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THE FUNCTIONAL INCOME DISTRIBUTION AND LABOUR MARKET INSTITUTIONS: THE MISSING LINKS IN THE AGENDA FOR INCLUSIVE GROWTH AFTER AUSTERITY

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Summary

In the period after the Great Recession and austerity politics, we have witnessed a growing interest among international economic institutions and in mainstream economics into the relationship between inequality and sustained economic growth. The term 'inclusive growth' has become widely used as a lever for economic change during and after the recovery from the Great Recession. However, there is still some unclarity on the contents, desired macroeconomic outcomes and policy recommendations that should establish the backbone of this approach. This paper contributes to the debate by providing an overview of viewpoints and expanding on a strategy for inclusive growth, building on research in the field of industrial relations and labour markets institutions. We argue that two elements are missing in the current programme: the functional distribution of income and the role of institutions.

1 Introduction: the definition and limitation of the inclusive growth concept

The concept of inclusive growth was developed in the 2000s, when the World Bank, first, and other international institutions (IMF, OECD, WEF) later, learned that contrary to the logic of Kuznets, growth does not reduce global inequalities. Also, it turned out that inequality may actually hinder economic growth in developing countries (Berg & Ostry, 2011).

As a consequence of the Great Recession and the policies developed by the OECD countries to tackle the crisis, after 2008 advanced countries experienced rising unemployment, an increase in fiscal cuts and the growth of low-paid jobs. In this context, work no longer assures a route out of poverty, economic inequalities grow, and the living conditions of large sections of the population are under pressure. From this point on, international organizations begin to use inclusive growth as an analytical framework to address the challenges of growth not only in emerging economies, but also in rich economies. The OECD defines inclusive growth as "economic growth that creates the opportunity for all segments of the population and distributes the dividends of increased prosperity both in monetary and non-monetary terms, fairly across society" (OECD, 2015).

The OECD approach relies on the assumption that globalization and technological change "have been a source of prosperity", but the benefits of these processes have been unevenly shared, producing high levels of inequality (OECD, 2017b). Hence the growth model *has failed* by not preventing the consequences of the crisis, the increase of inequalities and the unfulfilled expectations of well-being (OECD, 2017a). According to this view, the challenge now is to find the way to foster productivity and productive growth, in order to reduce inequalities and to create virtuous circles to put people wellbeing centre-stage.

Similarly, the World Economic Forum (WEF) considers that rich economies have entered in a period of *secular stagnation*, growing slowly as a consequence of accumulated debt, low productivity, inequality and changing demographics (WEF, 2017). Similar to the OECD, the WEF calls for a new policy agenda in which inclusion and sustainable growth are combined, turning the vicious cycle of stagnation and inequality into a virtuous one of social inclusion and sustainable growth (WEF, 2017).

Mainstream approaches to inclusive growth have focused on factors such as globalization, technological change and education gaps in order to explain the increase of inequalities (OECD, 2015; WEF, 2017). Specifically, the OECD focuses on the 'longstanding structural transformations' occurred during last decades: technological change and digitalization, financialization, competition failures, job polarization and the role of fiscal redistribution (OECD, 2017b). For the WEF, a combination of accelerated technological change, global integration, domestic deregulation and immigration explain major changes in labour markets, putting pressure on wages and labour standards (WEF, 2017). These accounts to a large extent neglect the role of institutions and institutional changes.

The concept of inclusive growth goes beyond income and per capita GDP, to include other elements related to well-being, such as jobs, skills and education, health status, environment, civic participation and social connections (OECD, 2015). This multidimensional view is also assumed by the WEF (2017). Its inclusive framework comprises seven dimensions ('pillars') that support inclusive growth, according to the literature (OECD, 2015; WEF, 2017): education and skills, basic services and infrastructure, corruption and rents, financial intermediation and real economy investment, asset building and entrepreneurship, employment and labour compensation, fiscal transfers. Inequalities are a source of concern for international organizations not only for the effect on social cohesion, but also for the potential impact on economic performance. Policies that increase income inequality may also lower economic growth (OECD, 2015). Inequality constrains the ability of low-income groups to contribute to economic growth, hindering their accumulation of human capital (underinvestment of human capital). This failure to put resources and skills into use weighs on productivity levels and reinforces inequalities (OECD, 2017b). Inequality has also put pressure on public and social budgets, constraining the governments' capacity to act and reducing trust in public institutions (OECD, 2017b).

In summary, inclusive growth has been presented by international organizations as a new approach on economic growth, changing the narrative, but still retaining many of the core elements of conventional economic policy. Consequently, the inclusive growth approach suffers today from some important limitations. First, despite the growing consensus on the need for a more socially-inclusive economic growth, there is no strategic framework to guide policy and practice. Second, the attempts that do have been made to develop a strategic framework to guide policy are limited and present important contradictions between theory and practice. Both the OECD and the WEF approaches on inclusive growth imply that many areas of policy-making have to be rethought, but the reasoning of these institutions stops halfway: 1) they recognize that fiscal policies are the key mechanism for redistribution, but they do not advocate for a fiscal (balanced) expansion that underpins welfare states; 2) it is recognised that capital tax rates have fallen in recent decades, but international harmonization in order to tax wealth and capital income is discarded in favour of traditional tax reforms (savings tax reforms, deductions for private pensions or mortgages); 3) welfare programs have to be 'redesigned' to target behaviour rather than income, following traditional labour supply recipes (obligations, benefits conditional to employment, etc.); 4) proposals concerning the labour market follow the well-known perspective of activation: activation should facilitate the economic transition to new sectors and new jobs, with changes on labour regulation and skills policies. Meanwhile unemployment protection is more strictly monitored and sanctioned; 5) finally, a radical departure from traditional contributory welfare policies is suggested, considering 'portable social protection' of universal basic income. There is at least the suspicion that many of these proposals will cause more issues than they solve.

On the side of labour demand, the economic perspective is largely unchanged: favourable conditions for business should be ensured, since 'businesses are uniquely placed to provide employment opportunities, to foster individual wellbeing at the workplace, to contribute to the development of skills and to disseminate technology'. Distinguishing old and new firms, there is a call for a revival of business dynamism, promoting

market competition, especially in services and international markets. This approach continues to rely on the belief that deregulation and competition create sufficient conditions for growth and a fair market where productive firms replace less successful firms. Hence changes in the regulatory framework should allow start-ups to enter in to markets to boost productivity growth[1]. The government should enable individuals to 'nourish' their opportunities, by redirecting welfare state provisions to the promotion of work incentives. Thirdly, these accounts neglect the nature of growth as well as the environmental context in which it is embedded. From late 1990s, there is an extensive literature analysing the limits of the current growth model, pointing out the necessity to incorporate negative externalities, such as the increasing need of finite resources (e.g. oil, drinkable water, etc.) to the significant deterioration of the environment (Raworth, 2017).

Finally, we will focus on the fourth limitation in the mainstream approach to inclusive growth: the relative absence of the distributional role played by industrial relations and labour market institutions. How can labour market and industrial relations institutions help to ensure inclusive growth? What design should a new income distribution model follow to be useful in that purpose? What kind of macroeconomic results can be expected from such a change in the income distribution model? The recommendations from this point of view are radically different from the neoclassical approach addressed in the second critique above. In the second section we discuss the two missing dimensions in the inclusive growth debate mentioned above: the functional income distribution and labour market institutions. In the third section we present the role that labour market institutions and collective bargaining may play in achieving inclusive growth. In the last section we analyse the possible outcomes of a new macroeconomic agenda based on a change in functional income distribution and present the economic policy implications derived from our analysis.

2 The missing links in the inclusive growth debate

The debate on inclusive growth has highlighted an important socio-economic reality: GDP growth is not enough to improve the living conditions of a large part of the population. As mentioned, other factors have been brought into the equation: education and skills, quality of employment and labour compensation, fiscal transfers, services and infrastructure, financial systems inclusion, corruption, and home and financial asset ownership. However, two factors are still underexposed in the debate: the functional distribution of income and the role of labour market institutions and collective bargaining. Both dimensions are intimately linked, and quintessential to a true inclusive growth strategy.

The value of labour market institutions lies in their capacity to objectivize the market distribution or pre-distribution of income based on economic determinants, rather than the net distribution or redistribution through taxation and transfers, based on social determinants. The former has unions and employers' federations as the main agents, acting on a platform for industrial relations. The latter has individuals, enterprises and the government as the main units, which introduces issues of market power and public choice.

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[1] "Young and small firms would benefit from a "better" regulatory framework. "There is a scope to boost labour productivity in regulatory frameworks".

2.1 Trends in inequalities and the functional income distribution

Contrary to the Great Depression of 1929, the Great Recession of 2008 did not immediately introduce an intellectual paradigm shift or a call for new economic policies. In most OECD countries, the key aspects of economic policy in the 1990s and 2000s have remained essentially unchanged: financial liberalization and full capital mobility in a context of flexible exchange rates, rigid control over fiscal budgets with the priority of reducing public deficits, deregulation of labour markets and strong pressure on labour costs as the main macroeconomic adjustment variable. This is often referred to as the 'low-road' strategy of economic development, accepting deteriorating working standards in order to increase output while keeping government expenditure low.

In the Eurozone, the Great Recession was explained as the consequence of some countries living "beyond their means", with heavy private indebtedness and significant external imbalances. This led the European Commission to impose austerity policies including constraints in public spending and public investment, and wage cutbacks to enable internal devaluation as a way to improve competitiveness and export-led growth. The European Commission and the international organizations presented this strategy as a shock therapy to enable a rapid recovery of GDP and employment, but by interpreting weak and unequal demand as the solution for the crisis and not as the cause, obtained poor results. Annual growth in the EU27 as a whole has been 0.6% for the period 2008-2016 and 1.1% during the second half of the period, from 2012 to 2016, once this strategy was fully implemented (0.3% and 0.8% respectively for the Eurozone). Seven million jobs were lost during the crisis and almost a decade later, the pre-crisis levels of employment have not yet recovered in peripheral countries that were most affected by the crisis. In 2016, 21 million Europeans were unemployed, compared to 17 million in 2007. Wages have stagnated, and there has been a significant loss of purchasing power in peripheral countries and increasing income inequality overall. At the same time, corporate investment remains below the pre-2007 levels: gross fixed capital formation in the Eurozone today is 6% lower than it was in 2007.

As Figures 1 and 2 show, the tendency of the wage share to fall –one of the most noteworthy characteristics of income distribution since the 1980s– was accelerated in those countries that were most affected by austerity policies.

Figure 1: Adjusted wage share in EU27 and peripheral countries, 1960-2016 (% GDP)
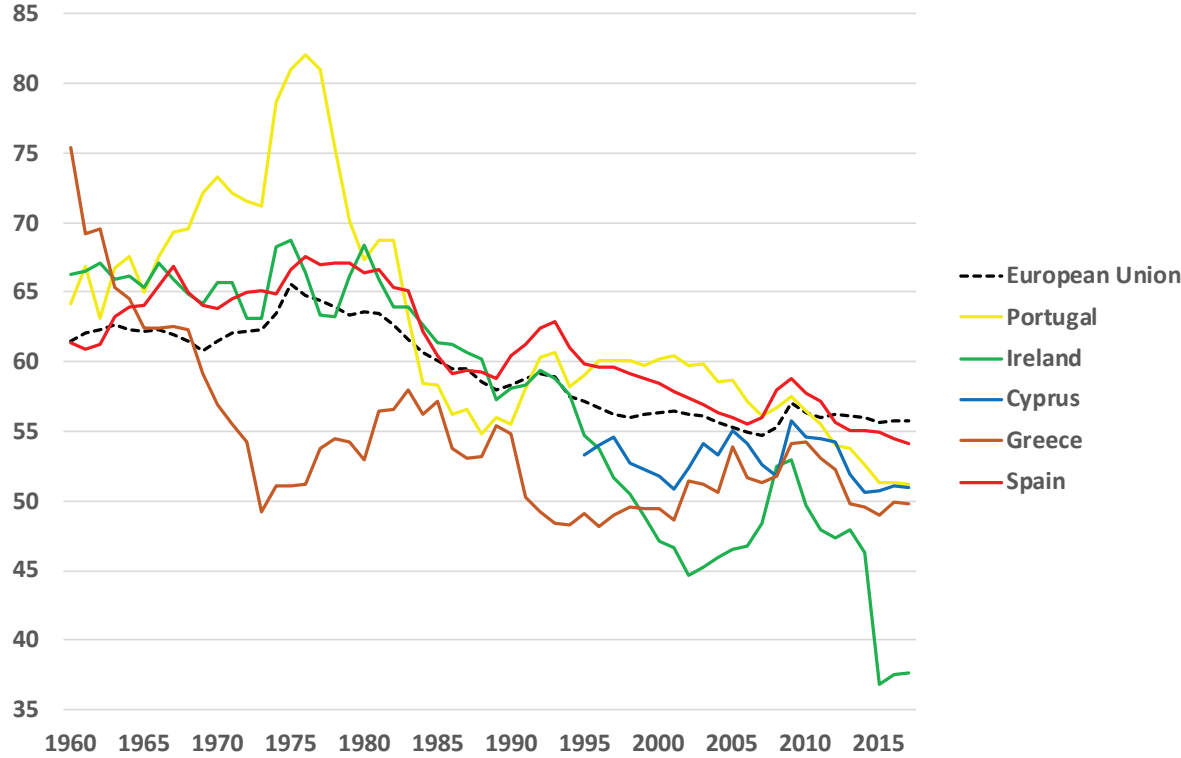
Source: AMECO

Figure 2: Adjusted wage share in EU27 and peripheral countries (2007=100)
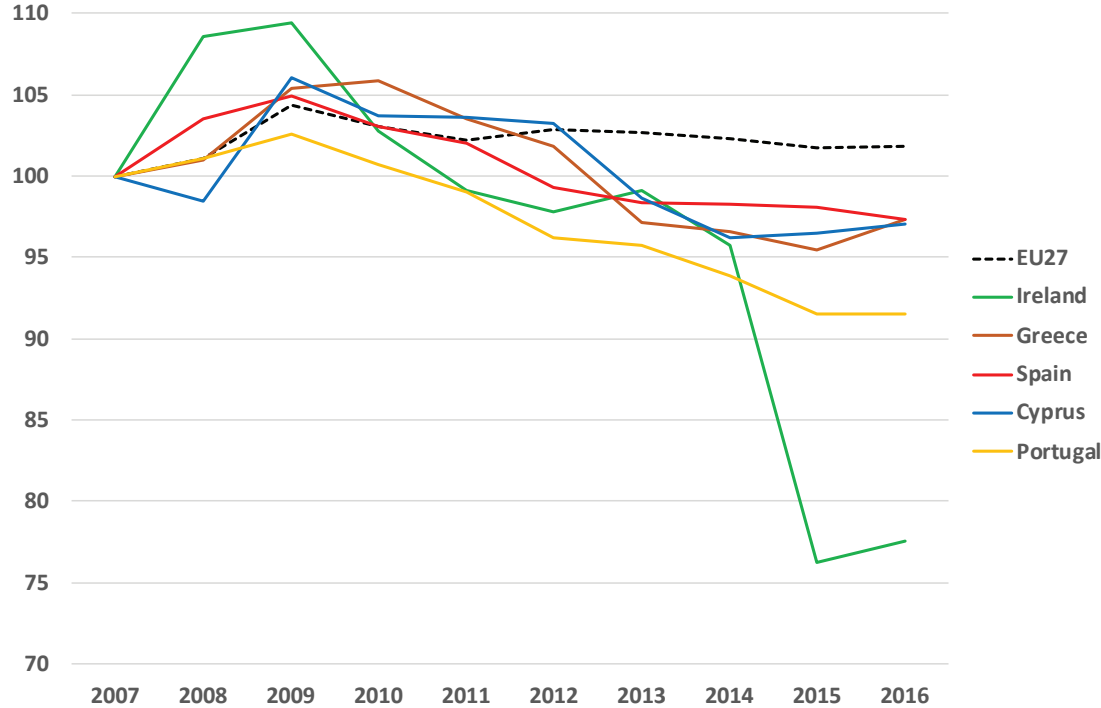
Source: Own calculations with AMECO

Growth after the crisis has been weak and was certainly unequal. These findings call for an analysis of the fundamentals of the distributive model related to the functional income distribution. Given that the majority of the population in the EU receives its income from wages, a change in the distributive model should have

as a priority to stop or partially reverse the falling trend experienced by the wage share during the last decades. The wage share has significantly deteriorated since the 1980s in the large majority of OECD countries and industries. There is a large literature explaining how the increase in income inequality experienced by developed countries over the last few decades are connected to this declining tendency of the wage share (Jacobson and Occhino, 2012; Piketty 2014; OECD and ILO 2015).

Empirical evidence shows that a higher capital share is associated with higher inequality in the personal distribution of income in EU27 countries, since capital is more concentrated than labour endowments (Piketty 2014; OECD and ILO, 2015). That is to say, since labour income is more uniformly distributed across households than capital income, the decline in the wage share concentrates total income at the top of the distribution. According to Jacobson and Occhino (2012) the decline in the labour share from 1979 to 2007 raised the Gini index by 2.3 percentage points, for the case of the US economy. As we can see in Figure 3, this inverse relationship also occurs for the rest of the advanced OECD economies: the wage share decline progresses hand-in-hand with the increase of market income inequalities.

Figure 3: Changes in the wage share and in income inequality in advances OECD economies, 1960-2014.

$$y = -0.38x + 50.312$$
$$R^2 = 0.1285$$
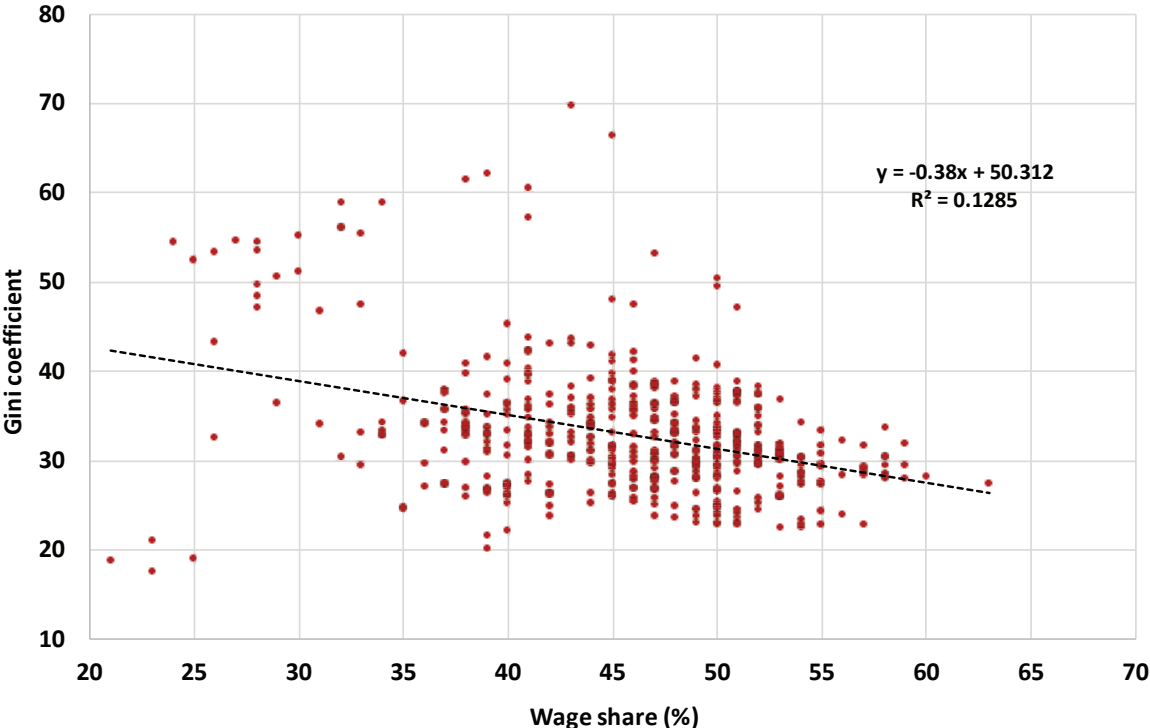
Source: Own elaboration with IMF data

Moreover, some studies indicate that the fall in the wage share hides very different effects depending on the diverse levels of wage remuneration. According to various estimates (OECD, 2012; Piketty 2014), the fall in the wage share is more pronounced if the richest 1% of the population is not considered. The increase in labour income that has occurred among the top incomes entails that, when we look at the aggregate data, the global fall of the wage share is somewhat blurred. In particular, the OECD (2012) points out how in advanced and EU economies the wage share has fallen during the last two decades for the 99 per cent of income earners, while increasing by 20 per cent for the top income population (1% per cent).

2.2 Inclusive growth through collective bargaining

In recent years, the literature has explained inequalities mainly as the result of globalization, technological change and educational differences (Acemoglu & Autor, 2011; IMF, 2007; Juhn, Murphy, & Pierce, 1993; Levy & Murnane, 1992). However, there is a re-emerging strand of research that highlights the role that labour market institutions play, not only in relation to economic growth, but also in relation to economic inequality and income distribution (DiNardo, Fortin, & Lemieux, 1996; Goos, Manning, & Salomons, 2011). Since labour market institutions influence economic inequalities, they should be considered as one factor to achieve of inclusive growth.

Labour market institutions –and particularly collective bargaining– are placed where the distribution of productivity gains takes place, and they can be therefore an important lever to achieve a new model of income distribution (Figure 4).

Figure 4: The role of labour market institutions in inclusive growth
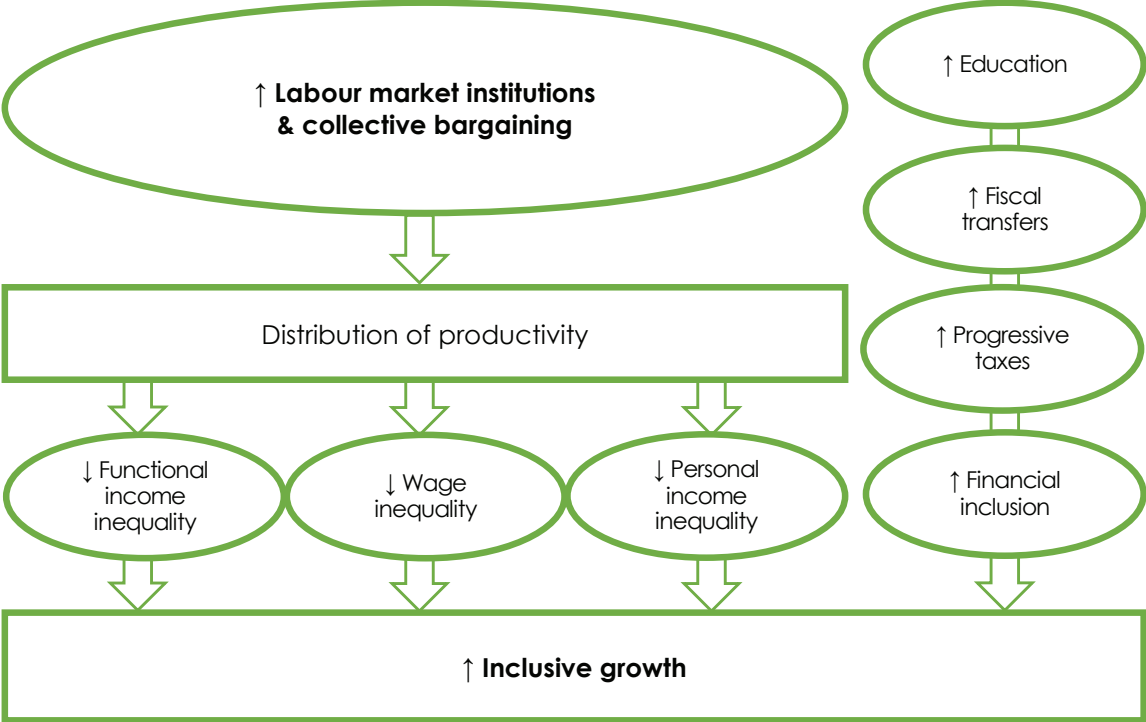
The decoupling between productivity growth and real compensation of employees has attracted the recent attention for the case of the US economy (Bivens and Mishel, 2015; Stansbury and Summers, 2017). But also in Europe there is a growing concern about this phenomenon (Pasimeni, 2018), as it helps to explain the missing 'trickle down' effect observed in past decades. According to these investigations, wage growth continues to maintain a relevant link with the evolution of productivity, but this link has become increasingly weak: not all gains in productivity are currently transferred to wages.

As we can see in Figure 5, since 1980s, the gap between productivity and wages has become important in the EU, and today productivity gains are unequally captured by capital and labour. A falling wage share reflects an increase in returns to capital relative to labour, due to a more rapid growth in labour productivity than in typical worker's compensation.

Figure 5: Disconnection between productivity and real compensation per employee, EU15, 1960-2016
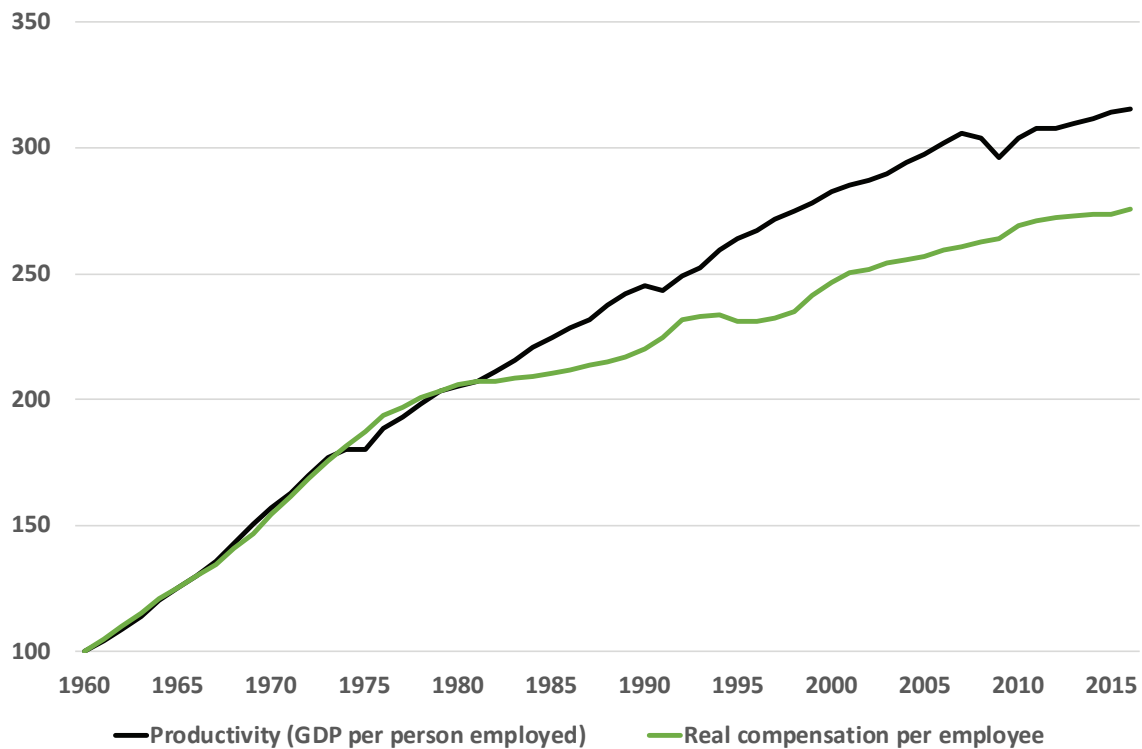
Source: AMECO

One of the reasons that explain this growing decoupling between productivity and wages is given by the new structural conditions of the labour markets. The fall of the wage share shows the uneven bargaining power among different social groups to capture increases in productivity. This is consistent with the profound changes that labour market institutions have experienced during the last decades: in OECD countries, on average, about 17% of employees were members of a trade union in 2015, compared to 30% in 1985. Furthermore, the *coverage rate* of collective agreements has fallen from 45% of employees in mid 80s to 33% in 2015 (OECD, 2017c). Although differences between countries are important, changes in the EU have been similar. In particular, higher unemployment –used as a proxy variable for a reduced bargaining power of workers– is found to be an important determinant of the productivity-wage gap (Pasimeni, 2018).

Another structural trend in EU labour markets –beyond technological and organizational changes, and globalization– that may have affected the bargaining power of workers has to do with the tendency towards *decentralization* in collective bargaining. Since this trend widens the differences in collective bargaining and shifts the dispute over productivity gains to the firm level, where workers generally have less bargaining power, it may have led to an expansion of the productivity-wage gap. In recent years, this trend has been reinforced by various labour market reforms in the EU, with the objective to deepen this decentralization in collective bargaining through the termination of national-level agreements, the extension of the scope for workplace deviation from industry-level agreements, a greater difficulty for the extension of agreements and the dismantlement of the union monopoly over negotiations (Schulten and Muller, 2013; Keune 2015).

This decoupling between productivity and wages has important macroeconomic implications, since it can be associated with a tendency to weak aggregate demand and 'secular stagnation' (Summers, 2016; Pasimeni, 2018). The implication for economic policy that must be taken into account is that, in order to guarantee inclusive growth, it is not enough to develop policies that boost productivity. To date, structural reforms

have been understood exclusively as those supply-side reforms aimed at boosting economic efficiency through sharpening market incentives. On many occasions, these reforms do not achieve their objectives and they usually entail important costs for workers. It is therefore necessary to rethink these structural reforms and move forward with a new concept that integrates demand and supply-side measures for the purpose of improving living conditions. One way to advance in this objective can be to strengthen institutions and, in particular, the reinforcement of labour market institutions. Rebalancing the institutional capacity of different social groups to capture productivity increases, i.e. re-establishing a more balanced bargaining power in collective bargaining, can be an instrument to address the problem of inequality and non-inclusive growth. Likewise, it is also necessary to promote policies that raise the level of aggregate demand and seek full employment.

3 The role of labour market institutions and collective bargaining in achieving inclusive growth

The economic literature that has traditionally tried to link the different models of collective bargaining with macroeconomic results (Calmfors and Driffil, 1988; Flanagan, 1999; Aidt and Tzannatos, 2008) has usually faced difficulties to reach conclusive and generalizable results at the *international* level. It is possible to observe diverse macroeconomic outcomes emerging from different national collective bargaining systems and, therefore, causal relationships are not straightforward. On the other hand, the link between the different labour market institutions and economic inequality is more established in the literature. The inclusive growth agenda looks for a high road strategy that builds on the evidence thus far.

3.1 Inequality, wages and labour market institutions: diverging views

In their influential book *The Spirit Level*, Wilkinson and Pickett (2009) point to the key role of work and the labour market in creating inequality: "It is there that value is created and divided between the various gradations of employees. It is there that the inequities which necessitate redistribution are set up (Wilkinson and Pickett 2009: 249-250)." They argue that these inequities have increased with declining union membership and bargaining power of trade unions. Similarly, Tony Atkinson (2015) underlined the importance of the capital and labour markets in causing inequality. He identified trade union strength and collective bargaining coverage among the key explanatory factors for inequality and argues that their decline in recent decades is part of the explanation of why inequality has increased.

Post-Keynesian authors and institutional economists have also given importance to factors other than technological change, globalization, and education gaps when explaining inequalities and the fall of the wage share, focusing also on labour market institutions as well as financialization[2]. Presumably, greater bargaining power of workers will lead to an increase in wages and to an increase in the wage share if the demand for labour is relatively inelastic. Recent empirical research uses different proxy variables related to labour market institutions in order to approximate the bargaining power of workers (employment protection legislation, unemployment benefits, strike activity, bargaining coverage or union density). In doing so, Hein (2009) finds that labour market institutions (measured as union density) is a significant key variable, more important than

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[2] The financialization process has resulted in more power for company ownership, allowing financial investors to impose higher dividend payments. This shareholder value orientation came at the expense of the wage share, since rentier income has structurally reduced the rate of investment, job creation and wage growth (Dünhaup, 2013).

technological change or globalization. Union density has a positive effect on the evolution of the wage share, reflecting the changes in the bargaining power between capital and labour during the last decades. Also, Finnof and Jayadev (2006), Fichtenbaum (2009), and Kristal (2010) report a significant positive effect of labour market institutions –particularly union density– on the bargaining power of unions and on the wage share[3].

Quite unexpectedly, in recent years, these findings were supported in a number of studies from the IMF and the OECD. Both organisations have become increasingly interested in inequality issues and have abandoned their view of the past partly. They used to see inequality simply as an almost unavoidable outcome of globalization, technological change, and educational differences, where the benefits of productivity and international trade are captured by capital, and where high-skilled workers are favoured over low-skilled workers. Often in very explicit terms, labour market institutions in general, and unions and collective bargaining in particular, were seen as simply market disturbing. In an early IMF paper that diverged from this view, Berg and Ostry (2011) show that longer economic growth spells are robustly associated with more equality in the income distribution, highlighting the destructive effects of inequality on sustainable growth. Next, their colleagues Jaumotte and Osorio Buitron (2015) zoom in on the relationships between inequality and labour market institutions. They find that de-unionisation leads to more inequality because it is strongly associated with a rise of top incomes. It weakens the bargaining power of unions and their influence on corporate decisions, limits their influence on public policy, and reduces the weight of equality-oriented social values. The decline in union density explains 40% of the average increase in the top 10% of income share in their sample countries. Interestingly, this effect could be partly offset when collective bargaining coverage is guaranteed by *extension* agreements, pointing to the importance of this mechanisms to control the increase of inequalities. Yet they argue that the effects are not the same in all countries, arguing that in southern Europe strong unions have resulted in more instead of less inequality as a result of union power causing higher unemployment and a loss of competitiveness.

Some OECD publications point in the same direction. A major OECD report (OECD 2011) argues that declining union power, lower bargaining coverage and bargaining decentralization all lead to greater wage inequality. Here, the relationship with income inequality is less clear. Another study by Denk (2015) points to the negative correlation between the labour share income of the top 1% and the coverage of collective bargaining. Where larger parts of the workforce are covered by collective agreements, inequality is lower as the top earners are to a lesser extent allowed to increase their work-based income.

The IMF devoted a chapter of the Work Economic Outlook of April 2017 to this issue. It found, again, that the fall of the wage share in advanced economies during the last decades is quite solidly linked to rises in income inequality. Furthermore, an IMF paper by Abdih and Danninger (2017), using disaggregated data across both state and industry for the US economy, finds that the fall in unionization (highly statistically significant) contributed to explain around 20% of the fall in the wage share. Hence, an extensive body of literature dealing with the negative social and economic consequences of inequality, underlines the role of industrial relations factors in shaping growth and (in)equality. Their positions imply that high collective bargaining coverage and strong trade unions are positively associated with equality, social cohesion and sustainable economic growth.

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[3] Trade union density is a variable that can however skew the results, underestimating the bargaining power of workers (union density is very low in some countries where collective bargaining extension mechanisms reach a much higher percentage of workers). If instead of considering union density, as most of these studies do, we consider the coverage of collective bargaining we can better capture the relationship between labour market institutions and wage share.

Paradoxically, since 2008 the EU, the ECB, the IMF (not in its research but in its policy making capacity) and a number of national governments have taken the exact opposite position. Most noteworthy here is the position of the EU during the crisis. Before, it was a supporter of social dialogue and autonomous collective bargaining. It repeatedly stressed their contribution to democracy, good governance, economic efficiency, innovation and social cohesion (European Commission 2002, 2004). In this way, it aimed to strengthen the social side of European integration. However, since the start of the crisis, Keune (2015: 447; also Serrano Pascual et al. 2017) writes: "… the position of the EU has changed dramatically. Its traditional discourse is increasingly being trumped by a counter-discourse originating largely in DG Economic and Financial Affairs, as well as in the European Central Bank (ECB). It pictures collective labour relations, and in particular trade unions, as obstacles to market coordination and hence to economic and employment growth. As argued in, for example, DG Economic and Financial Affair's 2012 Labour Market Developments Report (European Commission 2012: 104), the coverage of collective agreements should be decreased, collective bargaining should be decentralised, minimum wages should be reduced, and the wage-setting power of trade unions should be diminished."

This change of heart was expressed, among others, in the 2011 Euro Plus Pact, signed by the heads of state of the euro countries and six other EU member states. This Pact proposed a series of measures to strengthen competitiveness, increase employment and foster financial stability, including abandoning wage indexation mechanisms, wage moderation in the public sector, and decentralisation of collective bargaining. Also, the EU countries that requested financial support from the so-called Troika (the EU, the ECB and the International Monetary Fund) have had to make serious changes in their industrial relations systems. Countries like Greece, Portugal, Ireland and Spain have had to introduce harsh reforms aimed at decentralisation and lower coverage of collective bargaining, reduction of minimum wages and/or lower union influence. These reforms allow company-level agreements to deviate downwards from multi-employer (often sectoral) agreements and have already resulted in a dramatic decline in the number of workers falling under collective agreements in these countries (Keune 2015). In this way, the changing EU position undermines the autonomy and power of employers' federations and trade unions, and stimulates decentralisation of collective bargaining, actively undermining collective bargaining in general, and multi-employer bargaining in particular. By doing so, it fosters increasing inequality and the destruction of governance mechanisms that had proven their worth before and during the crisis (Keune 2015). It was joined in this quest by the ECB, and also the IMF.

The above accounts as well for a number of national governments. The governments of the Troika countries, like Greece, Portugal, Ireland or Spain, negotiate their agreements with the Troika. Although they are in a weak bargaining position, they have accepted and executed the Troika demands. Also, a number of other, non-Troika, countries, including France, Lithuania and Hungary, have in recent years introduced reforms that weaken collective bargaining and the position of trade unions in bargaining processes (Visser 2016).

3.2   Inequality, wages and labour market institutions: empirical analysis

In this paragraph, we will discuss in what way certain labour market institutions (e.g. coverage, unionization) are associated with wage inequality within the population of workers, with income inequality, and with the functional distribution of income between capital and labour. We will focus on the EU27, as data for Croatia were not available across the board.

With regard to wage inequality, Figure 6 shows a strong negative correlation ($r = -.772$) between the coverage of collective agreements and wage inequality as measured by the mean wage of the ninth decile as a proportion of the mean wage of the first decile. Where the coverage of collective agreement is high, wage

inequality is low, and vice versa. Figure 7 shows another strong correlation (r = -.823) between the coverage of collective bargaining and the percentage of workers with a low wage (below two-thirds of the mean wage). Again, where the coverage of collective agreements is high, the percentage of workers on a low wage is low and vice versa. Collective bargaining sets limits to wage dispersion by preventing both very low and very high wages (Visser and Checchi 2009), a mechanism that from a macro perspective is stronger the higher the coverage of collective agreements is. Here it is of importance how many sectors and companies are covered by collective agreements, and to what extent all categories of workers, and in particular managerial categories, are covered.

Similarly, trade union density has a fairly strong negative association with wage inequality (Figure 8, r = -.614) and with the percentage of workers with a low wage (Figure 9, -.701). Higher union density means more union power, which is associated with stricter limits on the growth of wages in the top of the distribution, as well as with limits on the use of low wages. The correlations of union density with wage inequality and low wage are lower than those of the coverage of collective bargaining however, suggesting that the latter matters more in reducing wage inequality than the former.

Through their association with wage inequality, collective bargaining coverage and trade union density also show clear negative associations with income inequality (Figures 10 and 11). Since income inequality is determined by many other factors than wages (e.g. household composition, other types of income, etc.), these associations are weaker than the ones above. Nevertheless, there is a clear relation between income inequality (GINI) and wage inequality (r=0.719) and between income inequality and the incidence of low wages (r=0.518) in the EU27.

Further, the coverage of collective bargaining is positively associated with the wage share, i.e. with the share of total income that goes to labour instead of capital (Figure 12). In countries where coverage is comparatively high, the wage share is comparatively high as well and vice versa. This suggests that widespread collective bargaining helps to capture a greater share of total income for workers and that collective agreements are an important resource in this respect. This is much less the case for trade union density. There is only a weak (although positive) association between trade union density and the wage share (Figure 13). This suggests that union are most successful in claiming a larger share of income when they are able to cover a large share of the labour market with collective agreements, through their own strength, or assisted by extensions or customs. Good examples here are France and the Netherlands, whose wage shares, (resp. 58.6% and 59.5%) are substantially above the average for the EU27 (52.3%) but with union densities (resp. 7.7% and 18.0%) substantially below the average union density of 27.8%. They do have high collective bargaining coverage (resp. 98.0% and 84.8%), far above the EU27 average of 55.2%, following from the extension of most sector agreements by the government and from their long bargaining traditions.

We should, however, be careful with the interpretation of cross-sectional data. It is not necessarily the case that over time change in of the two variables leads to comparable change in the other. For example, when we compare the evolution of collective bargaining coverage and the wage share in Germany and the Netherlands, we see that between 1992 and 2016, collective bargaining coverage decline steeply in Germany and remained relatively stable in the Netherlands (Figure 14). The change over time of the wage share in the two countries, however, has been fairly similar and the Dutch wage share has remained slightly above the German one in the whole period, with the difference between the two hoovering between minimum 0,7 and maximum 4.1.

Figure 6: Collective bargaining coverage (% employees) and wage inequality (9th decile as proportion of 1st decile), EU 27, 2014.
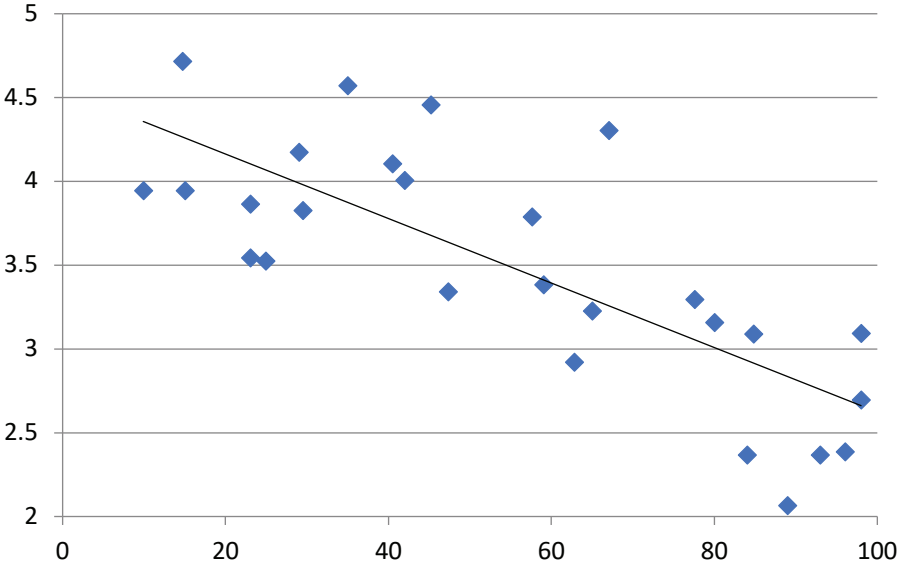
Sources: Eurostat and ICTWSS.

Figure 7: Collective bargaining coverage (% employees) and percentage workers with low wage, EU 27, 2014.
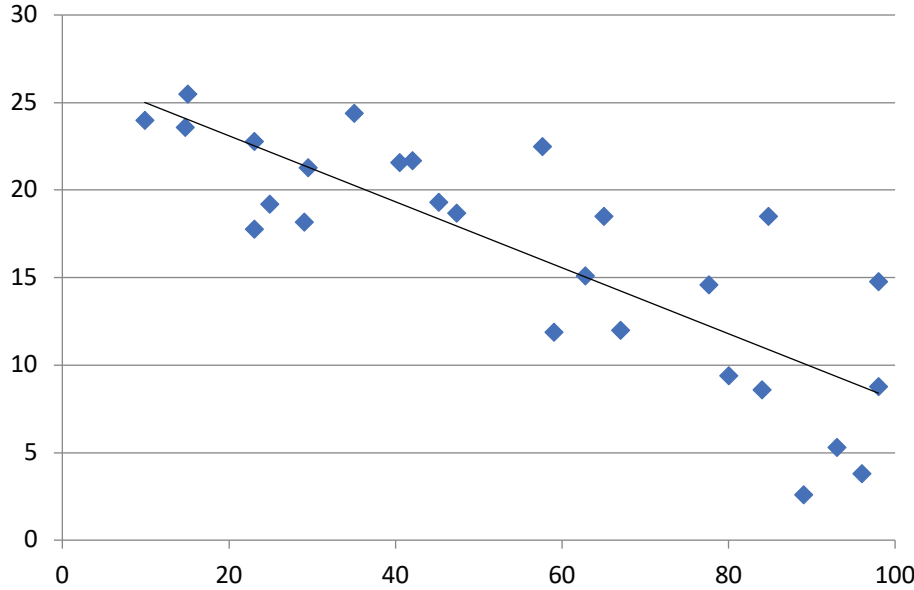
Note: low wage means below two-thirds of the mean wage.

Sources: Eurostat and ICTWSS

Figure 8: Union density and wage inequality (9th decile as proportion of 1st decile), EU 27, 2014
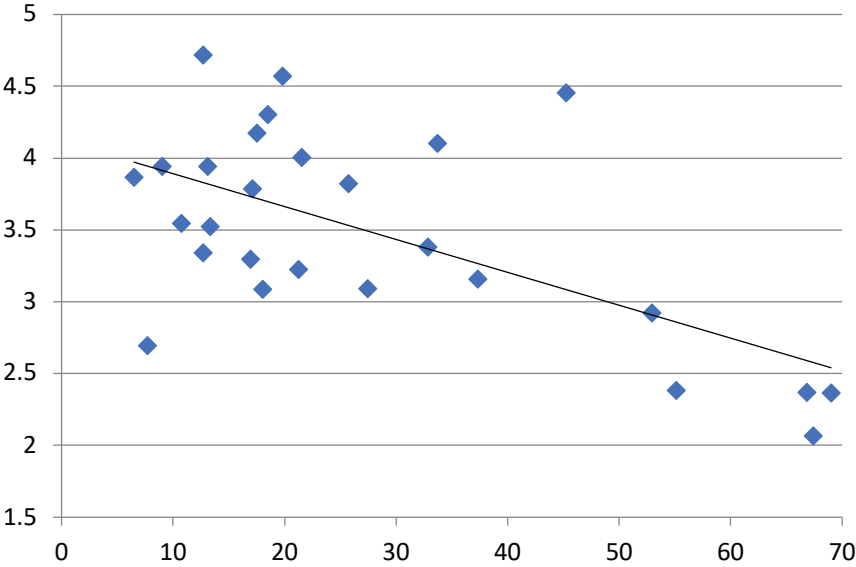
Sources: Eurostat and ICTWSS

Figure 9: Trade union density and percentage workers with low wage, EU 27, 2014.
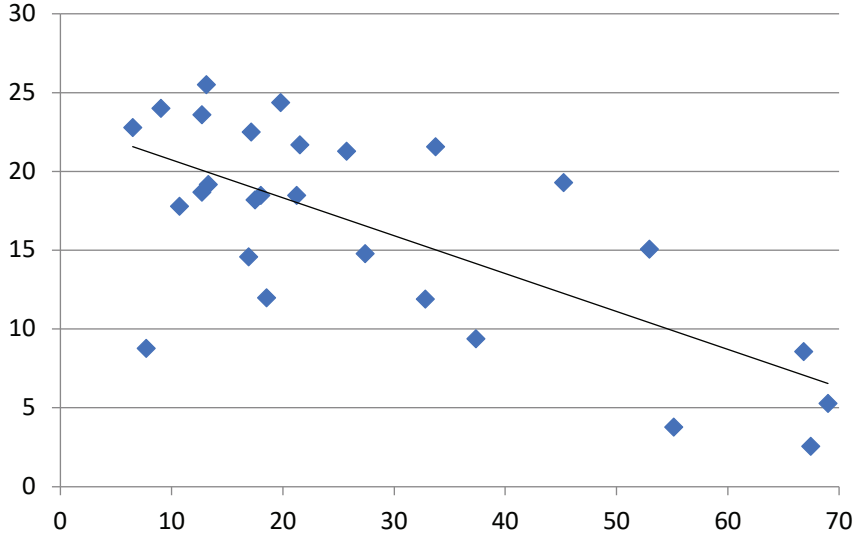
Sources: Eurostat and ICTWSS

Figure 10: Coverage of collective bargaining and income inequality (GINI), EU27, 2014.
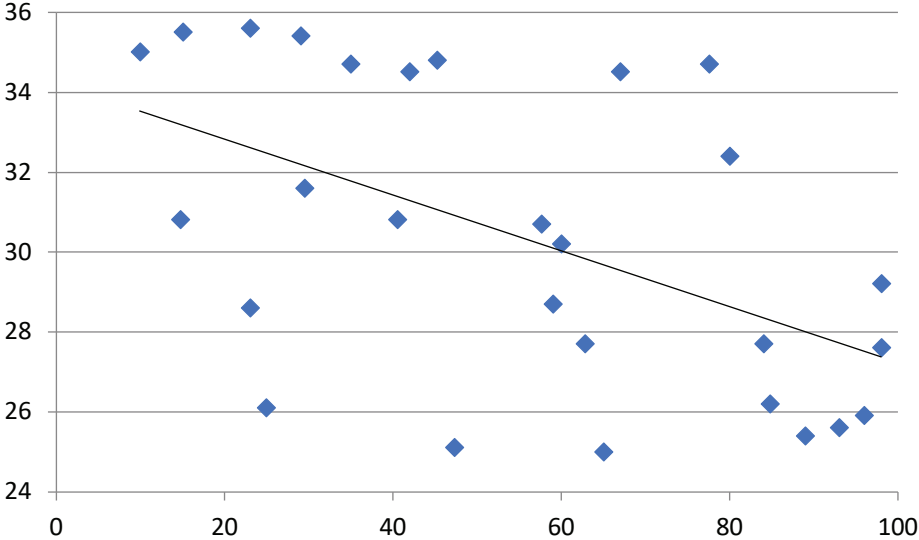
Sources: Eurostat and ICTWSS

Figure 11: Union density and income inequality (GINI), EU27, 2014.
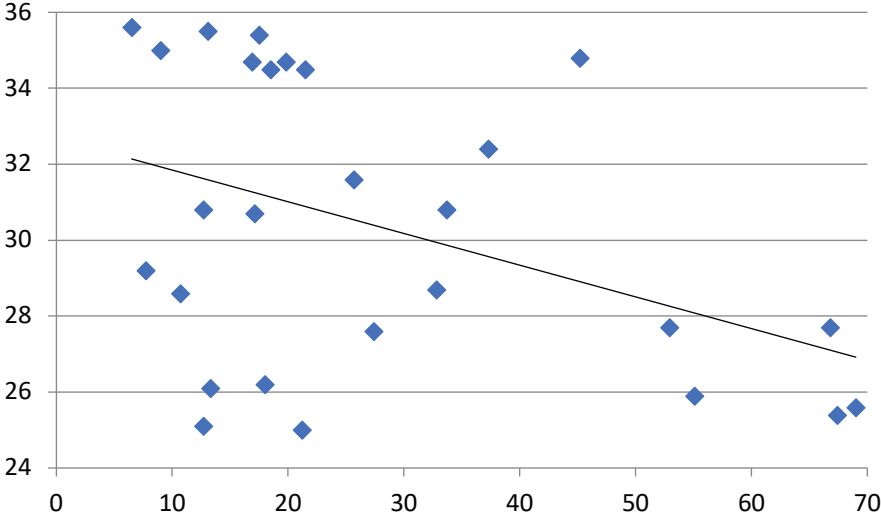
Sources: Eurostat and ICTWSS

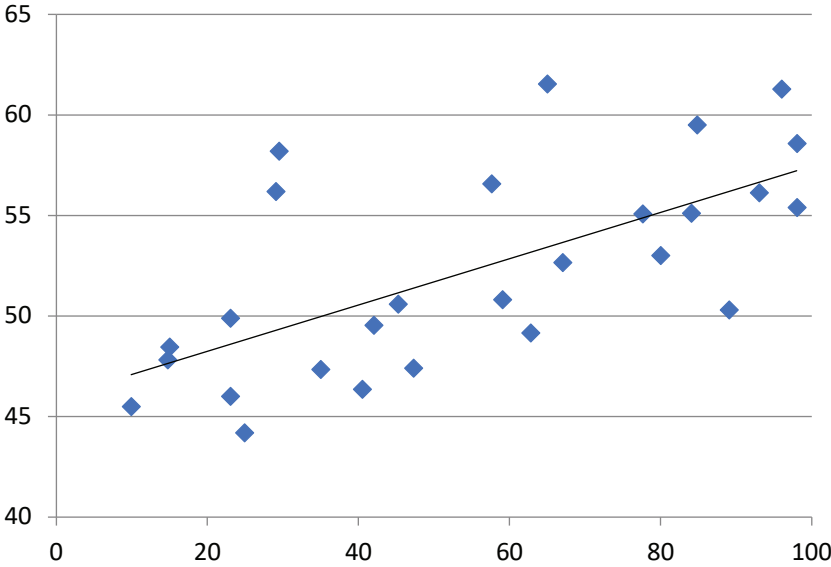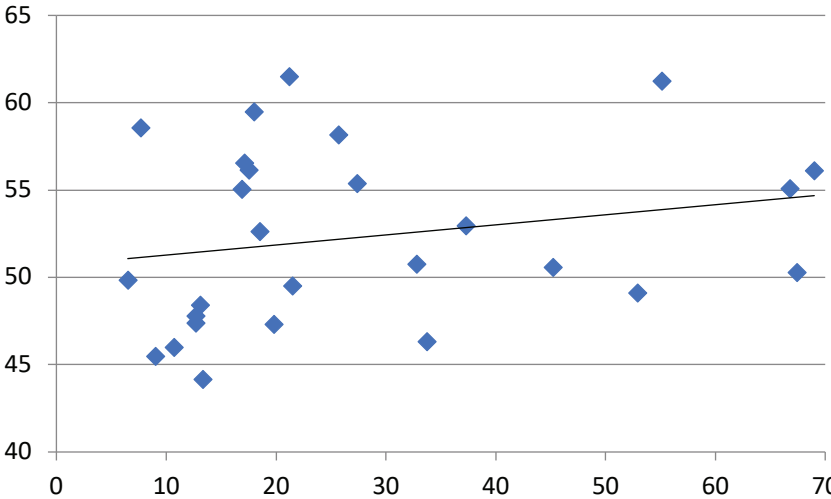**Figure 12: Collective bargaining coverage and adjusted wage share, EU27, 2014.**
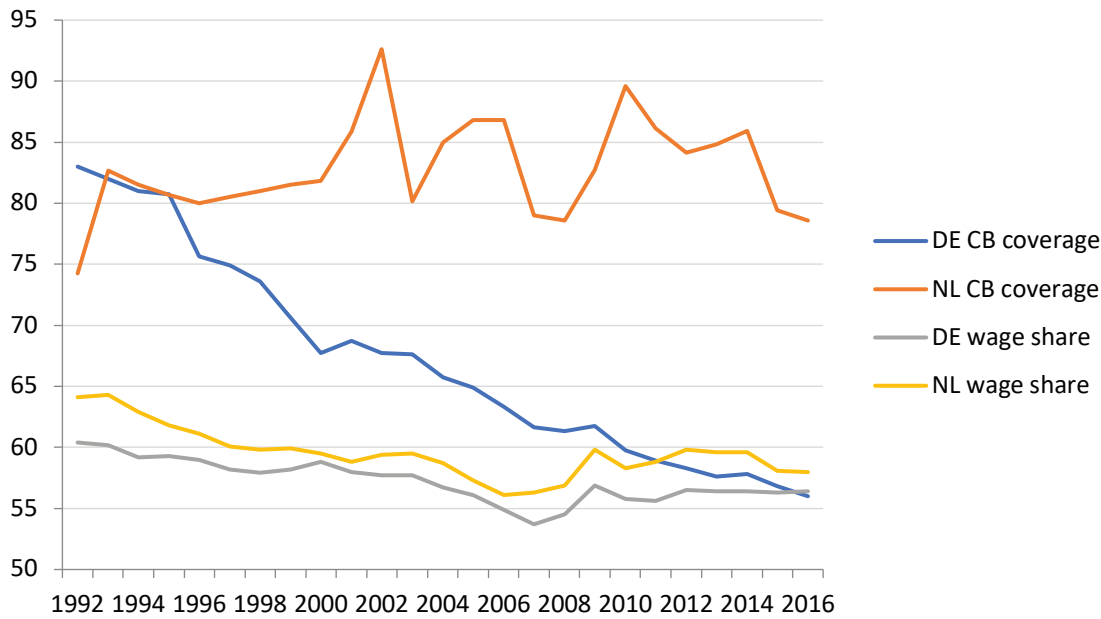

Sources: AMECO and ICTWSS

Figure 13: Trade union density and adjusted wage share, EU27, 2014.

Sources: AMECO and ICTWSS

Figure 14: Collective bargaining coverage and the wage share, Germany and the Netherlands, 1992-2016

Sources: AMECO, ICTWSS, OECD

4 The income distribution paving the way for a high-road strategy of inclusive growth

To what extent could a change in the pattern of income distribution activate a 'high-road' strategy of inclusive growth? Our position is that the key factor to following the 'high-road' towards inclusive growth is the reversal of the trend of a falling wage share. This would have four immediate results: (1) a significant reduction of economic inequalities; (2) a strengthening of job creation; (3) a sustained increase in productivity and a reinforcement of non-price determinants of competitiveness; and (4) greater financial and external stability. In this section we develop this argument.

4.1 The relationship with economic growth

In addition to affecting the personal distribution of income, a fall in the wage share also influences macroeconomic dynamics. This is due to the double dimension of wages in economics: wages represent a cost to corporations but, for households, wages are a significant determinant of private consumption and therefore of private investment as well.

Bhaduri and Marglin (1990) analysed the effects of changes in functional income distribution on consumption, investment and economic growth. They study the contradictory impact of a distributive change on the various components of aggregate demand, as well as the net effects on economic growth. Given an increase in the wage share, consumption will rise as the propensity to consume out of wages is higher than the propensity to consume out of profits. This increase in the wage share will have also contradictory effects on investment (with a negative effect due to increased costs, and a positive impact due to the accelerator effect of demand). Finally, net exports might fall if the increase in the wage share comes

with a loss of price competitiveness. On the other hand, an increase in the profit share will lead to lower consumption expenditure and a higher volume of net exports, as well as simultaneous opposite effects on the demand for investment (Figure 15). Depending on the final effect of a change in income distribution on aggregate demand, economies can be labelled as wage-led or profit-led.

The net effect of an increase in the wage share will depend on the elasticity of consumption, investment and net exports to a change in wages, profits, labour costs and prices. Specifically, the net effect will depend on whether the elasticity of investment vis-à-vis profits, and net exports elasticity vis-à-vis changes in relative prices, are large enough to offset the expansionary effect on consumption. The final effect of a change in functional income distribution on aggregate demand is therefore undetermined and depends on the specific characteristics of each economy. Whether an economy is wage led or profit led is thus an empirical issue. Depending on the regime, different policy implications can be drawn to take into account when authorities seek to support a sufficient level of aggregate demand.

Figure 15. The Bhaduri-Marglin model: wages are cost for corporations but also contribute to aggregate demand
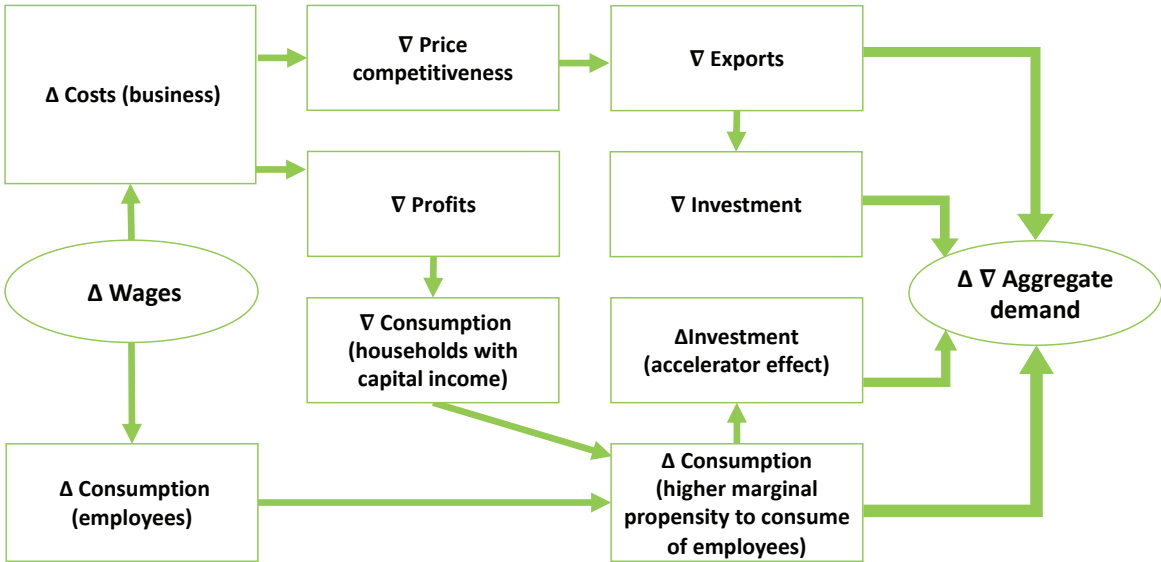
The Bhaduri-Marglin model has become widely used, resulting in abundant empirical literature aimed at determining the macroeconomic consequences of redistribution towards profits or wages. Notable surveys of the empirical studies carried out in the literature can be found in Hein and Vogel (2008), Onaran *et al.* (2011), Onaran and Galanis (2012), Lavoie and Stockhammer (2013), Stockhammer and Onaran (2012), Stockhammer (2015) and Blecker (2016).

Most of this literature, both for individual and for country-group studies, concludes that aggregate demand is mainly wage-led for advanced economies: Naastepad and Storm (2006) for Germany, France, Italy, the UK and the Netherlands; Hein and Vogel (2008) for Germany, France, the UK, the US; Stockhammer et al. (2011) for Germany; Ederer and Stockhammer (2007) for France; Álvarez *et al.* (2017) for Spain; Stockhammer and Stehrer (2011) for Germany, France, the US, Japan, Canada, Australia; Stockhammer *et al.* (2009) for the Eurozone; Onaran and Galanis (2012) for the main OECD economies. Moreover, even small open economies that may be profit-led in a single country analysis become wage-led when considered in external interaction with other trading partners, since, for instance, OECD or Eurozone countries have strong trade links with one another (Onaran and Galanis 2012; Onaran and Obst, 2016; Onaran and Stockhammer, 2016).

As we can see in Figure 16, which illustrates empirical estimations of Onaran and Obst (2016), the net effect of a 1 percentage-point increase in the profit share is mostly recessive in the Eurozone. The possible positive effect that a pro-capital distribution might have in some cases on the net export balance, or on investment (when considered isolated), is finally outweighed by the negative effect it has on private consumption and, via the accelerator effect, on final investment (when we consider all the simultaneous effects on the various components of aggregate demand).

Figure 16: The effect of a 1 percentage-point increase in the profit share on % change in consumption (C/Y), investment (I/Y), exports (X/Y) and imports (M/Y) on aggregate demand
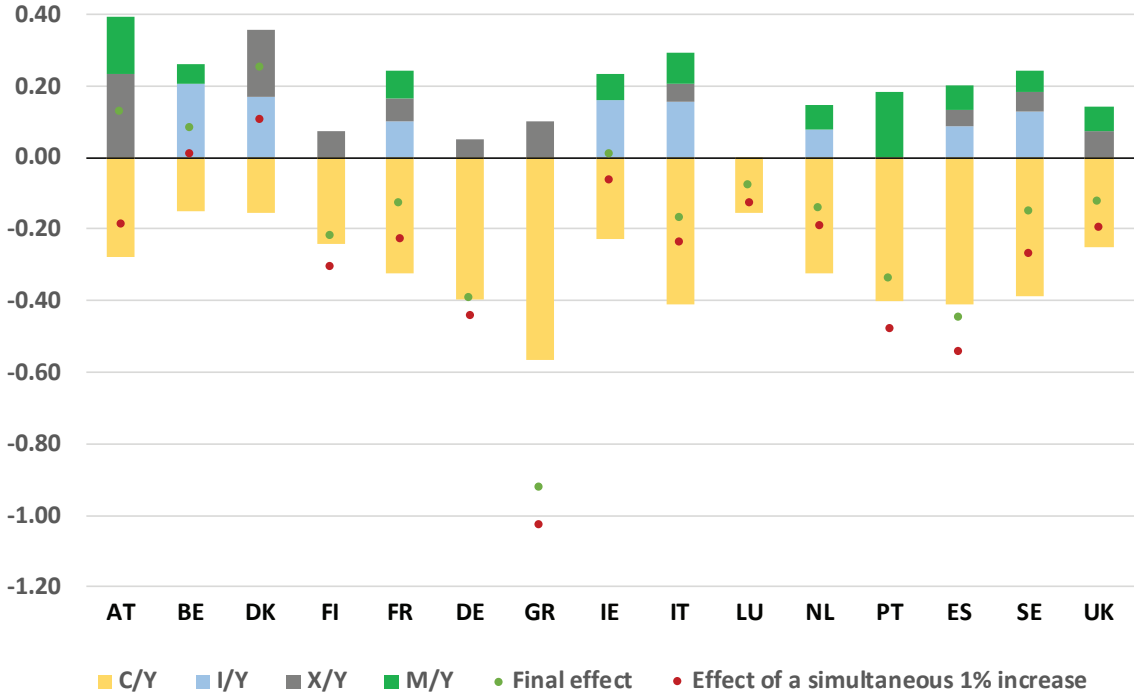
Notes: A = Austria, B = Belgium, DK = Denmark, FIN = Finland, F = France, D = Germany, GR = Greece, IRL = Ireland, I = Italy, L = Luxembourg, NL = Netherlands, P =

Portugal, E = Spain, S = Sweden, UK = United Kingdom

* The effects of Consumption (C/Y), investment (I/Y), exports (X/Y) and imports (M/Y) on aggregate demand are computed as the effect of a 1%-point increase in the profit share in the corresponding country. The final effect on aggregate demand is the sum of those effects multiplied by the implicit multiplier. The effect of a simultaneous 1%-point increase in the profit share is computed as an increase of all countries together.

Source: Own calculations based on Onaran and Obst (2016) data.

These outcomes are due to three important factors (Alvarez *et al.*, 2017). First, the marginal propensity to consume out of wage income is invariably greater than the marginal propensity to consume out of capital income. Thus, a pro-capital income distribution reduces aggregate consumption. Second, although the profit share has a significant statistical impact when explaining capital formation in the long term, private investment is more influenced by the evolution of income and the consequent accelerating effect of demand[4]. As internal devaluation policies shrink domestic demand, they tend to reduce also private investment (even if the increase profit margins). Third, unit labour costs are a strong determinant of domestic prices, while the translation of unit labour costs into export prices is much more limited. The

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[4] That is why in figure 16 an increase of the profit share does not have statistical effects on the investment in several countries

economic growth of major trading partners is far more relevant to explain exports than the change in relative prices. It thus crucial to support internal demand at the EU level.

The main consequence of the findings of this literature is that the economic policy pursued in recent years in EU27 countries, and particularly in the Eurozone, was mistaken. The strategy of internal devaluation and wage cuts has increased inequality and, moreover, it has also meant a loss of potential growth. Internal devaluation policies, especially in the peripheral countries of the Eurozone, have continued to deepen the decline in the wage share after the crisis, reinforcing the potential deficiency and the stagnation in aggregate demand.

More egalitarian policies in the field of functional distribution are required to achieve inclusive growth. It has sometimes been argued that the overall expansionary effect of a pro-labour wage policy on economic growth is limited. But, in any case, the good news is that contrary to what mainstream economics suggest, there is plenty of room to reduce inequality without hurting economic growth and job creation in the Eurozone (Onaran and Stockhammer, 2016). Policies aimed at recovering the wage share not only do not detract potential from economic growth, but they can even contribute to it.

Furthermore, if new distributive policies are complemented by new fiscal policies in the Eurozone, with a balanced budget expansionary policy, the expansive effect on aggregate demand becomes much more significant (Obst *et al.* 2017; Uxó and Alvarez, 2017). A policy mix that links the mentioned pro-labour wage policy with an expansionary fiscal policy financed by progressive taxation would have a considerable expansionary effect.

Particularly, the expansionary-inclusive effects of growth would be reinforced if a new fiscal policy is focused on promoting redistribution towards low-income families, with higher propensity to consume (for example a guaranteed income scheme for low income households to address the situation of those most affected by the crisis). As Obst *et al.* (2017) and Uxó and Alvarez (2017) have shown, this expansionary policy would be sustainable and compatible with a reduction of the public deficit since it would be financed by progressive taxes[5] and by the effect of growth on public revenues.

4.2   The relationship with productivity

Building a high-road strategy requires a better understanding of the impact of the prevailing income distribution regime not only on current macroeconomic aggregates, but also on future potential growth. An income distribution regime based on the fall of the wage share has a contractive effect on GDP. Furthermore, this distribution regime can also result in a more limited growth of labour productivity.

It is known that labour productivity has for decades experienced a decreasing trend in developed economies (Figure 17). While in the EU countries the annual productivity growth was 3.7% in the period of 1960-1980, this advance was reduced to 1.2% for the period of 1981-2007. Moreover, after the Great Depression productivity growth has slowed further, with average growth for the period 2008-2016 of 0.1%.

Mainstream economics have traditionally explained the major determinants of productivity using supply-side factors, typical of neoclassical economics (Wolff, 1997; Jorgenson, 2002; Griffith *et al.*, 2004). These

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[5] There are multiple combinations of revenues and expenditures by which the required stimulus in aggregate demand might be achieved: only by means of an increase in expenditures, only by tax reductions, by a combination of more expenditure and less taxes, or by an increase in both expenditures and taxes, taking advantage of the "balance budget multiplier" (Wren-Lewis, 2011; Karagounis *at al.*, 2015). Each of them, however, have different implications on public deficit and debt, because the multipliers associated to each instrument are not equal. Given that the expenditure multiplier is clearly higher than the revenues one, there exist a combination of discretional increases in both expenditures and revenues that would permit simultaneously to achieve the targeted impulse in GDP and employment and to let the public budget balance relatively constant.

factors include the strengthening of technological capital, research and development efforts, human capital and education, industrial structure and institutional flexibility (product market regulation, labour market regulation and taxes).

However, recognizing the importance of these determinants is not enough to explain the evolution of productivity in recent decades. Productivity has decelerated despite the fact that EU27 economies have followed the main recommendations of international organizations to increase efficiency growth: trade and financial liberalization, reduction of personal and corporate taxes, flexibilization of the labour market and institutional frameworks, development of legal regimes favourable to spill-overs, more advanced innovation systems and investment in human capital. None of these policies has been able to stop the productivity slowdown.

Figure 17: Gross domestic product at 2010 reference levels per person employed (annual growth rate %, EU15)
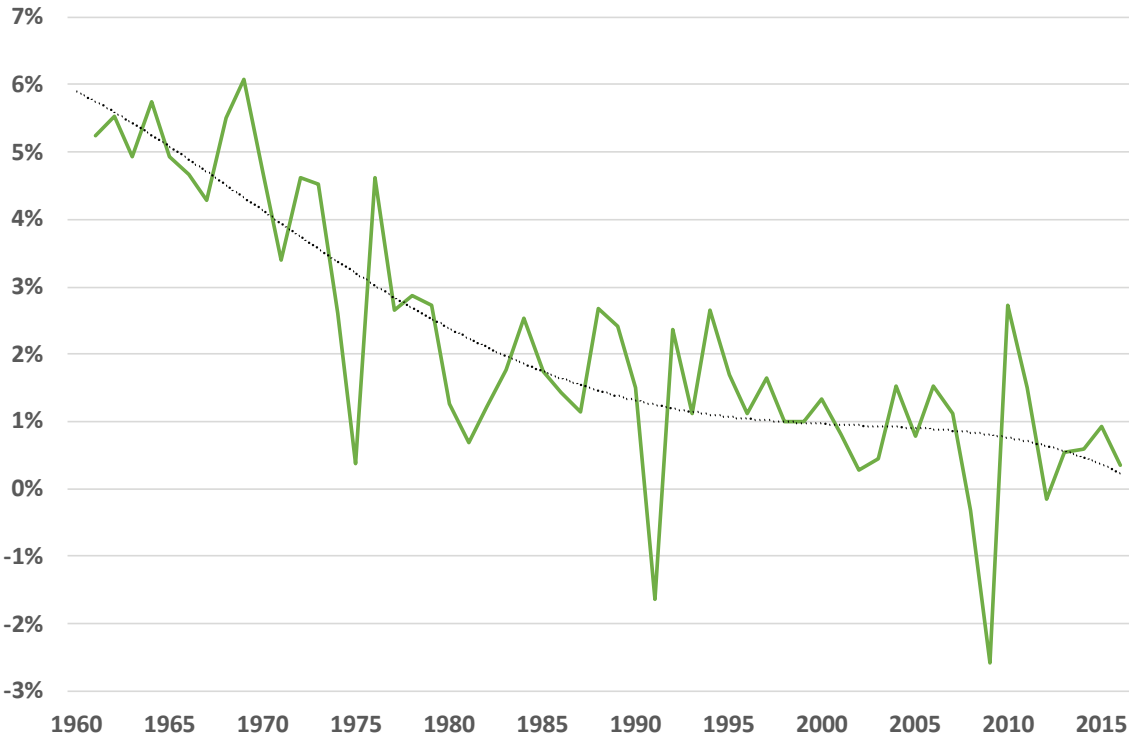
Source: AMECO

Nevertheless, the hypotheses that come from Keynesian and Kaleckian economics can play an important role in understanding this tendency. According to these approaches (Naastepad and Kleinknecht, 2004; Setterfield, 2002; Cornwall and Cornwall, 2002), the level of effective production compared to potential production is determined by the size of aggregate demand, and this general level of aggregate demand determines productivity growth. This influence occurs mainly through three channels (Palazuelos and Fernández, 2009):

- Scale effect: an increase in any of the components of aggregate demand will allow greater use of installed capacity that remains idle in corporations.
- Capitalization effect: if aggregate demand grows through non-residential investment, this increase will lead to an increase in the capital-labour ratio and, thus, in productivity.

- Modernization effect: increases in the capital-labour ratio never occur, particularly in relatively long periods of time, with a stable composition of technology. On the contrary, the expansion of the capital stock is always accompanied by new technical innovations.

If we accept that labour productivity is conditioned by the level of aggregate demand, we can better explain the evolution of productivity during the last decades in EU countries. Between 1960 and 2007, there was a significant reduction of the internal demand of the Eurozone economies, while the growth of exports and imports remained high and stable. From the 1980s onwards, we see how the Eurozone economies have experienced a significant and sustained restriction of their domestic demand (private consumption, public spending and, in particular, business investment). This reduction in the growth of domestic demand would have led to a parallel reduction in the growth rate of labour productivity

The greater the slowdown experienced by domestic demand in Eurozone countries, the greater the slowdown in productivity, as we can see in Figure 18. This weakness of domestic demand has conditioned the fact that, even if in the 1990s information and communication technologies had spread, productivity growth remained very modest.

Figure 18: Evolution of domestic demand and productivity, 1960–2016 (annual growth rate, %)
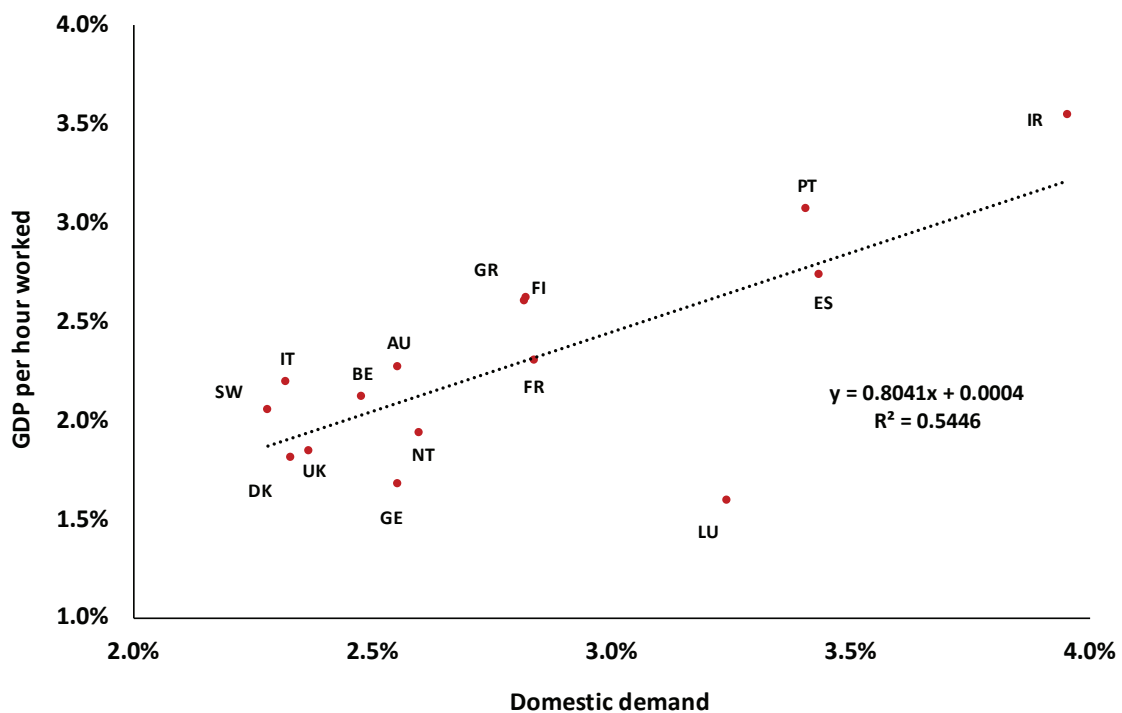
Source: Own calculations with AMECO

As stated by Cornwall and Cornwall (2002): "a prime benefit of strong aggregate demand is its stimulation of investment and technological change, leading to the adoption of new technology"[6]. This positive

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[6] For a more detailed analysis see Palazuelos and Fernández (2009). According to these authors, the dynamics of demand "structurally conditions" the performance of productivity and therefore the capacity for growth. Nevertheless, there is no direct and mono-causal relationship between the two variables, since labour productivity has a margin of variation that is not determined by demand. This entails, according to these authors, that in a context of weak domestic demand there is a trade-off between employment and productivity, since productivity also varies depending on the rate of employment (conditioned by demographic and supply side factors such as the labour force participation rate and the willingness of persons of working age to become active).

relationship between the level of aggregate demand and the evolution of productivity points to a positive relationship between wage growth and productivity. Since capital deepening –crucial for any recovery of productivity growth– is driven by investment decisions, wage growth will probably be followed by an increase in productivity growth (as long as wage growth does not entail a profit-squeeze effect, significantly damaging profitability).

There are several cross-country and international studies that show this causal relationship from wages to productivity (Hellwig and Irmen, 2001; Bivens, 2017; Naastepad and Kleinknecht, 2004; Vergeer and Kleinknecht, 2010). Figure 19 presents, following Bivens (2017), a straightforward scatterplot of annual productivity growth versus annual growth in real wages (lagged one year) for EU15 countries across the 1960-2017 period. The slope of the regression is clearly positive.

Different theoretical approaches point to various channels through which a wage growth constraint may slow down labour productivity growth. This causal link is pointed-out not only by demand side approaches. Neoclassical economics considers also the possibility of substitution between capital and labour at company level (Chennells and Van Reenen, 1997; Hellwig and Irmen, 2001; Bester and Petrakis; 2003): a fall in the price of labour relative to the price of capital induces firms to substitute the latter with the former, reducing therefore the ratio K/L of production and thus productivity growth. Therefore, a significant increase in wages increases the stock of productivity-augmenting capital.

Figure 19. Relationship between annual growth in productivity and lagged annual growth in real wages, (EU15, 1960-2017)

Gross domestic product per person employed (annual growth, %)
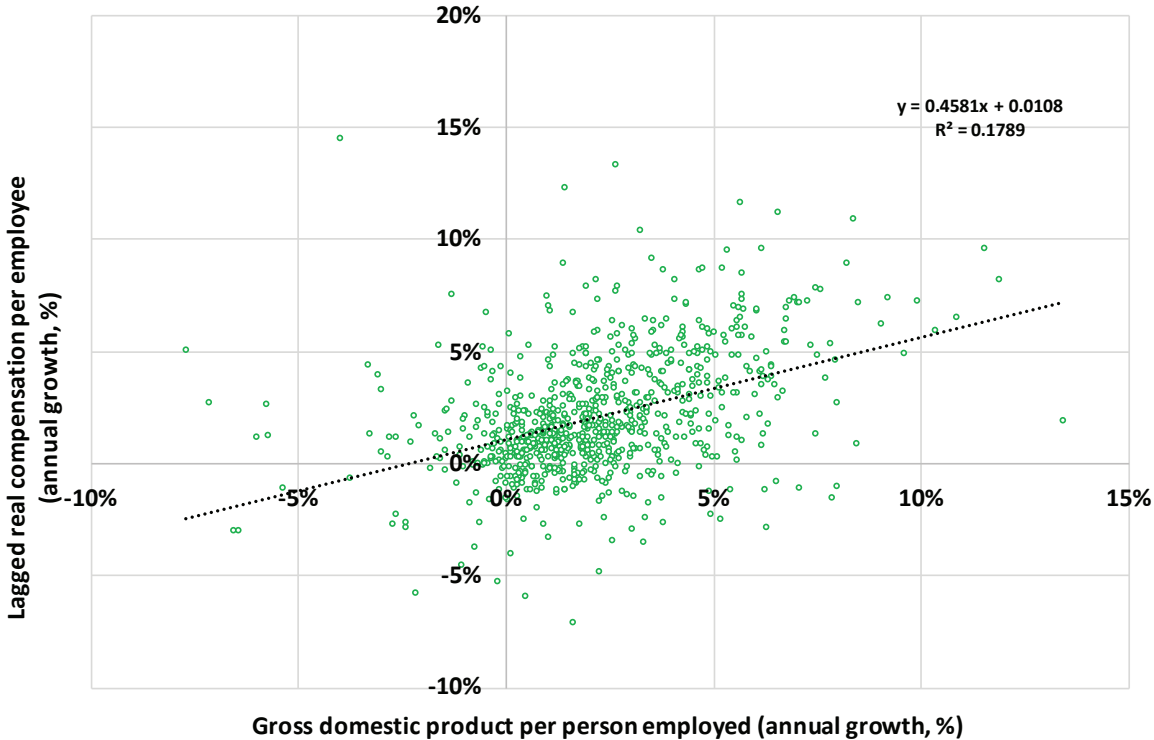
Source: Own calculations with AMECO

Furthermore, according to this approach the growth of wages not only encourages many companies to substitute labour for capital, but also to renew obsolete equipment and machinery. Obsolete equipment is renewed in these cases with labour-saving technologies, thus contributing to increased productivity (what we previously called the 'modernisation effect').

From the demand-led growth approach the Verdoorn-Kaldor Law refers to the importance of effective demand as a determinant of productivity (Geroski and Walters, 1995; Naastepad and Kleinknecht, 2004; Vergeer and Kleinknecht, 2010): faster output growth increases labour productivity, since investment and innovation are favoured by high demand expectations. The loss of effective demand resulting from a wage restraint would entail a slowdown in corporate investment and technological innovation. These approaches do not refute the possibility of a "classic-orthodox" causal relationship between labour productivity and wage growth (with the first variable determining the second). But they insist on the complexity of this relationship and on the double causality: in the long run, productivity growth sets a certain benchmark for wage increases, while in the short and medium term the demand impulse resulting from wage growth reinforces investment and productivity.

Making an economy function below its potential level of production over a long period of time -as a result of a shortfall in aggregate demand- entails insufficient investment to sustain faster productivity growth. According to the estimates of Bivens (2007), a 1 percentage-point increase in the growth rate of real wages in the US economy would boost the growth rate of non-residential fixed investment by 0.67 percent, and in the long run the increase in investment would rise to nearly 2 percent. Vergeer and Kleinknecht (2010) study how wage growth determines labour productivity growth, with a panel data analysis of 19 OECD countries (1960-2004). They show that a 1-percentage point change in growth rates of real wages corresponds to 0.3 - 0.4 percentage points change in labour productivity growth. Indeed, according to these authors, between 1960 and 2004 the 'flexible' Anglo-Saxon countries presented more limited productivity growth than the 'rigid' European economies, where wages grew faster.

These analyses are fully consistent with Bhaduri and Marglin's (1990) approach previously mentioned, as has been pointed out by Hein and Tarassow (2010): a positive impact of real wage growth on the wage share in wage-led economies tends to reinforce GDP growth, since the marginal propensity to consume out of wage income is greater than the marginal propensity to consume out of capital income, and private investment is particularly influenced by the accelerating effect of demand. As long as the increase in the wage share does not lead to a profit-squeeze and to a sharp fall in corporate profitability, it will expand the level of aggregate demand, increase investment in capital goods and thereby productivity (due to the aforementioned 'scale effect', 'capitalization effect' and 'modernization effect').

The estimations made by Hein and Tarassow (2010) for six OECD countries (Austria, France, Germany, the Netherlands, the UK and the USA) for the period of 1960 to 2007 confirm the predominance of the Verdoorn-Kaldor Law: a positive impact of GDP growth on productivity growth. Therefore, redistribution towards labour can strengthen aggregate demand and GDP growth in wage-led economies, reinforcing by this means productivity growth. In the six cases analyzed by these authors, a positive effect of real wage growth on productivity growth is confirmed: a 1 percentage point increase in the wage share increases labour productivity in a range from 0.3 points (Netherlands, USA) to 0.9 points (Germany).

All this literature would therefore call into question the trend towards rapid flexibilization of labour markets in Europe, with the resulting slowing in wage growth. On the contrary, a wage policy that begins to reverse the falling tendency of the wage share and the chronic shortfall of aggregate demand, would increase productivity as business would have more incentives to invest in capital equipment. The evolution towards 'secular stagnation' has fuelled this debate. Contrary to mainstream assumptions, changes in aggregate demand may have persistent effects on potential GDP growth. Structural changes in aggregate demand can lead to persistent effects on aggregate supply (Girardi *et al.,* 2018). Recessions have long-term effects on the path of GDP, and a structural lack of demand restricts corporate investment, resulting in economic growth below the potential growth of the economy. The current monetary policy within the EU is unable to avoid secular stagnation and revive GDP growth. In a context of persistent aggregate demand shortage, low

interest rates are not always useful for firms to expand productive capacity. Without a structural change in aggregate demand –through fiscal expansion and progressive income redistribution–, it will not be easy to leave secular stagnation behind (Storm, 2017).

4.3 The relationship with financial stability

Economic inequality, in addition to having important macroeconomic effects on aggregate demand, investment and productivity, also has important effects on economic and financial stability. In general terms, we can say that rising income inequality has contributed to the financialization process, to private debt accumulation and to financial imbalances that led to the Great Recession of 2008 (Rajan, 2011).

There is important empirical evidence that explains how a rising proportion of income in EU and OECD countries is being captured by the financial sector (Stiglitz, 2012). The Trade and Development Report 2017 analyses to what extent the growth of economic inequalities is a source of instability that precedes financial crises. The analysis confirms that – both for developed and developing economies – there is a systematic pattern of rising inequality before the crises take place, across a sample of 91 episodes (UNCTAD, 2017). In the run-up to financial crises, the income gap between the top 10 per cent and bottom 40 per cent of the population rose in 81 per cent of the cases.

An increase in inequality reinforces the top income share, with more savings being channelled to the financial sector and a subsequent expansion of credit supply. But also, in deregulated financial markets, financial institutions are able to create money endogenously, also undertaking risky strategies in the search for higher financial returns, with critical consequences for financial instability. Deregulated financial markets, fuelled by growing distributive inequalities, led to high-risk investment strategies, and to excessive leveraging of households and corporations before the crisis.

Deregulation of the financial and banking sector and the lack of vigilance by the authorities, relatively low interest rates, new financial products to promote access to credit for households and lower banking standards to access credit were combined before the Great Recession with stagnating real wages. In this context, the use of debt allowed to maintain consumption standards for millions of households in the EU, while higher-income households recycled their dividends and capital gains on financial markets.

The two reinforce each other. The use of credit not only supports wage stagnation, by delaying the effects that would arise from the lack of demand, but also intensifies credit bubbles. In a context of relatively low interest rates, banks need to give increasing amounts of credit to raise their profit rates. In addition, the loans were converted into financial assets that opened up an additional source of income for banks (securitization and portfolio management), financial operators and real estate corporations.

The extensive use of credit postpones the limitations to economic growth derived from wage stagnation, but it does not solve those limitations. Since the model is based on a continuous growth of private debt, it is finally unsustainable. This financialization process contributed greatly to the global fragility of the European economies. The credits were not only used to finance higher household expenditure, or corporate investment, but also allowed a large increase in speculation on different assets. The results were those predicted by Minsky in his financial instability hypothesis: credit growth well above the evolution of GDP, increases in debt-to-income ratios and the emergence of Ponzi schemes and huge credit bubbles in various European economies. The consequence of this growing divorce between the financial and productive spheres is well known: The Great Recession.

Within the Eurozone, the regime of weak aggregate demand has led to two diverse growth models, which have tried to by-pass the problem of insufficient internal demand in two different but complementary ways: with recourse to excessive private debt, or to an unsustainable neomercantilist export strategy. This way of

overcoming the problem of insufficient domestic demand created an unbalanced economic development between core and peripheral countries within the Eurozone for the period 1995-2008, set around two poles: on the one hand, a group of economies (particularly Germany) characterized by wage restraint and very weak domestic demand, with economic growth mainly driven by a strategy of increasing exports (*export-led growth*). On the other hand, the second pole (of which Spain is a good example) based its expansion on an internal demand financed by external debt (*debt-led growth*), thereby allowing the recycling of trade surpluses of the first group of countries.

Both strategies were in fact interdependent: growth in core countries was (in part) based on the external demand exerted by the peripheral economies and, simultaneously, the latter needed the surplus countries to finance their current account deficits. A common monetary policy and the existence of the single currency have played an important role in the development of this model, ensuring the same interest rate to all economies and reducing the credit risk of peripheral government bond yields.

The growth regime driven by debt has had enormous costs in terms of economic stability, on both sides of the Atlantic. Moving towards the de-financialization of the economy must therefore be an essential vector to reduce future systemic risks. This entails both advancing in (the still very insufficient) international financial regulation and reducing the inequalities that feed international financial markets.

Conclusion: an agenda for inclusive growth

We have presented extensive evidence that shows that inequalities can be reduced by focusing policy efforts on strengthening wage-setting mechanisms and increasing the wage share (also Checchi and García-Peñalosa, 2008 and 2009). Furthermore, we have shown that fostering a wage determination system that increases the wage share in national income does not have to entail costs in terms of GPD and employment growth. On the contrary, these policy measures could help to unleash a wage-led growth strategy.

Stabilizing, or reversing, the fall of the wage share would allow the development of a new pattern of income distribution that acts as a vector of a new, more inclusive, sustainable and efficient growth model. Recommendations in this sense could include (Dünhaup, 2013; Onaran and Stockhammer, 2016):

A new wage policy, the main objectives of which should be: 1) To overcome the lack of domestic demand of EU economies (especially in core economies) 2) Reduce economic inequalities 3) Boost private investment and productivity 4) Facilitate greater economic and financial stability and 5) Reduce external imbalances within the Eurozone. This new wage policy should require real wages to grow as much as productivity (nominal wages should grow equal to productivity, plus the rate of inflation target). Nevertheless, a temporary period where real wages grow faster than productivity must be included, to reverse the decline in the wage share.

The proposed *wage rule* would be the aggregate reference in the long term for the whole Eurozone, with a mechanism to progressively correct the deviations between the actual growth of labour costs and the trend prescribed by the rule. For example, if inflation target is 2% for the monetary union and productivity growth rate is 1% in a certain country, nominal wages should grow by 3% in this country according to the rule. Nevertheless, if wages only grow at 2% during some years, there will be a gap between the "target value" for wages (according to this reference) and its actual level. Therefore, during the following years, nominal wages should grow faster than the rule to close the gap. A similar regulatory mechanism would be operating symmetrically in other countries if wages are growing there too fast during some years.

However, since current account imbalances are not an exclusive consequence of competitiveness differentials, but also of the productive structure itself, wage policy rules are not sufficient to rebalance the external sector. These rules must be supported with *fiscal policy measures*. A shift in fiscal policy towards an expansionary balanced budget strategy would also help to raise the levels of aggregate demand, thereby strengthening investment, productivity and long-term growth. In this sense, a true pan-European investment plan is urgently needed.

In order to implement the wage norm already mentioned, *labour market institutions* and wage-setting mechanisms must be restored (particularly where there have been more intense labour market reforms, such as peripheral countries). In particular, the mechanisms for the extension of the agreements as well as sectoral and national bargaining (instead of decentralized bargaining) must be restored or expanded. As follows from our analysis, widening the coverage of collective bargaining is of crucial importance, as well as the strengthening of trade unions.

Minimum wages at a sufficient level (e.g. the living wage) are essential instruments for securing workers' incomes, avoiding wage poverty, reducing wage dispersion and stabilizing the income share of low-skilled workers. Establishing a minimum wage benchmark throughout the EU seems an essential mechanism: minimum wages should reach at least 60% of the median salary in each country. This measure is particularly important in those countries with weaker collective bargaining institutions, or with a larger number of small companies, where collective bargaining is more difficulty.

There are some European countries where the high temporality and rotation in employment is worrisome. This phenomenon usually leads to low-quality, poorly paid jobs. The expansion of this type of employment is one of the main determinants of the fall of the wage share in some EU economies. It is therefore urgent to develop *a strategy against job insecurity and atypical employment*, for example by legislating disincentives for those companies that make abusive use of these labour contracts.

Strengthening the *Welfare State* should also help to build a stronger framework for collective bargaining. In particular, it is necessary to develop guarantee income programs for those households that are unemployed, and decent unemployment benefits. In particular, a European unemployment insurance scheme could be a first big step for a federal fiscal budget.

The determinants that explain the fall in wage share are not limited to the evolution of labour market institutions, however important this may be. The rest of the factors must also be taken into account, among them financialization: it is necessary to truly *regulate the financial sector*, and to move to a progressive "euthanasia of the rentier", rethinking the actual full mobility of financial capital. In addition, it is key to replace the shareholder value orientation in corporations for a new system of corporate governance that involves all stakeholders and considers aims other than short-term financial objectives.

Establishing *taxes on the wealth* accumulated by top incomes is fundamental to modify the growth of the capital share, since much of this growth is concentrated in the wealthiest 1%. Therefore, the progressivity of the EU tax systems must be strengthened, and we should move towards new taxation figures on wealth. These new fiscal figures would not only contribute to the de-financialization of the economy, reducing the top income share. They would also help to move towards a balanced-budget fiscal expansion strategy.

The fall in the wage share is a long-term phenomenon, but in some countries of the EU the crisis has accelerated this process. Reversing this trend requires us to think of new instruments to promote, beyond collective bargaining, a new framework for income pre-distribution to allow a more equitable sharing of productivity gains. A useful instrument for this proposal can be the *reduction of working hours* per week. The workday has historically experienced very significant reductions during the last 150 years, without salary reductions. However, this trend has been slowed down or reversed in almost all European countries during

the last thirty years. Resuming this trend would help ensure sufficient growth of aggregate demand and productive capacity, and therefore a more inclusive growth.

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