Financialisation and Income Distribution in Australia: Theory and Evidence

Joey Reinhard

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Supervised by Graham White

STATEMENT OF ORIGINALITY

I hereby declare that this submission is my own work and to the best of my knowledge it contains no material previously published or written by another person. Nor does it contain any material which has been accepted for the award of any other degree or diploma at the University of Sydney or at any other educational institution, except where due acknowledgment is made in this thesis.

Any contributions made to the research by others with whom I have had the benefit of working at the University of Sydney is explicitly acknowledged.

I also declare that the intellectual content of this study is the product of my own work and research, except to the extent that assistance from others in the project's conception and design is acknowledged.

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ABSTRACT

While rising income inequality and financialisation are widely recognised as prominent features of advanced capitalist economies, theoretical explanations of these phenomena, and how they interact, have varied significantly. Many of these explanations involve the construction of all-encompassing cross-country narratives, which result in a lack of analytical specificity. By framing inequality through the lens of the functional distribution of income, and focusing on the case study of Australia, this thesis aims to paint a detailed picture of what the financialisation-income distribution nexus can look like in practice. The key theoretical approach adopted is a Sraffian model of financialisation, which proposes that an increase in the relative size of the financial sector, higher financial sector productivity, and reduced labour bargaining power, lead to a fall in the wage share of income. This model is synthesised with other heterodox perspectives in order to establish a nuanced understanding of the key historical events that have driven the financialisation process in Australia. In doing so, this thesis seeks to disentangle Australia's experience of financialisation and a falling wage share from the ambiguity of neoliberalism, deregulation, and globalisation.

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INTRODUCTION

Increasing income inequality and financialisation are two hallmarks of the structural transformation undergone by advanced capitalist economies in recent decades. Awareness of these issues has spread throughout public political and economic discourse, most notably through the "Occupy" movement which took place in the wake of the global financial crisis. The post-GFC period also prompted a significant uptick in academic interest in the concept of financialisation, while Thomas Piketty's Capital in the Twenty-First Century has brought income inequality back within the focus of mainstream economic research (Aalbers 2019, p. 2, Piketty 2014). Among this emerging body of research, however, is a decided lack of consensus at the theoretical level regarding what the driving forces behind these processes are, and how they interact. In particular, the various notions of what actually defines so-called financialisation are often vague and in some instances conflicting. This thesis evaluates key elements of the literature against empirical evidence from Australia, in order to construct a more concrete conception of the relationship between financialisation and income distribution. The use of a country-specific case study facilitates an understanding of the financialisationincome distribution nexus which is detached from the common broad-based narratives of "neoliberalism", "deregulation", and "globalisation".

There are several ways in which income inequality and distribution can be measured and understood. Following the approach of Piketty, Figure 1.1 displays the path of the top 1% of income earners' share of total income, for a selection of advanced economies. The increase in these shares over time indicates growing inequality, and with the COVID-19 pandemic marking the second time since the turn of the millennium in which an economic "crisis" has failed to disturb these long-run trends, further study of distributional issues is warranted (Ferreira 2021, p. 21).

It is important here to make a distinction between the separate but related concepts of the personal distribution of income, and the functional distribution of income. The former, which is analysed by Piketty and highlighted in Figure 1.1, refers to how wealth is allocated across different levels of individual income earners in an economy. The latter describes how income is allocated between categories of production, i.e. capital and labour, in the form of profits and wages.

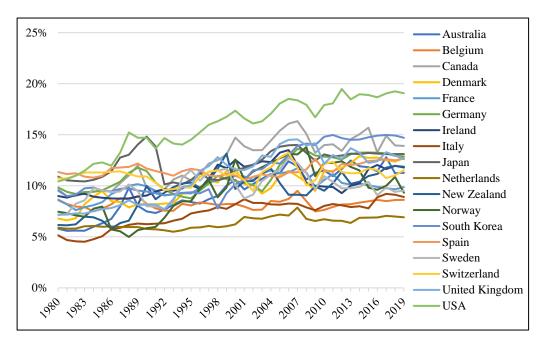


Figure 1.1: Income share of the top income percentile, selected countries, 1980-2019. Source: World Inequality Database

While the issue of income inequality is ultimately referring to changes in the personal distribution of income, the analysis that follows will focus on functional distribution.¹ The interaction between profit and wage shares is a useful proxy for understanding the interaction between high-income and low-income earners, and the aggregate nature of profit and wage shares makes them more conducive to both theoretical modelling and empirical measurement. The analytical categories of capital and labour also allow for important perspectives on institutional and class-based determinants of income distribution to be incorporated into the approach.

As demonstrated by Figure 1.2, the functional distribution of income in Australia has gradually been evolving in favour of profit since the 1970s, reflecting the aforementioned trend in personal income distribution shifting towards high income earners. An analogous method of understanding this change is examining the paths of productivity and real wages (La Cava 2019). For the labour share of income to remain constant, any increase in productivity (output per-hour worked) would have to be matched by a proportionate increase in the real wage,

¹ While Piketty's work is a seminal contribution to the literature, especially from an empirical standpoint, it will not receive significant attention in this thesis. This is due to Piketty's focus on the personal rather than functional distribution of income, and lack of a clear analytical theory which can be used to explain changes in distribution, particularly with respect to the process of financialisation.

however Figure 1.3 demonstrates a divergence between these two variables, again indicating that the profit share has increased.

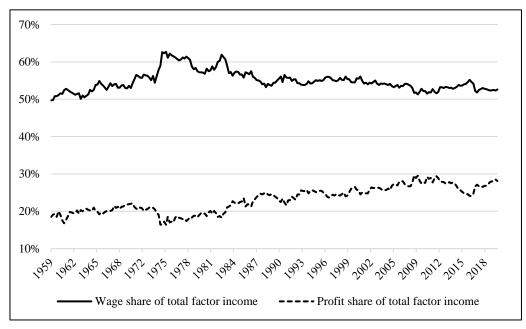


Figure 1.2: Functional distribution of income in Australia, 1959-2019. Source: ABS 5620.0

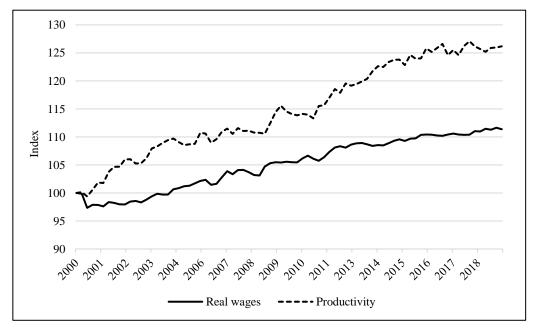


Figure 1.3: Real wages and productivity in Australia, 2000-2019. Source: ABS 6401.0, ABS 6345.0, ABS 5206.0, ABS 6150.0.55.003. Real wages calculated as WPI/CPI. Productivity calculated as GDP/hours worked

The decoupling of productivity and wages has also taken place against a backdrop of low unemployment – an environment which conventional labour market theory suggests should assist real wage growth (Bishop and Cassidy 2017). With the skills and education of the workforce also increasing during this period, other explanations of wage-stagnation are

necessary (Peetz 2018a, p. 105). One opinion is that the decoupling of productivity and wages, and the falling labour share of income, is due to the mining boom creating an aggregate compositional change in Australia's economy involving more capital used in production relative to labour (Kirchner 2019). However, even with the mining industry excluded, the labour share of income has still fallen during the mining boom period, so further explanations are required (Cowgill 2013, p. 15). Other analyses look at structural factors in the labour market outside the unemployment rate as potential causes of low wage growth, such as high underemployment, and the reduced bargaining power of workers (Bishop and Cassidy 2017).

While these factors may have contributed in some part to Australia's falling wage share, there is no consensus regarding the exact forces driving this long-term distributional shift, and there are explanatory gaps that need to filled. Arguably, the story is incomplete without considering the connection between distribution and the process of *financialisation*, whose origins tend to be traced back to the global economic restructuring of the 1970s and 1980s (Aalbers 2019, p. 4).

The most widely used definition of financialisation, perhaps partly due to its broad scope, is 'the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies' (Epstein 2005, p. 3). Specific characteristics of advanced economies which are commonly associated with financialisation include, but are not limited to: financial market deregulation and technical innovation, and the resulting explosion of new financial products (Hein and Van Treeck 2010, p. 206, Krippner 2005, p. 175); growth in the relative size of the financial sector and increasing financial intermediation (Abdulkarim et al. 2020, p. 5); growth in leverage for corporations and debt-financed consumption for households (Knafo and Dutta 2020, p. 489, Hein 2013, p. 3); the financialisation of daily life and increased risk faced by households (Martin 2002, Quiggin 2010); reduced bargaining power of workers (Martin et al. 2014, p. 8); and changes in corporate governance oriented toward shareholder value, ultimately giving rise to financial investment replacing physical investment (Stockhammer 2004, p.719). Importantly, almost all analyses of financialisation also point towards some negative effect on income distribution. While a general "increasing role of finance" in Australia is fairly undisputed, a closer examination of the various theories of financialisation against empirical evidence will help demystify the qualitative elements of this process, and how they connect to income distribution (Battellino 2000, p. 16).

Chapter 1 of this thesis surveys the diverse theoretical literature on financialisation and its relationship with income distribution, and evaluates these theories against key aggregate data from Australia. Given the limited engagement of the economic mainstream with the concept of financialisation, the theoretical discussion in Section 1.1 involves a particular focus on heterodox economic theory, as well as other critical perspectives from across the social sciences. Based on the evidence presented in 1.2, it is argued that a Sraffian approach to financialisation, as outlined by Carlo Panico and Antonio Pinto, is the most appropriate explanation for the fall in the wage share of income in Australia, (Panico and Pinto 2015).

Chapter 2 utilises the Panico and Pinto model as a theoretical starting point for a deeper empirical investigation into Australia's financialisation experience. The need to disentangle financialisation and its effect on distribution from generalisations about deregulation and neoliberalism is a central theme throughout the chapter. Section 2.1 chronicles the regulatory changes within the financial sector which enabled growth in the sector's output and productivity relative to the rest of the Australian economy. In Section 2.2, the story of financialisation in Australia is expanded beyond the financial sector itself, by delving into the changes to social and economic policy in Australia which demonstrate material linkages between financial expansion and reduced labour bargaining power – a key element of Panico and Pinto's explanation of distribution. Section 2.3 then identifies the common threads of orthodox economic theory which have run throughout many of these policy changes, which are argued to further justify the use of a heterodox model.

Chapter 3 takes stock of the preceding analysis, and provides forward looking comments regarding the dynamics of financialisation and income distribution in Australia. The key argument of this thesis is that the Sraffain model elaborated by Panico and Pinto provides an analytically powerful and nuanced characterisation of this relationship and its key long-term trends in recent decades. However, there are several emergent factors at play which have the capacity to alter the future trajectories of these trends.

CHAPTER 1: Which Financialisation?

1.1: Theorising the Relationship Between Financialisation and Distribution

The conventional economic approach to theorising distribution, as informed by the marginalist theoretical tradition, is hindered by both analytical and conceptual issues. It argues that factor income shares are explained by their marginal productivities at market-clearing quantities, given preferences, endowments, technology, and the properties of 'well-behaved aggregate production functions' (Stockhammer 2013, p. 44). However, the analytical critiques of the 1960s Cambridge capital debates demonstrated that there are significant logical inconsistencies within this approach (Kurz 2018, p. 1349-1358). Moreover, attempting to explain distribution in this way abstracts away from its inherently institutional and class-based character.

These limitations of marginalist analysis means that any attempts made by the orthodoxy to connect finance to income distribution have focused on micro-level dynamics instead. The role of finance in allowing individuals and firms to increase efficiency, flexibility, and access to opportunities has been emphasised, suggesting that financialisation might actually reduce inequality (Demirgurc-Kunt and Levine 2009, p. 288). While some empirical analyses from the mainstream have acknowledged the negative effect finance may have on income inequality (Denk and Cournede 2015), theoretical modelling of this negative relationship is not entirely consistent with the wider orthodox framework, given the overarching 'belief that deregulation and expansion of financial markets is welfare enhancing' (Palley 2007, p. 6). Furthermore, as Chapter 2 will subsequently illustrate, it is this orthodox belief in the welfare enhancing properties of financial markets that has helped establish the policy decisions that gave rise to financialisation in the first place.

Heterodox theoretical approaches, on the other hand, provide more analytical tools which can help understand the relationship between financialisation and distribution. A central role for functional distributive variables, a stronger focus on the structural processes shaping financialisation, and significant scope for these processes to affect real economic outcomes, have enabled heterodox schools of thought to produce a larger and more critical literature on the subject. The plethora of ways in which finance now affects the lives of ordinary people has led the issues described here to be studied by multiple disciplines within the social sciences. The 'often consciously eclectic' theoretical framework that has developed benefits from drawing on a diverse range of perspectives, but also sacrifices specificity as a result, creating issues of ambiguity around the definition of financialisation (Lapavitsas 2011, p. 617). This section identifies key strands of the financialisation literature, with a particular focus on the ramifications for income distribution.

The Sraffain Approach

Under the modern classical framework inspired by Piero Sraffa's *Production of Commodities* by *Means of Commodities*, recent authors have sought to incorporate financialisation into the analysis (Sraffa 1960). In the Sraffian price system, the profit rate and real wage rate are both key elements, and are not determined by marginal productivity theory. In order to close the system, Sraffa tacitly follows the approach of the classical economists and Marx, by requiring one of these distributive variables to be determined exogenously to the price system by institutional or historical factors (Garegnani pp. 13328-13329). The importance that is placed on these factors for explaining distribution in the Sraffian approach is one of its key merits, especially when attempting to incorporate the process of financialisation, which is usually characterised by institutional properties. As well as through the exogenous distributive variable, structural changes to the economy can also enter the price system through the technical coefficients of production, and thus affect the relationship between the distributive variables in multiple ways. These properties of the Sraffian framework provide fertile ground for analysing how an institutional process like financialisation may affect income distribution.

Incorporating financialisation into a Sraffain model has been conceptualised in several different ways: Di Bucchianico analyses how interactions between the financial sector and the industrial sector affect the rate of profit, while Dvoskin and Feldman provide an extension of Massimo Pivetti's monetary theory of distribution which focuses on banking (Di Bucchianico 2021, Dvoskin and Feldman 2021, Pivetti 1985). However, the approach which has the clearest view towards explaining the effects of financialisation on factor income shares has been developed by Carlo Panico and Antonio Pinto, for whom the key feature of financialisation is an increase in the relative size of the financial sector (Panico and Pinto 2015). It should be noted here, that as a simple accounting identity, if the wage share in the financial sector is lower than the wage share in the rest of the economy, and the financial sector grows relative to the rest of the economy, then, *ceteris paribus*, the aggregate wage share must fall. The value of the Panico and Pinto model is its ability to provide a more detailed analytical description of this

relationship, which facilitates deeper insights into its mechanisms, and the structural processes that shape them.

The model analyses a closed economy with no government deficit, and assumes that workers (recipients of wages) do not save and capitalists (recipients of profit) do not consume, so that the personal and functional income distributions coincide (Panico and Pinto 2015, pp. 14-15). With two sectors in the economy, the financial sector and the industrial sector, aggregate nominal output can be represented as the sum of outputs in these two sectors: $Y = Y_f + Y_i$. Nominal output can also be represented as Y = P + W, the sum of the incomes paid to each category of production – profits and wages. The labour or wage share of income is then:

$$\omega = w_m \left(\frac{L_f + L_i}{Y}\right) = w_m \left(l_f y_f + l_i y_i\right) \tag{1}$$

Where L_f and L_i are the quantity of labour hours in each sector, l_f and l_i are the labour-tooutput ratios in each sector, y_f and y_i are the output shares of each sector, and w_m is the hourly money wage rate. The choice to express outputs nominally here is in keeping with the more general Sraffian approach of allowing for price changes in a multi-commodity economy to affect nominal output, despite this particular model only consisting of a homogenous consumption good produced by the industrial sector. Differentiating this equation with respect to time, and rearranging, produces the following equation for the growth rate of the wage share of output:

$$g_{\omega} = g_{mw} - \left(\lambda_f \gamma_f + \lambda_i \gamma_i\right) + y_f g_{yf} \left(\frac{l_f - l_i}{l}\right)$$
(2)

where g_{mw} is the growth of the money wage rate, λ_f and λ_i are the shares of labour employed in each sector out of total labour employed l, γ_f and γ_i represent the rates of change of productivity in each sector, and g_{yf} is the growth rate of the financial sector's share of output. The sign of the growth rate of the wage share of output in equation 2 then depends on the following:

• The difference between money wage growth and total productivity growth (measured in terms of nominal output), $g_{mw} - (\lambda_f \gamma_f + \lambda_i \gamma_i)$, which is assumed to be < 0 given the reduced bargaining power of workers which has accompanied financialisation;

- The growth rate of the output share of the financial sector g_{yf} , which is assumed to be > 0 given financialisation involves the increasing relative size of the financial sector; and
- The term l_f l_i, the difference between the inverse of productivity in each sector, which is assumed to be < 0 given the 'faster rate of innovation' that has taken place in the financial sector as a part of financialisation (Panico and Pinto 2015, pp. 14-15). While the l_f l_i term is referring to a difference in *levels* of productivity, this assumption regarding a higher *growth rate* of productivity in the financial sector means that this difference in levels will become negative over time.

With this conception of financialisation in place (an increasing relative size of the financial sector, higher productivity in the financial sector, and limited bargaining power of workers), the growth of the wage share of output is then negative, suggesting that financialisation causes the distribution between profits and wages to widen.

The Neo-Kaleckian Approach

Another part of the heterodox literature that addresses the relationship between financialisation and income distribution has done so through the use of Kaleckian/neo-Kaleckian models. These models, like the Sraffian approach, place distributive variables at the centre of the analysis, and provide scope for institutional factors to play a role in their determination. The key difference however, is where the determination of output and growth is left 'open' in the Sraffian price system, Kaleckian models explicitly link the determination of the rate of accumulation to distribution (Trezzini and Palumbo 2016, pp. 505-506, Cesaratto 2015, p. 161). ² Kaleckian analyses have a strong focus on the corporate governance aspect of financialisation, in which 'the shareholder revolution and the development of a market for corporate control have shifted power to shareholders and thus changed management priorities, leading to a reduction in the desired growth rate' (Stockhammer 2004, p. 719). This primarily happens through a "profits versus growth" conflict in which investment in real capital is replaced with financial investment in order to increase short-term returns, and financial profits increase relative to non-financial profits.

² This could be viewed as an advantage of the neo-Kaleckian approach over the Sraffian approach, however if linking the Sraffian price system to the rate of output growth was required, Serrano provides a useful mechanism to do this through the 'supermultiplier' approach (Serrano 1995).

In terms of distribution, these models assume the wage share is falling based on the idea that, in parallel with the shareholder revolution, financialisation has also altered the sectoral composition of the economy in favour of the capital share, increased the management salaries and profit claims of the rentiers, and weakened trade union bargaining power (Hein 2013, p. 1). This distributional effect of financialisation is then used as an additional channel through which financialisation can impact growth – the Kaleckian models describe in detail how 'the reduction in the labour income share associated with rising shareholder power' affects the rate of accumulation (Hein and Van Treeck 2010, p. 225, Stockhammer 2004, p. 737). However, the relationship between the falling labour share and rising shareholder power itself, although argued for in qualitative terms, is not a part of the formal model, and is ultimately of secondary importance compared to the effect of financialisation on growth.

Other Capital Reallocation Theories

The idea that a key element of financialisation is the reallocation of capital from industrial investment to financial investment is not exclusive to the neo-Kaleckain school. Marxian perspectives have made arguments along these lines, although the underlying factors driving capital reallocation differ from those in the neo-Kaleckain approach. The tendency of the profit rate to fall is a key Marxian theoretical proposition which has been used to explain the supposed switch from industrial capital to financial capital in search of greater profits (Brenner 2004, p. 75). This proposition has been challenged by other Marxian authors, however, on the basis that measured profit rates have been stable over the period in which financialisation has taken place (Lapavitsas and Mendieta-Munoz 2016). Lapavitsas and Mendieta-Munoz instead point to the role of the state in facilitating the movement of capital into the financial sector through policy changes throughout the late 21st century, rather than the declining profitability of industrial capital. Despite differing arguments regarding the causes, both of these Marxian perspectives have the capital reallocation argument at their core, along with an associated rise in financial profits as a proportion of total profits (Brenner 2004, p. 77, Lapavitsas 2011, p. 615).

The shift from industrial investment to financial investment has also been argued to have taken place specifically in an Australian context. Namely, David Peetz has suggested that 'the widely recognised shift in income from labour to capital is really a net shift in income from labour, and from capital (including unincorporated enterprises) in other industries, to finance capital' (Peetz 2018b, p. 46). Peetz identifies capital reallocation as a key factor in the reduced wage share, as lower investment in the non-financial sector (where labour is more highly

concentrated) compromises the bargaining position of workers – the reduced profits of industrial capital mean that there is 'little to negotiate over', even for those workers 'who are brave enough' (Peetz 2018a, p. 112). This proposition adds to the capital reallocation argument a more direct relationship with the falling wage share of income than is present in either the neo-Kaleckian or Marxian approaches.

Other Heterodox Economics Theories

Outside of focusing on capital reallocation, research from the wider heterodox economics literature has identified additional channels through which financialisation may affect income distribution. Martin et al. point to credit expansion and increasing household indebtedness to the owners of capital as a cause of upward redistribution, while Westcott and Murray raise the related issue of asset price inflation having the same effect (Martin et al. 2014, p. 9, Westcott and Murray 2017, p. 522). Palley highlights how the combination of deregulated financial conduct, and government bailouts for investors, has created a moral hazard problem which encourages a higher level of risk-taking in the financial sector (Palley 2007, p. 25). This leaves economies more exposed to crises in which the financial sector's profits have greater protection than the incomes of households. These theories identify important potential linkages between financialisation and income distribution, and are therefore worthy of further study, however they tend to lack the formal models that are present in the Sraffian or neo-Kaleckian approaches.

Sociological Approaches to Financialisation

Research from the disciplines of sociology/economic sociology have also established alternative viewpoints on the role of financialisation. A focus of this literature has been on the "financialisation of daily life", a concept developed by Randy Martin (Martin 2002). This perspective argues that the creation of new financial products and the increasing role of finance in society outside of the financial sector, is related to workers and households being assigned more individual responsibility for their economic circumstances (Martin et al. 2008, p. 120, Parfitt 2018, p. 68). This results in greater exposure to financial risk and less secure employment (Chan 2013, p. 363). Adjacent to this literature is the concept of "risk shifting", which suggests that financialisation plays a role in the reconfiguration of the welfare state and the corresponding 'transfer of risk from government and business to workers and households' (Quiggin 2010, p. 17). No explicit connection to the functional distribution of income is established by these approaches. However, their focus on linking financialisation to the risk

faced by wage earners serves as a useful analytical lens through which labour bargaining power can be understood. These perspectives can then be synthesised with other strands of heterodox theory that provide more concrete mechanisms for labour bargaining power to affect distributional outcomes.

The Role of Executive Remuneration

Present throughout many of the varying theories of financialisation is some analysis of the large increase in executive remuneration that has occurred in recent decades. It has been argued that this phenomenon of the "working rich", whereby top managers of large corporations are able to secure remuneration packages with extraordinarily large salaries and bonuses, has been particularly salient in the financial sector (Abdulkarim et al. 2020, p. 57). This phenomenon should increase income inequality (as measured by the personal distribution of income), however managerial incomes are still measured in countries' national accounts as wages. Therefore any empirical analysis of the functional distribution of income, such as Figure 1.2 above, may be overestimating the wage share. The trend of a declining wage share would likely be more pronounced if the remuneration of executives was excluded.

In attempting to explain the growth in managerial pay, critics have pointed to certain features of the executive salary setting process which resemble neither conventional labour markets nor conventional labour market theory. Orthodox corporate finance theory suggests that executive contracts are bargained over by a principal (the board, representing shareholders), and an agent (the executive), in a relationship which is inherently adversarial, and analogous to the contract-setting environment for a worker and their boss (Tirole 2006, pp. 20-36). Peetz however, highlights the 'overlapping identities' between executives and board members, who are members of the same class, sometimes working as executives for other companies themselves, and therefore have a material interest in keeping market remuneration for these positions high (Peetz 2015, p. 711). In a stark portrayal of how the labour market for senior executives can diverge behaviourally from other labour markets, evidence form a 1992 survey of 196 Australian private companies suggested that 92% of companies seek to set their senior executive pay packages around or above the market median (Peetz 2015, p. 713).

This behaviour has led to the suggestion that managerial salaries should be included in the analytical category of profits rather than wages: 'their incomes are essentially part of the distribution of surplus value. The level of their earnings is shaped by the size of resources

commanded by that corporation and by distributional processes within the capitalist class' (Peetz 2018b, p. 35). However, evidence suggests that executive remuneration has been increasing irrespective of company profitability, which indicates other factors are at play. Sheehan highlights that while 69% of the typical CEO pay package for ASX top 100 companies was comprised of variable remuneration, many of the variable remuneration targets are based on non-financial objectives (Sheehan 2018, pp. 147-154). Moreover, Peetz acknowledges that there is only limited evidence for a positive correlation between company financial performance and CEO pay in an Australian context (Peetz 2015, p. 716). Thus, despite the evident class affiliations of top managers, the empirical disconnect between their increasing remuneration, and the profits of the companies they preside over, requires that these incomes still be analytically considered "wages".

The understanding of executive remuneration elaborated here also raises theoretical issues for other parts of the financialisation literature. Namely, the above critique of principal-agent models in the context of managerial pay-setting comes into conflict with the concept of the shareholder revolution. The shareholder revolution argument suggests that executives are beholden to the "profits over growth" demands of the shareholder class. If boards represent these shareholders, surely this demand for profits and a high dividend payout would also entail close policing of the potential earnings that are lost to inflated executive salaries. It is therefore difficult to reconcile the shareholder revolution argument with the phenomenon of high managerial pay, when this phenomenon is explained by non-adversarial relations between executives and their boards. This conflict is a particular issue for the neo-Kaleckian conception of financialisation, of which the shareholder revolution and inflated managerial pay are both key components.

These issues aside, the existence of the working rich phenomenon is difficult to deny – in 2022 CEO pay for Australia's top 20 companies increased by 9 times more than the that of ordinary full-time workers, many of whom have received a real wage cut due to inflationary pressures (Butler and Evershed 2022). This thesis proceeds with including executive remuneration as a part of the wage share, but with the caveat strongly in mind that this has the effect of overstating the income share going to the majority of workers.

1.2: Evidence for Financialisation in Australia

The literature outlined above is rich in its diversity of perspectives but also hindered by a lack of specificity. A key contributing factor to this ambiguity is the geographic heterogeneity of financialisation. Cross-country empirical analysis has suggested that the process of financialisation is the largest determinant of the fall in the wage share of income in advanced economies (Stockhammer 2013). In order to reach this conclusion, a time-series regression of the wage share against the degree of 'financial globalisation' and a handful of other explanatory variables was conducted. On top of the basic econometric issues with attributing causation based on this kind of methodology, financial globalisation here is measured simply by the size of balance sheets as a proportion of GDP, without theoretical explanation as to why growing balance sheets should result in a lower wage share. An ILO report follows a similar approach and reaches similar conclusions, with recourse to globalisation investment dynamics as an explanation for the relationship between balance sheet size and income shares. These studies call to attention the issues associated with attempting to generalise a process like financialisation which is subject to geographical variation. The ambiguity when describing financialisation on an international scale also enables the broad and somewhat careless association of financialisation with the even more nebulous concepts of neoliberalism and globalisation, which too have taken on different forms in different institutional landscapes (Barnes et al. 2018, p. 7).

This thesis aims to paint a clearer picture of the ways in which financialisation can affect income distribution by focusing on the Australian experience. This is not to completely reject the merit of comparing across countries or identifying international trends, but rather to demonstrate what these trends can look like in more concrete terms by focusing on one country, and providing substance to the proposed theoretical relationships. The analysis that follows therefore, does not claim to identify any "correct" definition of financialisation in general, but one that helps answer the question of how exactly financialisation has affected income distribution in Australia.

What is considered as the start date of the financialisation process varies between authors, but for the purposes of this thesis the "financialisation period" is defined in Australia as running from approximately 1980 to 2019. The reasons for this are fourfold:

- There were a number of key policy shifts beginning in the early 1980s which facilitated the financialisation process these will be explored in detail in Chapter 2;
- Many ABS datasets relating to key variables of interest only begin in the 1980s or 1990s;
- The drastic one-off effects that the COVID-19 pandemic had on numerous macroeconomic variables renders the years between 2020 and 2022 largely unhelpful in analysing long-term structural trends; and
- The period of 1980-2019 also corresponds with the long-run decrease in the wage share of income, which is the phenomenon this thesis aims to explain via financialisation.

The characterisation of the financialisation-income distribution relationship outlined in Panico and Pinto's Sraffian model matches up well with Australian data. Firstly, the relative size of the financial sector has grown – Figure 1.4 shows the share of gross value added for the financial sector increasing since the late 1980s. Secondly, the model assumes that productivity growth has been higher in the financial sector than the non-financial sector. Figure 1.5 shows that both the level and growth rate of productivity, have in fact been higher in the financial sector in Australia.

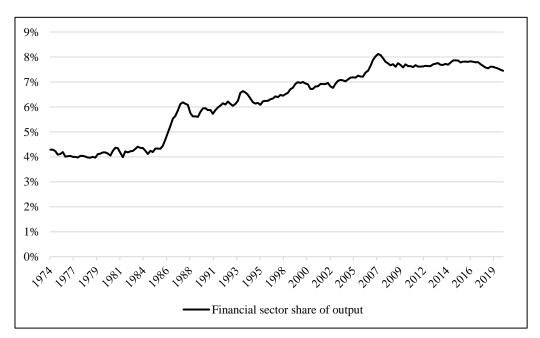


Figure 1.4: Relative size of the financial sector in Australia, 1974-2019. Source: ABS 5620.0

Finally, the model also assumes that there has been a reduction in labour's ability to capture gains in productivity in the form of wages. While this cannot be measured conclusively, a strong decline in Australian trade union membership, as shown in Figure 1.6, functions as a

useful proxy. Moreover, the purpose of this proposition is merely to suggest that nominal wage growth has been lower than productivity growth (in terms of nominal output). Given these variables are measured with the same price level, this is equivalent to suggesting that real wage growth has been lower than productivity growth (in terms of real output), which was shown to be the case in Figure 1.3. As discussed in Section 1.1, the three propositions outlined here (which have now been shown to be empirically consistent in Australia) result in the model producing a fall in the wage share of output. This result also matches up with the distributional change in Australia's economy exemplified by Figure 1.2.

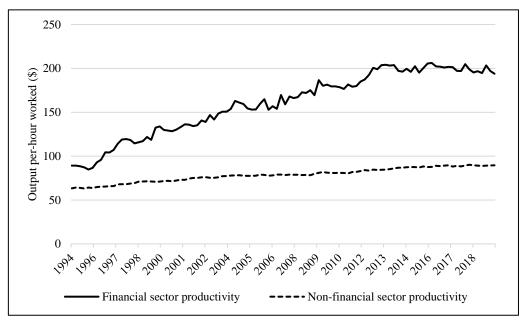


Figure 1.5: Sector level productivity in Australia, 1994-2019. Source: ABS 5206.0, ABS 6150.0.55.003. Productivity calculated as GDP/hours worked in each sector.

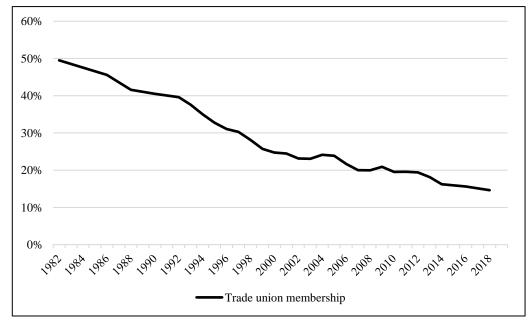


Figure 1.6: Trade union membership in Australia, 1982-2019. Source: ABS 6333.0, 6310.0, 6325.0

While a fall in the wage share of output is also a component of the Kaleckian approach to this question, the Section 1.1 highlighted that the key proposition of Kaleckian financialisation models is the so-called shareholder revolution causing investment to shift towards financial products and away from real capital. Krippner goes about testing this phenomenon empirically by analysing the financial activity of non-financial corporations (NFCs) in the United States (Krippner 2005). Specifically, the paper shows that the ratio of portfolio income to corporate cash flow for NFCs has increased, which supports the Kaleckian position (Krippner 2005, p.

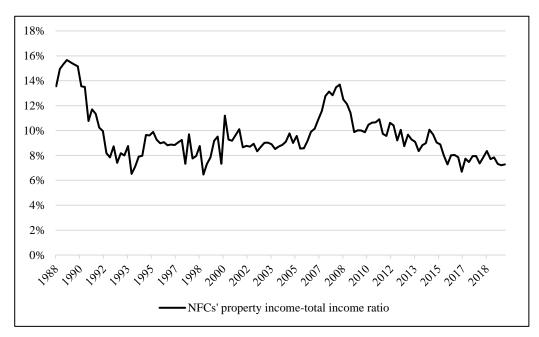


Figure 1.7: Financial activity of non-financial corporations in Australia, 1988-2019. Source: ABS 5206.0

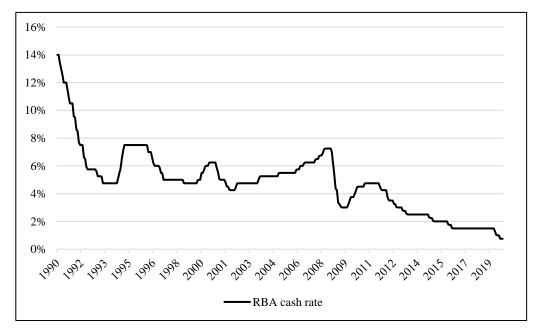


Figure 1.8: Interest rates in Australia, 1990-2019. Source: FRED IRSTCI01AUM156N

185). However in the Australian case, such an increase is not to be found.³ Following the same method, Figure 1.7 plots the ratio of property income (income receivable from interest, dividends, and other assets) to total gross income for NFCs, which has shown a moderate *decrease* since the late 1980s. The shape of this plot also closely resembles the path of the RBA cash rate over the same period, displayed in Figure 1.8. It would therefore appear that, assuming rates of return throughout the economy are correlated with the cash rate, the financial investment decisions of NFCs have been driven by variation in rates of return on financial assets, rather than any process of financialisation involving shareholder value orientation.

The other component of this argument, i.e. that investment in physical capital has decreased, holds slightly more weight when looking at Australian data. Figure 1.9, plotting private non-financial investment, or gross fixed capital formation (GFCF), as a proportion of GDP, shows a mixed picture over time. This measure has been fairly stable since the early 1980s, although after excluding mining investment, a slight decrease since the early 2000s can be observed. This lends some credence to the claim that investment in physical capital has slowed down, but only on an economy-wide scale. This means that any reduction in non-financial investment may just be due to aggregate compositional changes in favour of the financial sector, which was shown to have occurred above in Figure 1.4. Thus, while the slight decrease in GFCF as a

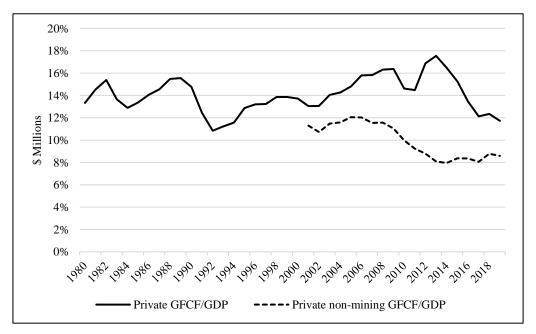


Figure 1.9: Real capital investment in Australia, 1988-2019. Source: ABS 5206.0

³ The main increase in Krippner (2005) takes place approximately between 1970-1990, whereas the Australian data only begins in 1988. The post-1990 U.S. data in Krippner shows a similar pattern to the Australian data presented here.

proportion of GDP provides some support for the capital reallocation argument on an aggregate level, it is insufficient to substantiate the claim of firm-level capital reallocation that is implied by the shareholder revolution argument.

Section 1.1 highlighted that at a theoretical level, the Sraffian approach to financialisation involves clearer mechanisms regarding the effect on distribution than neo-Kaleckain models. Moreover, potential inconsistencies within the neo-Kaleckain description of financialisation have been shown to emerge when considering the analytical conflict between the shareholder revolution and the role of executive remuneration. The evidence then presented here also points strongly towards the Sraffian conception of financialisation as being the more helpful framework through which distributional changes in Australia can be understood. It is for these reasons that the Sraffain model presented by Panico and Pinto will be used as the main framework for further analysing the Australian case, however this does not preclude the ongoing use of other parts of the financialisation literature. While the key neo-Kaleckian proposition of the shareholder revolution has been challenged here, other elements of Kaleckian theories, and capital reallocation theories more broadly, still provide useful perspectives on the dynamics of the Sraffain model. In particular, the reduction of labour bargaining power, one of the main components of financialisation proposed by Panico and Pinto, can be better understood by drawing on a variety of theoretical arguments from across the financialisation literature.

CHAPTER 2: Further Historical Inquiry

The Sraffain model proposed by Panico and Pinto, and its three key components – growth in the relative size of the financial sector, higher productivity in the financial sector, and reduced labour bargaining power – has been identified as a useful theoretical starting point to characterise Australia's financialisation experience, and the accompanying fall in the wage share of income. These propositions are empirically consistent with long-term, aggregate level trends observed in Australia, although further evaluation of the model requires a more detailed description of these trends and their drivers. By understanding specific aspects of the policy and structural economic changes which have occurred over the financialisation period, this section aims to establish a description of financialisation in Australia which is disentangled from ambiguous notions of neoliberalism, deregulation, and globalisation.

2.1: Structural Changes Within the Financial Sector

The build-up of numerous pressures on Australia's system of financial regulation towards the end of the 1970s, emerging from both domestically and abroad, set the scene for a decadeslong process of structural transformation within the financial sector. The ensuing liberalisation of financial markets that took place from the 1980s onwards was crucial in enabling the growth of the financial sector's share of output, as well as its higher level of productivity – two of the key elements of Panico and Pinto's characterisation of the financialisation process.

The Campbell Committee and the Dollar Float

Throughout the post-war period Australia's banking sector was subject to a system of regulations that was designed to assist the functioning of monetary policy, limit financial risk-taking, and control domestic and international capital flows (Battellino 2007). However, the 1970s saw the development of forces which undermined the effectiveness of this system. Domestically, the regulations in place on banking, such as interest rate ceilings and deposit requirements, were viewed to be hindering banks' 'ability to intermediate freely between borrowers and lenders' (Harper 1991). These conditions enabled the emergence of non-bank financial intermediaries (NBFIs), which weakened the power of the regulatory controls by evading them all together (Grenville 1991). Meanwhile, the breakdown of the Bretton Woods system of fixed exchange rates resulted in an increase in capital flows from overseas, and the pressure this placed on Australian monetary policy to defend the AUD exchange rate limited its ability to perform its key domestic functions (Battellino 2007).

These tensions prompted the government to establish an inquiry into the Australian financial system in 1979 known as the Campbell Committee (Campbell et al. 1981). In order to reestablish control over the domestic financial system and put banks and NBFIs on a level regulatory playing field, the Committee was faced with the option of either attempting to extend existing regulations to NBFIs, or removing regulations on banks (Grenville 1991). The final report handed down in 1981, informed by a 'general predilection for free market outcomes', opted for the latter, and recommended a swathe of regulatory changes which would remove the post-war controls and liberalise the domestic banking system significantly (Valentine 1991).

The vast majority of these recommendations were supported by both the banking sector and policy makers, and were formally enacted over the course of the next few years. These changes, including the decision to float the Australian dollar in 1983, produced an immediate expansion of the financial sector, underpinned by new financial market entrants in the form of both banks and NBFIs, the introduction of various new financial products, strong credit growth, and rising asset prices (Gizykci and Lowe 2000, pp. 181-183). As highlighted previously in Figure 1.4, the 1980s was the most significant period of growth for the financial sector's share of output, while the decade also saw large increases in financial market turnover and international capital flows (RBA 2014, pp. 16-19).

The Wallis Inquiry

After a decade of rapid financial expansion in Australia, the consequences of overvalued asset prices and poor credit quality were brought to bear in the early 1990s, as monetary policy tightening precipitated financial market collapses and an economy-wide recession. While financial institutions incurred significant losses in this period, they were able to return to profitability relatively quickly, and the financial sector's size and level of productivity resumed their long-term trends of increasing relative to the rest of the economy (Gizykci and Lowe 2000, p. 186). The financial market volatility exemplified by this episode did, however, trigger a series of regulatory reforms over the course of the 1990s aimed at improving prudential standards and financial stability, most notably through the 1996 financial system inquiry known as the Wallis Inquiry (Wallis et al. 1997). The key recommendation of the Wallis Inquiry, which was adopted in due course, was the "twin peaks" model of financial regulation involving the establishment of APRA and ASIC. Notwithstanding the number of new financial regulations this period brought about, the overarching goal of these reforms was still ultimately

to enhance efficiency, flexibility, and competition in the financial sector (Gizykci and Lowe 2000, p. 202).

Deregulation or Reregulation?

The policy changes which liberalised the Australian financial sector in the latter part of the 20th century are often characterised by supporters and critics alike as a process of deregulation. However, the experience of the 1990s and the Wallis Inquiry begs the question of whether this period was in fact one of 'reregulation', whereby the role of the state in financial markets hasn't materially receded, despite the clear 'freer rein for market forces' (Parfitt 2018, p. 66, Harper and Leslie 1993, p. 94). More than just a semantic difference, thinking of regulatory changes in this way pushes back against the 'megatrends' of deregulation, neoliberalism, globalisation, which imply 'stronger markets and weaker governments', and '[serve] only to obscure what is really going on' (Vogel 1998, pp. 1-5). Rather than portraying the relationships between states and markets as dichotomous and zero-sum, the reregulation perspective accounts for the inherent dependence of market liberalisation and expansion on state support.

Evidence in Australia for reregulation can be observed not only through the Wallis Inquiry and regulatory forms of the 1990s, but also in the initial liberalisation of banking recommended by the Campbell Committee in the early 1980s, which involved the introduction of new regulations in order to promote system stability (Valentine 1991). Furthermore, the first two decades of the 21st century have seen several bouts of reforms which have added complexity to the regulatory system while still aiming to meet the overarching goal of market efficiency and flexibility. New regulatory practices recommended by two rounds of international negotiations on financial stability known as Basel II and Basel III, as well as another Australian financial system inquiry in 2014 known as the Murrary Inquiry, have all been adopted by Australian authorities (Murray et al. 2014, Basel Committee on Banking Supervision 2004, 2010).

Measuring Financial Expansion

As ongoing financial reregulation has taken place, the key elements of Panico and Panico's conception of financialisation have persisted. While the propositions of a growing financial sector share of output, and higher productivity in the financial sector, were evidenced by Figures 1.4 and 1.5 respectively, further empirical detail can be added to this picture of financial market expansion. Figure 2.1 shows that total assets and liabilities as a proportion of GDP grew

by 4141% and 2030% respectively between 1988 and 2020. This growth in balance sheets relative to the size of the economy, which has occurred not only within the financial sector but also for businesses and households, has increased alongside the demand for credit, financial products, financial services, and financial intermediation, and has therefore been an important component of the rise in the financial sector's share of output.

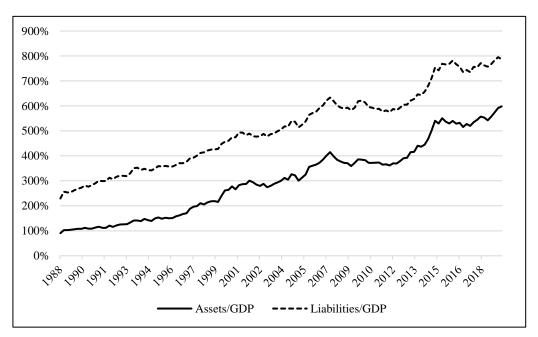


Figure 2.1: Balance sheets relative to output in Australia, 1988-2019. Source: ABS 5232.0, ABS 5620.0

Regarding higher financial sector productivity, the metric of output per-hour worked used in Figure 1.5 displays a convincing trend, but is subject to some measurement issues (La Cava 2019). Using alternative estimates of productivity from the ABS' multi-factor productivity index, which adjusts hours worked for quality, paints a similar long-term picture, with financial sector productivity growth averaging 1.4% per-year between 1994 and 2000, while economy-wide productivity grew at just 0.43% per-year.⁴ Further insight into the higher level of productivity which has developed in the financial sector can be gained by looking at the financial sector's share of total employment. Figure 2.2 shows that the financial sector has actually decreased its share of employment in the economy, over the same period which saw its share of output increase significantly. With output increasing and employment decreasing, any measurement of how "productive" a given unit of labour is will necessarily be increasing over time. Crucial to this trend has been the advancements made in information and communications technology, which have ultimately enabled the financial sector to expand and

⁴ Source: ABS 5260.0.55.002.

diversify the amount of financial products and investment channels that are available, without having to increase the number of labour hours used as inputs (RBA 2014 p. 17, La Cava 2019).



Figure 2.2: Financial sector share of employment in Australia, 1984-2019. Source: ABS 6291.0.55.001

2.2: Financialisation Outside the Financial Sector: The Social Wage, Risk, and Labour Bargaining Power

While growth in the relative size of the financial sector and higher productivity in the financial sector can be easily observed, and clearly linked to the regulatory changes described in Section 2.1, the third key assumption of Panico and Pinto's Sraffian model – decreasing labour bargaining power – is more contentious. In particular, it is not immediately obvious why this should be considered a component of financialisation. Suggesting that the ability for workers to negotiate wage increases has diminished is one thing, but including this trend as a part of financialisation which, at the surface level, is a process that has taken place externally to the labour market, is where the contention arises. This association has appeared in multiple theories of financialisation, although it runs the risk of defaulting to a common neoliberalism narrative in which market-oriented policy shifts in different sectors of the economy are reduced to being equal parts of an all-conquering tour de force of laissez-faire ideology (Burchell 1994, p. 332). Regulatory changes in financial markets and labour markets certainly have a common theoretical lineage which warrants further inquiry, but as highlighted by the reregulation literature, recourse to a homogenous "free market" economics discussion is unhelpful.

This section aims to push back against the association of reduced labour bargaining power with financialisation at a generalised level, but still proposes that material linkages between these phenomena can be identified in an Australian context. This is achieved by examining how specific aspects of the economic and social policy restructuring that have taken place over the financialisation period have affected both workers and the financial sector. Establishing this connection has important ramifications for the explanatory power of the Panico and Pinto model – the inclusion of the labour bargaining power dimension adds greater institutional detail to the description of financialisation, and ultimately enhances the model's capacity to analyse shifts in the functional distribution of income.

Labour Bargaining Power and Australia's Industrial Relations System

First, the claim that the bargaining power of workers has in fact decreased needs to be assessed in further detail. As shown previously in Section 1.2, the steep decline in union density and the decoupling of productivity and real wages provide solid preliminary evidence for this. As an alternative measure to union density, research has also pointed to the fall in the proportion of workers who are covered by enterprise bargaining agreements as a signal that the organised bargaining capacity of labour has been compromised (Peetz 2018a, p. 105, Pennington 2018, p. 86).

Beyond quantitative assessments, looking at the evolution of Australia's industrial relations system, which has developed into 'one of the most complex and usual systems of labour regulations in the world', provides further support for the claim (Stewart 2018, p. 295). The shift from central wage fixation to enterprise bargaining has been argued to have played a significant role in reducing labour bargaining power (Bell and Keating 2018, p. 61). This key change occurred as part of a long-running series of negotiations known as the Prices and Incomes Accord, involving the Hawke-Keating Labor Government of the 1980s and 1990s and the Australian Council of Trade Unions (ACTU). Largely in response to pressures of stagflation and the fractured industrial relations climate of the 1970s, the aim of the Accord was to reduce inflation by moderating the wage claims of workers and unions, in exchange for other forms of labour compensation through an expanded 'social wage' (Humphrys 2019, p. 5). While these moderated wage claims being governed by a centralised bargaining system was seen as a 'fundamental and unquestioned tenet' of the original Accord in 1983, ongoing changes in the focus of the Accord saw workplace-level bargaining introduced in Accord Mark VII in 1991 (Matthews 1994, p. 211).

The enterprise bargaining system weakened the potency of industrial action by essentially restricting it to individual workplaces, although changes to this system made by subsequent governments had arguably greater consequences for the bargaining position of labour. Under the Howard Liberal government, the *WorkChoices* legislation introduced in 2004 stripped back various worker protections affecting the ability to take industrial action, most notably with the removal of unfair dismissal laws (Quiggin 2010, p. 21). The following Rudd Labor government aimed to reform the *WorkChoices* system with the *Fair Work Act 2009*, although this has produced a set of restrictions and conditions around the right to take industrial action which is 'extraordinarily detailed' by international standards, and only marginally less restrictive for organised labour than the previous system (Peetz 2018a, p. 108).

Labour Bargaining Power and Financialisation

A system of labour regulations that has compromised the ability to take industrial action, a decline in union membership and union-negotiated agreements, and the lagging of real wages behind productivity, all suggest that the bargaining power of workers in Australia has decreased. However, why this decrease should be considered a component of financialisation, as in the Panico and Pinto model, requires further justification. In order to do so, the notion of labour bargaining power needs to be extended beyond the conditions of the labour market, as workers' bargaining power is not dictated by industrial relations regulation alone. The extent to which workers are exposed to other sources of economic and social hardship in their lives can greatly affect their ability to risk their employment through industrial militancy (Murphy 2010, pp. 27-28). This is reflected by the initial Accord promise of an expanded social wage (through tax reform and state provision of services) as a form of compensation for restricting strike action and wage claims (Adkins et al 2021, p. 554).

Despite the social wage restructuring of the Accord initially being intended to benefit workers, a number of the policy changes in this area in the years since can be viewed to have negatively impacted labour bargaining power. It is also around these changes that a material link between reduced labour bargaining power and financialisation can be established: by reconfiguring the social wage in a manner which prioritised individual responsibility for economic decisions, risk was shifted from the state to workers and households, while simultaneously providing the financial sector with opportunities for expansion. Section 2.1 highlighted the role of financial reregulation in enabling financial sector expansion, but this is only part of the story. This expansion was also fuelled by the exposure of various other aspects of the economy, which

have historically been decidedly non-financial, to financial processes. Elements of the social wage like retirement income, housing, and a number of state-provisioned services, have been restructured in a way which has assisted financialisation on one hand, and compromised labour bargaining power on the other.

The idea of risk shifting was pioneered in an American context by Jacob Hacker, and, as alluded to in Section 1.1, refers to changes to the operation of welfare states which expose individuals to increased economic risk (Hacker 2011, pp. 2-3). It is helpful here to adopt a notion of the "welfare state" which is broader than just the direct provision of welfare payments, but includes 'all of the state's actions or lack of actions' with regards to supporting its citizens (Bryson 1994, p. 292). Risk shifting has been directly linked to financialisation at a theoretical level: 'households can rely less on public institutions for their long-term security and become increasingly dependent on private firms, and in particular on financial institutions' (Aalbers 2019, p. 10). The instances of Australian welfare state restructuring outlined below demonstrate this relationship empirically, and therefore support the proposition that reduced labour bargaining power can be considered a component of the financialisation-income distribution relationship, as suggested by Panico and Pinto.

Retirement and Super

Retirement income in Australia serves as a poignant example of how changes in state welfare and the social wage can simultaneously reduce labour bargaining power and facilitate financial sector expansion. The introduction of compulsory super contributions under Keating was envisaged as 'a way of weaning workers off the aged pension and sold as part of the 'social wage' tradeoff for 'wage restraint'' in the Accord (Adkins et al. 2021, p. 554). With respect to financialisation, having retirement savings managed by private funds necessitated greater financial investment, while household wealth being shifted in into financial assets ensured that ongoing asset price inflation was in the interests of not just the financial sector, but all income earners. With respect to labour bargaining power, the key shift here is the dependence of retirement income on working age income. While the previous old-age pension had distributional issues of its own, it was unconditional on an individual's working-age employment status, whereas the insurance model of welfare adopted by compulsory superannuation makes retirement income a function of working-age private income, and thereby increases the risk associated with sacrificing one's employment (Pocock 2010, p. 110). As well as increasing the potential long-term loss created by working-age unemployment, the shift to superfunds as the focus of retirement income also exposed households to the volatility endemic to liberalised financial markets. Buying into asset price inflation also means buying into asset price fluctuations. This was entrenched by the move from a defined benefit scheme to a defined contribution scheme under the Howard government, which burdens workers with the risk associated with investment strategy – a risk that was originally borne by their employers (Murphy 2010, p. 38). Due to this government's untimely encouragement for households to make voluntary super contributions shortly before the GFC, financial market volatility reared its head in the form of a sharp drop in household wealth following the crisis (Quiggin 2010, pp. 21-22).

Housing

Housing policy is an integral component of the social wage or welfare state, and the form it takes has significant ramifications for labour bargaining power. Wage income being a precondition for access to secure shelter significantly increases the scope for worker exploitation (Pocock 2010, p. 109). Housing policy in Australia, by transforming shelter from a basic subsistence requirement to a lucrative investment asset, has done exactly this, while facilitating financial expansion in the process. Access to housing can be made independent from an individual's wage-earning status either through outright ownership, or to a lesser extent low-cost rental provided by the state. Alternatively, having to meet ongoing private rental or mortgage payments requires ongoing employment. Figure 2.3 shows that these latter forms of tenancy, which make workers more vulnerable to exploitation by requiring wage-labour in order to access shelter, have been on the rise since the 1990s. Overall housing ownership has decreased from 71.4% of all tenants to 66.3%, while the composition of that ownership has swung sharply in favour of mortgage-based ownership, from 41.5% in 1995 to above 55.5% in 2020. Private rental tenancy has seen the most significant change, increasing from 18.4% of all tenancy in 1995 to 26.2% in 2020, while the percentage of tenants under government housing has almost halved over this period.

There are several key government policies which have contributed to these trends. The decline in tenants covered by social housing can be traced back to policy changes which have limited supply – Yates highlights that a federal-level funding shift throughout the 1990s from supply-side subsidies through Commonwealth State Housing Agreements, to demand-side subsidies through Commonwealth Rent Assistance, resulted in Australia's social housing stock

decreasing from around 6% of the total housing stock in the early 1990s, to around 4% in 2008 (Yates 2013, p. 115). Moreover, policy changes which have increased investor demand for housing, and in turn caused large increases in house prices, can explain the fall of outright home ownership and the corresponding increases in mortgage-based ownership and private rental tenancy. Favourable tax treatment for negative gearing (introduced under Hawke in 1987) and capital gains (introduced under Howard in 1999) has resulted in housing becoming a highly lucrative asset for investors (Adkins et al. 2021, p. 557). Another aspect of the strong investor demand for housing has been the low interest rate environment which had prevailed for around three decades before 2022. While low interest rates did also benefit households with mortgages, and credit for owner-occupiers between 1990 and 2020 increased by 1682%, this pales in comparison to the 6249% increase in credit for housing investors.⁵ These statistics reflect the dominance of investors in Australia's housing market during this period, although are likely conservative given they do not include credit extended to overseas investors.

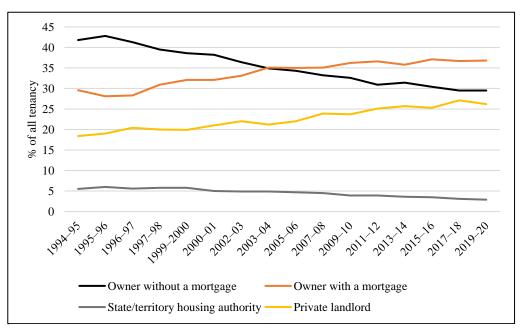


Figure 2.3: Forms of tenancy in Australia, 1994-2020. Source: ABS 6523.0

The growth in investor demand for residential property has seen Australia's capital city house price index grow at an average yearly rate of 4.58% between 2003 and 2020, while real wages have grown at 0.77% per-year over the same period.⁶ With housing less affordable and government housing assistance less available, wage-earners are forced to turn to either debt-financed ownership or private rental, making the risk associated with unemployment far

⁵ Source: RBA Statistical Table D1.

⁶ Source: ABS 6416.0, ABS 6401.0, 6345.0.

greater, thereby reducing their bargaining power. At the same time, the investment-friendly conditions described here have greatly facilitated financial sector growth through credit expansion, increased financial intermediation, and the creation of new financial products tied to mortgage debt.

Housing policy in Australia provides a clear instance of how financial sector growth and reduced labour bargaining power can be dual effects of the same causes, supporting the Sraffian notion of financialisation described by Panico and Pinto, and its explanation of changes in the wage share of income. However, the case of housing also poses challenges for the Sraffian theoretical framework. Namely, a key consequence of the aforementioned increase in house prices is a change in *wealth* distribution, and the *income* distribution focus of Sraffain theory is not conducive to capturing this (without adding considerable theoretical complexity). Comparing the personal distributions of income and wealth in Australia illustrates this point. The ratio of the top income quintile's share of total income to the bottom quintile's share has grown by 12.05% from 1994 to 2020, implying that income distribution has widened, which is expected given the discussion of the functional distribution of income thus far.⁷ The corresponding ratio for wealth quintiles however, has grown by a much larger 52.06% over the same period, which demonstrates that there are inequality effects which aren't captured by changes in income distribution. This presents a key limitation of the Panico and Pinto model in fully describing Australia's financialisation and inequality experience.

Another issue that housing poses for Sraffain theory is what is to be made of the role of land as a factor of production. In a modern classical theoretical framework, a key assumption for price systems to clear is that rents paid to land are equal to zero, which then allows total income to be divided between profits and wages (Kurz and Salvadori 2022, p. 112). Given the role of land in contributing to house prices, one might question whether land having no income share is in fact a reasonable assumption in the current context. While the land that expensive houses sit on is certainly not "no-rent", this assumption doesn't have any severe consequences for the usefulness of the theoretical framework that has been deployed. It is unlikely that a more elaborate theory of land value, which would have to involve a variety of factors that are mostly external to the financialisation process, would affect the way the Panico and Pinto model

⁷ Source: ABS 6523.0. Given that large shifts in profit and wage shares occurred before the start point of this data in 1994, the figure cited here likely underestimates the longer-term widening of the personal income distribution.

describes its key relationships, such as those between financial sector growth, labour bargaining power, and income distribution.

Furthermore, the Panico and Pinto model is being used to investigate an empirical relationship between profit and wage shares that doesn't include income to land as a factor of production, so it is consistent for the theoretical relationships not to either. It is also difficult to postulate why the "land share" of income, whatever it may be, could have changed at all over the financialisation period being studied. As argued above, the rise in house prices observed in Australia can largely be attributed to conditions in the market for housing as an investment asset, so it is unlikely that any increase in income that is generated as a result would go to the hypothetical land share. It is important to acknowledge that land is an input to housing with complex factors governing its value. However, for the purposes of the problem at hand, incorporating an exhaustive theory of land value would complicate the model considerably without adding a significant amount of insight, and land can therefore be treated analytically in the same way as any other produced input into production.⁸

The Marketisation of Social Services

Despite not being envisaged as part of the original Accord, the marketisation and privatisation of various state functions have been hallmarks of the social wage restructuring that has taken place during the financialisation period (Spies-Butcher 2020). The operation of these processes in the context of social services provides another instance of financial sector growth and labour bargaining power being linked through a common risk shift (Murphy 2010, p. 39). Key social or 'human' services which have been marketised to varying extents include health, aged care, childcare, and employment services (Keating 2004, pp. 86-95). The contacting out of these services can compromise the social wage in two ways: reduced service quality and/or availability for service recipients, and downward pressure on labour market conditions for service workers. The effects on the financial sector stem from the new private financing arrangements that marketisation creates.

Historically, public sector wage growth has been a key driver of private sector wage growth in Australia (Henderson 2018, p. 121). As social services are marketised and corresponding jobs are shifted from the public to the private sector, the scope for public sector employment

⁸ The land that a house is built on can itself be considered the result of a production process from a Sraffian perspective.

conditions to influence general labour market outcomes diminishes. MacDonald and Pegg note that 'government contracts are often awarded on the basis of cost and, as services are labourintensive and the bulk of costs are staffing-related, employees in the sector are particularly vulnerable to experiencing low pay and an inability to gain wage increases' (MacDonald and Pegg 2018, p. 130). Beyond the effect this has on labour markets within the social services sector and more broadly, the cost-competition that comes with marketisation can also result in the quality of social services decreasing, which negatively impacts the non-labour market support available for service recipients. (MacDonald and Pegg 2018, pp. 138-139). Downward pressure on labour market conditions and an inability to adequately access social services can both be thought of as reductions of state welfare that have compromised the bargaining position of labour

The marketisation of government services also creates opportunities for the financial sector. Davis and Harper highlight that the process of contracting out government functions constitutes a general shift from debt finance to private equity finance and 'significant new issues of equity into the Australian equity market', while debt that does get issued under marketised arrangements is private rather than central government debt (Davis and Harper 1993, p. 1). These changes create additional avenues for financial investment and intermediation, while the shift to private debt necessitates a greater role for ratings agencies. Once more, financial sector expansion has taken place with a close link to labour bargaining power reduction, providing further justification for the use of the Panico and Pinto model in an Australian context.

Macroeconomic Policy

Although not always considered a part of the social wage or welfare state, the choice of macroeconomic policy framework can have consequences for the bargaining position of workers. In Australia, the 1990s saw an increased focus on inflation targeting as a key function of the RBA, and this was cemented with the 1996 *Statement on the Conduct of Monetary Policy*, which was an agreement between the then treasurer and the RBA to make inflation outcomes the primary objective of macroeconomic policy. This focus on inflation, and the corresponding belief that policy couldn't alter the long-run path of the macroeconomy, rendered full employment an objective of secondary importance, and placed an even greater emphasis on restricting the nominal wage increases of workers – a trend that was already taking place over the evolution of the Accord (Beggs 2018, p. 258, Humphrys 2019, p. 6). The shift to monetary policy as the key lever of macroeconomic adjustment also demotes fiscal policy

to a less important role, and helps justify many of the funding changes to other elements of the social wage which have been described in this section (Srnicek 2016, pp. 15-16).

Guiding macroeconomic stabilisation through monetary policy also assigns to the financial sector a crucial role in the economy. In an environment which diminishes the role for both fiscal policy and the full employment objective, the main tool for stimulating aggregate demand is incentivising investment and consumption via the interest rate. It was these conditions that required the protracted period of low and stable interest rates from the late-1990s onwards, which, as demonstrated by the market for housing, contributed significantly to the expansion of credit over this period, and the corresponding growth of the financial sector. Moreover, with adjustment occurring through interest rates and therefore financial channels, the overall stability of the financial system also becomes necessary for wider macroeconomic policy objectives. This was best exemplified by the need for central banks, including the RBA, to extend credit to the financial sector in order to mitigate system level risk following the GFC (Debelle 2010). The 'capacity to respond' of Australia's public institutions regarding financial stability risk stands in stark contrast to the fiscal tightening that has been applied to policies which would help mitigate the risk faced by workers and households (Debelle 2010, Henderson 2018, p. 116).

In the context of retirement income, housing, social services, and macroeconomic policy, key policy changes over the last four decades have shifted risk from states to households, beginning with the social wage restructuring of the Accord under Hawke and Keating and continuing with the economic reforms of successive governments. This policy trajectory has contributed to the dual processes of financial sector expansion and the reduction of labour bargaining power. While an association between these processes under the umbrella of financialisation runs the risk of defaulting to a generalised neoliberalism narrative, the material linkages provided in this section justify the theoretical connection that is made in the Panico and Pinto model. It is important to note that these linkages between the financial sector and the bargaining power of workers by no means imply one-way causation in either direction. This is consistent with Panico and Pinto, who merely posit the two processes as equal components of financialisation. The causation in the model then runs from these components to the change in the functional distribution of income.

The focus of this section has largely been on the ways in which social wage restructuring and the Accord have had negative impacts on labour bargaining power, although this is only one side of the story. Supporters of the Accord have suggested that it was a necessary measure to boost productivity and investment, keep Australian labour costs internationally competitive, and do so in a way which was 'more equitable' than equivalent policy shifts in other advanced economies at the time (Wright 2014, pp. 265-269). Humphrys, on the other hand, takes a more critical view, arguing that the Accord represented the dominance of corporatism and state cooperation in the union movement, resulting in many of the same policy changes and negative consequences for workers that were observed overseas, albeit through different mechanisms (Humphrys 2019, p. 45). There is also an argument that allowing households to participate in the profits of financial expansion through owning homes and increasing their holdings of financial assets via compulsory super has been an important means of wealth generation. While the value of assets held by all households has certainly increased, it is the top wealth deciles which have seen the largest growth in wealth denominated in super and housing, indicating that greater household participation in finance has done little to counteract the long-term trend of widening distribution. (Gizycki and Lowe 2000, p. 188, Productivity Commission 2018, pp. 78-80).

While each of these perspectives regarding the pros and cons of social wage restructuring and financialisation have their merit, the purpose of this section is not to make a judgement regarding the overall net economic benefit of these changes to workers and households. Rather, it serves to show that irrespective of any compensation or benefits, labour bargaining power has unambiguously decreased in recent decades, and this decrease is materially connected to the financialisation process through several policy changes. Understanding this connection further validates the application of the Panico and Pinto Model to the Australian case, and ultimately paints a more detailed picture of how financialisation and income distribution are related by extending the analysis beyond the confines of financial markets themselves. These insights were made possible by drawing on a number of perspectives from across the social sciences which focus on the institutional dynamics that shape distributional outcomes, into a Sraffian theoretical framework that has the capacity for these dynamics to affect real economic variables. The result is an explanation for changes in the functional distribution of income which is difficult to obtain through the lens of orthodox economic theory, underscoring the value of a heterodox perspective.

2.3: The Role of Economic Theory

Among all of the key policy shifts described above as a part of financialisation, there are further connections to be found in the economic thinking that has underpinned them. Scholars have argued that the choice-maximising logic of financial market theory has worked its way into various other public policy decisions (Aalbers 2019, p. 10). In an Australian context, Michael Pusey has pointed to this process taking place through his work on *Economic Rationalism in* Canberra (Pusey 1991). He defines economic rationalism as 'the doctrine that economies, markets and money can always, at least in principle, deliver better outcomes than states', and that economies, markets and money offer, at least in principle, the only reliable means of setting values on anything' (Pusey 2018). It is left unclear, however, what is actually meant by 'economies, markets and money'. This definition demonstrates a decided lack of nuance by describing both economic theory and policy as a unidirectional triumph of markets over states, and faces the same problems as black-and-white understandings of deregulation or neoliberalism. Pusey's definition of economic rationalism has understandably been rejected by those from within the economic orthodoxy on these grounds (Brennan 1993, p. 3). This issue aside, Pusey's detailed research on the sociological makeup pf the Australian public service in the early 1990s does provide important insights into many of the policy changes taking place at the time. The prioritisation for public servants with greater 'technical' skills led to the prevalence of economics graduates with technically oriented training based on marginalist economic theory – the push from these so-called technocrats to vocationalise tertiary education only further validated the existence of such a curriculum (Pusey 1991, pp. 8-9).

Key tenets of marginalist economic theory regarding optimisation through choice and the supposed increases in efficiency which this brings, appear recurrently in the thinking behind the policy shifts described thus far. Regarding financial market reregulation, Harper and Leslie suggest there is 'no doubt' that neoclassical economic theory drove the key objectives of the Campbell Committee: 'to reduce waste, and to enhance the ability of the financial system to create wealth. It eschews judgements about the distribution of wealth' (Harper and Leslie 1993, pp. 86-87). The Wallis Inquiry 17 years later was also underpinned by marginalist thinking, and the 'argument by axiom' based on Arrow-Debreu general equilibrium theory that suggests greater financial activity and more financial products facilitate market completion, and can transform uncertainty into calculable risk (Harley 2014, p. 9).

This same treatment of risk and maximising choice can also be found in the justification for policies that shifted risk onto households. Marginalist theory suggests that when faced with uncertainty, flexibility achieved through a greater array of options increases the scope for agents to maximise their expected utility (Harper 1991). A greater array of options is precisely what Australian workers and households have been presented with, whether it be choice of superfund investment strategy, mortgage-lender, or private health insurance provider. However, McKenzie notes that 'if expansions in the scope and complexity of the choices available to citizens are not matched by corresponding expansions in the autonomy skills and consequences, the likely result is that many people will make poor choices, with potentially disastrous consequences' (McKenzie 2010, p. 6). This issue is particularly salient in the context of basic welfare provisions which have been marketised, such as disability services, aged care, and childcare.

Through this 'financialisaton of daily life', Chan argues a paradox is created: 'while the economic transformations of financialisation, such as increasingly precarious work, require workers to calculate risks and engage in complex self-insurance strategies, they simultaneously undermine the capacity to perform these calculations effectively' (Chan 2013, p. 363). Furthermore, the individualisation of risk and emphasis on choice masks the structural factors which limit individuals' opportunities or decision-making capacity (Pocock 2010, p. 106). The individualist, choice-maximising logic of orthodox economic theory is as present here as it is in the justification for liberalised financial markets. These common theoretical undercurrents throughout financial reregulation and social wage restructuring further validate the empirical connection between financialisation and labour bargaining power described in Section 2.2. The use, therefore, of a non-orthodox theoretical approach which accounts for this connection, such as that proposed by Panico and Pinto, is imperative in establishing a detailed description of the relationship between financialisation and income distribution in Australia.

CHAPTER 3: Financialisation or Financialised?

Chapter 2 has provided detail regarding the dynamics between financialisation and income distribution in an Australian context, as informed by the Sraffian approach to financialisation put forward by Panico and Pinto. Throughout this analysis there has been a particular focus on the structural changes that took place towards the end of the 20th century, due to the period's high concentration of both policy developments, and significant shifts in relevant economic variables. However, focusing on more recent movements in the key variables of financialisation in Australia raises questions about whether or not these processes are still ongoing. The financial sector's share of output has been basically constant since the GFC, financial sector productivity is still higher than the rest of the economy but its growth rate has slowed considerably, and the functional distribution of income has experienced movements in both directions for distribution? Under what circumstances could the functional distribution of income evolve back in favour of the wage share?

Following the logic of the Panico and Pinto model, equation 2 suggests that for the growth in the wage share to be non-negative, either the growth of the financial sector's share of output would have to be negative, productivity would have to be lower in the financial sector than the non-financial sector, or the rate of growth of money wages would have to outpace that of productivity through an increase in labour bargaining power. In order to make tentative suggestions about the future trajectories of these variables, we must again return to an analysis of the institutional forces that shape them.

Financial Sector Growth and Productivity

The RBA's submission to the Murray Inquiry suggested that the financial sector's increased share of output was 'by its nature a once-off adjustment, and one that seems to have run its course' (RBA 2014, p. 20). While recent stagnation in the growth of the financial sector hints at an end to the era of financial expansion, the lack of any decrease in the financial sector's relative size is also telling. It reflects a certain inertia which has been established regarding the centrality of finance to Australia's modern economy. Households and business have significantly expanded their holdings of financial assets and liabilities, macroeconomic policy is conducted primarily through financial channels, and complex interactions have developed between finance and the real economy, meaning that stability and profitability in the financial

sector is now intertwined with economic prosperity more broadly. There is also a degree of path-dependence in the liberalised regulatory conditions which enabled financial sector expansion in the first place, as Tom Valentine noted with respect to the regulatory changes of the 1980s: 'even if it was a mistake to embark on deregulation, now that it has been done, it would be a mistake to go backwards' (Valentine 1991).

There are also emergent forces which have the potential to facilitate further financial expansion. As discussed in Section 2.1, the 'information-sensitive' nature of finance has meant that developments in information and communications technology have assisted financial sector growth and productivity by enabling a number of product innovations (RBA 2014, p. 17). One key area of application for information technology has been attempting to price uncertainty, which is not measurable, into risk, which is, through the creation of financial products (Debelle 2010). As technological advancements continue, and global instability builds due to climate change, geopolitical frictions, and macroeconomic downturn, new opportunities are created for the financial sector to attempt to transform this uncertainty into manageable risk.

The proliferation of flood insurance in Australia is a recent illustrative example of this phenomenon: in 2006, less than 5% of household building insurance policies included flood cover, but a combination of 'improvements in flood mapping and modelling, which have allowed insurers to more accurately assess and price risks', and the increasing frequency and severity of floods due to climate change, resulted in this figure reaching approximately 90% by 2013 (Productivity Commission 2014, p. 450). Whether or not future opportunities to price uncertainty into risk will result in further growth in the financial sector's size or productivity relative to the rest of the economy is difficult to predict, but it is certainly hard to envisage the financial sector playing *less* of a role in a world of greater uncertainty.

The discussion of burgeoning uncertainty and the management of risk also calls to attention what may be the only genuine threat to the financial sector's position of importance in Australia's economy – the ever-present threat of another financial crisis. Yet the resilience of the financial sector in the wake of the GFC suggests that even this might not be enough. Basel III has altered the parameters of financial risk-taking, but only to the extent that the specific events leading up to the GFC can't repeat themselves – it does little to challenge the existing framework guiding financial regulation that seeks to encourage choice, diversity, and complete markets. Again underscoring the path-dependence of financialisation, this post-crisis

environment has allowed the financial sector in Australia to maintain high productivity and profitability without reducing its share of total output: 'the net result is that, despite the adjustments... [financial] intermediation has become both cheaper and more widely available' (RBA 2014, p. 27). It is interesting to note that the English word *crisis*, originating from the Greek word *krisis* (meaning a decision or judgement), has predominantly been used throughout history to denote some sort of turning point or crucial change – 'an intermediate stage leading to something' (BBC 2015). Following the various bouts of financial market volatility that have occurred in recent decades, the usual outcome is a reaffirmation, perhaps on slightly different terms than previously, of the underlying conditions which enabled the so-called crisis in the first place (O'Callaghan and McGuirk 2021, p. 811). It is therefore questionable whether these financial collapses ought to be considered "crises" at all, or just an inherent and recurring feature of financial inertia.

Labour Bargaining Power and Distribution

With the relative size and productivity of the financial sector unlikely to change, equation 2 then leaves a shift in labour bargaining power as the only mechanism through which the longterm trend in the functional distribution of income could be altered. This would have to involve the rate of growth of money wages outpacing that of productivity, which Figure 1.3 showed hasn't occurred for a number of years. However, despite decades of consistently declining union density, and policy developments which have restricted labour bargaining power, recent macroeconomic and political events in Australia have created the potential for a change in these patterns. In particular, there are currently factors at play which have an uncanny resemblance to those which predated the Accord, which Section 2.2 identified as a key structural shift in labour bargaining relations. High inflation and cost of living pressures driven by rising commodity prices, the threat of global economic downturn, protracted industrial relations disputes, and a newly elected government which at least notionally represents the interests of the working class, are features of Australia's political economy which existed pre-Accord and now exist in 2022. While the Accord reduced labour bargaining power and assisted the financialisation process, could a modern renegotiation of social and economic policy have the opposite effect? There are strong countervailing forces at work which limit the prospects for such a seismic shift: economic policy discourse is fixated with the goals of restricting inflation and reigning in budget deficits, while the general disposition towards the individualisation of risk which has underpinned social policy over the financialisation period does not appear to have subsided.

There are of course a number of other factors not mentioned here which have the potential to shape the functional distribution of income. However, from the viewpoint of the Sraffian model expressed by Panico and Pinto, which has been shown in this thesis to establish a powerful explanation of the fall in the wage share in Australia, it would seem that the functional distribution of income will at least maintain its current position, if not evolve further in favour of the profit share.

CONCLUSION

A long-term trend in rising income inequality beginning in the late-20th century has been a salient feature of advanced capitalist economies around the globe. However, the complex web of economic, social, and institutional forces which affect income distribution has resulted in a lack of any theoretical consensus regarding the drivers of this trend. Various theoretical links to the process of financialisation have been proposed, but these explanations are often hindered by their attempts to construct all-encompassing cross-country narratives which result in analytical ambiguity. By framing inequality through the lens of the functional distribution of income, and by focusing on the case study of Australia, this thesis has painted a detailed picture of what the financialisation-income distribution nexus can look like in practice.

The Sraffian approach to understanding the effects of financialisation on the wage share of income elaborated by Panico and Pinto, and its three key propositions of growth in the relative size of the financial sector, higher productivity in the financial sector, and reduced labour bargaining power, have been shown to match up well with aggregate Australian data. Furthermore, the compatibility of the Sraffian price system with institutional explanations of real economic variables has enabled a range of critical perspectives on these phenomena to be drawn into the analysis.

This synthesis of perspectives has revealed deeper insights into both the policy shifts which fuelled the financialisation process, and the tenets of orthodox economic theory which they embody. Financial market reregulation and liberalisation sowed the seeds for financial expansion, while social wage restructuring shifted risk from states to individuals in a manner which enhanced this expansion, and simultaneously compromised the bargaining position of workers. Throughout these policy changes runs a common thread of treating the maximisation of choice as an *a priori* welfare improvement (Harper 1991). While the future trajectory of financialisation is uncertain, the application of the Panico and Pinto model to an Australian context from the 1980s onwards has established a concrete description of this process in action, and as a result added an important alternative viewpoint to the story of a falling wage share in Australia.

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