicts. Emerging and developing economies outside China cannot provide an adequate outlet for them collectively without compromising their own industrialization and development. Ideally, a surge in investment and the imports needed to expand productive capacity could help accelerate growth in these economies while providing external stimulus to underconsumption economies. However, their size is too small to provide a solution. Without China the share of emerging and developing economies in world income (at market exchange rates) is no more than 20 per cent and their share in world trade is even less while the underconsumption economies account for more than half of world income and trade. This implies that they would need to run trade deficits in the order of several percentage points of their GDP for each percentage point trade surplus needed to avoid stagnation in the underconsumption economies. However, they cannot rely on inherently unstable international capital inflows to finance and sustain such deficits. On the contrary, they need to reduce their dependence on capital inflows in order to mitigate their vulnerability to boom-bust cycles generated by policies in major reserve-currency economies, notably the US.

VI. SOLUTION OR DISSOLUTION?

Neither financial bubbles nor export surpluses constitute sustainable solutions to underconsumption in major advanced economies. Nor is it possible, when demand and profit expectations are depressed, to stimulate productive private investment through interest rate adjustments. The solution is to be found in rebalancing labour and capital and reversing the secular decline of the share of wages in income and to reignite a wage-led growth.[17] Evidence suggests that in all major advanced economies, the US, Germany, Japan, France and the UK, a higher share of wages in GDP would lead to faster growth. Although at the national level increases in the wage share can lower growth in some major emerging economies such as China, wage competition can lower growth everywhere. Thus, the global economy in aggregate is wage-led; that is, a simultaneous increase in the wage share in all major economies would lift global growth (Onaran and Galanis 2012). This is also the only reliable way to create inflation that many central banks are striving but unable to achieve in order to lower the real interest rate in an effort to stimulate investment.

How this can be best done naturally varies from country to country but should include significant increases in minimum wages, reform of union legislation to widen the coverage of collective bargaining and increase union density so as to strengthen the bargaining power of labour.[18] There may also be need to restrict management remuneration (e.g. bonuses) which are found to contribute strongly to growing wage inequality (Lemieux *et al*. 2009). Lacklustre growth and growing inequality have recently impelled governments in some advanced economies to start acting on minimum wages (Sandbu 2016). However, these initiatives fall far short of what is needed to reduce income inequality and remove the deflationary gap. As long as the neoliberal ideology prevails, not much progress could be expected for reversing the secular decline in the share of wages. Indeed, even though the role of increased concentration of income and wealth in the emergence of a structural demand gap is recognized in the mainstream debate over secular stagnation, albeit as a savings problem rather than as an underconsumption problem, rebalancing labour and capital and reining in finance has not been an essential part of the policy debate.

There is a growing agreement that increased public spending has an important role to play in closing the deflationary gap. Since the gap is structural, the additional public spending needed should be permanent. That means bigger government. It may be possible for the public sector to constantly add to debt without running into the sustainability problem provided that it is used to finance productive investment, particularly in areas that help improve the overall productivity of the economy such as human and physical infrastructure. It follows that the analysis of fiscal sustainability should not just focus on gross public debt alone, but should also take into account income-generating assets built on the other side of

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[17] For a discussion of wage-led growth see Lavoie and Stockhammer (2012). Regarding the debate over wage-led versus profit-led growth, Palley (2014b: 1) argues that this depends on policies rather than the intrinsic character of the economies and that "policy has made economies appear more profit-led by lowering workers' share of the wage bill and tax rates on shareholder income. Increasing workers' wage bill share increases growth and capacity utilization regardless of whether the economy is wage-led, profit-led or conflictive."

[18] For a discussion of policies for wage-led growth in Europe, see Onaran and Stockhammer (2016).

the balance sheet of the public sector. When interest rates are at historical lows, additional revenues needed to service such debt may not be prohibitive.

However, debt-financed public spending encounters two problems. First, public debt is generally regressive since ownership of government bonds is heavily concentrated (Hager 2013). Thus, debt-financed spending may not be the best way of addressing the effective demand problem resulting from inequalities in income and wealth distribution. Secondly, if public spending is successful in raising economic activity, employment and prices, it could eventually lead to substantially higher interest rates and create debt servicing difficulties. For instance in early 2016, US rates for 10 year treasuries were around 2 per cent and interest payments accounted for 6 per cent of all federal outlays. But projections by the Congressional Budget Office show that they could account for more than 13 per cent of all federal outlays in 2026 when interest rates are projected to rise to 4.1 per cent (Wessel 2016). Thus, assessments of public debt sustainability based on historically low interest rates prevailing in conditions of deflation may contain a significant margin of error.

There are ways of financing permanently higher public spending without running into higher levels of debt. One way is to combine progressive taxation with increased public spending. Under conditions of deflation and highly skewed distribution of income and wealth, the so-called balanced-budget multiplier tends to be quite high, particularly if public spending is financed with additional taxes on top income classes and/or with capital levy. This is particularly true for the US and the UK where income and wealth inequality is much greater than other major OECD countries and taxation is much less progressive. It has been estimated that in such cases the top tax rate on the top 1 per cent income earners could be raised to over 80 per cent without impairing growth and that the potential tax revenue at stake is very large (Piketty *et al*. 2011).

Progressive taxes would not only provide financing for additional demand, but also help correct market-generated inequalities particularly if combined with transfers to lower income groups. Since the balance in the market place between labour and capital cannot be restored overnight, greater attention would need to be given to redistribution through the budget. However, such economically effective and socially progressive solutions have not been on the menu of policies for reigniting growth in advanced economies in recent years.

Perhaps even a more effective way is deficit monetization – central bank financing of additional public spending. When monetary policy fails to stimulate private spending but supports mainly speculative activities, as has been the case in recent years, a way out would be to make the money available directly to those who are willing to spend but cannot do so because of tight budget constraints and debt overhang. Milton Friedman long suggested dropping money from helicopters to increase spending and avert deflation. Naturally the public sector comes at the top of the list for helicopter drop. This was seen by Bernanke (2002) before becoming the chairman of the US Federal Reserve, as a way of reversing deflation, arguing that "a determined government can always generate higher spending and hence positive inflation" and "the effectiveness of anti-deflation policy could be significantly enhanced by cooperation between the monetary and fiscal authorities". In doing this, the Treasury would obtain a credit at the US Federal Reserve by selling sovereign debt and use this credit to finance tax cuts or transfers to households or direct purchases of goods and services in an investment programme. Either the US Federal Reserve cancels the treasury bonds or holds them indefinitely. In either case, the sovereign would incur no cost on this debt because US Federal Reserve's profits are remitted to the Treasury.

Deficit monetization in this way is significantly different from quantitative easing (QE) operations. First, QE is an exchange of assets, newly printed dollars for bonds held by the public through the banking system. By contrast, here the base money and reserves increase as a result of additional spending on goods and services either directly by the government or indirectly by the private sector through budgetary transfers and tax cuts, not because of asset substitution. Second, the US Federal Reserve's purchase of treasuries in QE operations do not provide the government non-debt creating, interest-free resources unless such debt is monetized indefinitely. In other words, deficit monetization requires permanent QE – an irreversible increase in the nominal stock of fiat money (Buiter 2014). It is true that as long as the bonds acquired by the US Federal Reserve stay on its balance sheet, they do not entail net cost to the government because US Federal Reserve's profits are remitted to the Treasury. But as soon as the expansion of the US Federal Reserve's balance sheet is reversed and these bonds exit the US Federal Reserve's balance sheet (that is, if they mature without being replaced or if they are liquidated), these profits would dry up. This, together with the return of interest rates to normalcy, would increase debt servicing costs significantly.

The kind of cooperation needed for deficit monetization between the monetary and fiscal authorities is in principle feasible in most other advanced economies suffering from deflationary gap. However, in the Eurozone, direct financing of government deficit is explicitly prohibited by the Lisbon Treaty. Unless the relevant provisions of this treaty are reformed, deficit monetization in the Eurozone would have to go through the market – governments would have to issue debt to finance deficits and the ECB would have to buy sovereign bonds from secondary markets but with a commitment to hold them indefinitely. Purchases of sovereign bonds in the secondary markets are already made with the QE programme that started in January 2015.

Under deflationary conditions "money-financed" spending or tax cuts need be no riskier for financial stability than the ultra-easy monetary policy, since the money thus created would not find its way directly into asset markets. Nor would it endanger monetary instability. If a permanent increase in money supply resulting from deficit financing turns out to be inflationary, it can be sterilized by using bank reserve requirements rather than selling government bonds. The claim that monetization of fiscal deficits is inherently more inflationary than monetary expansion to support private spending has no sound theoretical basis and the main challenge is how to "design institutional constraints and rules that would guard against the misuse of this powerful medicine." [19]

As monetary policy turned to be ineffective in dealing with deflation in advanced economies, the orthodoxy has started to give way to pragmatism. The *Financial Times*, in an editorial entitled "Helicopter Money: Extreme Money-Printing Should be Openly Discussed" (October 13-14, 2012) argued: "Printing Money – not just temporarily for trading securities in the market, but permanently handing it over to be spent by someone – is the central banker's heresy. Yet it would be irresponsible to rule that option out". It is suggested even by financial market actors that helicopter money may be the next step in unconventional monetary policy after zero-bound interest rates and QE, particularly in the Eurozone which

[19] Turner (2013a: 4). For the debate on public deficit and debt monetization, see White (2013); Turner (2013b and 2015) and Wolf (2013).

needs more radical measures to save the euro.[20] Among the more progressives helicopter drop has been referred to as People's Quantitative Easing which occupied a central place in the reform proposal of the new UK Labour Party Leader, Jeremy Corbyn (Kaletsky 2012; Öncü (2015).

There thus exists an array of policy measures that can overcome the chronic deflationary gap in major economies by reversing the secular decline in the wage share, using redistributive policies through progressive taxes and transfers or raising government spending to permanently higher levels without commensurate increases in public debt. However, under the dominant neoliberal ideology it would be far-fetched to expect governments to take effective measures to rebalance capital and labour or to put finance in the reverse gear. Nor is it possible to expect a fundamental restructuring and redesign of taxes, public spending and financing of budget deficits so as to enable the public sector to play an effective role in aggregate demand management and more equitable distribution of income and wealth. Consequently, stagnation is likely to remain the new normal in the years to come with governments attempting to reignite growth by creating financial bubbles and/or trying to export unemployment through beggar-thy-neighbour macroeconomic, labour market and exchange rate policies, thereby generating financial and economic instability and tensions in international economic relations.

These entail significant repercussions for emerging and developing economies which have become highly susceptible to external shocks as a result of their deepened integration into the global economy, particularly the international financial system. Attempts by underconsumption economies to export unemployment through beggar-thy-neighbour policies would widen their trade deficits and increase their dependence on international capital inflows while boom-bust financial cycles generated to overcome stagnation in advanced economies would expose them to currency and balance-of-payments instability and debt crises. The new millennium has once again attested to the decisive role such cycles play in the fortunes of the South. The absence of effective global arrangements for the prevention of beggar-thy-neighbour trade and financial policies in major advanced economies that have a disproportionately large impact on global economic and financial conditions makes it all the more important for the South to rethink their integration into the global economy, notably in finance where the pendulum has swung too far and would have to be rebalanced.[21]

[20] For instance, Bridgewater's fund manager Ray Dalio predicts that circumstances will probably drive governments to usher in what he calls "monetary policy 3" after zero-bound interest rates and QE (Wigglesworth 2016). It is suggested that the ECB may be compelled to take more radical measures including, *inter alia*, helicopter drop – Lynn (2016); see also Wolf (2016).

[21] The deepened global financial integration of emerging and developing economies and the vulnerabilities this entails are discussed in some length in a forthcoming book by this author, Akyüz (in press).

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