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## *Rising Inequality: A benign outgrowth of markets, or a symptom of cancerous political favours?*

**By Paul Frijters and Gigi Foster**

### **Introduction**

Rising inequality has become an issue of great political interest in recent years, as exemplified by the “We are the 99%” movement<sup>1</sup> and the global response to Thomas Piketty’s 2013 book, *Capital in the Twenty-First Century*. Andrew Leigh’s *Battlers and Billionaires: The Story of Inequality in Australia* (2013) highlights the growing divide in Australia between rich and poor, ever since the 1970s.<sup>2</sup>

In this short paper, we take these trends as given. We also assume that inequality as a social outcome is undesirable, all else equal: mainstream economic theory invariably presumes that the utility of consumption diminishes with income, implying that the millionaire receives less utility from an extra dollar than the pauper, and hence that a more equal distribution of dollars delivers more overall utility. Happiness research bears this out empirically: given the same average income, OECD countries with higher inequality, and hence also higher levels of poverty, are less happy than more equal and homogenous regions (Ferrer-i-Carbonell and Ramos 2012), and populations display preferences for redistribution (Alesina and Giuliano 2011). As these authors

and others have documented, higher inequality is also associated with higher levels of crime, less stable political institutions, and mental anxiety amongst the less well-off.

We consider in this paper whether inequality has grown as a by-product of market forces that deliver other social benefits, or as a consequence of socially damaging forces. We begin by discussing two likely candidate explanations for increased inequality, and then suggest a research agenda to support a more detailed analysis of the problem and realistic reform options.

### **Two views**

From a standard first-year economics point of view, the most natural cause of greater inequality is a shift in the marginal productivity of skills. Both skill-biased technological change and increasing returns to superstars would imply that economic returns to skills have been disproportionately re-directed towards a smaller set of individuals. Yet interfering with these shifts is deemed difficult, possibly counter-productive, and probably futile: such ‘technological’ shifts are normally thought to be outside the scope of national policy, as they reflect world trends. One standard policy response to these shifts is therefore to take changes in skill prices as given, and try to generate relatively more of the skills that have become more valuable. Calls for educational improvement, public sector infrastructure in support of

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<sup>1</sup> [http://en.wikipedia.org/wiki/We\\_are\\_the\\_99%25](http://en.wikipedia.org/wiki/We_are_the_99%25)

<sup>2</sup> A like trend seems to hold across Anglo-Saxon countries, though it is has not been seen in all OECD countries (Atkinson, Piketty, and Saez 2009).

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innovation, and more skilled migration are often motivated by this view (Frijters and Gregory 2006).

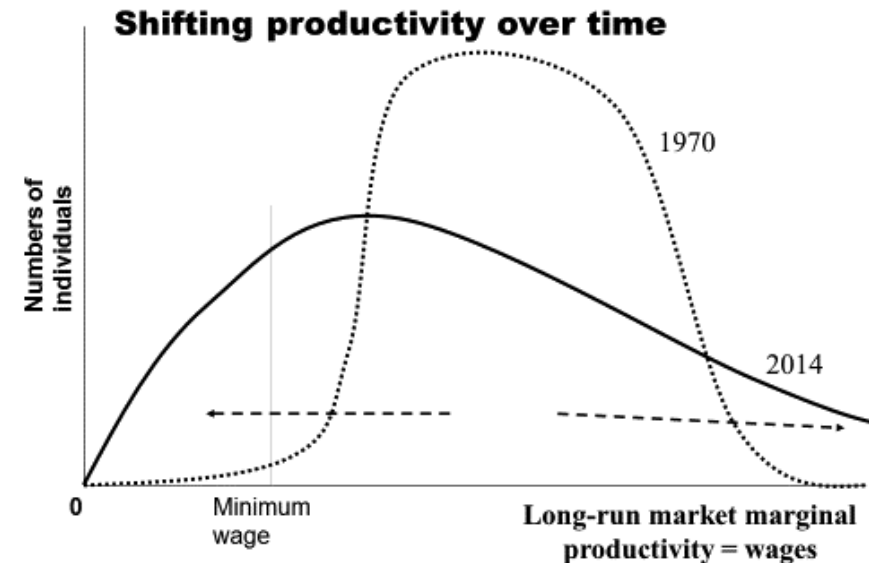
By contrast, a rent-seeking political economy view (reviewed in Congleton et al. 2008) suggests a radically different story, namely that inequality grows with increases in the value of political favours, and with increasing returns to scale in the technology that produces those favours. Rather than the result of natural market forces, inequality through this lens is the result of efforts to circumvent the competitive market through obtaining special favours via the political process. This view has been framed in terms of regulatory capture, increasing returns to lobbying, and the natural resource curse (Van der Ploeg 2011). Calls for political reform, such as for more direct democracy that supposedly reduces the return to political lobbying, or for more explicit pricing rather than bureaucratic allocation of political favours, are outgrowths of this view.

We set out these two opposing arguments: first, that inequality has risen due to shifts in the marginal productivity of skills, and second, that it has risen due to changes related to political favours. We then review some empirical evidence on the likelihood of each alternative, leading us to suggest an economic research and reform agenda for the coming years.

### Case 1: How shifts in marginal productivity could exacerbate inequality

Frijters and Gregory (2006) set out the standard economic story of how shifts in production realities would change the distribution of the marginal productivity of skills. The stylised story is that between 1970 and 2014, the distribution of returns to skill became more unequal, with more people today both at the bottom and at

the top of the wage distribution – i.e.,:



Both income and wealth can be seen as tied in the longer run to marginal productivity<sup>3</sup>, meaning that a shift in the distribution of marginal productivity would fit two key facets of the data: increased dependence at the bottom on government-provided income, and the rapid increase of relative wealth at the very top.

What types of phenomena could cause such a change? Three main candidates have been suggested: automation, superstar effects, and globalisation.

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<sup>3</sup> Even returns on capital can be seen as returns on previously stored output, and hence ultimately derivative of the value of labour time.

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The automation of activities by means of computers, such as the use of ATMs instead of bank tellers, increases firms' payoffs to automation and thus workers' payoffs to the knowledge and skill required to implement and manage that automation. Replacing farmhands with drones and combine harvesters, or small labour-intensive warehouses with large fully-automated warehouses, requires a type of skill that has become more valuable relative to the skills required to perform standardised activities like sowing or typing. One might say that certain 'specific' skills have proven highly substitutable with capital, and that higher value is placed today on 'generic' skills which are in practice complementary to capital. Continued improvements in computerisation, spatial and language recognition software, and machine-building techniques can be argued to have further increased the relative returns to having high technical, organizational, or managerial skill. One should then expect the wealthiest people in today's society to be highly technically trained and great organisers – people like Bill Gates and Warren Buffett.

Superstar effects are subtly different, as they do not arise ultimately from doing the same thing with fewer resources, but rather from an increased return to winning. Legal and sporting contests for example deliver rewards not to those with some objective level of skill, but rather to those who are more skilled than others, and these rewards increase with the size of the market in which the contest occurs. Moving from a world where every town runs its own competition to one where a single high-stakes competition is held for a whole country, or the whole world, involves the replacement of local winners with über-winners who enjoy far higher returns but of whom there are far fewer per type of contest – resulting in a more unequal overall income distribution. This kind of effect explains the enormous salaries earned by today's soccer stars, top artists, top financial advisors,

inventors who obtain patents, and so on. Both an increase in the scale of contests and greater use of winner-take-all contests would lead to increased rewards at the very top, while simultaneously re-orienting much of the population – who have no chance of getting to the top, no matter how much they invest – towards activities that cannot be automated and for which winner-take-all contests are not played (like gardening or personal fitness services).

The superstar argument relies crucially on the increased scale of today's markets. For example, when the attention of the public turns to global sports competitions, the returns to winning local sports competitions reduce because the slice of economic pie devoted to that sport is spent less on the locally best and more on the globally best<sup>4</sup>. The returns to innovation are also much greater in a global market than in a local one, as innovation then involves pushing out the production possibilities frontier of the whole world, yielding enormous payoffs.

Hence globalisation, or reduced market frictions generally, has been argued to underpin the rise of top incomes and the demise of middle incomes. Those who can compete at the top end are playing for enormous stakes and will spend their lives preparing for the contests in the hope of winning, while those who cannot compete are 'demoted' early on to activities that are additive in terms of rewards. Hard-working gardeners might manage to improve twice as many gardens as others, but they will not improve a million times as many. By contrast, a cancer researcher who hits upon an effective new treatment alternative is

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<sup>4</sup> To simplify the argument here, we assume no spillovers: the amount of social resources that will be spent on soccer for example stays fixed, and it is only the distribution of those resources that changes with the rise of global competitions.

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worth exponentially more than one who does not, as that innovator brings about improvements in millions of lives.

The very advances in communication and automation that made global markets possible have also sped up the process of innovation, product development, and standardisation. Many sub-markets now flourish, each with its own innovators and frontiers being expanded at a furious pace. Innovations are found and rewarded in newly-spawned markets like conditioning shampoo for dogs, or near-extinct language recognition. A “winner” today is one who, at some point in his career, pushes out the PPF of some highly specialized sub-market. Others exist not only as maids and welfare recipients, but also as service workers who translate and spread innovations across markets. A reasonable fraction of individuals in the modern economy invest heavily in education in order to compete for having a chance being an innovator or at least servicing the innovators in the dissemination of their new inventions. The rise of service jobs as the main source of employment, replacing agricultural and manufacturing activities that have been automated, fits in with this (Ngai and Pissarides 2007).

One key prediction of this view is that those at the top of the distribution could just as easily be at the top in other countries, as they do not require political connections to be productive. They should be mobile, highly skilled, and involved in new products.

Perhaps surprisingly, one cannot find large numbers of people fitting this description amongst the wealthiest Australians. The stylised story put forth in Frijters and Gregory (2006), which rests squarely on mainstream economic logic, might have some relevance for explaining increased inequality in some countries and some industries, but fits remarkably poorly when one looks at

the data for Australia as a whole. What else could then be going on?

### **Case 2: How changes related to political favours could exacerbate inequality**

Within the rent-seeking model of politics, whose proponents include Olson (1965), Murphy et al. (1993), Acemoglu and Robinson (2012), Baumol (1990), and others (surveyed in Congleton 2008), our democratic political process both sets the rules of economic interaction amongst market agents and allocates political favours, including taxes and subsidies. In this view, each institution within a country’s bureaucracy has some discretionary power of its own. Local councillors and local politicians allocate political favours, most notably via personnel appointments and property-related permits and exemptions. State bureaucrats and politicians decide on large projects, appoint people to top positions in state-related industries such as education and health, and award monopoly rights in markets like local education services, television licenses, mandated industry superannuation, and toll roads. Federal bureaucrats and civil servants decide on hundreds of thousands of pages of regulation, giving rise to taxes and subsidies that create not only market improvements but a myriad of small and large market distortions.

This power-sharing conception of political decision making leads to many potential reasons for increased wealth inequality, of which the most obvious are described below.<sup>5</sup>

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<sup>5</sup> Once created via the mechanisms described here, the political advantages responsible for increased inequality could be maintained partly via a vicious cycle whereby entrenched elites use their expanded powers to create more ways to get more power.

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1. The political balance of power can change, such that the taxes and transfers set by politicians start to favour the rich and hurt the rest. Such a change could be derivative of many factors, including changes in demographics, changes in the underlying distribution of pre-transfer incomes, improvements in the enlightened self-interested voting intentions of the poor if lowering taxes on the rich ultimately creates jobs for them, increases in the ability of small groups to organise against the interests of large groups (for example due to an increase in the ease with which coalition formation by the majority can be disrupted), direct regulatory capture, and so on. Whatever the ultimate cause, changes in the levels of taxes and transfers applied to different income and wealth categories can be scrutinized to determine whether or not changes in inequality have been politically mediated.
  2. Increased inequality may be an unanticipated side effect of changes in the technology of government. For example, the advent of email and computerisation may have made bureaucratic coordination on new regulation much easier and quicker, leading to an explosion in new regulations that have not been well thought-through. Such regulations then themselves may have the unintended consequence of creating increased possibilities for rents. These rents may then be appropriated by groups that afterwards defend the very regulations that accidentally empowered them. A concrete example of this is the protection of banana farmers from foreign imports by means of quarantine restrictions here in Australia. The politicians and ministry officials designing this protection almost surely did not intend to open the door to the huge rents it made possible in the aftermath of cyclones, which led to ten-fold increases in the price of bananas together with billions of dollars of lost consumer surplus and production inefficiencies (Ko and Frijters 2014). A similar thing could be said for the medical cartels that now support enormous incomes for our medical specialists: one can argue that they are the unintended spawn of reducing the number of medical training places in the 1990s (Jolly 2009), which unexpectedly increased the value and eased political coordination amongst medical practitioners. Many such small rents may have been generated by mistake in recent decades and then proven very hard to undo, due to the entrenchment of the very advantages they witlessly created. This type of reasoning fits the theories of Olsen (1965), in whose view modern societies gradually grind to a halt because of the accumulation of entrenched rent-seeking elites, but where occasional revolutions by the majority ‘flush out’ those entrenched elites, only to slowly have them replaced with new ones based on new mistakes.
  3. Mining concessions, planning exemptions, and local permits for activities like property development could have exacerbated inequality if the value of such favours increased due to unexpected external factors, such as a boom in foreign demand for minerals, or a property boom due to a large influx of wealthy migrants and cheap loans due to unexpectedly low interest rates. Many variants of this basic logic are possible. For example, local political favours awarded via long-standing political networks may have gained in value due to unexpected price shocks; or there may have been unexpected changes in the way local government is run, causing existing political links to increase in value.

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## Empirical avenues

Each of the theoretical possibilities above leads to stylised predictions, of which two can be tested by examining the redistributive aspects of the changes in net transfers and the career activities of the super-rich. Who has disproportionately benefitted from recent changes in net transfers? Have the super-rich made their wealth in industries heavily dependent on political favouritism, or in more competitive industries?

### Regressive changes to net transfers?

Some attempts have already been made to examine changes in Australia's taxes and subsidies over the past few decades. Atkinson and Leigh (2013) found that the large increases in inequality in five Anglo-Saxon countries (including Australia, the US and the UK) over the last 30 years were strongly related to reductions in tax rates. In regard to wage and investment taxes alone, these authors conclude that 'reductions in tax rates can explain between one-third and one half of the rise in the income share of the richest 1 per cent'. Including changes in other taxes (like those on capital) would likely push this percentage even higher, suggesting a direct political role in rising inequality. The fact that similar changes in inequality were not found in all OECD countries (see Atkinson, Piketty, and Saez 2009) further suggests that increases in inequality are likely to be politically mediated rather than merely a function of unstoppable international economic trends.

Yet, this literature is silent about deeper mechanisms. Scandals and official inquiries into criminal activity involving politicians can reveal something about the means, and sometimes the scope, of

political favouritism,<sup>6</sup> but we await a more complete view of who championed particular tax changes and who opposed them, and hence of the underlying changes in the balance of politics.

### What skills make us super-rich?

Have the richest Australians made their fortunes by expanding the production possibilities frontier of society and reaping part of the greater overall production that their efforts have enabled, or by obtaining political favours? Naturally it is impossible to distinguish perfectly between these two possibilities, but examining the actual career trajectories of rich people would seem the most feasible and convincing research design. Adequately capturing how they made their wealth is trickier, but allows for all kinds of research innovation such as linking historical education and career records, mapping political relations, and examining the geographic mobility of the rich.

If great wealth is due to contributions to the social PPF, then there is no reason why the wealthiest should have strong local roots or local political connections: many of our wealthiest people should have come to Australia later in life to make their fortunes working with new technologies, such as in IT or health services. If instead our wealthiest are wealthy due to their connections, then we should find them working in industries that depend strongly on political favours, and making heavy investments into nurturing the political connections associated with those favours.

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<sup>6</sup> Though we make no comment on the merits of the complainant, an impressive list of instances in which oversight agencies failed to address documented cases of corruption throughout Australia can be found here: <http://victimsofdsto.com/royal-cosgrove-1/>.

To find out, our research assistant Amalia Savini categorized the industries and activities in which the 200 wealthiest Australians – as reported by BRW Magazine in July 2009 – made their money. Table 1 shows that the category producing the largest number of the richest Australians was buying and selling property, with 61 super-rich. Natural resources was second with 23, and ‘organising investments’ (e.g., through coordinating the activities of banks and investors) enriched 19. These 103 cases account for the vast bulk of the AUD\$119 billion owned in 2009 by the top 200 richest Australians. According to our information, only eight families in the top 200 held large amounts of inherited wealth, and all eight were in these three categories. Hence, most of the money of Australia’s super-rich was made relatively recently.

**Table 1: Number of richest 200 Australians in 2009 By Industry**

Property	61
Natural Resources	23
Organising Investments	19
Retail	17
Services	14
Rural	13
Manufacturing	11
Media	9
Financial Services	9
Technology	8
Entertainment	5
Transport	5
Health Services	2
Construction	1

Energy	1
Telecommunications	1
Wholesaling	1
<b>Total</b>	<b>200</b>

Source: own calculations using the BRW 2009 list (available on request). For 2014, see <http://www.brw.com.au/lists/rich-200/2014/>.

People working in the largest categories listed in Table 1 are not the kinds of innovators one has in mind when reading in economic textbooks about how innovation expands the economic frontier. Of the top 200 Australian super-rich, clear cases of people inventing new machines, like new types of solar panels, number only five at best. Another five at best are top entertainers. Hence, only 5% of our super-rich could be classified as superstars or top innovators. About half of our super-rich spend their efforts on activities where local political decisions determine the winners – decisions about who gets to build which property where, who gets access to favourable mining concessions, and so on. While one might argue that some people in finance or real estate may have innovated in ways that help society, these innovations – if responsible for the huge fortunes of those in Table 1 – should be seminal enough to be visible to the broader society, and should attract similar returns in at least some other countries, so we should see these same innovations being used there as well as in Australia. Where are these innovations? The default should be that they are not there.

It is of course impossible with such a cursory examination to say unequivocally that political favouritism explains who is wealthiest, but based on these simple data, the political favours story seems more likely than the marginal productivity story.

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## Towards a research and reform agenda

The early indications are that increasing inequality in Australia is due not to changes in the marginal productivity distribution, but rather to changes in the political landscape: changes in taxation alone seem able to explain up to 50%, and almost none of the wealthiest 200 Australians look like the storied innovators of first-year economics who push out the production possibilities frontier for everyone. Rather, over 80% of the wealthiest Australians have made their fortunes in property, mining, banking, superannuation, and finance generally – all heavily regulated industries in which fortunes can be made by getting favourable property re-zonings, planning law exemptions, mining concessions, labour law exemptions, money creation powers, and mandated markets of many stripes.

A more detailed empirical investigation of this question would arguably involve a type of research hitherto hardly seen in applied economics: essentially a political forensic accounting of the interactions that lead to wealth redistribution and political decisions, and particularly those deliberately hidden from public view. Such an endeavour would require linking datasets and focussing on relations between people, for example by reconstructing life histories, political interactions, and subsequent political rewards. One could imagine using Google Earth to estimate the size of the mansion possessed by a former councillor who, 20 years earlier, awarded mining concessions. One could imagine using sophisticated search and internet-scraping algorithms to estimate how many children of politicians lived as students in suspiciously comfortable accommodation far outstripping the reported means of their parents. Such forensic techniques are as yet almost unknown in economics, being the province mainly of journalists and criminal investigators. A further

understanding of the causes of inequality would seem fruitfully served by incorporating such techniques into the applied economics toolkit.

Much work also remains to be done to determine how the technology of political favours has changed so as to redistribute the returns to these favours. Has an increased ease of regulation created unexpected winners? Has the mining boom, fed by increased world prices, caused price increases in local political favours? Are we experiencing a normal dynamic of Mancur Olsen's world where rent-seeking elites come in waves, because it takes time for the majority to become aware of the trampling of their interests and for a reform wave to re-set the allocation of political favours? We admit that we simply do not know which of these possibilities has the most merit. We have no dearth of theories about how rent-seeking arises and is maintained; what is required is data to test them.

Once we are surer about the root causes of the problem, much empirical and theoretical work is needed to develop possible counter-moves. If we suppose that the political favours theory is correct, then from a standard economic point of view the classic counter-move would be to explicitly price these favours and make them contestable by means of frequent competitions for them by atomistic market participants who distrust each enough to prevent collusion. How this could be done in the case of property zoning, planning exemptions, mining concessions, financial favouritism, and so on is an open question. Standard economic theory would suggest combining the sale of similar favours across regions and regulatory zones so as to create competition between unconnected market participants, such as when property developers in Perth must compete with property developers in Victoria and Adelaide over a scarce number of re-zoning favours.



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Yet, existing institutions and issues of legal definition might well lead to different complicated optimal designs for different types of favours: it seems unlikely that a similar contest could be run for local planning exemptions as for compulsory superannuation fund legislation.

Thinking more broadly, counter-moves relating to political favouritism could also include changes in our democratic institutions that nullify the advantages of political incumbency and existing political networks, and that help to mobilise the majority more quickly to recognise and act upon its own interests. Options include the more frequent use of referenda, a constitutional right to freedom of speech, or more oversight mechanisms within the current democratic system. Again, we admit to simply not knowing which of these, if any, to advise: the various trade-offs and deep constraints will be illuminated via more research.

Finally, the possibility that increased inequality has been driven by changes in the allocation of political favours lends strength to the argument that economists should seriously examine political power and group behaviour. Many economists have engaged with these topics in the past, but they have by and large not made it into the core undergraduate curriculum, and hence issues of groups and power will be seen only rarely as part of the purview of the discipline. Finding a way to incorporate insights on power and group behaviour into standard economic thinking is then a further item on the agenda.

While increased inequality is alarming, the research and reform challenges it raises are exciting: they give a new generation of economists a chance to redefine our discipline, to make their mark using new types of empirical and theoretical work, and to build an enhanced vision of what Australia should aim for.

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## References

- Acemoglu, D. and Robinson, J. (2012). *Why Nations Fail: The origins of power, prosperity, and poverty*. New York: Crown Publishing.
- Alesina, A. and P. Giuliano (2011). "Preferences for Redistribution." In J. Benhabib, A. Bisin and M. O. Jackson (eds.), *Handbook of Social Economics*. Chapter 3. New York: Elsevier.
- Atkinson, A. B., and Andrew Leigh (2013). "The Distribution of Top Incomes in Five Anglo-Saxon Countries Over the Long Run." *Economic Record* 89.S1: 31-47.
- Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez (2009). "Top incomes in the long run of history." National Bureau of Economic Research Working Paper Number w15408.
- Baumol, W. J. (1990) "Entrepreneurship: Productive, unproductive, and destructive," *Journal of Political Economy*, 98: 893–921.
- Congleton, R., Hillman, A., and Konrad, K. eds. (2008). *40 Years of Rent-Seeking Research*. Springer Verlag.
- Ferrer-i-Carbonell, Ada, and Xavier Ramos (2012). "Inequality and happiness: A Survey." Amsterdam, AIAS, GINI Discussion Paper 38.
- Frijters, P., Gregory, R. (2006). "From Golden Age to Golden Age: Australia's Great Leap Forward." June 2006 edition of the *Economic Record* for the celebration of Prof. Robert Gregory's career, 82(2): 207-225.
- Jolly, R. (2009). *Medical practitioners: Education and training in Australia*. Parliamentary Library background note 15 July 2009, 2009-10, Department of Parliamentary Services, Canberra
- Ko, C.C. and Frijters, P. (2014). "When Banana Import Restrictions Lead to Exports: A Tale of Cyclones and Quarantine Policies," IZA Discussion Paper 7988, Institute for the Study of Labor (IZA).
- Leigh, A. (2013), *Battlers and Billionaires: The Story of Inequality in Australia*, Black Inc.
- Matthews, Stephen (2011). "Trends in Top Incomes and their Tax Policy Implications." *OECD Taxation Working Papers 4*, OECD Publishing. (inequality is mainly anglo-saxon)
- Murphy, K.M., A. Shleifer, and R.W. Vishny (1993). "Why is Rent-seeking so Costly to Growth?" *American Economic Review* 83(2): 409-414.
- Ngai, L. Rachel, and Christopher A. Pissarides (2007). "Structural Change in a Multisector Model of Growth." *American Economic Review*, 97(1): 429-443.
- Olson, M. (1965). *The Logic of Collective Action: Public goods and the theory of groups*. Harvard University Press.
- Piketty, T. (2013). *Le Capital au XXI siècle*. Editions du Seuil.
- Van der Ploeg, F. (2011). "Natural Resources: Curse or blessing?" *Journal of Economic Literature*, 49(2): 366–420.