



Theoretical and Empirical Analyses of the Rise of Income Inequality in Rich Countries

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1 Introduction

Since 1980, the establishment of a finance-led regime was introduced in the policy agenda of most advanced countries, and in particular under the Thatcher and Reagan administrations in the UK and the US. At first in the UK and the US and, later, in other advanced economies, a set of neoliberal policies boosting financialisation and globalisation were implemented. These policies included deregulation of the financial sector, liberalisation of trade, capital mobility, wage flexibility, privatisations, structural adjustments, retrenchment of welfare states, and the creation of a second pillar in the pension system (i.e. heavily encouraged private pension schemes).

According to Krippner (2005), financialisation can be identified as a political economy phenomenon where there is a growing dominance

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of capital financial systems over bank-based financial systems. Epstein (2005, pp. 3–4) refers to financialisation as the increasing role of financial motives, financial markets, financial actors, and financial institutions in the operation of domestic and international economies. Hein (2017, p. 2), who uses interchangeably financialisation and finance-dominated capitalism (terminology which will also be used here), argues that it can be analysed from several perspectives: *‘the deregulation of the financial sector and the rise of shadow banking, the ascendance of shareholder dominance at the firm level, the financialisation of everyday life, and the emergence of several macroeconomic regimes under the dominance of finance, among others’*.

The process of financialisation could be recognised, according to the Bank for International Settlements, in a daily volume of foreign exchange transactions of around 2 trillion dollars in 2006, just before the beginnings of the financial crash in the summer 2007. This amount is more or less equivalent to the GDP of France. In contrast, in 1989, this volume was about 500 billion dollars per day (BIS 2013).

A proxy that is used here for financialisation is ‘Market capitalisation’—also known as capital market value—of listed domestic companies,¹ which refers to the rise of financial claims and incomes versus the real sector, and it amounts to the share price multiplied by the number of outstanding shares. Listed domestic companies are the domestically incorporated companies listed on the country’s stock exchanges at the end of the year. These companies do not include investment companies, mutual funds, or other collective investment vehicles.

Figure 1 describes the increase of financialisation as proxied by stock market capitalisation in advanced countries since the 1970s. Financialisation increased, along with financial instability and fluctuations in the stock market. It is interesting to note the trend of the market capitalisation of listed companies before and after the crisis.

¹According to the World Bank definition, “Listed domestic companies, including foreign companies which are exclusively listed, are those which have shares listed on an exchange at the end of the year. Investment funds, unit trusts, and companies whose only business goal is to hold shares of other legal listed companies, such as holding companies and investment companies, regardless of their legal status, are excluded. A company with several classes of shares is counted once. Only companies admitted to listing on the exchange are included.” (<https://data.worldbank.org/indicator/CM.MKT.LDOM.NO>).

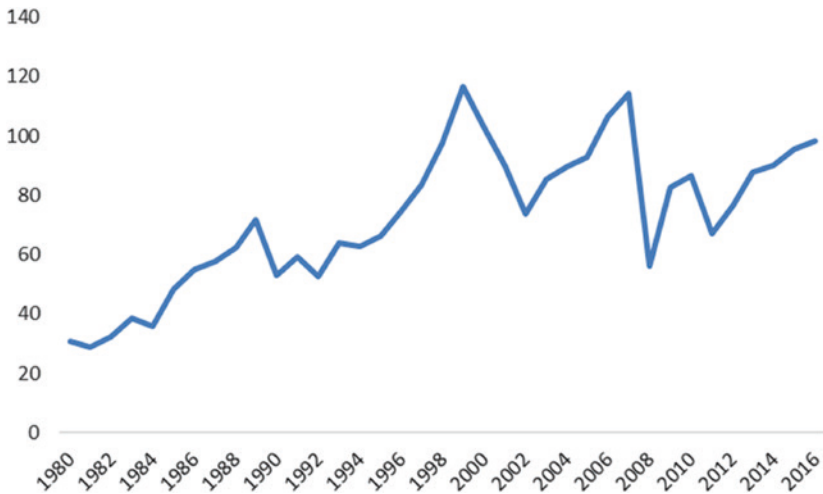


Fig. 1 Stock market capitalisation as a % of GDP, world, weighted average, 1975–2016 (Source The World Bank Database)

The data suggest that companies might have tried to protect themselves by opting to delist as the crisis began. Prior to that, the financial euphoria and manias, as Kindleberger (2005) argued, convinced many firms to be listed in the stock exchanges and to engage in speculative trading. Once the crisis of confidence, in 2007–2008, dampened the euphoria, average stock market capitalisation (as a % of GDP) decreased dramatically, and as Kindleberger (2005) predicted, panics substituted themselves for manias. Clearly, a ‘reversed V’ is visible in the figure below, with the average capitalisation in 2007, on the eve of the crisis, peaking around 115% of GDP, while the average in 2002 and in 2008 was 73 and 56%, respectively. In the mid-2010s, the trend is back to its increasing pattern, and in some countries market capitalisation goes well above 100% of GDP (such as 212% in Switzerland, around 150% in USA, 130% in Canada, 110% in Netherlands, 105%, in Australia etc.).

Throughout this chapter, we will show evidence according to which the financialisation of economies along with globalisation generated the main mechanism which allowed for the increase of income inequality. These processes have been taking place since at least 1980, when

labour flexibility intensified, labour market institutions weakened as trade unions lost power, and public social spending started to retrench and did not compensate for the much vulnerabilities created by the globalisation process. In this context, wage share declined and functional income distribution worsened with an increase of profits, rents and financial compensation. A favourable tax policy towards the richest, payments of dividends and the structural change occurred in most advanced economies, i.e. a gradual abandonment of manufacturing in favour of services, also contributed to this result.

This chapter proceeds as follows: in Sect. 2, we investigate the main determinants of the fall in the wage share in advanced economies, namely financialisation, changes in the productive structures, globalisation, and the increase in labour flexibility. In Sect. 3, we discuss the impact of globalisation and financialisation on income inequality, while in Sect. 4, we try to establish a link between financialisation, the adoption of different welfare models and inequality. In Sect. 5, we deal with other possible factors that contribute to worsen income equality: the steady reduction in the degree of unionisation and the adoption of fiscal measures that tend to benefit the wealthier fractions of population. Section 6 deals with a possible interpretation of the slowdown of labour productivity, experienced by many advanced economies in recent years, according to which financialisation and unbalanced trends in income distribution represent a drag on the productivity dynamics. The last section concludes.

2 The Determinants of the Labour Share: Theory and Stylised Facts

In the last four decades, sluggish and stagnating wages have been a common feature in many advanced economies. This has been translated into a generalised decrease in the wage share,² an empirical regularity that

²Obviously not every country's wage share has displayed the same pattern. See, for example, the case of United Kingdom, which displayed a mildly increasing wage share in the 1990s, until the end of the 2000s.

has been confirmed and documented in the relevant literature (see, for example, Onaran and Galanis 2014; ILO and OECD 2015; ILO et al. 2015; Stockhammer 2015, 2017; Dünhaupt 2017).

As it has been widely discussed in the literature, these trends in income distribution have proven to be unsustainable and potentially explosive for the countries experiencing them. According to several authors (for example Barba and Pivetti 2009; Rajan 2010; Stockhammer 2015), household debt has acted as a substitute for stagnating wages in financing private consumption. However, this only postponed the demand generating problem ensuing from the compression of workers' purchasing power, as the burst of the debt-led growth bubble and pervasive financial instability proved at the onset of the Great Recession. The decrease in the wage share, moreover, poses a further threat by being potentially detrimental to the dynamics of labour productivity. This intuition dates back to Webb (1912) and has since been a key element of non-mainstream analyses of the determinants of labour productivity growth (see, for example, Sylos Labini 1999; Cassetti 2003; Naastepad 2006; Hein and Tarassow 2010; Tridico and Pariboni 2017a). To conclude this brief summary, it has to be recalled that, since Marglin and Bhaduri's contribution (Marglin and Bhaduri 1990), Post Keynesian economics has emphasised the causal effect of functional income distribution on growth with the introduction of the concepts of wage (or profit) led growth. Several empirical works have found that most advanced economies tend to be wage-led, with, in general, the exception of small open economies (see, for example, Hein and Vogel 2008; Hein and Tarassow 2010; Storm and Naastepad 2012; Onaran and Galanis 2014; Hartwig 2014, 2015; Onaran and Obst 2016). Independent of the merits of the wage versus profit-led growth literature,³ Skott (2017) reminds us that a more equitable and balanced split of national income is a worthy outcome to be pursued, regardless of its impact on the dynamics of aggregate demand and GDP.

³See Pariboni (2016) and Skott (2017) for sceptical views on this stream of literature. The former, in particular, by criticizing the investment function adopted by Marglin and Bhaduri and their neglect of demand components other than induced consumption and investment, questions the validity of the Marglin and Bhaduri's taxonomy (wage-led versus profit-led).

2.1 Financialisation

In the introductory section, we have provided an overview on the multifaceted socio-economic phenomenon known as financialisation. As we have already maintained, financialisation has been one of the main forces behind the persisting decrease in the labour income share experienced by most advanced economies in the last decades. Its influence has been confirmed by several empirical studies (see, for example, Hein and Schoder 2011; Stockhammer 2013, 2017; Dühaupt 2017) and finds its rationale in a growing body of theoretical literature. Argitis and Pitelis (2008) notice that financialisation has contributed to the increase in financial pay-out ratios, leading to distributional changes detrimental to non-shareholders. Indeed, Van der Zwan (2014, p. 108) makes clear that the shareholder value literature has acknowledged that financialisation is intrinsically a *'redistributive process.'* Shareholder value orientation is, however, only one of the main features of financialisation. For this reason, we believe it is reasonable to include, among the determinants of the wage share, both a variable related to the 'down-size and distribute' governance principle (see Lazonick and O'Sullivan 2000)—the share of income distributed by non-financial corporations in GDP⁴—and a more general variable—market capitalisation of listed domestic companies.⁵ Financialisation is a complex social process and is likely to influence income distribution through several channels. Hein (2015, pp. 924–925), for example, provides a Kaleckian framework to single out seven stylised facts related to financialisation that have a direct impact on functional income distribution and include in the picture phenomena as different as the reduction of public intervention in the economy and the threats of hostile takeovers and mergers.

⁴We are referring here to the OECD variable 'Distributed income of corporations', for the sector 'Non-financial corporations'. 'Distributed income of corporations' is given by the sum of dividends and withdrawals from income of quasi-corporations, with the latter component being mostly negligible.

⁵Market capitalization is a variable with a trend similar to that of other possible proxies for financialisation, as dividend share, FDI and indexes of globalisation, as correlations between the variables show.

We also find particularly convincing the discussion of the effects of the financialisation of everyday life proposed by Van der Zwan (2014, p. 102). As the author argues, this circumstance tends to develop new subjectivities: workers slowly begin to perceive themselves as investors and owners of financial assets. The focus shifts on the individual dimension of responsibilities and the main purpose is self-fulfilment. As a consequence, class consciousness is undermined and the bargaining power of the worker class as a whole is under siege by individualism, in a context where '*the uneven distribution of financial power among social classes*' is functional to '*the structural inequalities that exist in an equity-based economy*' (Van der Zwan 2014, p. 103).⁶

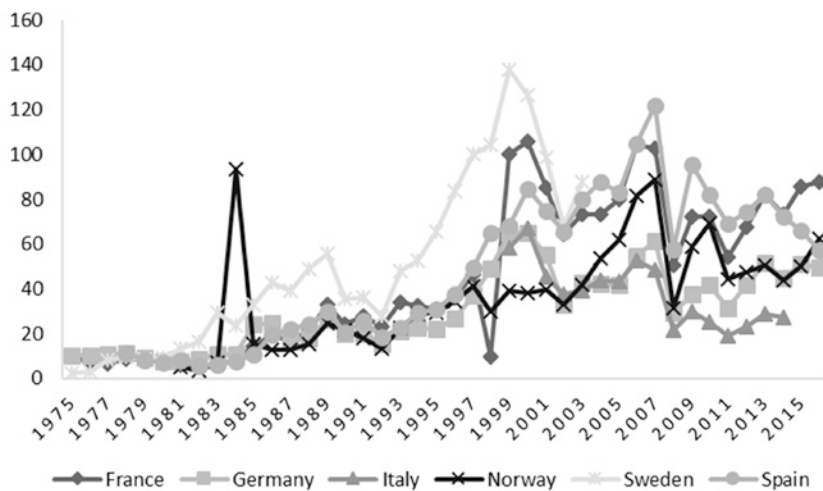
Figure 2 shows trends of financialisation in a selected sub-sample of countries. Panel (a) includes Scandinavian, Mediterranean, and coordinated market economies (France and Germany), while panel (b) is focused on Anglo-Saxon countries. The general picture of Fig. 1 seems confirmed and 'reverse V' paths are broadly discernible; moreover, market capitalisation appears again on the rise, with the exceptions of Ireland, Spain, and of the countries for which we miss the data relative to the last few years. In Anglo-Saxon countries (Australia, Canada, United Kingdom and United States in our sample), however, the phenomenon takes place on a larger scale, confirming the received wisdom about the relevance of financial markets in the countries belonging to this socio-economic welfare model. Germany and Italy (and Ireland, an outlier within Anglo-Saxon countries) are on the other end of the spectrum, reaffirming the insights of Lapavitsas and Powell (2013): financialisation takes different shapes in different countries, due to institutional, historical, and political peculiarities.

2.2 Structural Change

According to Lapavitsas and Powell (2013, p. 362), '*financialisation represents a structural transformation of advanced economies resting on*

⁶"The role that financialisation played in lowering workers bargaining power" is recognised and admitted also by OECD (2012, p. 143).

(a)



(b)

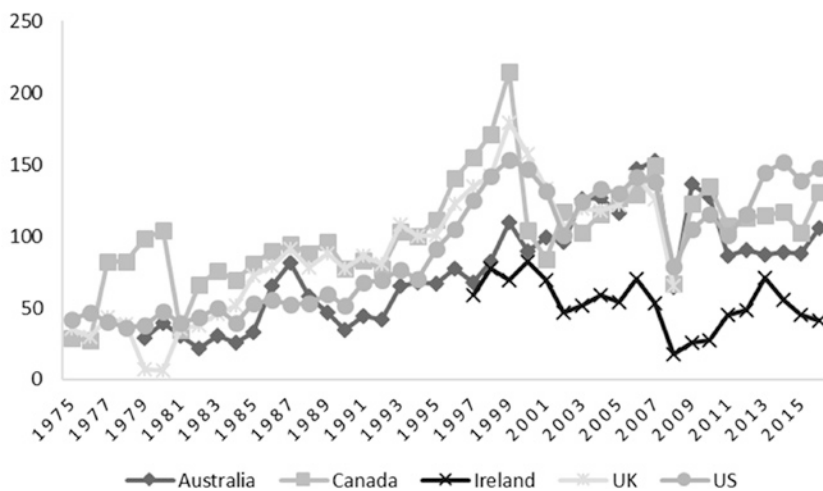


Fig. 2 Financialisation—Stock market capitalisation as a % of GDP, 1975–2016
(Source The World Bank Database)

altered relations among industrial enterprises, financial enterprises and workers.' We agree with the view that characterises financialisation as an element of a broader structural change that has been affecting advanced economies in the last 30–40 years. Indeed, in this time span, many advanced economies have experienced significant changes in their productive structures and in their industrial strategies. While the post-WWII period of expansion—labelled by some scholars as 'The Golden Age of Capitalism' (Marglin and Schor 1990)—was characterised by the manufacturing industry exerting a leading role, in more recent years, a massive shift in employment has been taking place in most Western countries. A steady decline in the share of workers in manufacturing and a transition towards the service sector are very well-known features of contemporary capitalism. The link between financialisation and deindustrialisation has been highlighted in Krippner (2005, p. 176), where the author considers both elements as fundamental keys to understand the transformation the United States was (and is) going through. Robert Boyer, in his prescient 2000 article (Boyer 2000), also identified the rising dominance of finance and the shift from manufacturing to services as elements of the emerging 'finance-led growth regime'.

Figure 3 synthetically conveys a picture of these trends, for a sample of selected countries, belonging to different institutional frameworks.⁷

France and Italy present the most clear-cut trends, with a sharp decrease in manufacturing employment mirrored by the rising contribution of finance and real estate activities to total economy's gross value added. These phenomena are less accentuated in Germany, a country that remains characterised by a stable and efficient manufacturing industry and by a relatively slower process of shift towards the financial business. The United Kingdom, in a sense, represents the other extreme of the spectrum, with the divarication between real and financial production already in place since the beginning of the 1980s and the faster process of deindustrialisation. Finally, Norway has experienced a similar

⁷See Lapavistas and Powell (2013) for a comparative analysis of different forms of financialisation in different countries.



Fig. 3 Finance, insurance, and real estate (FIRE) activities share in gross value added (Following Krippner [2005], we treat finance and real estate as a single industry group, given the speculative aspects of real estate markets. We also

- ▶ decided not to report the employment share of FIRE activities in total employment, given that these industries are not employment-intensive [Krippner 2005, p. 175]. To stress the increasing relevance of finance, we opted for the share of value added produced in the related industries) (total activity): dark line; share of employment in manufacturing in total employment: light line (Source OECD)

decreasing pattern concerning the abandonment of manufacturing, but the shift towards services has interested mainly industries like ‘community, social and personal services’.⁸

We include a variable for ‘structural change’—namely, the share of employment in manufacturing in total employment—in our analysis, because we consider the drift away from manufacturing as a factor capable in itself to negatively affect the share of wages in income. Remunerations tend to be higher in manufacture than in most of the service industries,⁹ as well as the degree of unionisation and the working-class coherence.¹⁰ In a similar vein, Rodrik links the current weaknesses of the labour movement to the persistent trends of de-industrialisation across advanced and developing economies (Rodrik 2016) and warns against the perils that the abandonment of manufacturing poses for labour–capital relations and, more generally, for democracy (Rodrik 2013).

Even though it is outside the scope of this chapter, it is worth reminding that a process of ungoverned structural change, as described above, may also pose a threat to the dynamics of labour productivity.¹¹ Several service industries have a limited potential for productivity gains and are defined by labour–intensive production processes. Moreover, as pointed out by Wölfl (2005), service industries may suffer from specific

⁸This is the term used by the EU KLEMS Growth and Productivity Accounts to aggregate services industries like public administration, health, education etc.

⁹See Tridico and Pariboni (2017b) for some descriptive evidence.

¹⁰We refer with this term to “the unity and organisational ability of the working classes to assert their (economic) interests” (Stockhammer et al. 2016, p. 1805).

¹¹This phenomenon goes by the name of *Baumol’s disease* (see Baumol and Bowen 1965) in the related literature. A qualification and a reassessment of the *disease* has been advanced by Baumol himself. See, for example, Baumol et al. (1989) and Baumol (2002).

obstacles to innovation: for example the average small size of firms in this sector (and the related difficulties in gathering the necessary financing) leads to low investment, specifically in high-risk, high-tech capital assets (Wöflf 2005, p. 55). Also, investments in R&D and in workforce training tend to be underfunded and industries operating in the service sector often resort to non-firm specific technologies and knowledge, developed elsewhere (ibid.). Finally, we find persuasive the arguments that have been collectively labelled as the ‘Manufacturing imperative’ (Rodrik 2011), discussed and summarised in Cirillo and Guarascio (2015): an advanced manufacturing sector generates innovation spillovers in the service industries as well; manufactured capital goods, used by the service sector, embody most of the technical progress and knowledge generated in the economy moreover, being tradable, is an efficient vector to disseminate innovation.

2.3 Globalisation

Post-Keynesian and Critical Political Economy literatures tend to consider globalisation as an element of a more general and multi-dimensional process of Neoliberal restructuring. Globalisation and financialisation can be considered the two main pillars of this political project; the timing of the two principal waves of the former almost overlap with that of the latter and the two phenomena are complementary: *‘financialization may thrive only to the extent that the spatial constraints of exchange are removed, while the process of globalization may be implemented to the extent that it is supported by internationalized finance’* (Vercelli 2013, p. 25). Onaran (2011), Stockhammer (2013, 2017) and Dünhaupt (2017), among other studies, find a significant negative effect of globalisation on the labour share in income. As Stockhammer (2017, p. 8) argues, globalisation exerts a downward pressure on the wage share mainly by altering the balance of powers between capital and labour: the looming threat of relocations can suffice to deter higher wage claims or to make wage cuts more palatable to workers. Capitalists can also exploit and take advantage of the expansion of the reserve army of labour, brought about by the inclusion in the global labour market

of workers from developing countries.¹² Moreover, to keep production at home, governments can decide to implement selective tax reductions in favour of capital and embark on tax competition among themselves (Tridico 2017). Finally, although not an exhaustive list, in advanced economies globalisation is often associated with a decline in manufacture employment, which tends to be replaced by employment in low value-added service industries, with the consequences described in the previous sub-section.

3 Labour Flexibility and Labour Bargaining Power

The economic processes we have mentioned so far—financialisation, structural change, globalisation—have been associated with a stream of labour market reforms, i.e. an increase in labour flexibility and a reduction in employees' protections. We will investigate whether the flexibilisation of labour exerts a negative pressure on the wage share, as we expect. In this regard, our variable of interest is the EPL (Employment Protection Legislation) index: developed by the OECD, the index represents the level of protection offered by national legislation with respect to regular employment, temporary employment, and collective dismissal. In other words, the index offers a synthetic picture of the state of the regulations that allow employers to fire and hire workers at will (the index varies between 0 for very low protection and 6 for very high protection). Traditionally, European economies maintained higher levels of EPL in comparison to Anglo-Saxon economies (Nickell 1997). However, in the present period, labour flexibility has been increasing everywhere, although in Europe the policy agenda is moving towards a so called 'flexicurity', which would promote some types of jobs and income securities (i.e., employability) while accounting for the need for flexibility on the part of firms (Kok 2004; Boyer 2009; Tridico 2009).

¹²See Dünhaupt (2017, p. 290) and the literature reviewed there.

Typically, the case of Denmark represents a situation where a lower EPL is associated with income and job securities.

Our hypothesis is that a decrease in labour rigidity enhances capital's bargaining power: the precarious nature of job tenure makes workers reluctant to engage in workplace struggles.¹³

The institutional and structural changes that have occurred in the labour market over the last twenty years in Europe, and over the past 30 years in US, were critical to the financialisation process. These changes allowed for labour flexibility, wage moderation and, ultimately, inequality and profit soar. All this occurred with the demise of the Keynesian policies of public demand management.

The new, post-Fordist growth model requires a higher degree of labour flexibility because, with the massive shift from the industrial sector to the service sector, technology, and innovation bring about rapid structural changes which demand quick responses from firms. Therefore, labour should adjust to the firms' need. The financial sector in particular, because of its peculiarities, requires a very flexible workforce and fast adjustments, partially compensated by relatively higher remunerations. Shareholders want higher dividends because they invested their own capital in firms, taking on a higher level of risk. But, for shareholders to obtain higher dividends, wages have to be compressed and labour flexibility is instrumental to obtain this result.

As it has been shown elsewhere (Tridico 2012), there is a positive correlation between the level of market financialisation and the level of labour flexibility (EPL) and between EPL and Gini coefficient, so that countries with lower labour protections are also countries with higher inequality. In other words, when financialisation increases, one observes both increased flexibility and inequality.

A flexible labour market with compressed wages needs to be supplemented by available financing. Hence, to have developed financial tools to sustain consumption, which otherwise were compressed by low and

¹³In the literature, alternative measures of the institutional factors we proxy by means of EPL are also utilised; for example, Dünhaupt (2017) introduces 'labour's bargaining power'—proxied by several variables—among the determinants of the labour share; Stockhammer (2017) uses 'welfare state retrenchments'.

unstable wages. It is difficult to establish a causal relation, though: we cannot be certain whether financialisation required labour flexibility or if increased labour flexibility brought about hyper-financialisation. A simple correlation between these two complementary institutional forms of neoliberalism seems more likely.

The unemployment rate is used as a proxy for labour's bargaining power, as captured by a classic 'reserve army of labour' effect, as is often done in the literature (see, for example, Dünhaupt 2017; Stockhammer 2017).¹⁴

4 General Forces Driving Inequality: Globalisation and Financialisation

The link between globalisation and income distribution has been explored in detail in the literature calling on the Stolper and Samuelson theorem, according to which market integration might increase inequality and vulnerability because increased international trade raises the incomes of the owners of abundant factors and reduces the incomes of the owners of scarce factors (Stolper and Samuelson 1941). Since advanced industrial countries are more capital-intensive economies and abundant in skilled labour, trade is expected to be beneficial for skilled labour and detrimental to unskilled labour, thus increasing inequality of earnings. For labour-intensive economies, which are typically those of developing countries, trade is expected to increase regional disparities.

Globalisation and financialisation have taken place almost simultaneously in advanced economies. Globalisation, just like financialisation, is still a generic term which, in most definitions, is identified as a process of *intensification* of trade, capital mobility, finance, and labour mobility. Conversely, authors such as Hay and Wincott (2012) disagree with such a definition of globalisation and would rather define it as a process not only of *intensification* of those flows but also of *extensive increase*, on a global level, of trade, capital, labour mobility, and

¹⁴The downward pressure exerted on wages by unemployment is also reported in OECD (2014).

technological exchange (see, for example, Held et al. 1999). Because evidence of this second type of definition of globalisation is missing and because not all countries have taken part in the globalisation process (globalisation involves mostly OECD countries and some emerging economies), Hay and Wincott (2012) conclude that it would be more appropriate to speak about regionalisation rather than globalisation. For instance, trade, capital, and labour mobility increased particularly in the European Union (Europeanisation), among advanced and emerging economies (trans-regionalism), and between North American countries (with regional agreements such as NAFTA), etc. Hence, the interpretation of globalisation remains quite controversial and an on-going and evolutionary process.

Nonetheless, while it is true that globalisation and financialisation affect more advanced and increasingly more emerging economies—as for example BRIC countries—it is objectively impossible to deny the intensification of this process and the increase in the number of countries involved in the global economy over the last two decades.

It is possible to get a rough but straightforward picture of globalisation, as can be seen through the lenses of trade intensification, by looking at trends in world exports (and imports) as a percentage of GDP. With this in mind, it can be noticed that a first big wave of globalisation, identified purely according to the *intensive* definition, occurred after 1970 and may have been generated by a new international monetary system, the change in oil prices, and the birth of the European Monetary System. However, this first wave of globalisation was unstable and the process of intensification declined during the 1980s. Finally, the process of intensive globalisation, often accompanied by the extensive inclusion of more and more countries, steadily rejuvenated at the end of the 1980s when several institutional, geopolitical, and technological changes occurred.

Globalisation or, to be more precisely, trade openness (defined as imports and exports as a percentage of Gross Domestic Product) was and is supported by the mainstream neoclassical approach as being beneficial. Lewis (1980) and many other economists such as Lucas (1993) and Bhagwati (2004) believe trade is the engine of economic growth. However, the experience of globalisation so far has shown that the

performance of open economies can vary dramatically (Rodrik 1999). Openness to and integration into the world economy should be accompanied by appropriate institutions, state strategies, and by an important welfare state that supports internal cohesion and maintains external competitive advantages. In fact, according to Rodrik (1999), the best-performing countries are the ones that are integrated in the world economy with institutions capable of supporting the impact of globalisation on the domestic market and social cohesion. Countries with poor social institutions, weak conflict management institutions (which means poor welfare states), and strong social cleavages suffer external shocks and do not perform well in the world economy.

The current financial and economic crisis, which started in the US in 2007, suggests Rodrik's argument still holds true: '*The world market is a source of disruption and upheaval as much as it is an opportunity for profit and economic growth. Without the complementary institutions at home—in the areas of governance, judiciary, civil liberties, social insurance, and education—one gets too much of the former and too little of the latter*' (Rodrik 1999, p. 96).

For Lucas (1993), international trade stimulates economic growth through a process of structural change and capital accumulation. According to Walsh and Whelan (2000), this is the case for Ireland, where a structural change had already taken place during the 1970s and would have created conditions that allowed the Irish economy to grow considerably in the 1990s and later in the 2000s.¹⁵ Capital accumulation is determined by 'learning by doing' and 'learning by schooling' in a process of knowledge and innovation spillovers. A country that protects its goods made with intensive skilled work from international competition by raising tariffs on them will see a domestic increase in the price of those goods. Skilled workers' wages will increase and R&D will become more expensive. Consequently, investments in R&D will decrease and growth will be negatively affected. On the contrary, removing tariffs on those goods will cause a reduction in their price, a

¹⁵It is however argued that subsidies for inward foreign direct investment were the key factor in fostering Irish economic growth.

reduction in the cost of R&D, and thus an increase in investments in R&D with positive effects on growth (Lucas 1993).

This argument, however, does not take into consideration the inequality and uneven development caused by trade liberalisation and intensification via wage differentials. This issue had already been raised by Stolper and Samuelson, as we saw previously. Similarly, increased capital flows are expected to raise income inequality in advanced industrial economies because capital outflows from capital-rich countries to LDCs reduce domestic investment and lower the productive capability and demands for labour in these economies. Since, according to mainstream economics, a reduction in total capital in the production process would increase the marginal productivity of capital¹⁶ and reduces the marginal effect of labour, capital outflows would increase the income of capital relative to labour, thus exacerbating income inequality. In particular, because foreign direct investment (FDI) outflows from advanced industrial economies tend to be concentrated in industries with low-skilled labour in the home country (Lee 1996), rapidly rising FDI outflows often reduce the demand for low-skilled labour and increase income gaps in industrialised countries. In fact, several studies find that FDI outflows are associated with expanded income inequality in industrialised countries (see, for example, Leamer 1996).

It is interesting to observe the expansion of Foreign Direct Investment, which experienced a strong increase in the 1990s due to the liberalisation of capital markets, followed by a collapse at the beginning of the 2000s due to the global uncertainty caused by the international events of September 11, 2001. A further and bigger increase in FDI flows can be

¹⁶It has to be recalled that non-mainstream economists tend to reject the very concept of marginal productivity of production factors and the theoretical legitimacy of aggregate production functions. See, for example, Garegnani (1970, 1976). Discussing Garegnani (1970), Petri notices that “income distribution can be seen as reflecting the ‘marginal products’ of an Aggregate Production Function only if the economy produces, to all relevant effects, a single good (that is if capital goods are produced with exactly the same physical input proportions as output), or at least if relative prices are unaffected by changes in distribution along the entire outward envelope of the $w(r)$ curves” (Petri 2004, p. 334). He also adds that “the marginal product of capital – and hence the decreasing demand-for-capital schedule – is not determined without a full-employment-of-labour assumption” (ibid., p. 270). See, for example, Felipe and McCombie (2014) for a recent reassessment of the fundamental flaws of these aspects of Neoclassical theory.

observed immediately afterwards and up to the financial crash of 2007, reaching a peak in 2006–2007. Indeed, in these years, FDI reached their maximum level, around a one percentage point of GDP higher than the previous peak.¹⁷ The current crisis, marked by financial instability and depression, caused a further squeeze in FDI, although it remains at a substantially higher level than at the beginning of the 1990s.

Globalisation poses several challenges to national economies and governments. One of the most important is its effect on inequality—both within and between countries—and its impact on welfare state sustainability.

The new macroeconomic consensus of the last two to three decades is strictly linked to, if not completely corresponding with, the Washington Consensus doctrine, which calls for the implementation of some institutional forms that better suit the globalisation process such as the financialisation of the economy and the introduction of labour flexibility in the economy (see Tridico 2012). Moreover, the new macroeconomic consensus removes by construction inequality from the picture, being grounded on the assumption of the representative agent. Acemoglu (2011) argues that the policies implemented over the last two decades in particular were more closely aligned with the preferences of a minority of high-income voters in USA. Instead of redistributive policies favouring low- and middle-income constituents, politicians implemented financial deregulation policies favouring a small group of influential high-income earners (many of whom worked in, or directly benefited from, the financial sector).

To sum up, inequality has increased in most advanced and emerging economies over the last two decades—an era of growing interconnectedness of the world economy—as many studies have already shown (Atkinson 1999; Galbraith 2012; Piketty 2014), a simple look at Gini coefficients across countries indicates that trend. As can be seen in Fig. 4, between 1985 and 2012 inequality has increased in all the countries in the sample, in

¹⁷In 2000, FDI (net inflows) as a percentage of GDP amounted to 4.35%. The share then steadily decreased until it reached a trough in 2003 (1.81%). The trend was, however, rapidly reversed: in 2007 Foreign Direct Investments were at their top, being equal to about 5.3% of the World GDP. In 2015–2016 the datum has stabilised around 3.05% of GDP.

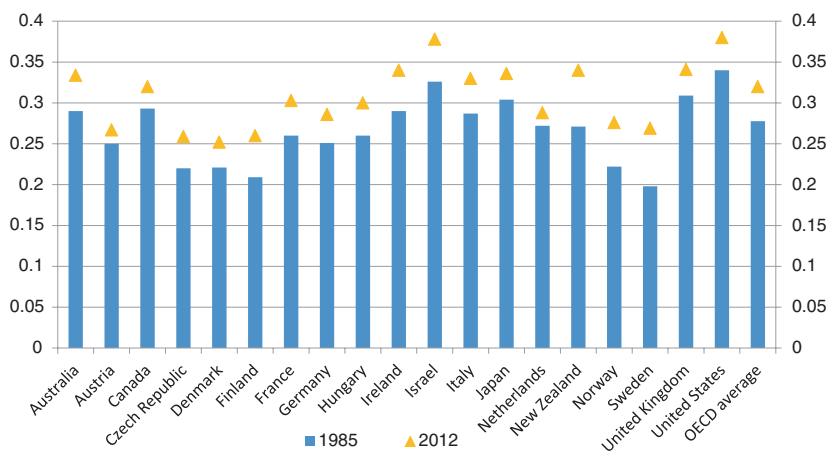


Fig. 4 Inequality—Gini coefficient (Source OECD. Stat database)

spite of these countries belonging to different welfare and socio-economic models. Austria and Netherlands, two small Continental Europe countries appear as those who experienced the smallest jump in inequality in the years under analysis. On the other extreme, and this might be considered not completely in line with standard received wisdom, Scandinavian countries as Finland, Norway, and Sweden stand out for the spike in the Gini coefficient, although they started from relatively lower levels.

5 Financialisation, Welfare Models, and Inequality

As has been shown elsewhere (Tridico 2018) empirical results suggest that what contributes to the increase or decrease of income inequality seems to be the nature of the socio-economic model that each country built during the decades after the Second World War. More specifically, what is most relevant is the set of policies that each country is currently able to implement in order to cope with the challenges of globalisation both in terms of income distribution and competitiveness (Rodrik 1999). These include in particular social protection against

unemployment and low wages, welfare programs against poverty, health and education policies, social policy for housing, and so forth. In general, there seems to be a clear relationship between inequality and welfare expenditures in the sense that countries that spend more on welfare generally have a lower level of inequality (Tridico 2018).

After the Second World War, countries, especially those in Europe, invested increasing shares of their GDP in developing welfare states. This trend continued until the beginning of the 1990s. After that, and particularly after the peak reached in 1993, governments started to retrench welfare states and welfare expenditure was lower on the eve of the financial crisis in 2007 than in 1993 (OECD 2012).

According to the empirical evidence, which can be summarised in Fig. 5, Asian countries show the highest labour income shares, despite the huge decrease experienced in last decades. Furthermore, wage shares remain, on average, higher in Scandinavian and in Continental European countries, while they are lower in Anglo-Saxon, in Mediterranean and in Central and Eastern European countries. In our view, the most alarming

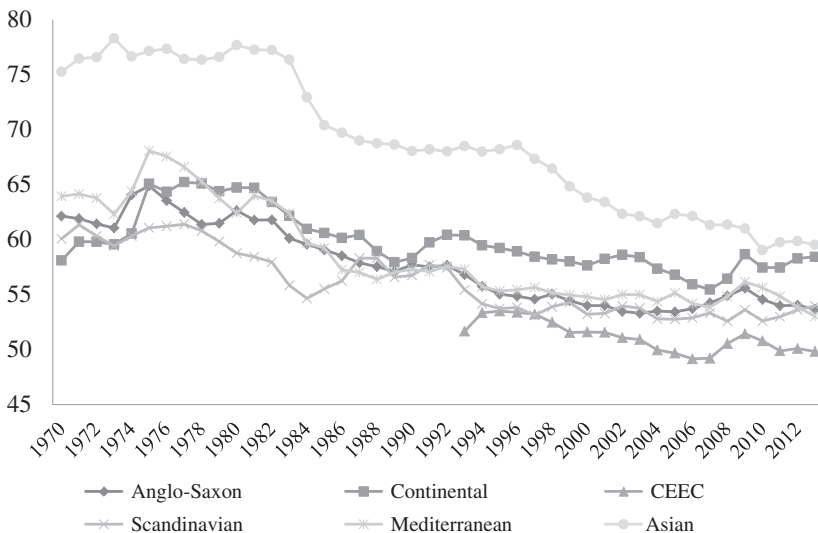


Fig. 5 Labour income shares by welfare model (1970/2013) (Source Our elaboration on data from ILO)

scenario refer to the Anglo-Saxon and the Mediterranean economies, which suffered the most from the restructuring process, occurred since the 1980s and progressively intensified. In this respect, it should be considered that globalisation has posed several challenges to national economies and governments. One of the most important issues is the pressure on labour relations and its impact on income inequality, both within and between countries, as well as its consequences on welfare state sustainability (Hay and Wincott 2012). In this context, the debate is very lively, and it has produced two main interpretations of the problem (see, for example, Tridico and Paternesi Meloni 2018).

The first one states that globalisation would press down the size of welfare states because social provision constitutes a cost for firms: since expanded welfare states lead to higher income taxes, social costs, and contributions, this would reduce prospective profits and increase companies' costs. These latter would be hence pushed to transfer capital abroad unless government retrenched welfare spending and reduced taxes: then, in order to maintain higher levels of investment and employment, the welfare state needs to be confined under the process of globalisation with bad consequences on income inequality. This interpretation is well known as the 'efficiency thesis', developed within the so-called 'neoliberal' paradigm: basically, it argues that globalisation has forced states to retrench social spending in order to achieve a market-friendly environment, to increasingly attract international capital and to foster external competitiveness (see Blackmon 2006; Castells 2004). Moreover, according to this view, welfare states can represent a cost for firms since due to capital mobility companies will de-localise to the lowest-cost location for production, putting pressure on governments to lower their welfare provision.

In contrast to this argument, a second approach emerged: the 'compensation thesis' maintains that since globalisation increases income inequality, welfare states should need to be expanded to mitigate vulnerability created by globalisation. In other words, increasing trade openness and capital mobility actually pressure governments to expand welfare support in order to compensate those who are damaged by the globalisation process (see Brady et al. 2005; Rodrik 1998): to put it simply, globalisation can produce net gains at the national level but within nations

there can be winners and losers, then losers should be compensated by (partial) redistribution from the winners. In a way, following the ‘compensation’ argument, it can be also stated that welfare expansion would allow countries to further pursue globalisation. An extensive interpretation would then see welfare expansion not as a result but as a condition of globalisation: briefly, in order to continue (or to start) with the process of globalisation, policy makers must expand social safety nets.

Nonetheless, with respect to income inequality, it is widely recognised that the introduction of outsourcing practices and FDI outflows, globalisation has improved the bargaining position of capital relative to labour in higher-income countries. As Feenstra (1998) observes, the impact of globalisation on changing the bargaining position of labour and capital has far-reaching consequences—for instance, the decline in trade union power, particularly within export-oriented industries, may well account for a portion of increasing wage inequality in the United States and in other countries (Lavoie and Stockhammer 2013). Moreover, the decision (or just the possibility) of firms to relocate capital and production across countries has distributional effects since it can worsen the position of low-skilled workers in industrial countries by a combination of (1) growing globalisation; and (2) availability of new technologies. The first one, as well as exacerbating competition among workers, may increase the bargaining power of capital against labour, with the consequence that it is easier for capitalists to obtain tax reductions and welfare retrenchment, hence the states are willing to embark on tax competition among them in order to keep investment and production at home. The second one, according to the so-called *skill-biased technical change* argument, has a direct and negative impact on unskilled workers and their earnings—and consequently on real output in wage-led economies—in a context of lowering welfare support and social institutions.

As a consequence of these processes, during globalisation (and particularly during the 1990s and the 2000s) income inequality increased not only in emerging economies but also in advanced countries too.¹⁸

¹⁸See, for example, Atkinson (1999), Galbraith (2012) and Piketty (2014).

In this regard, Fig. 6 reports Gini coefficient across OECD countries, aggregated by welfare models.

As Fig. 6 shows, inequality is higher in Mediterranean and Anglo-Saxon countries. On the other hand, Scandinavian countries exhibit the lowest income inequality levels, despite a general, steady upward trend. Continental Europe and Central and Eastern European countries lay in between these two poles, while Asian countries display a pattern parallel (but at a slightly lower level) to that of Anglo-Saxon countries.

Financialisation (a process which involves a set of institutions and financial tools) and labour flexibility (a set of labour market policies that increase the ease with which businesses can fire and hire workers and cut wages) are two general categories of institutional arrangements that have gone hand in hand particularly during the last two decades, although not at the same pace everywhere. They have been introduced across the world by governments, in varying degrees, in order to take advantage of the globalisation process which most policy makers and governments believe will boost their national economy.

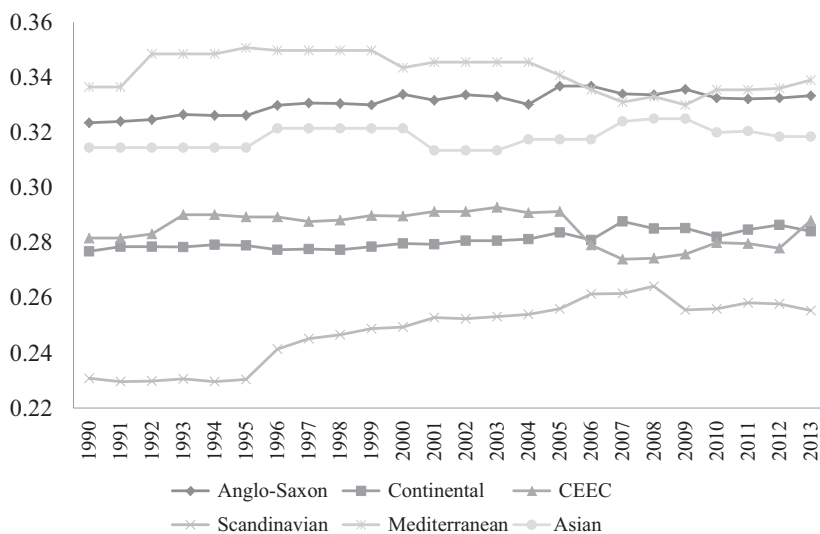


Fig. 6 Inequality (average Ginis) by welfare model (1990–2013) (Source Our elaboration on OCED)

Labour flexibility has increased almost everywhere in Europe and in advanced economies over the last 20 years. However, some countries, such as Austria, Belgium, France, and Germany have retained more rigid labour markets. Other economies, such as Denmark, Sweden, Finland, and the Netherlands, introduced higher levels of flexibility along with higher levels of security (OECD 2013). Countries such as the US, the UK, and Ireland increased (or maintained) their already very flexible labour markets. Finally, Mediterranean countries such as Italy, Spain, and Greece and most of the former communist economies in Europe combined very hybrid situations (of liberal and corporative elements) with an increased level of labour flexibility.

The political and economic roots of the financialisation process that brought about a new financial-led growth regime can be traced to the 1970s. After the fall of the Soviet Union, Alan Greenspan, who rose to oversee the US Federal Reserve by the end of the Reagan administration, believed that the world economy could expand greatly through the globalisation of the financial sector (Greenspan 2007). Many other economies followed the American example of a financial-led regime of accumulation, which used other institutional forms such as flexible labour and the nexus of compressed wages in order to increase firms' competitiveness (Tridico 2012). Shareholders sought higher dividends because they invested their own capital in firms, taking on a higher level of risk. Since the economic growth of advanced economies under financial capitalism has not been higher than under previous phases (the so-called Fordist period), as Fig. 7 shows, it follows that wages should be compressed in order for shareholders to obtain higher dividends. However, wages did not follow the increases in productivity and profits continued to soar (as was the case in most advanced countries and, in particular, in the US).

Figure 7 shows that the Fordist period (which is usually identified with the period before 1980) displays consistently higher GDP growth rates, in the countries under analysis and at the aggregate level. The decade 1981–1991 can be considered as a period of transition away from the previous accumulation regime and is characterised by the first traces of a growth slowdown, which fully manifests itself during the post-Fordist period, identified as the period from 1992 until today and marked by a steady acceleration in financialisation and globalisation.

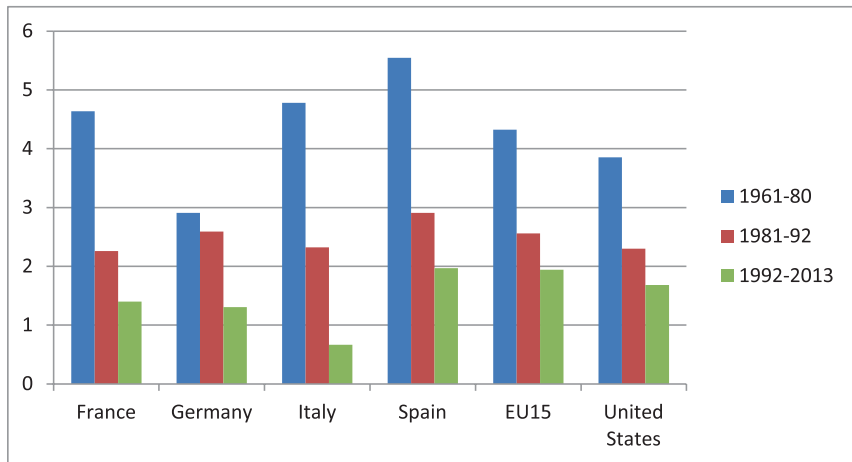


Fig. 7 Average GDP growth in the EU15 and the US (1961–2013) (Source The World Bank Database)

6 Other Determinants of Inequality: De-unionisation, Tax and Labour Market Institutions

As Lin and Tomaskovic-Devey (2013) argue, the increasing reliance by firms on earnings realised through financial channels generated surplus from production, strengthening owners' and elite workers' negotiating power relative to other workers. This resulted in the exclusion of most workers from revenue and, therefore, in the increase of inequality. Labour flexibility and wage contraction functioned to obtain this result (higher dividends for shareholders), at least in the short run.

The US promoted neo-liberalism as a main ideological paradigm for globalisation and financialisation through global, multi-, and bilateral measures under pressure from all the major international financial institutions, multinational corporations, and Wall Street institutions (Epstein 2005).

Importantly, within financial capitalism, the bargaining position of capital relative to labour in higher-income countries increased.

As Feenstra (1998, p. 46) observes, the impact of globalisation on changing the bargaining position of labour and capital has far-reaching consequences. The decline in union power, particularly within trade-oriented industries, may well account for a portion of the increased wage inequality in the United States and in other countries (Borjas and Ramey 1995; Gordon 2012). In this regard, a simple look at OECD data on trade union density shows a continuously decreasing trend for this variable, at the world level but also for most advanced economies.

Of particular interest seems to be the case of the USA where it is clear that throughout most of the twentieth century, the inverse relation existed between trade union membership and inequality. Gordon (2012) argues that between the New Deal—which granted, among other important things, workers’ basic collective bargaining rights—and the end of 1960s, *‘labor unions both sustained prosperity, and ensured that it was shared.’* Since the 1970s, and in particular during the Reagan administration, *‘unions came under attack—in the workplace, in the courts, and in public policy. As a result, union membership has fallen and income inequality has worsened—reaching levels not seen since the 1920s.’* Gordon (op. cit.) also shows evidence that the process of de-unionisation and the increase in inequality have moved hand in hand in the last 70 years: beginning from the 1950s, the degree of unionisation in the US slowly starts to decrease, with this diminution gaining momentum since the beginning of the 1980s. In the same time span, the share of income going to the top 10% displays a specular, opposite trend: it starts to increase in correspondence with the first signs of reduction in trade union density and then it accelerates its growth during the 1980s.

The decline in unionisation rates has contributed to the weakening of labour market institutions such as labour protection against firing and hiring, the level and duration of unemployment benefits with the introduction of constraints concerning eligibility, and the reduction in most cases of their length and amount, the minimum wage, etc. In Tridico (2017), a score of 9 indicators of labour market institutions is presented in correlation against the inequality index (Gini). This score is obtained through a factor analysis carried out in order to establish the most important elements which explain variation among the nine

institutional indicators.¹⁹ The evidence presented displays a clear correlation: the higher the score of the principal component (more protection in the labour market), the lower the Gini level, and vice versa.²⁰

The OECD's Employment Protection Legislation (EPL) indicator is probably one of the most important labour market indicators, at least for our purposes in this paper, as far as it is able to capture labour market flexibility, which represents a crucial variable in our analysis and the evolution of which represents one of the most important changes in the labour market in the last two decades in many advanced economies. It measures the general level of worker protection in the labour market and, consequently, the level of labour flexibility (it varies between 0 for very low protection and 6 for very high protection). In essence, it shows the level of protection offered by national legislation with respect to regular employment, temporary employment, and collective dismissal; in other words, regulation that allows employers to fire and hire workers at will. Looking at the pattern of average EPL levels among OECD countries, a sharp and continuous decline can be observed, starting in 1990 and until 2013 (the last date for which OECD issues data on this index), pointing to a sustained increase in labour flexibility,

As already noted by Hall and Soskice (2001) and by Storm and Naastepad (2012), complementarities between labour flexibility and financialisation are strong in advanced economies. A flexible labour market with compressed wages needs to be supplemented by available financialisation, credit, and developed financial tools to sustain consumption, which otherwise would be compressed by low and unstable wages. Therefore, a large number of financial tools were invented to finance consumption, postpone payments, extend credit, and create extra-consumption. That being said, it is difficult to establish a causal relationship: we cannot be

¹⁹Active Policy 2012 (% of GDP), Passive Policy 2012 (% of GDP), Coverage (in % of workers) of trade Unions 2009–2011, Level of coordination bargaining wage, Length of unemployment subsidies (in months) 2011, Substitution rate for unemployment Subsidies (% 2009–2011), Minimum wage, hourly (US\$ PPP), EPL and Trade Union density. All data from OECD online database.

²⁰A similar result was obtained by Butcher et al. (2012) and by Autor et al. (2016) who found that minimum wages have little effect on employment, but do have impacts on wage inequality, in particular in the UK and in the US during the 1990s and 2000s.

certain whether financialisation requires labour flexibility or if increased labour flexibility brings about hyper-financialisation. A simple, but important, correlation between these two complementary institutional forms of neoliberalism seems more likely.

Labour flexibility allows for the reduction of firms' labour costs and, thus, wage savings at the expense of wage earners; that is, consumers. In such a situation, inequality increases and aggregate demand is restricted because consumption decreases.

It is very interesting to notice an inverse relationship between inequality and the EPL index (labour flexibility): the lower the EPL (higher labour flexibility), the higher the inequality. Continental and Scandinavian European countries have a higher EPL (lower labour flexibility) and lower inequality relative to Anglo-Saxon and Mediterranean countries, which generally show the opposite values of higher inequality and lower EPL (higher labour flexibility).²¹

As a result, one can see that high financialisation is typically associated with high Gini coefficients and high labour flexibility. More interesting are the parallel trends of these variables: when financialisation increases, both flexibility and inequality increases. In other words, as was argued elsewhere (Tridico 2012), the rise of inequality generated an increased demand for credit, which translated into a credit expansion provided for by accommodating monetary policies and financial deregulation. One should take particular notice of the particular path of Scandinavian countries (especially Sweden and Finland) which display a relatively high degree of financialisation, but yet, are able to limit inequality (which nevertheless is increasing) with their strong welfare states (along with other labour market institutions).

Last but not least, tax policy deserves further attention as far as increase in income inequality is concerned. Many economists in the recent years showed, empirically, a strong correlation between inequality and tax reduction, in particular for top income earners (Piketty 2014; Atkinson et al. 2011; Facundo et al. 2013). In fact, as extensively shown in Piketty (2014), the top marginal taxation, among advanced

²¹See Tridico (2018).

economies, decreased steadily since 1970 from 60 to 80%, and stabilised before 1990 around a rate of 40–50%. It can be noticed that this evolution has been very similar in countries such as, for example US, United Kingdom, Japan, Germany, and France and might have contributed, in that period, and immediately after, to the increase of inequality.

However, between 1990 up to today, top marginal rates on income earned was stable with little variation around 45% in most of advanced economies, and in the last part of this period, after 2007, slowly increased to 48%. Data on personal income tax show this pattern as discussed, for example, in Tridico (2018).

On the other hand, when looking at data on tax on dividends, both corporate income tax and personal income tax, between 2000–2017 in the 25 OECD countries under analysis, decreased steadily (the decrease of corporate income tax was more marked and it amounted to a diminution of almost 10 percentage points in the 17 years of the sample). This is consistent with our hypothesis of financialisation of the economy. Low taxes on dividends pushed economic agents to invest in the financial sectors and in particular on shares.

7 Inequality, Financialisation, and Economic Decline

We have discussed above the main determinants behind the rise in income inequality and the compression of the wage share, experienced by most advanced economies in the last decades. As we have argued, these phenomena prompted an intense debate on the macroeconomic consequences of inequality, particularly in connection with the specular diffusion of household debt which, according to several authors²² has acted as a substitute for wages in financing private consumption. However, the ongoing worsening in income equality poses a further, perhaps less discussed threat. Storm and Naastepad (2015,

²²See, for example, the already mentioned Barba and Pivetti (2009), Rajan (2010), Stockhammer (2015).

p. 973) rightfully identify as a main problem for the Eurozone ‘*the wide differentials in labour productivity and technological capabilities*’ among its members. Similar supply-side aspects are often neglected or only marginally treated in the critical Keynesian literature, leaving the field open for the recipes proposed by the international institutions, according to which the simple remedy to lack of external competitiveness is internal devaluation and wage compression. Nonetheless, relying on a Classical-Kaldorian approach, it is possible to identify a weak GDP performance and a decline in the wage share as major explanatory factors of sluggish productivity. Moreover, drawing inspiration from recent Post-Keynesian literature, it can also be argued that the increases of income inequality and of the degree of financialisation of economies have hindered the dynamics of labour productivity.

A systemic picture can be drawn from the work of Paolo Sylos Labini (see, for example, Sylos Labini 1984, 1999), who stressed the connections among labour productivity, the dynamics of demand, the relative price of production inputs (capital and labour, in this case), and income distribution. It is possible to synthetically convey the main Sylos Labini’s insights by means of the following productivity equation (Sylos Labini 1999, p. 259):

$$g^\lambda = g^{Y/L} = f(g^Y, W/P_{ma}, 1 - \Pi), \text{ with } f'_{g^Y}, f'_{W/P_{ma}}, f'_{1-\Pi} > 0 \quad (1)$$

The rate of growth of labour productivity λ —equal to the ratio between output (Y) and the level of employment (L)—is a positive function of output expansion, the relative cheapness of labour over capital (W is an index of the real wage, P_{ma} is the price index of machinery) and the wage share ($1 - \Pi$).

The first argument of the equation captures what the author calls the ‘Smith effect’ (*‘the division of labour depends on the extent of the market; and the division of labour is at the origin of those – Sylos Labini is referring here to labour productivity—increases,’* Sylos Labini 1999, p. 258) and describes a mechanism similar to the already introduced Kaldor-Verdoorn effect. The second argument—the price of labour relative to the price of investment—is labelled as the ‘Ricardo effect’ and finds its

rationale ‘*in the classical notion of induced, factor-biased technical change*’ (Tronti 2010, p. 784).

Sylos Labini, however, focuses its attention on the productivity-enhancing role of the wage share: from the entrepreneur’s perspective, the pressure exerted by the increasing cost of labour provides a stimulus to reorganise the production process in a more efficient way; moreover, it also incentives, by making the necessary investment relatively convenient, the adoption of technologically advanced equipment and machinery, which allow to raise production without having to increase the number of employees. As reported in Lavoie (2014), traces of this intuition date back to Webb (1912), a seminal contribution whose main purpose was to support a proposal for the establishment of a legal minimum wage. The basic idea is that, as long as wage compression is prevented, entrepreneurs have to find other ways to lower the production costs with respect to their competitors. Indeed, they are induced to hunt for productivity gains, to be generated by means of improvements in the productive process. Furthermore, the institution of a minimum wage is plausibly followed by an increase in the real wage, which can be troublesome and push out of the market firms which do not keep pace with technological innovations. As a consequence, the average productivity and efficiency of productive units which remain active are higher (Webb 1912, p. 984). As Webb vividly puts it, ‘*the enforcement of the Common Rule (i.e. a legal minimum wage) concentrates the pressure of competition on the brains of the employers and keeps them always on the stretch*’ (Webb 1912, p. 983).

A similar line of reasoning is developed in Altman (1998), where the effect of higher wages on labour productivity is decomposed into several components: (a) the so-called x-inefficiencies are reduced. Low compensations and more in general a conflictual working environment are detrimental for the firm’s work culture and negatively affect workers’ effort. The improvement of workers’ conditions, on the other hand, contributes to the establishment of more cooperative industrial relations and elicits employees’ commitment; and (b) given that ‘*low wages can serve as a substitute for technological change*’ (ibid., p. 101), firms which experience rising labour costs may be compelled to adopt already existing innovative techniques or to develop new ones.

The idea of a positive influence of the wage share on the economy's productivity has been picked up also by authors such as Cassetti (2003) and Hein and Tarassow (2010), who include the Webb-Sylos Labini effect into a Kaleckian growth and distribution model. In these formalisations, as a response to an exogenous increase in workers' bargaining power, capitalists try to defend their income share by means of an improvement in productivity and the consequent reduction in labour unit costs. Post-Keynesian scholars have also substantiated convincingly the effects of income distribution on the productivity dynamics. Naastepad (2006) studies the Dutch case and concludes that '*a reduction in real wage growth is likely to slow down productivity growth*' (Naastepad 2006, p. 428): not only wage moderation inhibits induced technical change; if the economy's demand regime is wage-led, it harms labour productivity also indirectly, through the Kaldor-Verdoorn effect. Similar conclusions are presented in the empirical part of Hein and Tarassow (2010). The authors estimate the nature of the demand and productivity regimes of six OECD countries: a direct negative effect of the profit share on productivity growth is found for five out of the six countries in the sample, since at least the beginning of the 1980s. The indirect effect—operating through the impact of shifts in functional income distribution on GDP growth—is at work for the four countries that are found to be wage-led. Indeed, the analysis also confirms the prevalence of the Kaldor-Verdoorn effect for the whole period. Hartwig (2013) and Hartwig (2014) extend the Marglin-Bhaduri growth model (Bhaduri and Marglin 1990), to study the interaction between demand growth and productivity growth. The former analyses the case of Switzerland for the 1950–2010 period; the main result is that, despite the Swiss demand regime being profit led, the overall effect of real wage growth on productivity growth is (weakly) negative, and the productivity regime is wage-led. The latter (Hartwig 2014) performs a panel data analysis on OECD countries, concluding that, on average, 'real wage growth has a direct positive effect on productivity growth (the wage-induced technological progress) and an indirect positive effect that stems from real wage growth increasing demand growth (since the demand regime is wage-led), which in turn raises productivity growth through the Verdoorn channel' (Hartwig 2014, p. 429).

On the basis of the brief discussion above, it is possible to conclude that wage compression and a worsening in income distribution do not alone necessarily enhance the external competitiveness and dynamism of a country. On the contrary, they might create a drag on productivity and inhibit technical change. In this regard, the case of the Southern European countries described in Storm and Naastepad (2015) is paradigmatic: low wages countries tend to remain stuck in low-tech production segments, specialised in ‘commodities and destination markets where demand growth is above average’ (ibid., p. 968) and exposed to the competition of countries with a permanent advantage in terms of labour cheapness.

In this context, financialisation plays a prominent role as well. Financialisation is connected with both a re-distribution of income in favour of profit-recipients and labour productivity slowdown. This is an important point that finds empirical evidences and theoretical foundations. In his thorough overview, Hein (2015) singles out seven stylised facts connected to financialisation that, following a Kaleckian approach, impact directly functional income distribution: ‘increasing shareholder value orientation and increasing short-termism of management; rising dividend payments; increasing interest rates and interest payments, in particular in the 1980s; increasing top management salaries; increasing relevance of financial as compared to real investment and hence of the financial sector relative to the non-financial sector; hostile takeovers, mergers and acquisitions; and liberalisation and globalisation of international finance and trade’ (Hein 2015, pp. 924–925). Later on, the author also mentions the strong reduction of public intervention in the economy and the implementation of labour market deregulations, both occurred since the beginning of the 1980s. As also noticed by Hein, we can add that financialisation worsens income distribution—and in turn this affects labour productivity—also because of the following:

1. It favours the aggressive implementation of the principle ‘downsize and distribute’ so that corporations’ managers have as the only objective to maximize and distribute dividends for the shareholders at the cost of squeezing production and cutting wages.

2. It favours an aggressive short terms strategy of corporations' managers interested mainly in the maximisation of bonuses and profits in the short term at the expenses of the wage bill.

We are interested here in assessing if and to what extent financialisation has affected the recent trends in productivity. This idea has been analytically investigated, within the framework of a Post-Kaleckian endogenous growth model, in Hein (2012). As the author maintains, financialisation might have, at first, a direct positive effect on productivity. However, also indirect effects are at work: financialisation might negatively affect demand growth and, through the functioning of the Kaldor-Verdoorn effect, also the dynamics of productivity. Moreover, financialisation is likely to weaken workers' bargaining power and reduce the wage share. Given that a wage-push component is included in the productivity equation, the overall effect can be plausibly expected to be negative. Indeed, there are several theoretical reasons to expect a negative relationship between financialisation and productivity growth. It seems possible, in particular, to identify a causal link that goes from the prominence attributed to shareholder value orientation—one of the main features of financialisation (see Lazonick and O'Sullivan 2000)—to a decline in aggregate investment. The spectacular increase in interest and dividend payments to rentiers not only implies a loss in firms' internal means of finance, but also makes the recourse to external sources to finance capital accumulation more expensive and complicated, as highlighted by the Kaleckian principle of increasing risk. Moreover, the implementation of remuneration schemes for managers based on the firm's short-term performance on the financial markets is supposed to cause a slowdown in investment in capital stock, replaced by financial operations as a major concern for management.²³

²³Orhangazi (2008) finds empirical evidence of a negative influence of financialisation on real investment, using data on US non-financial corporations for the 1973–2003 period. Similar results can be found in Onaran et al. (2011), regarding the US economy in 1960–2007. More recently, Tori and Onaran's analysis of the behaviour of physical investment in selected European countries show that “financialisation, depicted as the increasing orientation towards external financing, shareholder value orientation and the internal substitution of fixed investment by financial activity, had a fundamental role in suppressing investment in the NFCs (non-financial corporations)” (Tori and Onaran 2017, p. 35).

As a natural consequence of an unsatisfactory investment dynamics, productivity lags behind. This is one of the most relevant conclusions of Lazonick and O'Sullivan's (op. cit.) analysis, where it is noticed that US corporate managers—but the same holds true for most of the OECD countries—in recent years have faced the new challenges posed by international competitors mainly by downsizing firms and compressing labour costs. At the same time, they renounced attaining productivity gains through the reinvestment of profits and chose to pursue short-term profitability.

Financialisation diverts assets and resources towards speculative rather than productive investments with negative consequences on technological progress, which directly influences labour productivity. Labour flexibility influences negatively labour productivity because allows for size reduction and employment squeezing: it reduces income opportunities and the wage share, increases precarious jobs, and de-stabilises aggregate demand. At the same time, a flexible labour market with compressed and low wages needs to be supplemented by credit consumption and developed financial tools to sustain consumption, reinforcing a vicious circle.

Deregulation of labour markets, labour flexibility, capital mobility and global finance allow easily for labour pressure, cost compression, and wage stagnation. Consecutively, households are more and more pushed towards private indebtedness and credit consumption since their income constraints increase consistently in a period of wage stagnation. In this context, income inequality increases because labour, which is the most important production factor for income, is seen by the supply-side approach as a cost to be compressed rather than as a fundamental part of aggregate demand to be expanded.

The negative relation between labour productivity and labour flexibility can also be identified in the perspective of the models of the new consensus macroeconomics that describe, at margin, work effort to be positively correlated with wages, so that unstable jobs, flexibility, scarce incentives, and low paid jobs push workers to put little effort into their work. Moreover, this does not guarantee that firms and workers invest in training and education in order to improve the quality of human capital, with lower results in terms of productivity, *ceteris paribus*, by the economic

system (Salop 1979; Shapiro and Stiglitz 1984). From a non-mainstream perspective, similar arguments can be found in the works of Vergeer and Kleinknecht. In Vergeer and Kleinknecht (2010), the authors perform a panel data analysis based on 19 OECD countries, for the period 1960–2004. Among their main results, flexible labour relations are found to damage labour productivity growth through multiple channels (p. 393) and to disincentive knowledge accumulation. Interestingly, Vergeer and Kleinknecht provide evidence that the labour productivity slowdown is not only due to the creation of precarious, deregulated, low-productivity jobs, but also the productivity of existing jobs is negatively affected. Vergeer and Kleinknecht (2014) perform a similar exercise for 20 OECD countries, in the same time span (1960–2004) of Vergeer and Kleinknecht (2010), substantially confirming the main findings presented there. Attention is drawn on the fact that easier hiring and firing procedures, leading to shorter job tenures, prevent the formation of firm-specific, ‘tacit’ knowledge, and hinder the functioning of the ‘routinised’ innovation model (Vergeer and Kleinknecht 2014, p. 383).

We have discussed so far mainly contributions belonging to non-mainstream schools of thought. Indeed, our section aims to enrich the Post-Keynesian literature concerned with the study of the endogenous dynamics of labour productivity. For a more orthodox account of similar issues, a useful reference is Cetto et al. (2016), where the authors summarise some Neo-classical explanations for the pre-Great Recession decline in productivity. For what concerns Continental Europe, a main problem seems to be represented (not surprisingly) by structural rigidities in the labour and product markets, which prevented these countries from benefitting ‘as much from reorganizations associated with ICT as the US and UK’ (Cetto et al. 2016, p. 7). Southern Europe, apparently, suffers from a further disease, represented by the fall in interest rates that followed the introduction of Euro. According to Cetto and co-authors, and also to the literature mentioned in the article, low interest rates—and abundant credit—can affect negatively total factor productivity through three channels: (a) capital inflows tend to be misallocated towards low-productivity sectors like services or construction instead of manufacturing; (b) within a sector, low-productivity firms may get their investment project funded while the more efficient ones,

for some reasons, may not; (c) low interest rates can damage the quality of a country's institutions. Within the mainstream, another recent, relevant contribution is Thimann (2015): competitiveness issues in the Eurozone are due to 'high labor costs relative to underlying productivity' (p. 142), with labour productivity problems not being addressed, given the lack of appropriate structural reforms (p. 155).

We will not discuss, in the remaining of the chapter, these ideas and we leave to future research a critical assessment of them.

As we have argued elsewhere (Tridico and Pariboni 2017a), an alternative take on the dynamics of labour productivity, based on the literature discussed in this section, can be summarised through an extended and modified Sylos Labini equation:

$$g^{\lambda} = g^{Y/L} = f(g^Y, 1 - \Pi, \text{Ineq}, \text{Fin}) \quad (2)$$

according to which the growth of labour productivity is thought to be a positive function of the rate of growth of the economy and of the wage share, while inequality and financialisation represent a drag on its dynamics.²⁴

8 Concluding Remarks

The rise of income inequality and the related generalised compression of the share of income attributable to workers are probably THE economic facts of the last decades. In this chapter, we have attempted to provide a broad overview of these phenomena. We have identified, consistently with a vast body of mostly non-mainstream literature, financialisation, and globalisation as two of the main determinants of both wage share diminution and income equality worsening. In the introductory section, we have provided an overview on the multifaceted socio-economic phenomenon known as financialisation. As we have argued,

²⁴See Tridico and Pariboni (2017a) for an empirical validation of this extended version of the Sylos Labini productivity equation.

financialisation's potentially disruptive effects on income distribution have been confirmed by several empirical studies and find their rationale in a growing body of theoretical literature: first of all, it has contributed to the increase in financial pay-out ratios, which lead to distributional changes detrimental to non-shareholders. Indeed, prominent scholars in the literature on shareholder value have acknowledged that financialisation is, by construction, a '*redistributive process*.' Multiple other channels can be and have been identified, but we believe it is useful to recall here the analysis on the effects of the financialisation of everyday life, as proposed by Van der Zwan (2014): new subjectivities are developed and workers begin to implicitly perceive themselves as investors and owners of financial assets. The individual dimension of responsibilities and the adoption of self-fulfilment as the main purpose of life undermine class consciousness. As a consequence, the bargaining power of the worker class as a whole is under siege by individualism and is harder and harder to defend and sustain a fair split of the social product. Globalisation, as well, exerts a pressure on wage recipients mainly by altering the balance of powers between labour and capital, which can benefit from the expansion of the global labour reserve army and use the threat of relocations to strengthen their bargaining position and obtain advantages from governments. We have also argued that globalisation and financialisation are not two separated, independent processes. Their timing is similar and tends to be complementary aspects of a broader political, economic, and social transformation, which has been synthetically labelled as Neoliberalism. The impact of financialisation, however, does not happen in a vacuum, but is mediated by the institutional framework, as we have discussed in the section devoted to the interaction with different welfare models. In fact, the choice of the socio-economic model, made by most countries in the decades after the Second World War, seems to contribute relevantly to the evolution over time of income inequality. The set of policies each country is able to implement in order to cope with the challenges of globalisation, both in terms of income distribution and competitiveness are of paramount importance: social protection against unemployment and low wages, welfare programs against poverty, health and education policies, social policy for housing, just to mention some of them, can alleviate the burden on

the most vulnerable layers of a country's population. In general, there seems to be a clear relationship between inequality and welfare expenditures, meaning that countries spending more on welfare tend to have a lower level of inequality. The deregulation of the labour market and the stream of labour reforms aiming at increasing flexibility have also played a significant role with respect to both inequality and the shift of income in favour of the richer fractions of population, since the precarious nature of job tenure makes workers reluctant to engage in workplace struggles and capital's bargaining power is enhanced by a decrease in labour rigidity. Finally, the gradual abandonment of manufacturing and the structural change that has been taking place since the 1970s is likely to exert a downward pressure on wages as well, in connection with trends of de-unionisation and tax reforms that benefit the few. In this chapter, we have tried to build a bridge between different theoretical perspectives. The backbone of our argument could be considered somehow old-fashioned: the main force behind the distribution of the social product is the balance of bargaining power between social classes. Adopting this perspective, we have attempted to substantiate this claim by asking ourselves how financialisation and globalisation can alter the power equilibrium. We have then framed these questions in the context of alternative welfare socio-economic models and enriched the analysis with the explicit consideration of institutional features of these different models.

The phenomena briefly recalled here represent multiple aspects of an unsustainable and inequitable growth trajectory. The implications, however, go beyond the standard domain of heterodox economics. We started with Storm and Naastepad's (Storm and Naastepad 2015) who claim that differences in productivity and technological capabilities are of major importance to explain diverging economic performances across countries. We also agree with these authors that the mainstream received wisdom—according to which external competitiveness and labour productivity have to be enhanced through labour costs compression and labour flexibilisation—is extremely unconvincing. Hence, we sketched an alternative interpretative framework for the analysis of endogenous labour productivity: following a Classical-Kaldorian approach, we have argued that a weak GDP performance and a decrease

in the wage share contribute to explain a decline in labour productivity growth. Drawing inspiration from recent Post-Keynesian literature, we have also identified financialisation and income inequality as factors with a negative influence on the evolution of labour productivity. Existing literature has extensively dealt with non-mainstream explanations of the labour productivity slowdown. With this contribution, we have attempted to provide a unified, systemic interpretation of multiple and complementary factors that are likely to represent a drag on the dynamics of productivity. In particular, we have tried to enrich and update the insights that can be derived from Sylos Labini's productivity function, complementing the traditional Kaldor-Verdoorn-Smith effect and cost-push effect with a consideration of the effects of financialisation and income inequality.

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