POLICIES FOR WAGE-LED GROWTH IN EUROPE

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The European Commission (EC) has long encouraged wage moderation for many years, and it has explicitly recommended real wage growth below productivity growth to increase the international competitiveness of the EU. This policy has resulted in three decades of increasing inequality, declining share of wages in national income, and the emergence of a new class of super rich without generating a sustainable growth model for Europe. Full employment has not been achieved in any of the EU countries, even before the crisis. This paper summarizes the findings of two recent reports by and derives the policy implications.

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Abstract

This paper summarizes the findings of two recent reports by Onaran and Obst (2015) and Stockhammer and Wildauer (2015), and derives the policy implications. Results of research by Onaran and Obst (2015) and Stockhammer and Wildauer (2015) show that the current European policy of wage moderation is counter-productive, and leads to a stagnation in growth, risk of deflation, and it has resulted in unstable growth models driven by debt or export surpluses in the absence of a healthy wage growth. Policies aiming at reversing the fall in the wage share and the rise in inequality are particularly important for an economically and politically sustainable recovery after the Great Recession. Globalisation is not in itself an impediment to a wage-led development strategy, as long as the neoliberal policies that have determined the process of globalisation since the 1980s can be replaced by policy coordination to bring wages in line with productivity increases. The need for coordination does not exclude the possibility to implement pro-labour policies in a single country. However, the impact of these policies on growth and employment are stronger when they are coordinated across countries. This calls for Europe to play a leading role in coordinating policies both at the European and global level to reverse the fall in the wage share. A strategy of wage-led development requires a mix of policies aiming at pre-distribution and redistribution as well as macroeconomic policies and industrial policy for full employment and ecological sustainability.

1. Introduction

The European Commission (EC) has long encouraged wage moderation for many years, and it has explicitly recommended real wage growth below productivity growth to increase the international competitiveness of the EU. This policy has resulted in three decades of increasing inequality, declining share of wages in national income, and the emergence of a new class of super rich without generating a sustainable growth model for Europe. Full employment has not been achieved in any of the EU countries, even before the crisis. This paper summarizes the findings of two recent reports by Onaran and Obst (2015) and Stockhammer and Wildauer (2015), and derives the policy implications.

As Onaran and Obst (2015) shows the decline in the wage share was associated with a weaker and more volatile growth performance. Stockhammer and Wildauer (2015) highlights that in countries like the UK, Ireland, Spain, Greece, or Portugal households increased their debt to maintain consumption levels in the absence of decent wage increases. In countries such as Germany, Austria, and the Netherlands an excessive reliance on exports was required to maintain growth in the absence of domestic demand based. The Great Recession 2007-9, and the subsequent Euro Crisis have proven the fragility of both models. However, wage moderation policies are still part of the crisis management policies in the national reform and stability programmes as well as the Europe 2020 strategy of the EC. Economic policies for tackling the jobs and equality deficit in Europe are remarkably ignored by the EC. In particular the detrimental effects of austerity measures aiming at the fiscal consolidation as well as structural reforms in labour markets, which will continue wage restraint policies, are still seen as part of the solution rather than the problem.

Rather than more of the same medicine, we argue that Europe needs a fundamental rethinking of its economic policy. The crisis in Europe has laid bare the fundament flaws of the European economic policy regime based on the Maastricht Treaty and the Stability and Growth Pact. Six years after the beginning of the crisis, the Euro area's GDP is still below its pre-crisis level. The EU's policy mix has resulted in a deep economic crisis in southern Europe and in a weak recovery in the northern countries, with the Euro area teetering at the brink of deflation. Europe needs a fundamental rethink of fiscal policy, monetary policy and financial regulation (e.g. Arestis et al 2001, Hein 2013, Stockhammer 2016b), however, the focus of this report is on wage developments and wage policy. Our approach highlights the role of wages as a source of demand building on a large body of theoretical work in post-Keynesian/post-Kaleckian economics (Bhaduri and Marglin, 1990; Blecker, 1989). Empirical evidence shows that when the share of wages in national income decreases four things happen (Onaran and Obst, 2015). First, consumption decreases, since workers consume more as a proportion of their income compared to higher income groups who earn profit income; hence when there is a redistribution from wages to profits, domestic consumption in the national economy unambiguously decreases. Second, although private investment may partially increase due to higher profits, this increase is insufficient to offset the negative effects on domestic consumption. Third, net exports (exports minus imports) increase due to a fall in unit labour costs, but in the majority of countries, in particular in the large, relatively closed economies, this increase is not enough to offset the negative effect on domestic demand. Finally, in an environment of the global race to the bottom in the wage share, most of the positive effects on net exports are wiped out as labour costs fall simultaneously in all countries, and their international competitiveness relative to each other does not change significantly. Thus, in the vast majority of countries a fall in the wage share leads to lower growth; this is what we call a wage-led demand regime.[1] In contrast, mainstream economics, which forms the theoretical basis of the wage restraint policies of the EC, assumes that all our economies and Europe as a whole is profit-led, i.e. they assume that a lower wage share leads to higher growth.

[1] In this report we will use the terms wage-led growth or wage-led economy as synonymous with the analytically more precise term 'wage-led demand regime'.

Results of research by Onaran and Obst (2015) and Stockhammer and Wildauer (2015) show that the EC policy of wage moderation is counter-productive, and leads to a stagnation in growth, risk of deflation, and it has resulted in unstable growth models driven by debt or export surpluses in the absence of a healthy wage growth. The rest of this paper is structured as follows: Section 2 summarizes the findings of the empirical research, in particular by Onaran and Obst (2015) and Stockhammer and Wildauer (2015). Section 3 presents the policy implications. Section 4 discusses policy alternatives for Europe. Section 5 concludes.

2. Empirical evidence on wage-led growth

A wide body of empirical research in the tradition of post-Keynesian/post-Kaleckian models challenge the assumption that all countries are profit-led (e.g. Onaran and Galanis, 2014; Onaran et al 2011; Stockhammer et al 2009; Hein and Vogel, 2008; Naastepad and Storm, 2007; Stockhammer and Onaran, 2004; Bowles and Boyer, 1995).

This section first summarizes our most recent estimation results regarding the effects of the changes in the wage share on growth based on Onaran and Obst (2015) for the EU15 countries. Onaran and Obst (2015) provide evidence that the Euro area overall is a wage-led demand regime.[2] Individual European countries, in particular ones with small open economies may be profit-led, because of the net export component of aggregate demand, but as European countries mostly trade among each other, these effects to a large extent cancel out at the European level.

Onaran and Obst (2015) extending the methodology in Stockhammer et al (2011) and Onaran and Galanis (2014) estimate the effects of a decline in the wage share on domestic consumption, private investment, domestic prices, export prices, exports, and imports in each of the EU15 countries. The results are summarized in Table 1. First, in all countries, consumption decreases (see Column A in Table 1), since workers consume more as a proportion of their income compared to those who earn profit income. Second, private investment is not very responsive to the increase in profits, but responds strongly to demand (see Column B in Table 1); furthermore when the wage share is decreased in all the EU15 countries, investment decreases in the majority of the countries when the partial effect of profitability is compounded by aggregate demand effects (the UK, Germany, Spain, Greece, Austria, Portugal, Finland, Luxembourg, see Onaran and Obst, 2015). In almost all countries the increase in investment due to higher profits remains insufficient to offset the negative effects on domestic consumption. Third, net exports (exports minus imports) increase due to a fall in unit labour costs, but again in the vast majority of countries, this increase is not enough to offset the negative effect on domestic demand (see Column E in Table 1).

[2] There are some Marx-inspired authors, who report evidence for profit-led growth regimes for several countries (e.g. Kiefer and Rada 2015)

Table 1. The summary of the effects of a 1%-point increase in the profit share at the national and European level

	The effect of a 1%-point increase in the profit share in only one country on:								The effect of a simultaneous 1% - point increase in the profit share on % change in aggregate demand
	C/Y	I/Y	X/Y	M/Y	NX/Y	Private excess demand / Y	Multiplier	% Change in aggregate demand (F*G)	
	A	B	C	D	E (C-D)	F (A+B+E)	G	H	I
A	-0.277	0.000	0.234	-0.161	0.396	0.119	1.039	0.124	-0.185
B	-0.151	0.206	0.000	-0.053	0.053	0.108	0.740	0.080	0.009
DK	-0.155	0.169	0.185	0.000	0.185	0.198	1.246	0.247	0.107
FIN	-0.243	0.000	0.074	0.000	0.074	-0.169	1.316	-0.222	-0.304
F	-0.324	0.101	0.062	-0.078	0.140	-0.083	1.559	-0.129	-0.228
D	-0.397	0.000	0.049	0.000	0.049	-0.348	1.136	-0.395	-0.442
GR	-0.564	0.000	0.099	0.000	0.099	-0.465	1.984	-0.923	-1.027
IRL	-0.229	0.161	0.000	-0.074	0.074	0.006	0.863	0.005	-0.066
I	-0.410	0.156	0.050	-0.087	0.137	-0.117	1.451	-0.170	-0.238
L	-0.153	0.000	0.000	0.000	0.000	-0.153	0.535	-0.082	-0.128
NL	-0.322	0.078	0.000	-0.069	0.069	-0.175	0.820	-0.144	-0.191
P	-0.402	0.000	0.000	-0.182	0.182	-0.219	1.546	-0.339	-0.477
E	-0.410	0.088	0.044	-0.068	0.113	-0.210	2.147	-0.450	-0.544
S	-0.388	0.128	0.057	-0.056	0.113	-0.147	1.058	-0.155	-0.271
UK	-0.252	0.000	0.074	-0.066	0.140	-0.112	1.129	-0.126	-0.195
EU15 GDP									-0.298*

Source: Onaran and Obst, 2015
Notes: A = Austria, B = Belgium, DK = Denmark, FIN = Finland, F = France, D = Germany, GR = Greece, IRL = Ireland, I = Italy, L = Luxembourg, NL = Netherlands, P = Portugal, E = Spain, S = Sweden, UK = United Kingdom
* The country specific growth rates from column I are multiplied with the weighted share of each country in EU15 GDP.

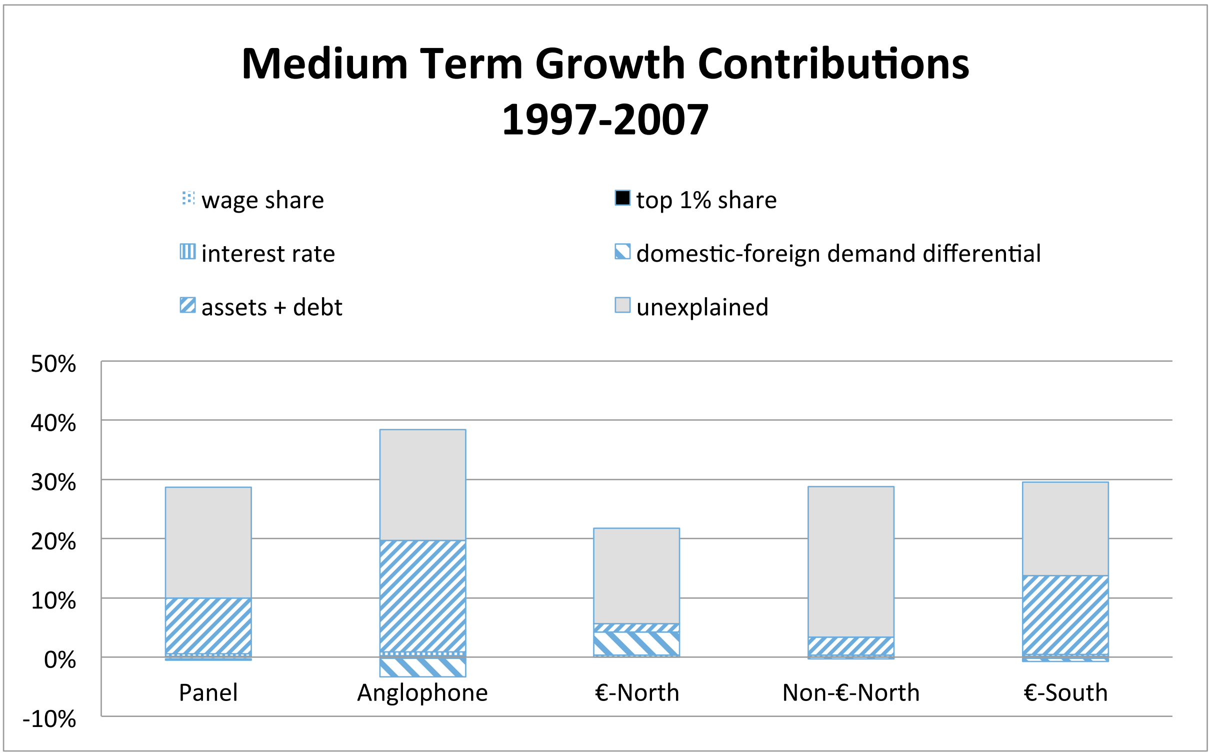
These findings show that the EU15 as a whole is a wage-led economy; i.e. a fall in the wage share leads to lower growth (see Column F in Table 1).[3] The multiplier effects further aggravate these initial effects of changes in private demand (see Columns G and H in Table 1). Large economies such as the UK, Germany, France, Italy, and Spain as well as some small economies such as Greece, Portugal, Sweden, Finland, the Netherlands, and Luxemburg are wage-led. Four small economies, Ireland, Austria, Belgium and Denmark, are profit-led in isolation, i.e. they could grow along with a rise in the profit share, if they are the only countries doing this. However, it is misleading to analyse the EU Member States (MS) in isolation, since the same wage moderation policies have been implemented in all countries simultaneously. The EU is a rather closed economy with low extra-EU trade and high intra-EU trade; hence a fall in the wage share in Europe as a whole has only moderate positive effects on trade balances, but it has substantial negative effects on domestic demand. When wages change simultaneously in all the EU countries, the export prices of each country relative to the other countries change little. "Beggar thy neighbour" policies through wage suppression in the EU lead to strong negative effects on domestic demand, which cannot be offset by the international competitiveness effects. Hence not only the wage-led countries but also the profit-led countries such as Ireland and Austria contract as an outcome of wage restraint policies (see Column I in Table 1).

Our approach highlights the role of wages as a source of demand, and not only a cost item. Overall, a simultaneous decline in the wage share by 1 percentage point in all countries leads to a decline in the EU15 GDP by 0.30% (Onaran and Obst, 2015). The negative effect of the simultaneous race to the bottom on growth ranges between 0.07% in Ireland and 1.03% in Greece.

Stockhammer and Wildauer (2015) provide further evidence regarding the effects of distribution, while integrating also the impact of wealth and financialization on aggregate demand. They extend the post-Keynesian model to include personal income inequality as well as measures of property and financial wealth and private debt. They estimate behavioural functions for consumption, investment, exports and imports for a panel of 18 OECD countries for the period 1980 to 2013. Their results confirm that, on average, the countries in the panel follow a wage-led domestic demand regime. This effect is modest, but non-trivial. They find strong effects of real estate prices and household debt in both the consumption and investment functions. They use their results to explain the growth performance in different country groups. They provide an empirical assessment of the relative growth contributions of these effects for the decade prior to the crisis for four different country groups: Anglophones (Australia, Canada, the United Kingdom and the United States), Euro-North (Austria, Belgium, Germany, Finland, and the Netherlands), Euro-South (Spain, Italy and Ireland) and non-Euro-North (Denmark, Switzerland, Norway and Sweden). Figure 1 below summarizes these results.

[3] In the estimations they control for interest rates, the results are thus to be interpreted for a given monetary policy stance.

Figure 1. Distribution effects versus asset and debt effects 1997-2007, according to Stockhammer and Wildauer 2016)



Note: based on Stockhammer and Wildauer (2016), Table 6. Country groups: Anglo-American (Australia, Canada, the United Kingdom and the United States), Euro-North (Austria, Belgium, Germany, Finland, and the Netherlands), Euro-South (Spain, Italy and Ireland), non-Euro-North (Denmark, Switzerland, Norway and Sweden)

It turns out that changes in debt and property prices explain most of the differences between country group performances. Changes in personal and functional income inequality have had comparably small effects. Changes in property prices, stock prices and debt explain a rise in consumer spending of 12.8%, 10.2% and 20.4% for the Anglo-Saxon, non-Euro-North and Euro-South groups. For investment these asset variables explain 11.9% and 11.4% for Anglo-Saxon and non-Euro-North while they did not affect or even diminished investment spending in the other two groups. Taking into account the multiplier mechanism, asset effects contributed almost 20% to GDP growth in the Anglo-Saxon economies and 13% in Euro-South, but only 1.4% in Euro-North and 3% in non-Euro-North. Property prices and household debt played the dominant role in explaining growth prior to the crisis.

These results are in striking contrast to the expectations of neoclassical economics, which forms the theoretical basis of the wage restraint policies of the European Commission, which assumes that all our economies and Europe as a whole is profit-led. This is empirically not true according to recent econometric analysis by Onaran and Obst (2015), Stockhammer and Wildauer (2015), Onaran and Galanis (2014), and Stockhammer et al (2011).

In a wage-led economy like the EU as a whole, more egalitarian policies are consistent with growth. Onaran and Obst (2015) suggest a wage-led recovery scenario, where all EU15 countries increase their wage share during 2016-2020, albeit at differentiated rates, with a 5%-point cumulative increase in the wage-led countries in the next five years, a 3%-point increase in the intermediate group of Ireland and Austria, which become wage-led when there is a simultaneous change in wages, and a 1%-point increase in Belgium and Denmark, which remain profit-led also in the race to the bottom scenario. In this scenario, all individual EU15 countries can grow along with an improvement in equality, and the overall EU15 GDP would be 1.51% higher in 2020. This wage-led recovery scenario will lead to only a modest 1.2 percentage point increase in inflation in the EU15 (Onaran and Obst, 2015). Indeed in light of a risk of deflation in the Eurozone our findings indicate that a wage stimulus in the EU15 would help the ECB approach its inflation target.

3. Policy implications

Empirical evidence summarized in Section 2 provides support for alternative policies for wage-led development. At the national level, in a country, where the parameters of the economy suggest that the growth regime is wage-led, pro-capital redistributive policies are detrimental to growth. In wage-led economies, more egalitarian policies are consistent with growth. Even if we make a very cautious interpretation of the empirical findings, it is clear that there is room for policies to decrease income inequality without hurting the growth potential in a wage-led economy.

Evidence also shows that large countries or large economic areas like the EU, which have a high intra-regional trade and low extra-regional trade, are more likely to be wage-led; this implies that in the EU macroeconomic policy coordination, in particular with regards to a wage policy, with an aim to reverse the fall in the wage share in the last decades, can improve growth and employment. The current wage moderation policy of the European Commission impedes growth.

The mainstream often tells us that in a highly competitive global environment, we cannot increase wages. We have strong empirical evidence to reject this myth that a single country cannot have pro-labour policies in a globalized economy. Globalisation is not an isolated phenomenon; and it is not only an economic process, but also a process of political contagion. Wage moderation policies have been imposed in all countries to improve competitiveness based on labour costs. Results by Onaran and Galanis (2014) show that globalization increases the contractionary effects of wage moderation as pro-capital policies are diffused globally. When policies that lead to a decrease in the wage share are implemented in all countries, their effects on net exports become irrelevant, as relative prices of exports and imports do not change much.

The low wage reserve army of labour in the developing world is not the main cause of labour losing ground to capital at home in Europe.[4] Indeed the developed countries have been the leader of pro-capital policies; and used globalization as a pre-text to implement them and to claim that there is no alternative. Furthermore, international financial institutions have served to implement them in the developing countries as part of the austerity and structural adjustment programmes in the 1980s. However, evidence shows that, the developed world has to do just the opposite: start with pro-labour policies to improve the wage share unilaterally at home and export these good policies to the rest of the world (Onaran, 2015). According to our findings, the EU as a whole would be the economies that would benefit most from a coordinated boost to the wage share at the global level. As the main beneficiaries of a global wage-led recovery, Europe could and should take a step forward in terms of radically reversing the fall in the wage share first at home. This would create space for levelling the global playground through international labour standards and domestic demand-led and egalitarian growth strategies. Even the individual profit-led countries can grow if there is a simultaneous increase in the wage share. Indeed, in the majority of the profit-led countries, it is not at all possible to grow with a pro-capital redistribution of income, when this strategy is implemented in many other large economies at the same time. If we want developing countries like China to rebalance their economies towards domestic demand as opposed to mere reliance on export

[4] Bengtsson (2014), Kirstal (2010) and Stockhammer (2016a) offer empirical analyses of the determinants of the wage share. Ssee IMF 2007a for a mainstream view.

orientation based on low wages, we should start at home. The wage moderation policy of Europe is the ultimate impediment to a wage-led development in the Global South as well. The current mainstream policies that place an excessive emphasis on international competitiveness based on wage competition are counter-productive in a highly integrated global economy. In contrast, a wage-led recovery offers a solution to correct global imbalances via coordinated macroeconomic and wage policy, where domestic demand plays an important role.

Finally, a common worry, also among the progressive policy makers on the left is the following question: if the rest of the world does not reverse their low road policies, can the Europe implement pro-labour policies unilaterally? Yes, because Europe as whole is a wage-led economy, even after considering the negative effects of a rise in the wage share on international trade (Onaran, 2015). Starting from today's bottom low wage shares, if our trade partners do nothing to increase their wages, and if it is only Europe (Eurozone) that leads pro-labour policies leading to an increase in the wage share, the Eurozone could still achieve a higher GDP. The effect of a moderate increase in the wage share on growth is not very high, but at least it is positive; hence a rise in the wage share does not lead to a recession. Would that not increase the trade deficit problem further? Not much; the effect of a rise in the wage share on the trade deficit is minor as estimated by Onaran and Obst (2015). Furthermore trade imbalance is a structural problem, and it has to be tackled accordingly through industrial policy rather than being posed as a barrier to egalitarian policies. Finally, what if our trade partners continue their aggressive wage competition policies via further decreases in the wage share, while they free ride on the rise in the wage share and growth in the Eurozone? There would be still an area of manoeuvre left in a wage-led economy like the Eurozone even in the presence of beggar thy neighbour policies elsewhere; however we do not deny the fact that this area of manoeuvre will be significantly narrower in the case of continued race to the bottom, and if good pro-labour policies cannot be extended to the rest of Europe, protectionist measures against social dumping can be in place. Conversely, the effects of the pro-labour policies would be a lot stronger if implemented at the European level; therefore we should see Europe as a chance to increase our area of manoeuvre, and use every chance to improve the cooperation among the pro-labour forces.

Policies to push for a wage-led development strategy can be and should be implemented for not only equality but also economic as well as political stability: rising income inequality has been one of the root causes of the Great Recession (Goda et al, 2014). How did the global economy or Europe manage to grow along with declining wage shares until the Great Recession? A decline in the wage share has led to a potential deficiency in aggregate demand; the outcome should have been a stagnation of demand and growth according to our results. This was mainly circumvented by two growth models: in the UK, the US, or the periphery of Europe, households increased their debt to maintain consumption levels in the absence of decent wage increases. Financial deregulation and housing bubbles made this possible. The second growth model has been the export-led case of countries like Germany or Japan. As domestic demand stagnated along with falling wage share in these countries, they maintained their growth thanks to net exports to the countries with a debt-led growth model. The debt in the latter model was financed with capital flows from the export-led countries. The current account surpluses in the export-led countries are the mirror image of the current account deficits of the debt-led countries. Both are equally unsustainable as they could only co-exist with debt and global imbalances. The Great Recession has proven the fragility of this model. Lessons have been ignored by those who benefit from inequality. The recovery is built once again on the shaky ground of household debt or export reliance instead of wage growth.

How can we achieve wage-led development? Has the fall in the wage share not been an inevitable consequence of the so-called skilled bias technological change or globalization as the mainstream tells us? No, the fall in the wage share has been a deliberate outcome of policies that led to the fall in the bargaining power of labour, welfare state retrenchment, and financialization (Stockhammer, 2016). The solution therefore lies in reversing this process.

Policies should be in place to ensure that nominal wages increase in line with inflation and productivity. This should follow an initial gradual correction of the loss in the wage share in the past three decades. Productivity orientation, however, should reflect what is relevant and valuable for the job, rather than a blind emphasis on output per worker or hour. In particular in services, e.g. in care jobs, a high quality delivery of the service requires a lower output per hour rather than a high one; wage norms should reflect meaningful measures of performance and quality (Onaran, 2015).

4. Alternative policies for wage-led development in Europe

A strategy of wage-led development requires a policy mix that includes labour market policies aiming at pre-distribution, i.e. the determination of wages as market outcomes, as well as redistributive policies through progressive taxes (Onaran, 2015). Furthermore, distribution policies need to be complemented by a macroeconomic and industrial policy mix. Wage policies have to be embedded into broader targets of equality, full employment, and ecological sustainability. This is why this paper discusses a strategy for wage-led development rather than simply a strategy for growth.

4.1 Pre-distributive labour market policies

A wage-led development strategy requires policies targeting the top, middle, and bottom of the wage distribution (Onaran, 2015). Mainstream interest in inequality has focused excessively on the bottom, and only more recently on the top of the income distribution, while the middle is either ignored, or is seen as an impediment to improvements in the bottom due to the so-called powerful workers organised in the unions. However, the wage share of workers in the middle of the income distribution has also been squeezed by rising profits and managerial salaries.

4.1.1 Strengthening the bargaining power of labour

An improvement in the wage share has to include a rise in the wages of the middle, which in turn requires re-regulating the labour market, and strengthening the bargaining power of labour via an improvement in union legislation, and widening the coverage of collective bargaining.

A government dedicated to strengthening collective bargaining as a policy objective can make a big difference. For example, Ewing and Hendy (2013) remind us how the UK was the pioneer in the world in the development of collective bargaining during 1917-1921 and in the aftermath of the Great Depression after 1934. Sadly the UK has also led the attack on collective bargaining in the post-1980s. Their work highlights the importance of the state in institution building to facilitate sectoral bargaining structures, and the key role played by the Ministry of Labour, which was established in 1916. In its early days, sectoral collective bargaining also received the interest of employers, who regarded it as a means of avoiding undercutting by competitors. Collective bargaining coverage was as high as 70% in 1950, and increased to 82% in 1979; yet is now below 25%. The UK was the only country in the EU with collective bargaining coverage below 50% until recently (Ewing and Hendy, 2013). What we need now is for the EU to provide a similar institution building effort at the European level. Below, we elaborate more on the issue of wage coordination, and trade unions can play a role at the European level.

Recent findings by Onaran et al (2015) show that if union density would recover back to where it was in the early 1980s in each EU15 Member State, EU15 GDP would increase by up to 1.8% due to the positive impact of higher union density on the wage share and consequently the positive impact on demand in a wage-led economic region.

Beyond sectoral bargaining structures, improving wage coordination at the national level is crucial for reducing wage inequality. Highly structured industrial relations at the national level lead to lower inequality among wage earners. Earnings dispersion is lower the higher the union density, bargaining coverage and the degree of centralisation or coordination (OECD, 2004). Even the World Bank (2013) in its recent World Development Report admits that the potential negative impacts of collective bargaining and minimum wages on employment and other labour market outcomes have been overstated in the past.

4.1.2 Improving minimum and living wages

Regarding the bottom of the wage distribution, the key priority is establishing a sufficiently high statutory minimum wage to address the growth of in-work poverty. Evidence shows that robust minimum wages can reduce inequality (ILO, 2012). A rise in minimum wages not only reduces reliance on benefits, but also improves demand and growth in a wage-led economy. Low-income earners would spend a higher proportion of their income, and this would lead to a further increase in growth and employment through the multiplier effects. In the US, the myth about the negative effects of minimum wages on youth employment was discredited after research by Card and Krueger (1994) showed that in the fast food industry, a major employer of young workers, minimum wages indeed increased, not decreased, youth employment. In an extensive meta-analysis of the studies on the effects of minimum wages in the US, Doucouliagos and Stanley (2008) show that there is little or no evidence of a negative association between minimum wages and employment. Butcher et al. (2012) showed that minimum wages in the UK decreased inequality, but had no significant negative effects on employment. Furthermore research shows that a higher minimum wage reduces turnover among workers, and creates employment stability for low-wage workers (Dube et al., 2011), which in turn helps firms to increase their productivity (Pollin et al., 2008). The Greater London Authority reports that 80% of employers believe that the living wage has enhanced the quality of work (Lansley and Reed, 2013). Raising the minimum wage can also increase labour force participation rates, as paid employment becomes attractive, and reduce spending on unemployment benefits by the state. Lansley and Reed (2013) argue that the government gets back about 45% of any increase in low pay rates through reduction in public spending on tax credit and benefits as well as increased tax revenues.

How high should the minimum wage be? The reference point has to be a living wage. A living wage is defined as a wage that gives workers the ability "to maintain self respect and to have both the means and the leisure to participate in the civic life of the nation" (Glickman, 1997). Pollin (2007) discusses the experience of Santa Fe in the US, and suggests a strategy of making the minimum wage a living wage through gradual increases. After each step of increase, employment effects can be assessed before proceeding with further increases. Once the living wage level has been attained, increases beyond this could then be tied both to inflation and average labour productivity (Pollin, 2007). In the transition period of gradual adjustments to the minimum wage, living wage rates should be used within public sector organisations, and should be imposed on private firms working as contractors or suppliers to the public sector. Even after the convergence of the national minimum wage to a living wage, local authorities can set their own living wage norms at levels higher than the national minimum wage as local costs of living differ.

At the EU level, minimum wages can also be used as a tool for convergence, with nation specific minimum rates defined in relation to the median wage of each country, as elaborated by Schulten and Watt (2007). Such a policy should further be embedded within a broader wage coordination policy as we discuss in more detail below in order to achieve an upward convergence in wages.

4.1.3 Enforcing pay ratios

Finally, for a wage-led recovery, the higher end of the wage distribution must be regulated as well. This would increase the area of maneuver to increase wages at the bottom and the middle, while offsetting the squeeze on profits by cutting high managerial wages. The recent crisis has made it clearer that top executive pay has been fundamentally unrelated to firm performance in the financial industry, but the problems with top pay is not limited to banks but is in fact widespread among large companies in the private sector. Hutton (2011) reports that pay ratios in the public sector are mostly within a 20:1 band, whereas according to a report by One Society (2011), the ratio is at 262:1 among FTSE 100 companies. Corporate governance reforms should aim at curtailing top managerial compensation via limiting the ratio of top pay to median incomes in the private sector. Lansley and Reed (2013) report a variety of examples where private firms or cooperatives voluntarily implemented top-to-bottom ratios between 6:1 to 19:1. France has imposed a maximum of 20:1 pay ratio in public sector firms in 2012, which has put a downward pressure on executive pay in some major private companies as well (Lansley and Reed, 2013). In 2013 in a referendum in Switzerland, 35% of the voters voted for legally capping the top-to-bottom pay ratio in all firms at 12:1.

4.2. Role of the European Union for wage coordination and rebalancing[5]

Any viable economic policy strategy for the Euro area will need to rebalance the current account positions. How much rebalancing has there to be? Unit labour costs (ULC) have increased by 25-30% faster in Greece, Ireland and Portugal than in Germany since 2000 (Stockhammer and Sotiropoulos 2014). To return the relative ULC positions of 2000 would require an inflation rate in Germany that is 2-3 percentage points higher than in the Greece, Ireland and Portugal for a full decade.[6] There are two ways to achieve this adjustment within a currency union (or of course some combination of the two): First, Greece, Ireland and Portugal could (try to) lower their inflation rates well below German ones. As Germany has had, for practical purposes, flat ULC in the last decade, this would imply nominal wage deflation in these countries for a full decade. This could be called the deflationary rebalancing strategy and could only be achieved by a period of sustained high unemployment in the deficit countries. It would effectively require a Japanese-style lost decade of deflation and stagnation for the peripheral European countries. It would also make reducing debt (be it private or public) more difficult as the real value of debt would increase in this scenario. The economic costs of such a strategy would be enormous (Stockhammer and Sotiropoulos 2014). Instead of economic growth and a convergence of living standards (as EC 1990 had envisioned), the Euro area would become a club where the poorest members are condemned to stagnation and further falling behind. The political implications of such a scenario are impossible to predict, but it does not require excessive fantasy to conclude that EU membership under these conditions will be questioned.

The second way to achieve this rebalancing is for German ULC to rise substantially. If Greece, Ireland and Portugal were to maintain moderate growth rates that result in moderate inflation of, say two percent per annum, this would require inflation in Germany of four to five percent. We can call this inflationary rebalancing. This strategy would be consistent with growth, but it would come with a higher overall level of inflation. This would contradict the present inflation target of the ECB. It would probably have only small negative effects on overall EU exports, but it may be politically contentious. Higher inflation may be unpopular in Germany. However, the main alternative seems to be permanent fiscal transfers from Germany to the Greece, Ireland and Portugal, which would be even more unpopular.

In the medium term rebalancing thus requires substantially higher wage growth in Germany if it is to come without a decade of stagnation in the periphery of Europe. It will also require a higher inflation target for the Euro area. In the longer term, the macroeconomic role of wages has to be taken into account in the design of economic policy and economic institutions in Europe. To be consistent with a stable distribution income and with balanced internal current account positions, wages would have to grow in line with productivity growth (in the country) and with inflation.

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[5] This sections draws heavily on Stockhammer and Onaran (2012).

[6] This is to be understood as a thought experiment where ULC play the major role in rebalancing as implied in the EU's internal devaluation and austerity policies, not as a statement that ULC are necessarily the main determinant of current account positions.

A simple wage rule that approximates this aim is

$$w_j = x_j + p^T + a(ULC_{EU} - ULC_j)$$

where w, x, p^T, and ULC denote nominal wage growth, labour productivity growth, the inflation target, and unit labour costs respectively and subscripts EU and j refer to the EU and to country j (Stockhammer and Onaran, 2012). The inflation target would have to be set such as to avoid deflation in all countries. Note that there is no role for unemployment in this wage equation. In this sense, the wage rule is inconsistent with wage flexibility in the standard sense. Rather it recognises the macroeconomic role of wages.

This wage equation is not to be understood as a technocratic rule (like the Taylor rule), but as a policy goal. The question is how a set of institutions can be built that allows wages to become a policy instrument. European wage policy thus faces a double challenge. On the one hand it has to solve the prisoners' dilemma situation, where individual countries pursue beggar thy neighbour policies by encouraging wage moderation. On the other hand, it has to ensure that relative wages respond to trade imbalances. This requires strengthening collective bargaining systems, while at the same time building wage bargaining into a broader set of macroeconomic consideration.

We suggest a system of coordinated national collective bargaining where social partners are also part of tripartite commissions that decide on fiscal and monetary policy. This would require institution building at the national as well as the European level and would effectively try to replicate labour relations systems of the Germanic or Nordic type at the national level and institution building at the European level. As unions would have to give up part of their ability to influence wages, they would have to be compensated by getting a greater say in other policy areas, that is, in fiscal policy and, ultimately, in monetary policy. Simply put, the above wage equation will not be attractive to unions unless they get a say in the determination of the inflation target and unless the European Commission is committed to full employment rather than labour market flexibility (see Hein et al 2004 for an interesting discussion of macroeconomic policy coordination).

Three points of clarifications are in place. First, our approach would thus require a very different overall economic policy regime in the EU than the present one. Indeed, any deviation in the role of wage policy will require a rethinking of the entire economic policy mix in the EU because wage flexibility is such crucial part of the current policy regime: as exchange rates are frozen internally, monetary policy is centralized and the room for manoeuvre for fiscal policy is narrowly circumscribed, wages are the only variable that can adjust in the face of asymmetric shocks (Stockhammer 2011, 2016b).

Second, our suggestion requires institution building at the national and even more so at the European level. Wage bargaining institutions are, at present, almost exclusively national, sectoral or firm level (Visser 2004). Experience of transnational wage bargaining coordination is limited (Schulten 2004). However, at least in our view, given that if Europe wants to maintain its monetary union, a deepening of integration has to take place.

Third, the wage equation, by design, guarantees a stable wage share. It has nothing to say about the level at which the wage share should be stabilized. This is up to the political process. In particular, the wage equation is consistent with government policies to increase the wage, e.g. by introducing or increasing minimum wages.

Fourth, we consider European wage coordination and inflationary rebalancing a necessary condition for the survival of the Euro. It is not clear whether it would also be sufficient. This is not the place to evaluate the merits of debt restructuring. Instead we merely note that given the debt levels Greece, Portugal and Ireland, it is has been argued that debt restructuring is unavoidable. As is most apparent in the case of Ireland it is also questionable whether socializing private debt is socially desirable (Eichengreen 2010).

4.3 Redistributive policies

Labour market policies need to be complemented by redistributive policies to tame the power of capital. Wage-led development requires redistribution from capital to labour and from the top 1% towards the 99%, in particular towards the bottom 50%. This requires a rise in corporate tax rates as well as top marginal income tax rates.

We need to restore the progressivity of the tax system. Recent history shows that higher top marginal tax rates discourage excessive managerial pay. Progressive income tax could be used to impose a maximum income, with the highest marginal tax rate increasing to 90-95% above a threshold corresponding to the top 1% of incomes. Indeed, this rate is not radical compared to the top tax rates in the UK before the 1980s: between 1974 and 1979 the top income tax rate in the UK was 83% on incomes above approximately £91,000 in today's prices (£24,000 at 1979's; Onaran, 2015). Indeed, with additional taxes of 15% on unearned income such as dividends and interest on investments, the top rate was as high as 98% in 1979. High top marginal tax rates need to be combined with policies regulating bonuses in the form of stock options and top pay.

Progressive taxation should also include taxes on wealth such as real estate, cash, deposits, shares and bonds. This would permanently narrow the inequality in wealth distribution, and prevent a high concentration of wealth.

One possibility would be to link top income and wealth taxes to median incomes and median wealth holdings (Goda et al. 2014), e.g. a top marginal tax rate of 70% for income above 10 times the median income, a top marginal tax rate of 10% on all personal net wealth (excluding primary residence) that is above 100 times the median wealth, and of 90% for all inheritances that are above 100 times the median wealth.

In the meantime, tougher regulations, preferably at the EU or global level should make sure to prevent tax avoidance and evasion.

4.4 Egalitarian development through a macroeconomic and industrial policy mix

The policies that have changed the balance of power relations in favour of capital have been among the core causes of the fall in the wage share and go well beyond labour market policies. Therefore any strategy to reverse this has to include policies to rebalance power relations.

This strategy should firstly aim at reversing the welfare state retrenchment of the previous decades. Government spending on public goods such as education, health, pensions, and social security are part of the social wage. The dramatic marketisation of the supply of these public goods has narrowed the fall-back options of labour, and eroded its bargaining power. Restoring and strengthening the welfare state will significantly improve labour market outcomes for wage bargaining.

A related issue about public spending is public sector wage setting (Onaran, 2015). Public sector wage setting has a strong signal effect on the wage bargaining process in the private sector. The severe austerity policies since 2010 have been not only about shrinking the state and slashing welfare spending, but have also been an agenda for eroding the power of labour unions in the public sector, and imposing pay freezes on public sector workers. Austerity policies with further detrimental effects on the wage shares will only bring further stagnation.

Financialisation has been the other important macroeconomic factor that has caused a massive shift in power relations in favour of capital (Onaran, 2015, Stockhammer 2016b). The increased role of financial activity and financial institutions in determining corporate strategies and economic outcomes since the 1980s has had significant effects on the bargaining position of labour (Hein and van Treeck, 2010; Hein and Mundt, 2012; Stockhammer, 2013). Non-financial firms have increased their fall-back options in terms of the choice between geographic locations as well as investing in financial versus real assets. It has also led to the orientation towards shareholder value, and hence prioritised shareholders' demands over workers. The same process often had effects on the public spending and taxation decisions of governments, which in turn has contributed to the erosion of the bargaining power of labour. Hence, reregulating finance, and reversing financialisation is an indispensable element of a wage-led development strategy.

Finally, the neoliberal shift in macroeconomic policy away from a broad focus on full employment to a narrow focus on inflation targeting and tight fiscal and monetary policy in the post-1980s has been detrimental for growth, as well as labour's bargaining power and equality (Onaran, 2015). Reorienting macroeconomic policies towards full employment is important for not just rebalancing power relations but also for rebalancing the economy.

It is also crucial that policies for wage-led development are complemented by a broad mix of economic policy, because the effects that can come from a wage-led recovery on growth and hence employment are modest, albeit positive, in magnitude (Onaran, 2014, 2015; Onaran and Obst, 2015; Stockhammer and Wildauer, 2015). Wage-led growth is not a magic bullet to solve all the ills of our current economic model. For sustainable and egalitarian development, we need to mobilise all of the tools of economic policy and public spending with an aim to achieve full employment, ecological sustainability, and equality. Investment and industrial policy lie at the core of such an economic policy mix. New investments are the most important locomotive of growth and increases in productivity. As such, it is also an important guarantee for productivity-oriented wage increases. As already mentioned above, investment and industrial policy is also the tool to offset and change the effects of wage increases on trade deficits in two ways: Firstly, investment can decrease the import dependency of the economy. Secondly, in the long run it can change the composition of exports, and shift exports towards innovative products, where demand is less sensitive to prices, thereby the effect of labour costs on exports are more modest.

The weakening of productive investment has been detrimental for job creation. Private sector investment has grown at a significantly slower pace than GDP, and this has curbed job creation in many EU countries (IILS/ILO, 2011; Tori and Onaran, 2015). This has been related to financialisation and the short-termism orientated towards the maximisation of dividends to shareholders along with managerial bonuses. A pro-labour and pro-jobs strategy needs to break this orientation and put private investments in line with profits, as well as stimulating investments via higher demand, and industrial policies. But most of all, an investment programme has to rely on public investment, in two areas in particular: ecological investments and social infrastructure.

First, public investment, in green industries like renewable energy, public transport, and housing would not only make up for the missing investment, but will also help to meet emissions targets to address the ecological crisis. Ecological sustainability requires a shift in the composition of aggregate demand towards long-term green investments; this cannot be achieved without new strategic tasks for active public investment.

Second, public investment should fill in the big gap in social infrastructure; i.e. in health, education, childcare, and elderly care, which cannot be provided adequately by private investment based on profit motive (Onaran, 2016). The need for social services is not met under the present circumstances, where they are provided either at very low wages (to ensure an adequate profit), or as a luxury service for the rich, or via invisible unpaid female labour within the gendered division of labour in the private sphere. To avoid this deficit they can be provided by the state or by non-profit/community organisations. Public investment and spending in social infrastructure would generate public employment in labour-intensive social services, and be a vehicle for generating full employment with lower rates of growth, a target more consistent with low carbon emissions. This could also hit another target of increasing female labour force participation rates via socialising the invisible and unpaid care work done by women. Ilkkaracan (2013) calls these purple jobs. However, these jobs need to be made attractive for all by improving pay and working conditions in these industries. Thus a new orientation towards high-skilled, decent service-sector jobs should be promoted instead of the current reliance on low-pay service jobs with weaker labour unions. These policies put gender equality in pay and employment at the heart of a wage-led development strategy.

Last but not least, a key policy measure to maintain full employment and a more equal income distribution is a substantial shortening of working time in parallel with the historical growth in productivity. Reduction in weekly working hours should take place without loss of wages, in particular, in the case of low and median wage earners, which implies an increase in hourly wages as well as the wage share. This is not an unrealistic target. Compared to the 19th Century, we are all working part-time today. But the shortening of working hours has slowed down since the 1980s, with the notable exception of France (Bosch and Lehndorff, 2001). More equal countries have shorter working hours (Schor, 2010). The shortening of hours over previous decades has also been associated with higher hourly productivity (Bosch and Lehndorff, 2001). Shorter working hours not only create more growth but also increase the job creation potential of a given rate of growth. The UK and the US have much longer working hours than Germany and the Netherlands (Schor, 2010). This means that an employer in the UK needs more demand than a German employer to create an additional job. This is again a way of combining full employment and low carbon emission targets.

5. Conclusion

There is strong empirical evidence for Europe and for the world economy overall that a fall in the wage share leads to lower growth; hence growth is wage-led and not profit-led. In a wage-led region like the EU as a whole, more egalitarian policies are consistent with growth. Globalisation is not in itself an impediment to a wage-led development strategy, as long as the neoliberal policies that have determined the process of globalisation since the 1980s can be replaced by policy coordination to bring wages in line with productivity increases. The need for coordination does not exclude the possibility to implement pro-labour policies in individual countries. However, the impact of these policies on growth and employment is stronger when they are coordinated across countries. This calls for Europe to play a leading role in coordinating policies both at the European and global level to reverse the fall in the wage share.

Policies aiming at reversing the fall in the wage share and the rise in inequality are particularly important for an economically and politically sustainable recovery after the Great Recession. However, wage policy alone is not a sufficient policy tool against recession; a strategy of wage-led growth requires a mix of policies aiming at pre-distribution and redistribution as well as macroeconomic policies and industrial policy for full employment and ecological sustainability.

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