Importance of Tackling Income Inequality and Relevant Economic Policies

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1 Introduction

This contribution deals with inequality of income, which has increased over the last forty years or so. In fact, the increase in inequality started in the 1980s, after the 1945 to the 1970s reduction in inequality. Atkinson (2015) labels the change in the 1980s as the 'Inequality Turn'; Yates (2012) labels the subsequent period as the 'Great Inequality' era; and the former USA President Obama called increasing income inequality as the 'defining challenge of our time' (Dabla-Norris et al. 2015). Income inequality is evident in developed, emerging and developing countries (Dabla-Norris et al., op. cit.; see, also, Goldberg and Pavcnik 2007). An important and relevant observation is the substantial decline in wage shares across the world, with relevant statistics provided

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in *the Economist* (2015). It is reported therein that, in 2014, US real wages were 1.2% lower in relation to their 2009 level; in the UK, the median pay was 10% below its 2008 high; and in Germany, wages were 2.4% below their 2008 level. Distribution of income became more polarised in the OECD countries (OECD 2008, 2011), with the top-income groups increasing their shares substantially, especially the financial sector group (Arestis and Karakitsos 2013). This was particularly the case in the Anglo-Saxon countries, and especially so in the US (Atkinson et al. 2011). In fact, real wage growth has lagged behind productivity growth since the 1980s in the advanced economies and since the 1990s in developing and emerging economies (Stockhammer 2013). Dabla-Norris et al. (2015) also suggest that "average wages have risen at a slower pace than productivity growth amid large economic rents (for example, high profitability and large increase in executive compensation) accruing to the top end of the income distribution" (p. 13). That was the case over the period 2005–2012 in both of their samples of selected developed and emerging countries.

Inequality of wealth is also an important and relevant issue. An example of wealth inequality is the US; and as CBO (2016) states: "In 2013, families in the top 10 percent of the wealth distribution held 76 percent of all family wealth, families in the 51st to the 90th percentiles held 23 percent, and those in the bottom half of the distribution held 1 percent" (p. 1). In terms of the period 1989–2013, and the distribution of the US family wealth (defined as total assets minus total debt), the same study shows that it was more unequal in 2013 than in 1989. It is the case, though, that "personal distribution of wealth (both capital and land) is less available on an internationally comparable basis than in the case of income" (Atkinson 2015, p. 71). It is also the case that "the construction of wealth distribution statistics is much more problematic than that of income distribution. The availability of wealth surveys is much less than income surveys; reliance is often placed on estate duty and inheritance tax data, which have their own difficulties" (Sawyer 2015, p. 880). Alvaredo et al. (2017) stress that even now "available statistics on the distribution of wealth are highly imperfect" (p. 407). Davies et al. (2011) discuss relevant problems and provide results to show that "wealth is unambiguously more unequally distributed than

income"; and also "that income inequality can be used to generate an imputation of wealth inequality when wealth distribution data are not available" (p. 242; see, also, Dabla-Norris et al. 2015). It is also suggested that although wealth inequality is greater than income inequality, once income inequality is curtailed, wealth inequality is also curtailed. Another difficulty with wealth is its measure of rich households in view of the globalised world and the offshore financial centres. As Alstadsæter et al. (2017) show, these centres "provide a variety of financial services to these individuals, many of which are legal and legitimate, but most of which make wealth harder to observe in traditional economic datasets, such as national accounts and tax records" (p. 1). In view of recent relevant data, Alstadsæter et al. (op. cit.) examine the implications for financial wealth inequality to conclude that "accounting for offshore assets increases the level and the rise of top wealth shares seen in tax data, but the magnitude of the effect varies across countries" (p. 18). Clearly, wealth inequality needs a separate contribution to be dealt with satisfactorily; we refer to it, nonetheless, in what follows as necessary.

A further relevant issue is gender inequality. Atkinson et al. (2014) provide evidence that women are seriously under-represented at the top 1% of gross income. Two examples are given to make the point: Canada where, in 2010, the relevant proportion of women was 21%; and in the UK, in 2011, the corresponding figure was 17%.[1] Gender inequality has worsened in view of neo-liberalism; this is so as a result of a number of changes in the labour market, which have disadvantaged women. Deregulation of the labour markets and the ensued flexibility have affected those in low-paid jobs. Given that women are over-represented in these jobs, they have suffered disproportionately. It is also the case that women have suffered a great deal more than men as a consequence of austerity policies because of their social positioning. They are likely to be more employed in the public sector, and it is the public sector that has experienced most austerity. In fact, there is evidence

[1]In the European Union (EU), the average gross hourly earnings of female employees are 16.3% below those of men. This 'gender pay gap' differs substantially among the EU countries. For example, in Italy and Luxembourg, it is at 5.5%, in Germany, at 22%, and Estonia at 26.9% (Eurostat, March 2017).

(Sands 2012), which suggests that in the UK, 70–80% of the effect of austerity has been experienced by women. Ponthieux and Mears (2015) review the relevant evidence in eight OECD countries, and conclude that "the gender wage gap has been decreasing more slowly since the late 1990s (except in the UK and Japan, where the narrowing has continued at the same pace) or stagnating, and even increasing in Italy" (p. 1008).[2] Where a decline in the gender-wage gap has occurred, it is entirely due to education and thereby better labour-market positioning (see Atkinson 2015, p. 40). Blau and Kahn (2017) provide evidence in the case of the US that suggests that gender pay gap fell from 1980 to 1989, continuing through 2010, but at a slower convergence; persistent gender pay gap still exists, which is larger at the top of the distribution and has decreased more slowly than at the middle and the bottom of the distribution. Over the period 1989–2010, improvement in women's education, experience and occupational representation, as well as elimination of the female shortfall in union representation, were the main causes of the reduction in the gender pay gap where it materialised. Goldin et al. (2017) examine the expanding gender inequality over the period 1995–2008, using the 2000 census, based on the Longitudinal Employer-Household Dynamics (LEHD) database, and conclude that the widening of gender inequality "is split between men's greater ability and preferences to move to higher paying firms and positions and their better facility to advance within firms" (p. 114). Women's greater family responsibilities enhance these factors significantly. This is probably the main reason that despite equal-pay laws, the pay-gap between men and women is no longer narrowing in rich countries especially.

It is thereby very important for an improved and enabling environment where increased labour force participation for women emerges. Lagarde (2017) reinforces this issue when she claims that gender equality matters for two reasons: "first of all, because women matter, full

[2] The members of the EU Parliament adopted, in March 2013, a proposal to enable progress on "equality between women and men in the European Union" (available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2015-0015+0+DOC+XML+V0//EN). This was part of a text asking the Commission and the EU members to set employment targets so that women can have the same opportunities as men.

stop. Second, there are large benefits for all of society, and this includes men, women, and children, to be had from raising women's participation in the economy - it can boost GDP growth, help economies diversify, and tackle income inequality … At the IMF, we are incorporating gender-related considerations in the policy advice we provide to our member countries - so far, we have completed consultations along these lines with 22 countries, with more to come". It is also stated by Lagarde (op. cit.) that "despite progress made by most G7 countries in improving gender equality … there is still a large unfinished agenda" (see, also, IMF 2017a). Clearly, gender inequality is also an area that needs a separate contribution to be dealt with satisfactorily.

We proceed in Sect. 2 with a discussion of the world state of inequality. In Sect. 3, we turn our attention to the importance of tackling inequality. Section 4 deals with inequality and economic growth, and Sect. 5 focuses on economic policies to tackle inequality. We summarise and conclude in Sect. 6.

2 World State of Inequality

The evidence produced by Atkinson et al. (2011) shows that the share of US total income going to top-income groups had risen dramatically prior to the GFC of 2007/2008. The top pre-tax decile income share reached almost 50% by 2007, the highest level on record. The share of an even wealthier group—the top 0.1%—more than quadrupled from 2.6 to 12.3% over the period 1976–2007. Also, and by the emergence of the GFC, Stiglitz (2013) reports that the top 0.1% of US households had an income that was 220 times larger than the average of the bottom 90%. Real wages in the US, where wages constitute the most important component of incomes, had fallen even behind productivity well before the onset of the Great Recession (GR). Tcherneva (2017) provides US data to suggest that the recovery of 2001–2007 produced no growth in the income of the bottom 90% of households. Indeed, and following the GFC and GR, the first years of the recovery, their income kept falling with all income benefits going to the wealthiest 10%. However, the average real income for the bottom 90% of households, and in 2014

and 2015, began to recover but still the growth in the economy delivered most of the benefits to the top 10%. Reeves (2017) notes that between 1979 and 2013, average income for the bottom 80% of US households rose by 42%; for the next 19%, it rose by 70% and for the top 1%, by 192%. Lensing and Markiewicz (2015) utilise a quantitative growth model to assess the welfare consequences of the increased income inequality from 1970 to 2013 in the US. Their results show that "the increase in income inequality since 1970 has delivered large welfare gains to the top income quintile of US households. For households, outside this exclusive group, the welfare losses have been substantial" (p. 22). Kuhn et al. (2017) also confirm the proposition that income and wealth inequality in the US, studied jointly over the period 1949–2013, follows 'increasing polarisation'. They also show that the US middle class was the main loser of the increasing income and wealth of the top 10%.

An important characteristic of the period 1983–2007, in terms of the declining wage and rising profit shares, was the increasing concentration of earnings at the top, especially in the financial sector. That was the case around the world, but especially so in the US (Arestis and Karakitsos 2013). Indeed, and as Galbraith (2012) also showed, countries with larger financial sectors had more inequality. In the US, the share of the financial sector to GDP almost doubled in size between 1981 and 2007, and more recently accounted for 8% of US GDP (Philippon 2008). Between 1981 and 2007, the US financial sector, as measured by the ratio of private credit to GDP, grew from 90 to 210%. Also, a sharp, nearly six-fold increase occurred in their profitability after 1982. Indeed, and over the same period, wages in the financial sector were higher than in other sectors, even after controlling for education (Philippon and Reshef 2009). Financial sector relative wages, and the ratio of the wage bill in the financial sector to its full-time-equivalent employment share, enjoyed a steep increase over the period from mid-1980s to 2006. Such inequality was one of the main causes of the GFC, as argued in Arestis and Karakitsos (2013) and Arestis (2016).[3]

[3]Goda et al. (2016) showed that the increase of income and wealth inequality was the cause of

It is the case, though, that despite inequality rising in the past four decades, its trend has not always been upwards. The historical record, as in Sawyer (1976), using a range of measures of inequality, as well as pre-tax and post-tax income, showed for 12 OECD countries (with comparable data) income inequality, and over the post World-War II period to mid-1970s, tended to decline or remain broadly constant. Atkinson (2015) suggests that there was a fall in inequality between 1914 and 1945, and after 1945 until the 1970s. That reduction in inequality was due to the two World Wars in view of the 'chaos' of the wars and occupations, and of the structural breaks imposed by the post-war settlements. In the case of the Second World War and afterwards, a greater sense of social solidarity and strengthening of trade unions were the main contributory factors to the lower inequality. In the 1970s, and in the US, inequality was similar to that of the late 1940s, as measured by the Gini coefficient, which ranges between 0 (complete equality) and 100 (complete inequality). Piketty (2014) also shows that between 1914 and the 1970s, income and wealth inequality in the US fell dramatically. After the 1970s, however, both income and wealth inequality rose back to the pre-1914 norms. In the past forty years or so, though, Piketty (op. cit.) shows that in the US, nearly 75% of the aggregate income growth went to the top of the distribution. And since 1980, "income inequality has exploded in the United States. The upper decile's share increased from 30 to 35% of national income in the 1970s to 40–45 in the 2000s—an increase of 15 points of national income" (p. 294). Piketty (2014) utilises the inequality $r>g$ (where r is return on capital and g rate of growth) to illustrate how inequality is compounded.

Atkinson (1997) suggests that 'unparalleled' rise in the UK inequality occurred in the 1980s: "the United Kingdom stands out for the sharpness of the rise in recorded income inequality in the 1980s" (p. 301).

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the euro crisis of 2010. The high levels of income inequality produced high levels of debt and balance-of-payments imbalances, which caused the crisis. Their approach also demonstrated that both income and wealth inequality should be closely examined so that the close relationship between inequality and financial stability should be seriously considered.

Also, Turner (2010) suggested in the case of the UK: "there has been a sharp rise in income differential between many employees in the financial sector and average incomes across the whole of the economy". Hein and Mundt (2012) show that in the G20 developed economies, and since the early 1980s, a falling trend of the wage share clearly materialised. They also examine a group of emerging G20 countries, which experienced an overall falling trend of the wage share with the exception of India. In the European Union, and prior to the late 1970s, inequality declined in view of the expansion of the welfare state and social provision, along with progressive income taxation. However, and since the 1980s, the welfare state in the EU has failed to reduce inequality as a result of explicit policy decisions aimed at cutting back on benefits. Inequality has in fact increased between the highest and lowest incomes. Social Europe (2017) reports that between 2005 and 2015, the Gini coefficient in the EU rose from 30.6 to 31 and income disparity increased from 4.7 to 5.2 between the top and bottom 20% of income recipients. Social Europe (op. cit.) suggests that globalisation and migration, one of the manifestations of globalisation, put pressure on wages thereby becoming factors that led to inequality in the EU. Weakening of collective bargaining, the deterioration in working conditions, increased temporary working, and policies of internal wage devaluation were further sources of worsening prosperity for many people.

Actually, inequality between the OECD members is higher than within them. In Germany, for example, and according to the OECD (2008), income inequality over the years 2000–2005 grew faster than in any other OECD country.[4] Eurofound (2017) shows that prior to 2008, inequality amongst the EU countries had been reduced in view of the process of economic integration and income convergence. It accelerated by the creation of the euro, with inequality within countries remaining stable. After 2008, inequality has increased in view of the process of economic integration stalled due to the emergence of the

[4]Inequality in Germany is worse since the 1990 reunification. As reported in the Financial Times (18 August, 2017), household income inequality is close to that of the EU; wealth inequality is significantly less equal than the EU's—the bottom 40% of people in Germany have almost no assets at all, not even savings; it is the top 10% that have them.

GFC and the ensuing sovereign debt crisis, also because income inequality within the EU countries increased.[5] The main causes of that experience are thought to be unemployment and changes in the capacity of households and welfare states to cushion income effects.

Similar but less pronounced inequality shares are relevant in many other countries. In China, the top 1% income share gradually increased from 2.6% in 1986 to 5.9% in 2003. The financial intermediary shares to GDP in China rose from 1.6% in 1980 to 5.4% in 2008 (Greenspan 2010, p. 15). Alvaredo et al. (2017) compare the evolution of inequality in China, US and France over four decades, utilising data from WID. World (available at: www.wid.world). Inequality in China increased substantially after private enterprise was introduced. In 1978, the top 10% of Chinese earned just over a quarter of overall income before tax. That was significantly below the relevant proportions in the US and France. However, by 2015, the top 10% of Chinese earners were paid two-fifths of total income, above the relevant share in France, but still below the US. The bottom 50% income share in China was above the US and France in 1978, but by 2015, it was below that of France but still above that of the US. Alvaredo et al. (op. cit.) conclude that there has been a "rising top income and wealth share in nearly all countries in recent decades, but the magnitude varies substantially across countries; thereby suggesting different country-specific policies and institutions matter considerably" (p. 408).

Arestis and González Martínez (2016) summarise the Gini coefficients of the fifteen most unequal and fifteen least unequal countries around the world. The Gini coefficients reported in Arestis and González Martínez (op. cit.) clearly make the point of inequality and the urgency for relevant economic policies around the world to reduce inequality. It is the case that although inequality between countries over the last few decades has been reduced, inequality within many countries has been rising (the top 1% owns about half of the world's wealth), particularly in advanced countries. Income inequality has been

[5]The period the Eurofound (2017) examines is 2005–2014 (with the income variable referring to 2004–2013).

rising in most countries around the world since the early 1980s (see, also, OECD 2008). Milanovic (2011) shows that between the 1980s and 2010, "the United States and the United Kingdom - and indeed most advanced economies - have become much richer and much more unequal. In 2010, real per capita income in the United States was 65 percent above its 1980s level and in the United Kingdom, 77 percent higher. Over the same period, inequality in the United States increased from about 35 to 40 ….. and in the United Kingdom, from 30 to about 37 Gini points. These increases reflect significant adverse movements in income distributions. Overall, between the mid-1980s and the mid-2000s, inequality rose in 16 out of 20 rich OECD countries" (p. 8).

By contrast, inequality in Latin America was reduced in the 2000s, after a period of rising inequality in the 1970s and 1980s; the inequality reduction in Latin America "was achieved by a combination of changes in market incomes and expanded redistribution" (Atkinson 2015, p. 80). An interesting case in Latin America is the Brazilian experience, over the period 1996–2014, where the effect of the introduction of a minimum wage helped to produce a large decrease of inequality. This is empirically validated by Engbom and Moser (2017), who employ an equilibrium search model with heterogeneous firms and workers with their empirical results explaining 70% of the observed inequality decrease due to the rise in the minimum wage. The federal minimum wage in Brazil over the period 1996–2012 grew by 119% in real terms; labour productivity increased by 16.6% over the same period (Engbolt and Moser, op. cit., p. 6). Similar results are reported in Góes and Karpowicz (2017), for the period 2004–2014, in terms of regional inequality and inequality of outcomes, using the Gini coefficient, both between and within the 27 states. Their results are mainly due to labour income growth and redistributive policies, such as *Bolsa Família* (the social assistance programme to reduce poverty, introduced in 2004). It is also the case that other parts of Latin America have had similar experience (see, for example, Tsounta and Osueke 2014).[6]

[6]The UNDP (2017) report on income inequality in Sub-Saharan Africa shows inequality tending to decline in African countries.

The overall conclusion from this section's discussion is that rising inequality has played a serious role in creating the conditions for both chronic and acute economic instability. We turn our attention next to discuss the importance of tackling inequality.

3 Importance of Tackling Inequality

Our analysis so far clearly indicates that it is of vital importance to tackle inequality (see, also, Arestis and Sawyer 2011). Also Haldane (2017) suggests that "Until the crisis, it is difficult to identify a period in the past 50 years when inequality was close to the top of the public policy or academic agenda"; and it should have been. Keynes (1936) argued that the two outstanding faults of economic policy were the failure to secure full employment and to tackle the inequitable distribution of income. Reducing inequality enhances growth and with appropriate economic policies full employment could be achieved. Other studies have similar suggestions as in Kumhof and Rencière (2010): "Restoring equality by redistributing income from the rich to the poor would not only please the Robin Hoods of the world, but could also save the global economy from another major crisis" (p. 31; see, also, Berg and Ostry 2011; Stiglitz 2013, 2015; and OECD 2011). Such crisis, it is argued by Kumhof et al. (2015), could occur from high household debt and changes in income distribution. In both periods, 1920–1929 and 1983–2008, a large increase in the income of high-income households (5% of income distribution) along with a large increase in the household debt emerged and thereby higher leverage of low- to middle-income households (95% of income distribution) generated financial fragility, which eventually caused the Great Depression of 1929, the GFC of 2007 and the Great Recession of 2008 (see, also, Arestis 2016). This is shown by Kumhof et al. (2015) by presenting a theoretical framework and relevant US empirical support.[7] McCombie and

[7]A key assumption is that the top earners, whose income share increases, provide loans to bottom earners instead of increasing their consumption.

Spreafico (2015) summarise relevant empirical evidence to conclude that it "now strongly suggests that greater inequality is harmful for growth" (p. 20; see, also, Stiglitz 2015). Cynamon and Fazzari (2015, 2016) support the argument that rise in inequality in the personal distribution of income has been a barrier to growth and employment in the US. The massive consumer debt, though, for the bottom 95% unlike the top 5%, which had emerged prior to the GFC, mitigated the impact of inequality on aggregate demand but post-crisis inequality has held back output and employment. The slow and uneven recovery in the US since the GR is due to the existence of inadequate demand; the latter would be stronger if lower income groups received a higher share of income.

Dabla-Norris et al. (2015) provide evidence, utilising a sample of 159 developed, emerging and developing economies for the period 1980–2012, which suggests that there is an inverse relationship between the disposable income share of the top 20% and economic growth (a 1% increase in the disposable income of the top 20% is associated with a 0.08% decrease in GDP growth in the following five years). A similar increase in the disposable income of the bottom 20% produces a 0.38% higher income growth. This is also the case with the second and third quintiles (the middle class). The empirical results of Dabla-Norris et al. (op. cit.) are in line with the findings of the OECD (2014) study, which utilises a smaller sample of developed countries. The empirical evidence provided by Ostry (2015) suggests that more equality in the income distribution is robustly and positively associated with more and sustainable growth spells. Grigoli and Robles (2017) examine the possibility of non-linear income inequality in relation to economic development, and in the case of 77 countries. Under such a relationship, an 'inequality overhang' is identified whereby the relationship between inequality and economic development turns negative from positive. This, it is shown, occurs when the Gini coefficient reaches 27%, indicating that the inequality overhang occurs at low levels of income inequality. It is concluded that under such circumstances, the way to combat inequality is to improve access of households and business to banking services and promote participation of women in the labour force.

Policy-makers also refer to inequality. The Bank of England (2012) report shows that its 'unconventional' Quantitative Easing (QE) programme increased the value of the targeted assets by 26% with 40% of the gains having gone to the richest 5% of holders. The Bank of England (op. cit.) justifies it as follows: "By pushing up a range of asset prices, asset purchases have boosted the value of households' financial wealth held outside pension funds, but holdings are heavily skewed with the top 5% of households holding 40% of these assets".[8] The euro area has had similar results in view of the QE there, whereby the net wealth of the richest 20% increased by roughly 30% (ECB Annual Report, 2016). Similar results are relevant for the US economy, where the top 5% of wealthiest households own 82% of all individually held stocks and more than 90% of the individually held bonds (Hughes Hallett 2015). The Chair of the US Federal Reserve System made relevant comments. At the Federal Reserve Bank of Boston conference (October 2014), Yellen (2014) clearly admitted that "The extent of and continuing increase in inequality in the United States greatly concern me. The past several decades have seen the most sustained rise in inequality since the 19th century after more than 40 years of narrowing inequality following the Great Depression". Yellen (op. cit.) went on to suggest that "It is no secret that the past few decades of widening inequality can be summed up as significant income and wealth gains for those at the very top and stagnant living standards for the majority". The European Central Bank (ECB) President (Draqhi 2015) warned central banks of the dangers of aggressive monetary easing, including mass bond buying, which might lead to financial instability and thereby worsen income inequality. Draqui (op. cit.) suggests that distributional consequences may arise from "rising asset prices as a consequence of our purchases might benefit the wealthy disproportionately and thereby increase inequality". The IMF managing director and the governor of the Bank of England clearly stated at a conference in London ('Inclusive

[8]It is also the case that, in the UK, there have been massive property-price increases, essentially generated by the QE's liquidity increase. This has also benefitted the richest segment of the population, thereby adding to the top five percent real gains.

Capitalism', 27 May 2014) that rising inequality was a threat to economic growth and financial stability.

The IMF managing director (Lagarde 2014) made the point that "One of the leading economic stories of our time is increasing income inequality and the dark shadow it casts across the global economy" (p. 11). The IMF managing director went on to suggest that "The facts are familiar. Since 1980, the richest 1 percent increased their share of income in 24 out of 26 countries for which we have data. In the US, the share of income taken home by the top one percent more than doubled since the 1980s, returning to where it was on the eve of the Great Depression. In the UK, France, and Germany, the share of private capital in national income is now back to levels last seen almost a century ago" (p. 11). The Governor of the Bank of England (Carney 2014) clearly stated in his speech that "Bankers made enormous sums in the run-up to the crisis and were well compensated after it hit. In turn, taxpayers picked up the tab for their failure. That unjust sharing of risk and reward contributed directly to inequality but – more importantly – has had a corrosive effect on social fabric of which finance is part and on which it relies" (p. 36). The IMF managing director Lagarde (2015) summarises the relevant arguments when she suggests that growing income inequality has become a serious problem for economic growth and development; and that "if you want to see more *durable* growth, you need to generate more *equitable* growth". Also, a Bank of International Settlements study (Domanski et al. 2016) argues that unconventional monetary policy has contributed to rising wealth inequality in advanced economies since the GFC, essentially through increasing equity prices.

The inequality effects discussed above were greatly affected by a number of factors. Globalisation is one of them (IMF 2007). There is actually a great deal of evidence that inequality increased in developing countries as a result of globalisation in view of less skilled workers who are relatively abundant in these countries and are not better off in relation to higher skill workers or education levels (Goldberg and Pavcnik 2007). Not only is the increase in demand for educated workers being driven by globalisation but also by technological changes in terms of information and communication technologies, which have displaced

low-skilled workers and created demand for those with better education. Another contributory factor to inequality is attempts at deregulation and liberalisation of finance in many countries around the world, especially so before the GFC. As a result, financial markets became bigger and more global. Of particular importance from this point of view, was the financial liberalisation framework in the US, another cause of the GFC (see Arestis and Karakitsos 2013; and Arestis 2016, for further details).

There were also significant fiscal costs to the relevant governments in view of the GFC and GR bailout payments to rescue their banking sectors, especially the 'too big to fail' banks. A relevant IMF (2009) report cites the fiscal costs in the case of a number of countries, most important of which are (the percentages cited are in terms of the relevant GDPs): Austria (8.9%), Canada (9.5%), Greece (5.4%), Ireland (5.4%), Netherlands (6.2%), Norway (15.8%), Sweden (5.2%), UK (18.9%), US (7.5%); in terms of advanced countries (5.8%) and emerging countries (0.3%). Clearly, emerging countries suffered significantly less than developed countries in view of the fact that most did not suffer from the GFC. The scaling back of redistributive tax- and transfer-policies has had significant redistributive effects, especially in the developed countries. An important implication of these fiscal costs is that cuts in welfare and national health system expenditures emerged, which had distributional effects from the bottom to the top whose salaries and bonuses were secured by the relevant fiscal costs. This redistribution was also helped by a sharp acceleration of the austerity policies, especially after the GFC, accompanied by labour market deregulation and thereby weakening the role of trade unions and pay norms, as well as privatisations in many countries, initiated in the late 1970s.

The reduced role of trade unions is highlighted by the OECD (2011) publication, which shows that in every OECD country, with the exception of Spain, trade union membership was lower in 2008 than in 1980. In the US, the overall trade union membership was reduced substantially from 1980 to 2017; it declined from 20.1% in 1983 (the first year for which comparable union data are available) to 11.9% in 2010. In 2014, the union membership rate was 11.1%, down 0.2 percentage point from 2013; in June 2016, it was 10.7%, which is half of what

it was in the 1980s (US Bureau of Labour Statistics, 23 January, 2015 and 26 January, 2017). It is clear that the US case is an example where labour has no bargaining power. No wonder the labour GDP share is at a post-World War II low. This is a serious problem for an economy, which is 70% dependent on consumer spending. No wonder that over the period since the GFC and GR, the US economic 'recovery' has been unusually weak. Similar trends prevail in many other countries.[9] There is general agreement that such a decline in the role of trade unions and of collective bargaining coincides with widening of the pay distribution. The legal framework of trade unions is another important consideration. Atkinson (2015) provides a relevant example in the case of the UK: "a succession of laws enacted between 1980 and 1993 that reduced the autonomy of trade unions in the UK and the legitimacy of industrial action". This clearly implies that "The end result of the legislation is that unions are considerably weakened in their legal status and protection" (pp. 128–129).[10]

Atkinson (2015) summarises the contributory factors to inequality as follows; "globalisation, technological change (information and communications technology), growth of financial services; changing pay norms, reduced role of trade unions; scaling back of the redistributive tax-and-transfer policy" (p. 82). Atkinson (1997) refers to the demand for and supply of skilled and unskilled labour as a possible explanation of the earnings dispersion. When the relative number of skilled workers rises, then a rise in the demand for them emerges, thereby shifting the demand for labour. One explanation for this possibility is international trade liberalisation and increased competition from the countries where unskilled labour is abundant. Other relevant explanations emphasise technical change and the introduction of automation and information technology. Dabla-Norris et al. (2015) provide empirical evidence that supports the argument that less regulated labour markets, financial

[9]Gosling and Mashin (1995) provide evidence in the case of the UK that suggests the decline in unionisation accounted for 15–20% of earnings dispersion in the 1980s.

[10]Immigration could be another contributory factor, although the evidence suggests that it is a minor factor. Card (2009), for example, concludes that in the US, it only accounts for a small share (4–6%) of inequality.

deepening and technological progress explain income inequality over the last forty years. Financial openness played a reinforcing, but smaller, role, with improvements in health mitigated ½% of the 3% increase in the Gini index over the period of their investigation.

Stockhammer (2013), utilising panel estimations of the determinants of the wage share in 71 countries (28 developed and 43 developing and emerging countries) from 1970 to 2007, concludes that globalisation had negative effects; not just in developed but also in developing countries (see, also, Goldberg and Pavcnik 2007, on developing countries). It is also shown in Stockhammer (2013) that financialisation, welfare state retrenchment and decline in the bargaining power of trade unions over time had negative effects on the wage share. In addition, changes in technology had some effect on the wage share of the countries considered, but it was not one of the main drivers in income distribution. Stockhammer (op. cit.) also suggests that welfare state retrenchment, weakened bargaining power of labour and increased market power of firms in relation to labour are further factors that have contributed to the increased inequality. The empirical evidence provided suggests that financialisation, measured as foreign assets and liabilities relative to GDP, has been the main factor to the decline of the wage share, followed by globalisation and welfare state retrenchment.

Kristal and Cohen (2013) provide empirical evidence, based on 43 US private non-agricultural industries, which suggests that "the erosion of pay-setting institutions, mainly unionization and the real minimum wage, explains about 50 percent of rising wage inequality in US private industries between 1969 and 2007, while the spread of computer technology explains 12–14 percent between 1969 and 1997 and 21–24 percent between 1988 and 2007" (p. 37). It is also the case that "similar results showing a larger effect of de-unionization (vs. computerization) on inequality were found in Germany (King 2013), as well as in a study on 22 developed countries (OECD 2011)" (Kristal and Cohen 2013, p. 37). Furceri and Loungani (2013) suggest two further explanations of the increased inequality: capital account liberalisation and lower government budget deficits; 58 episodes of large-scale capital account reforms are considered in 17 advanced economies to conclude that "on average, capital account liberalization is followed by a significant and persistent

increase in inequality. The Gini coefficient increases by about 1 percent a year after liberalization and by 2 percent after five years" (p. 26; see, also, Furceri and Loungani 2015).[11] It is also argued by Furceri and Loungani (2013) that "Over the past 30 years, there were 173 episodes of fiscal consolidation in our sample of 17 advanced economies. On average across these episodes, policy actions reduced the budget deficit by about 1 percent of GDP. There is clear evidence that the decline in budget deficits was followed by increases in inequality. The Gini coefficient increased by 2 percentage points two years following the fiscal consolidation and by nearly 1 percentage point after eight years" (pp. 26–27).

We proceed to discuss next how inequality affects economic growth.

4 Inequality and Economic Growth: Wage-Led or Profit-Led Demand

In discussing the significant changes in income inequality and how they affect economic growth, the distinction between 'wage-led' and 'profit-led' regimes is relevant. A wage-led regime is one where a shift in income towards wages results in higher growth, in view of the higher marginal propensity to consume out of wage income in relation to that out of profit income. A profit-led regime is one where a shift in income towards profits lowers income; this is so, since in a profit-led regime, redistribution of income to profits results in higher savings and reduction in aggregate demand. In this scenario, there are two demand effects in place: the domestic-demand effect, which captures the impact of changes in distribution on consumption and investment; and the open-economy effect, which accounts for the impact of the relevant changes on net exports. Rising wage shares are expected to have

[11] Lagarda et al. (2017) also examine empirically, in a panel of 141 countries from 1990 to 2013, the relationship between capital account liberalisation and inequality in the case of developing and emerging countries. Although they confirm this relationship, they suggest that it differs between booms, when there is a positive effect of capital account liberalisation on inequality, and busts, when inequality increases; thereby relevant policies are necessary.

a positive effect on consumption, but negative effect on investment (in view of falling profits as a result of higher wages, which are a cost factor) and net exports (in view of the sensitivity of net exports to unit labour cost).[12] Whether the first effect is larger than the sum of the other two is an empirical question. Still, it is the case that a higher wage share can have expansionary effects since wages are the main source of income for most households; higher wages feed into higher consumption; and since low-income households have a higher marginal propensity to consume than high-income households, low-income households spend a higher share of their income.

Redistribution of income to profits is thereby detrimental to growth. By contrast, "a wage-led strategy", as Lavoie and Stockhammer (2013) emphasise, "will generate a much more stable growth regime for the future" (pp. 13–14). This is, of course, particularly important in view of the 2007/2008 GFC and the subsequent GR, which weakened the power of labour to defend lower nominal and real wages (see, also, Hein and Mundt 2013). In large economic areas, like the euro one, where wage-led is in place, wage-led recovery policies, instead of wage moderation, can improve growth and employment. Indeed, a global wage-led recovery through a significant increase in wage share can lead to an increase in global growth. Such approach would also help to reduce the danger of another GFC by reducing inequality.

In addition, there are supply-side effects, which are also relevant. Changes in wage share affect productivity growth in view of improvement in labour relations, which enhance the propensity of workers to contribute to production. In this context, the Allen (2009) study is relevant, in that it shows that the British industrial revolution emerged in view of its comparatively high wages. Lavoie and Stockhammer (2013) conclude that changes in functional income distribution have

[12] Aggregate demand is: $AD = C + I + G + NX$, where C is consumption, I is investment, G is government expenditure and NX is net exports (exports minus imports). In the text, we refer to C, I and NX. Government expenditure is treated as an exogenous variable, so the relevant domestic components are consumption and investment and the external component is net exports.

supply-side effects in addition to demand-side effects.[13] The authors argue that the "summary variable for the supply side is labour productivity" (p. 26), and as such it is a wage-led partial productivity regime. Their empirical findings, which are based on data for the last thirty years, suggest that "aggregate demand and productivity in most G20 countries, would respond favourably to an increase in the wage share" (p. 7). Hein and Tarassow (2010) provide evidence in six OECD countries, over the period 1960–2007, to show that faster real wage growth leads to higher productivity growth. McCombie et al. (2002), reviewing 80 empirical studies, based on OECD countries, conclude that there is a causal link from growth of demand to productivity. Storm and Naastepad (2013) provide a review of the empirical evidence for the group of OECD countries, which suggests that in terms of the causal link from demand growth to productivity growth, a one percentage point change in demand growth is associated with a 0.46 percentage change in labour productivity growth. In terms of the relationship between real wage growth and productivity growth for the same group of countries, the relevant coefficient is 0.38, so that a one percentage change in real wage growth is associated with 0.38 percentage change in productivity growth.

Onaran and Galanis (2013) provide empirical evidence, in terms of wage-led and profit-led regimes, based on the examination of the effects of income distribution on growth in G20 countries; 16 large developed and developing countries, which comprise more than 80% of the global GDP. This is undertaken for the period 1960–2007 for developed countries and 1970–2007 for developing countries (in the case of China, the period is 1978–2007). The evidence provided by Onaran and Galanis (op. cit.) suggests that in most of the major advanced economies, there is a wage-led demand regime. Canada and Australia are two exceptions where a profit-led regime is confirmed. Their empirical evidence further suggests that a 1 percentage point simultaneous decline in the wage

[13]There is a difference between functional income distribution and personal income distribution. Functional income distribution refers to the division between groups of people (who own various kinds of resources, namely land, labour and capital), while personal income distribution refers to the division among individuals regardless of the groups to which they belong.

share of the 16 countries in their sample leads to a decline in global GDP by 0.36 percentage points. Also, if all wage-led countries were to return to their 1970s wage-share levels, global GDP would increase by 3.05 percentage points. When the external sector is included, aggregate demand remains wage-led in 16 of the developed G20, as well as in the euro area countries. Not only do these empirical findings hold true for the G20 developed economies, but also for most of the emerging market economies in this group, with the exception of South Africa.

Onaran and Galanis (2013) suggest that their empirical evidence implies three important conclusions: "First, domestic private demand (that is the sum of consumption and investment) is wage-led in all countries ….. Second, foreign trade forms only a small part of aggregate demand in large countries ….. Similarly, if countries, which have strong trade relations with each other ….. are considered as an aggregate economic area, the private demand regime is wage-led. Finally, the most novel finding is that even if there are some countries, which are profit-led, the global economy is wage-led. Thus, a simultaneous wage cut in a highly integrated global economy leaves most countries with only the negative domestic demand effects, and the global economy contracts. Furthermore, most profit-led countries contract when they decrease their wage-share, if a similar strategy is implemented also by their trading partners" (p. 87). Onaran and Obst (2015) examine empirically a simultaneous increase in the wage share in 15 countries of the EU, which leads to an increase in growth. They show that a 1% increase in the wage share would lead to a 0.30% increase in the GDP of the 15 European countries; 11 of these countries are wage-led and 4 are profit-led, when the 15 countries are examined in isolation. A further contribution is by Obst et al. (2017), who examine a demand-led growth model, including the government in an open economy context, in the case of the 15 West European states of the EU (EU15). The empirical results of the model suggest that a coordinated policy mix of progressive tax policy and pro-labour wage policy along with expansionary government expenditure leads to a significant rise in GDP (by 6.72%), and also to an improvement in the budget balance in all EU15 countries (by 0.69%).

Blecker (2015) argues that the time dimension of wage-led versus profit-led demand regimes is important and should be accounted for as in his study, where a distinction between short run and long run is the focus. In the short run, demand is likely to be profit-led and weakly wage-led; but in the long run, it is more strongly wage-led. The positive effects of higher profits or lower labour costs on investment and net exports are mainly short-run phenomena, while the positive effects of a wage-led long-run impact on consumption are stronger. Blecker (op. cit.) demonstrates that profits in the US are normally a leading variable for investment in expansions and recessions. In expansions, investment follows profits usually with no lags in terms of annual data, although they may in quarterly data; in downturns, longer lags are in place. Such relationships, which are justified formally by the accelerator theory of investment, disappear in the long term. It is also the case that net exports are affected in the short run if a rise in unit labour cost emerges, which makes domestic goods and services less competitive in relation to foreign ones, if the sum of the price elasticity of export and import demand exceeds unity in absolute terms. Consumption is the one part of aggregate demand, whose impact on income distribution is likely to be greater in the long run than in the short run. This is so in view of most households' attempt to maintain some degree of stability in their consumption behaviour with respect to income fluctuations in the short term. Household borrowing and debt are used in the short run, but this is constrained in the long run in view of debt accumulation. Wage income, therefore, influences workers' consumption a great deal more in the long run rather in the short run. Given that most consumers rely on labour income, it is concluded that the marginal propensity to consume is higher in the long run rather than in the short run out of wages. Capital income receivers have marginal propensities to consume, which not only are low but are pretty much the same in the short run and long run.

Blecker (2015) provides relevant correlations, utilising raw annual data for the US economy for the period 1948–2013, and also for sub-periods. Three measures of economic activity are utilised: GDP growth rate; manufacturing sector capacity utilisation rate; and capital accumulation (rate of non-residential private fixed assets). The relevant

correlation coefficients provide support for the relevant hypothesis. Clearly, though, more sophisticated econometric techniques are necessary. Blecker (op. cit.) recognises this limitation and suggests that such techniques could better distinguish long-run versus short-run effects of income distribution on growth.

It is then clear that pro-labour distributional policies that promote wage policies, strengthening the welfare state and the power of the labour unions via improving the status of labour unions through changing union legislation to foster collective bargaining, and establishing sufficiently high minimum wages, are important economic policy ingredients. This, along with further economic policies, is discussed in the section that follows.

5 Economic Policies to Tackle Inequality

Relevant policies, and from the wage-led strategy point of view, include minimum wage policies, along with legislation that strengthens the status of labour unions and collective bargaining institutions. However, increasing the minimum wage may affect negatively the demand for labour.[14] It is the case, though, that "careful empirical research has found that moderate increases to the minimum wage have no effect on employment" (Bouchey 2015, p. 187). As stated above, Stockhammer (2013) strongly supports economic policies to reduce inequality. All in all, social institutions and the structure of the financial system are important ingredients of income distribution. Financial regulation, then, is a further important and relevant policy ingedient (see, for example, Arestis 2016).

In terms of fiscal policy, reform of taxes to make them fairer and more effective, especially so taxation on corporate profits, is very important. Indeed, Korinek and Kreamer (2013) advocate that redistributive policies "such as higher taxes on financial sector profits that are used to

[14]Clearly, though, this does not happen in a wage-led regime, where aggregate demand and employment rise.

strengthen the social safety net of the economy would constitute such a mechanism" (p. 6). Berg and Ostry (2011) also show that a redistributive tax system is associated with higher and durable economic growth. Raising the minimum wage and indexing it to inflation is another important tool to fight inequality (see, for example, *The Economist* 2014). A further example, and priority, is the removal of subsidies for the 'too-big-to-fail' financial institutions (see, also, *The Economist* 2012). Such a policy initiative would help to remove, to a large extent, one of the main contributory factors to the surge in income and wealth at the top of income distribution and to the financial sector in particular. A recovery led by domestic demand and increase in the wage share would help to reverse the major factor of inequality. Gains in competitiveness can and should be achieved through productivity increases rather than wage reductions and weak labour conditions. In this sense, strong trade unions, collective bargaining and high minimum wages are beneficial. All this would ensure that wage growth catches up with productivity growth, and hence consumption and income growth.

Muinelo-Gallo and Roca-Sagalés (2011) employ an endogenous growth model that incorporates fiscal policy and economic growth along with their effects on income inequality. Pooled-panel estimations are undertaken for 43 developed countries for the period 1972–2006 to conclude that increases in public investment expenditure reduce inequality without harming output, regardless of whether they are financed through direct or indirect taxes. Furceri and Li (2017), produce evidence in developing countries, by employing the Gini coefficients, which shows increases in public investment lower income inequality in the short and medium term—a 10% increase in public expenditure reduces the Gini coefficient by 0.2%, which is not really a significant effect if at all. We would suggest that such strategy should be complemented by coordinated fiscal and monetary policies, as argued in Arestis (2015) and further discussed below.

The International Labour Organisation (2008) study provides evidence to show that relevant policies can avoid income inequality, while achieving a high employment rate. This is the case for high, medium and low per-capita GDP countries. Examples provided by the International Labour Organisation (op. cit.) study among high

per-capita GDP countries, where employment rates are high and income inequalities relatively low, are countries like Austria, Australia, the Nordics and Switzerland. These countries "are characterized by relatively strong, employment-oriented social protection, higher than average coverage of collective agreements and well-respected political rights" (p. 156). Examples among medium and low per-capita GDP are countries, like the Czech Republic and Uruguay, where relatively high employment is accompanied by limited income inequalities. It is suggested that these countries are also "associated with relatively developed social protection, stronger tripartite institutions than in other countries, and observance of political rights" (p. 6).

Bernanke (2015) suggests that the Fed monetary policy post GFC/GR may have produced inequality effects, but such effects "are almost certainly modest and transient". These effects are unlike the "deep structural changes in our economy that have taken place over many years, including globalisation, technological progress, demographic trends, and institutional changes in the labour market and elsewhere". Monetary policy is "neutral" or "nearly so in the longer term". In another speech (Bernanke (2017) states that "According to the World Bank, the United States has the highest Gini coefficient of the G7 industrial countries, relative to other U.S. demographic groups and working-class Europeans". No wonder, Bernanke (op. cit.) proposes further policies to tackle inequality, "such as fiscal policy (taxes and government spending programs) and policies aimed at improving workers' skills"; these policies are needed "to help ensure adequate demand and remedy the underlying source of trade imbalances".

More generally speaking, the state should be able to reduce inequality through progressive taxation and public expenditure policies.[15] These policies would tax the top more than the rest, and through the orientation of social expenditure towards the low-income households. By contrast, those programmes, which allow a country to give away resources

[15]There is the argument that fiscal policy is ineffective in view of the Ricardian Equivalence Theorem. As argued in Arestis (2011, 2012, and 2015) and Arestis and González Martinez (2015), such argument lacks convincing theoretical backing and empirical credence.

to the rich and well connected, increase inequality. A good example of the latter case is the enormous decrease in the progressivity of the income tax in the US and UK since 1980, which "probably explains much of the increase in the very highest earned income" (Pigetty 2014, pp. 495–496). As Godar et al. (2015) argue, progressive taxation not only corrects disparities in income and wealth distribution but also increases the fiscal space for expansion. In Germany, what is needed, therefore, Godar et al. (op. cit.) suggest, is to use the revenues from progressive taxation reforms to finance public investment projects, thereby enhancing aggregate domestic demand and also contributing to rebalancing within the Euro Area.

As discussed above, the IMF (2014) study suggests that there is growing evidence that high income inequality has increased in recent decades in developed, developing, and emerging countries; as such, it has been detrimental to macroeconomic stability and growth. It is thereby of paramount importance for governments to employ fiscal policy to influence income distribution. Fiscal policy, it is argued, is the primary tool for governments to affect income distribution and thereby inequality. This should be undertaken through both tax and spending policies. Another IMF (2015) study suggests that "Fiscal policy is a powerful and adaptable tool for achieving distributional objectives. Considering tax and spending programs together enhances the effectiveness of fiscal redistribution". Thereby, "improving both distributional outcomes and economic efficiency is possible" (p. 1). As for specific guidance on the use of fiscal policy for redistribution, this, it is suggested, is a country-specific problem (IMF 2014, 2015; see, also, Dabla-Norris et al. 2015). IMF (2017b) cites such an example in the case of Ireland's progressive tax-benefit system, which is one of the most effective means in the EU in redistributing income. Biswas et al. (2017) investigate how tax policies that reduce income inequality affect economic growth. This is undertaken by employing US state-based data and micro-level household tax returns over the period 1979–2008. Reducing income inequality between low- and median-income households enhances economic growth. But reducing income inequality through taxation between median and high-income households reduces economic growth. Supply side (business activity and female labour supply) and demand side

(consumption demand) are the main mechanisms through which tax policies that reduce inequality affect economic growth.

Piketty (2014) argues for a progressive global tax on capital, "that is a tax on the net value of assets each person controls" (p. 516), which should be "a progressive annual tax on global wealth. The largest fortunes are to be taxed more heavily, and all types of assets are to be included: real estate, financial assets, and business assets – no exceptions" (p. 517). Such a proposition, it is argued, would offer the best option for keeping inequality under control, and such a tax is "by far less dangerous than the alternatives" (Piketty, op. cit., p. 516). Still, though, it is suggested that capital, income, and inheritance taxes play "useful and complementary" (p. 547) roles. It is also argued that a global tax on capital can impose effective regulation on the financial and banking system, which helps to avoid crises. Such tax would require international cooperation, and as such, Piketty (2014) admits, "it is a utopian idea", but "it is nevertheless useful" (p. 515). Still, and although implementing such a tax would be a serious challenge politically, Piketty (op. cit.) suggests that if the EU and the US supported such a tax, it would be a great beginning. It is further suggested that "Short of that, a regional or continental tax might be tried, in particular in Europe, starting with countries willing to accept such a tax" (p. 471; see, also, Piketty et al. 2014). It is further suggested that "Such a tax would also have another virtue: it would expose wealth to democratic scrutiny, which is a necessary condition for effective regulation of the banking system and international capital flows" (Piketty 2014, p. 471). Atkinson (2015) suggests in the context of global taxation that such a tax "under the auspices of OECD" (p. 201) could produce a 'World Tax Administration'.

Atkinson (2015) suggests that "One mechanism that reduced inequality in the post-war decades appears … to have been the rising share of wages in national income, a rise that was subsequently reversed" (p. 70). Also, and "At the same time, the distribution of capital income was becoming less unequal" (p. 71), which, however, did come to an end after the 1980s. Unemployment is another factor, which was significantly lower in the period after the Second World War until the late 1970s; subsequently, it increased substantially, especially in Europe.

And as Atkinson (op. cit.) suggests, "The government should adopt an explicit target for preventing and reducing unemployment and underpin this ambition by offering guaranteed public employment at the minimum wage to those who seek it" (p. 140). Atkinson (op. cit.) also suggests that "There should be a national pay policy, consisting of two elements: a statutory minimum wage set at a living wage, and a code of practice for pay above the minimum, agreed as part of a 'national conversation' involving the Social and Economic Council" (p. 148). It is also necessary, it is suggested, an unemployment target of 2% along with the government acting as 'an employer of last resort', thereby introducing guaranteed public employment; not forgetting of course that unemployment benefits should be higher than now. It is further proposed the introduction of a national pay and social policy, under the aegis of a Social and Economic Council involving trade unions, other social partners and non-governmental bodies; and establishing a substantially higher statutory minimum wage. 'Technological change' in a way that increases the 'employability of workers' (through funding of scientific research), a more secure legal framework for trade unions, more comprehensive taxation of inheritance and property tax, and expansion of universal benefits are further proposals. All these measures should produce a more equitable income distribution.

Furthermore, Atkinson (2015) suggests that "a more progressive structure for the personal income tax" (p. 290) is most appropriate to tackle inequality. It is also proposed that an 'Earned Income Discount' should be introduced, aiming at not raising the tax rate on low levels of earnings (and pensions) as a result of the implementation of the progressive tax structure. In addition, Atkinson (op. cit.) argues for renewal of 'social security for all' in view of the fact that "One reason for rising inequality in recent decades has been the scaling back of social protection at a time when needs are growing, not shrinking". It is indeed the case that in the past, and prior to that period, the welfare state had "played a major role in reducing inequality". The welfare state "is the primary vehicle by which our societies seek to ensure a minimum level of resources for all members" (p. 205). It is further suggested that radical reform of inheritance taxation is necessary, so that "receipts of inheritance and gifts inter vivos should be taxed under a progressive lifetime

capital receipts tax" (p. 194). Proportional or progressive property taxation, a wealth tax, child benefits, which should be central to any policy action to reduce inequality, and a global taxation are all important ingredients. Atkinson (2015) suggests that economic policies to reduce inequality in the OECD and EU countries as a whole are indeed possible. Although Atkinson (op. cit.) recognises the difficulties of pursuing such a path, the suggested relevant proposals can be introduced on the basis of cooperation and coordination of economic policies of the group of countries concerned.

We would agree with Atkinson (2015) that it is of paramount importance to have in place proper distributional policies, especially fiscal policies along with wage policies, if a viable growth regime is to emerge and be sustained. However, we would go a step further and suggest that to reduce inequality significantly as Atkinson (2015) and, also, Arestis and Sawyer (2013) propose, proper coordination of monetary and fiscal policies along with financial stability, the main focus of monetary policy, would be the best way forward (see, also, Arestis 2012, 2015, 2016, 2017). Fiscal policy should be directed at reducing inequality through appropriate expenditure and progressive tax policies, which should be supported by monetary and financial stability policies. The latter should be concerned with reforms in an attempt to regulate and avoid the type of financial architecture that led to the GFC; for it is the case that such regulation had been neglected prior to the GFC. The regime of inflation targeting under the auspices of an independent central bank, and the neglect of proper regulation of the financial system, have not worked as efficiently as the proponents had expected, as many authors have demonstrated (see, for example, Angeriz and Arestis 2008; Angeriz et al. 2008; Stiglitz 2013, Chapter 9).

Most important, though, is that inflation targeting neglects distributional effects in view of its central assumption of the representative agent and its emphasis on inflation as the single target of economic policy, thereby neglecting unemployment. Such concerns clearly imply that prudential regulation and financial supervision are extremely important aspects. The role of monetary policy in promoting employment creation is another objective that needs to be properly implemented. Manipulation of the rate of interest by the Central Bank to keep the

real interest rate below the productivity growth would have stimulating effects on aggregate demand (Hein and Mundt 2013). Such monetary policy should be implemented in coordination with fiscal policy and financial stability. Financial stability policies are necessary to avoid sharp and unsustainable increases in debt-to-income ratios among lower and middle-income households, thereby containing the leverage ratio and the risks of crises like the GFC. At the end of the day, crises can be avoided if economies are well managed and financial markets are sufficiently regulated. Another relevant suggestion is the introduction and implementation of a financial transaction tax, which should cover both spot and derivative assets. The purpose of such tax should be to curb speculation and raise substantial funds for public investment (see, for example, Arestis and Sawyer 2013; Seguino 2014). Such tax, though, requires international cooperation, which has not emerged yet. Also relevant proposals are the reconstruction of the international macroeconomic policy coordination, along with the suggestion of Keynes (1942) in terms of the creation of an 'international clearing union'; the latter contains a fixed but adjustable exchange rate system along with the 'bancor' as the international means of payment. Such proposals would help to coordinate action to tackle tax avoidance and tax evasion.

In terms of coordination of monetary with fiscal policy, Eggertsson (2006) suggests a concrete channel of fiscal expansion under coordination with monetary policy. Fiscal expansion enhances expectations about future inflation, and, provided the central bank collaborates with the fiscal authority, the real rate of interest is reduced, which stimulates spending. It is important, though, in this approach, for the monetary authority to trade off some inflation for lower unemployment. Under such possibility, a fiscal stimulus that increases inflationary pressures and a monetary authority that keeps constant the nominal interest rate produces a lower real interest rate, thereby giving rise to further increases in consumption and investment expenditures. Also, a lower real interest rate causes the real exchange rate to depreciate, which can play a role in stimulating aggregate demand.

The empirical evidence is very supportive in terms of coordinating fiscal and monetary policies. Eggertsson (2006), utilising a calibrated model not dissimilar in substance to the New Consensus

Macroeconomics, reaches the conclusion that under fiscal and monetary policy coordination, fiscal multipliers are higher than in the case of no coordination; they are, indeed, bigger than those found in the traditional Keynesian literature. Two types of fiscal multipliers are reported in Eggertsson (op. cit.): a real spending multiplier, where government consumption is raised but holding the budget balanced; and a deficit multiplier, where deficit spending increases. These fiscal multipliers are derived under two scenarios: when fiscal and monetary policies are coordinated; and when there is no policy coordination. The fiscal policy multiplier under coordination is 3.4 in the case of the real spending multiplier, and 3.8 under the deficit spending multiplier. When no policy coordination is present, i.e. when the central bank is 'goal independent', the real spending multiplier is unchanged, while the deficit spending multiplier is zero. Eggertsson (2006) explains this important difference in fiscal multipliers, when coordination is present in relation to those where coordination is absent, by the expectations channel as discussed above. It is also suggested by Eggertsson (op. cit.) that in the case of independent monetary and fiscal authorities, coordination of fiscal and monetary policy does not necessarily imply that the respective authorities need to lose their 'independence'. This is possible so long as both fiscal and monetary authorities have *a common objective*—for example, maximisation of social welfare (Eggertsson 2006). Under such arrangements, both authorities would have to agree on the variables to be included in the social welfare function and the nature of trade-offs between the objectives.[16]

In all the economic policies suggested above, pro-labour policies are vital. Such policies should include the following: tackling

[16]A recent contribution from the ECB (Corsetti et al. 2016) acknowledges the recent prolonged period of weak economic activity and very low inflation in the euro area, and suggests that monetary and fiscal policy 'together' are necessary to stabilise the level of economic activity and inflation, especially so when the central bank's policy rates stay close to the lower bound for a lengthy period. Under such circumstances, Corsetti et al. (op. cit.) suggest that "the multiplier effect of government spending on output at the lower bound can be sizable. For the multiplier to be sizable it is essential that monetary policy accommodates the fiscal stimulus" (p. 8). It is also suggested that "The necessary fiscal accommodation might be sizable, potentially falling outside the limits of the Stability and Growth Pact" (p. 15).

unemployment through employment-friendly growth; strengthening the welfare state, labour unions and labour market institutions, collective bargaining and trade unions, as well as improving union legislation. Increased unemployment benefits, higher minimum wages, and real wage growth in line with labour productivity are further policies that could help to reduce inequality. Only when wages grow with productivity growth, will consumption expenditure grow without raising debt levels to unsustainable levels that can trigger crises. Socioeconomic differences also cause inequalities, especially so in terms of access to education and training. Relevant policies are obviously needed for this purpose. Also measures to restrict financial speculation, including reining on excessive pay in the financial sector, and restructuring the financial sector to avoid financial crises. It is also important that fiscal and monetary policies are implemented to restore full employment alongside the policies for redistributive goals.[17]

6 Summary and Conclusions

We have discussed in this chapter the state of inequality in the world, the importance of tackling inequality, the relationship between inequality and economic growth, and economic policies to tackle inequality. We have concluded that such economic policies should be coordination of fiscal and monetary policies along with financial stability type of policies, without forgetting, of course, pro-labour distributional policies. A relevant question is whether it is likely that appropriate economic policies will be pursued to reduce inequality. Especially so since, and as Lagarde (2015) has suggested, "politicians, business leaders, top-notch economists, and even central bankers are talking about excessive

[17]An interesting and relevant question is the extent to which globalisation prevents policy-makers from pursuing the type of policies, discussed in the text, to reduce inequality. The argument is that such policies may reduce competitiveness in the globalised world markets. Atkinson (2015) examines this possibility to conclude that there may be relevant constraints, but this should be sorted out by policy-makers.

inequality of wealth and income. And these concerns can be heard across the political spectrum".

However, and unfortunately, tackling unequal distribution is an area where very little progress, if any, has taken place; and it is highly unlikely to materialise in view of the undue political influence of the top 1% influential group in the political system. Atkinson (2015) suggests that the influence of the upper class on government policy in their attempt to protect their wealth is an important factor on this score (see, also, Bonica et al. 2013). However, and as Atkinson (2015) notes, there are chances of a change in attitude on inequality for in the past significant reductions in inequality were achieved; and history can, and does, teach us a great deal. A final and important relevant consideration is that clearly "There has to be an appetite for action, and this requires political leadership. The inter-relation between inequality and politics is crucial. A major instrumental reason for concern about economic inequality is that concentrations of wealth and income convey political power and influence" (Atkinson, op. cit., p. 305). This clearly implies that "Any policy proposal to reduce inequality runs immediately into the issue that economic inequality is accompanied by political inequality, and the operation of the latter reduces the political possibility to address the former" (Sawyer 2015, p. 888).

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