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## ECONOMIC NOTES

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### CAPITAL AND LABOUR: THE PIKETTY SPLIT

**Christopher Sheil**

The increasing share of national income flowing to the owners of capital is the climax of the story told by Thomas Piketty in his landmark *Capital in the Twenty-First Century* (2014; see also Sheil, 2015). In Piketty's analysis, the increasing share is a reflection of the rising stock of capital relative to the annual flow of national income, or as he writes: 'the available data indicate that capital's share of income has increased in most rich countries between 1970 and 2010 to the extent that the capital/income ratio increased' (221). The tepid language tends to veil the author's claim that the most original contribution of *Capital in the Twenty-First Century* is that the work is 'the first attempt to place the question of the capital-labor split and the recent increase in capital's share of national income in a broader historical context' (220). Australia's only appearance in the book is as an illustration of this key trend by virtue of its standing as one of the eight wealthiest countries in the world (not counting China).<sup>1</sup> This short note adds a little to the data published in *Capital in the Twenty-First Century* and offers a brief reflection on the implications for public revenue.

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<sup>1</sup> Australia's high position in the wealth pecking order is not widely appreciated, probably because its GDP ranks in a modest (relative to the major economies) position of 13th (total) or 18th (per capita, PPP) (IMF, 2018). But based on net household wealth, Australia ranks as the world's eighth richest country (leaving the historically and structurally distinct case of China aside). When this is distributed as 'average net wealth per adult' (in US dollars), Australia is the second richest nation on the planet (after Switzerland and above the United States, with China sinking to 51st position by this criterion) (Credit Suisse, 2017).

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First, it is worth acknowledging that we can observe and analyse the trend without broaching the thorny question of what causes the rise in capital's share of income, a question Piketty finally leaves open. He prefers the hypothesis that the long-run trend approximates marginal productivity theory. Capital's price has been duly falling with the increasing supply, but its owners have maintained a rising income, and are therefore claiming an ever-greater share of national income, because the price fall has not been in proportion to the rising volume. Yet this foreground argument is hedged in the background. 'In more complex models, which are also more realistic', Piketty writes in introducing the discussion of the causes, 'the rate of return on capital also depends on the relative bargaining power of the various parties involved. Depending on the situation, it may be higher or lower than the marginal productivity of capital (especially since this quantity is not always precisely measurable)' (212). 'Note, however, that this upward trend', he adds in concluding the discussion, 'is not only consistent with [capital's marginal productivity] but also with an increase in capital's bargaining power vis-a-vis labor over the past few decades, which has seen an increased mobility of capital and heightened competition between states eager to attract investments' (221). Given that 'labour' income in the context of the work covers everything from executive salaries to the minimum wage, he is more explicit about its contingent status: 'To an even greater extent than other markets, the labor market is not a mathematical abstraction whose workings are entirely determined by natural and immutable mechanisms and implacable technological forces: it is a social construct based on specific rules and compromises' (308). The causes, in sum, are left overdetermined. The intellectual potency of the preference for the neoclassical orthodoxy lies in the conclusion that, on this basis, indeed especially on this basis, the consequences for inequality appear dire and — in the absence of countervailing action — inexorable.

Let's now turn to the trend itself, which necessitates understanding Piketty's terms. There are several ways to describe the capital-labour split, none entirely satisfactory. The most common method is to measure the respective incomes as a proportion of GDP.<sup>2</sup> Piketty prefers to split the shares as proportions of the total income available to a country's

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<sup>2</sup>. See, for example, the article by Stanford in this issue, with which the conclusions of this note are not inconsistent, except with respect to the change in the labour share in France, which probably reflects the different treatment of mixed incomes (see discussion below).

residents, which means: (1) subtracting capital depreciation from GDP (about 15 per cent in the case of Australia); and (2), adding net income received from abroad, or subtracting net income paid to foreigners (which means deducting a further 1-5 per cent from GDP for Australia). Reasonably, Piketty defines the result as *national income*.

His definitions of capital and labour income also depart from some common classifications. By *capital*, Piketty means all income-earning wealth, regardless of its form, consistent with the system of national accounts. Capital in this sense ranges from natural resources and housing through to capital goods as a factor of production and onto financial assets, less debt (excluding only household durables such as cars and furniture). It follows that the income from this wealth (or capital, in the book's terms) refers to a broader concept than the rate of profit and is much broader than the interest rate, including rents, dividends, royalties, capital gains, etc., excluding only interest received on government debt and before taxes (direct and indirect). Income from labour refers to total pre-tax compensation paid to employees plus a distribution from the *mixed incomes* of the self-employed, such as professionals, small business owners, small farmers, independent contractors, etc. It is well recognised that most mixed income is for labour services, such that utilising an *adjusted labour share* is now considered 'standard in the literature' (Stockhammer, 2017: 14); although how the adjustment is done is a matter of debate (see Krueger, 1999; Gollin, 2002; Lübker 2007). Piketty opts for apportioning mixed incomes in line with the average capital-labour split in the rest of the economy, which is defended as the least arbitrary choice. By this construction, Piketty's capital-labour split sums to 100 per cent of national income.

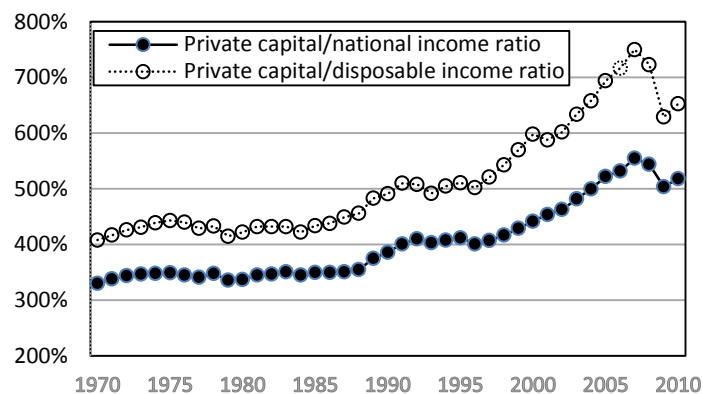
## The trend

Australia first appears in the book as one of the eight rich countries that show the present long-term trend for national stocks of private capital to rise, when measured against the flow of national incomes. At the beginning of the 1970s, the value of private capital (that is, net household wealth, as defined above) was between two and three and a half years of national income in all eight countries. By 2010, forty years later, the stock represented between four and seven times annual national income (see Appendix: Piketty's Figure 5.3).

This trend goes to Piketty's major general point, which is that the stock of capital relative to the flow of income is gradually building to levels not seen since the age of extreme inequality in the leading economies of Western Europe, which stretched from the eighteenth century to the First World War, when the stock was worth about seven times annual national income. To underscore the point, he also traces the ratio of the capital stock to annual national disposable income, deducting taxes, fees and other obligatory payments and adding money transfers (pensions, family assistance, welfare payments, etc.). Because the role of governments has expanded significantly since the 19th century (from about 10 per cent to 20-30 per cent of national income), the ratio of private capital to national disposable income in today's rich countries is 'no doubt the highest ever recorded' (180) (as shown in the Appendix in Piketty's Figure 5.4).

Both trends are extracted for Australia below. As can be seen in Figure 1, the nation's stock of private capital was worth a little over three times the national income in 1970 and more than five times by 2010. When expressed in years of annual disposable income, the stock reaches a proportion analogous to the most capital-intensive societies of the remote European past.

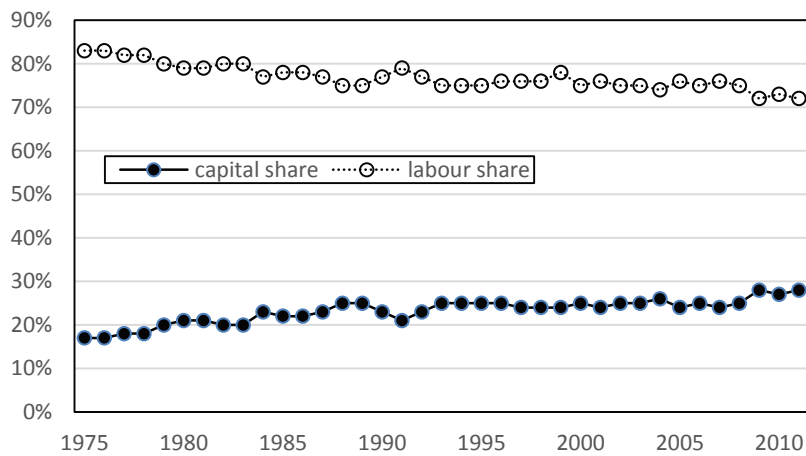
**Figure 1: Private capital in Australia as a percentage of national income and disposable income, 1970-2010**



Source: Derived from Piketty and Zucman (2013)

The next step is to show the central apparent fact that, while the stock has risen dramatically, its use has not fallen proportionately in price; that is, the return to capital is steadily increasing, albeit not at the same rate as supply. The share of national income absorbed by the return to capital in the eight rich countries was between 15 and 25 per cent in 1975, and had risen to between 25 and 30 per cent by 2010 (see Appendix: Piketty's Figure 6.5). The trend for Australia is extracted in Figure 2 below and shown with the labour share. Illustrating the argument at the climax of *Capital in the Twenty-First Century*, capital's share of Australia's national income rose from about 17 per cent in 1975 to 28 per cent in 2010, a shift of more than 10 per cent.

**Figure 2: The capital-labour split in national income, Australia: 1975-2010**



Source: Derived from Piketty and Zucman (2013).

## Discussion

Some qualifications are in order. The analysis is based on average returns, which vary widely in practice according to the kind of asset, especially according to size and risk. Yields can be much higher, and

generally the greater the capital the higher the return due to superior intermediaries, economies of scale and more capacity to take risks and invest over the long term. On the other hand, the nominal interest on bank saving accounts can be below the inflation rate. It is also worth re-emphasising that this analysis is based on values after depreciation and before tax, which isolates the underlying direction of the economics. In addition, the systemic limitations of the data ought to be acknowledged. Economic inequality is currently a dynamic field of international study, and the official data on Australia's wealth has fallen behind world's best practice, particularly with respect to the nation's top decile and top percentiles. The advances in the field have been many, major and rapid, but all research is still best regarded as approximate at this stage (see Sheil and Stilwell, 2016; and more generally Alvaredo et al., 2017). At the same time, the great increase in executive salaries over this period has moderated the decline in the labour share, which is to say that, however provisional, the trend is assuredly conservative from the perspective of the mass of regular wage-earners.

It should also be said that there is nothing inherently wrong with the accumulation of capital (or wealth as Piketty measures it), and nor with the yield absorbing more of the nation's income, were it not for the fact that the ownership is highly concentrated. On conservative assumptions, in 2014 the top 10 per cent of Australia's households owned at least 50 per cent of the nation's private wealth, with the top 1 per cent owning at least 15 per cent, while the bottom 40 per cent effectively had no share (Sheil and Stilwell, 2016). More recent research reveals that the ownership is continuing to concentrate, necessarily reducing the share owned by Australia's middle class (Sheil and Stilwell, forthcoming). This research is consistent with the trends in the most recent survey by the Australian Bureau of Statistics (2017), and the analysis by Credit Suisse (2017) that was widely publicised by Oxfam (2018) on the eve of the 2018 World Economic Forum in Davos.

The increasing concentration of ownership is, of course, in line with Piketty's analysis, which finds that 'no self-corrective mechanism exists to prevent a steady increase in the capital/income ratio ... together with a steady rise in capital's share of national income' (222). While allowing that various future scenarios are possible, Piketty's conclusion is that the 'most likely outcome' is 'that the decrease in the rate of return will be smaller than the increase in the capital/income ratio, so that capital's share will [continue to] increase', conceivably to absorb 40 per cent of

global income or higher, such that, ‘by 2100, the entire planet could look like Europe at the turn of the twentieth century’ (196, 233).

## Conclusion

The long-run social, economic and political consequences of the implied levels of inequality are profound and beyond this note, but even traditionally conservative organisations such as the IMF and the OECD have found that the current trend is so severe that it is inhibiting economic growth (see: Stiglitz, 2012 and 2015; Leigh, 2013; Ostry et al., 2015; OECD, 2015; Atkinson, 2015; Alvaredo et al., 2017). Tackling the apparently otherwise inexorable rise of inequality is, moreover, a policy matter that embraces both capital incomes and executive (‘labour’) incomes. Here, suffice it to draw a general conclusion for tax policy. All else being equal, it follows that maintaining public revenue must depend on a steady shift in taxation from labour to capital incomes. Such a shift is critical for Australian living standards, given the disproportionately small size of the nation’s public sector by OECD standards, and particularly given the low level of social spending. Australia might be the world’s eighth richest country, but it only ranks 25th by expenditure on social programs compared with the other OECD countries, well below the average and even behind the United States, which the citizenry popularly fears emulating (OECD, 2018).

To finish on an upbeat note, it is refreshing to observe that the Australian Labor Party opposition under the leadership of Bill Shorten has framed an impressive range of policies to tax capital incomes, most of which were only recently widely believed to be unthinkable. These include overdue reforms to the negative gearing of capital assets, the discount on capital gains, the tax immunity of discretionary trusts, and the handouts for corporate dividend imputation credits. Given the changing capital-labour split, without such a structural shift in the tax base, the nation’s public sector and the living standards that depend upon it are on a slow but sure hiding to nothing.

*Christopher Sheil is a visiting senior fellow in history at UNSW and the president of the Evatt Foundation.*

*chris.s@unsw.edu.au*

### Appendix:

#### The three figures featuring Australia in *Capital in the Twenty-First Century*

The three following figures show the trends for the world's eight richest countries with respect to: the ratio of the stock of private capital (i.e., net national household wealth) to national income; the ratio of the capital stock to national disposable income; and the increasing share of national income going to capital. The figures are from pages 171, 181, and 222 of Thomas Piketty's book.

The three figures encapsulate Piketty's general thesis, which is that the increasing share of national income claimed by the owners of capital results from the rising stock of capital relative to national income, a trend that has been apparent since the 1970s (and a reversal of the trend evident for most of the 20th century). The figures trace the key ratios in the eight richest countries, in order of decreasing GDP: the United States, Japan, Germany, France, Britain, Italy, Canada, and Australia. While the ratios vary constantly in the short run (and are subject to bubbles), there is a clearly visible long-term trend at work in the rich countries.

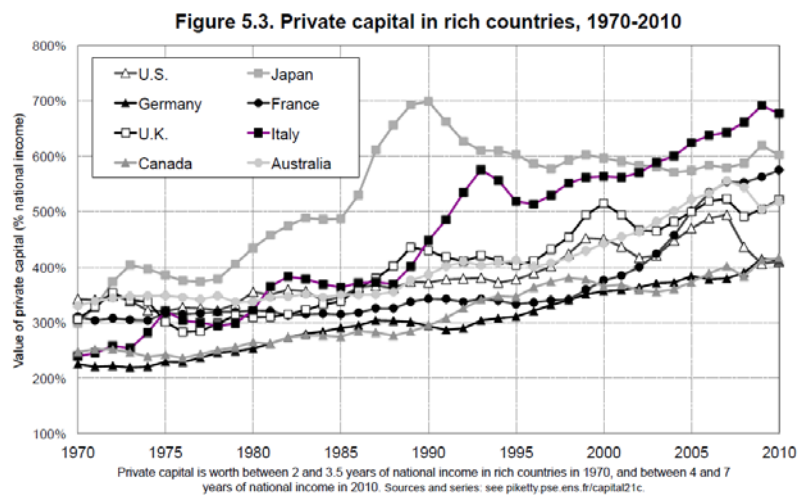




Figure 5.4. Private capital measured in years of disposable income

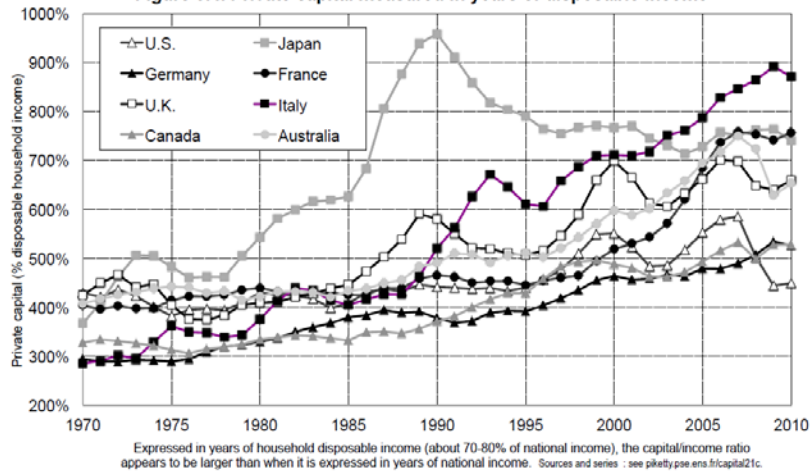
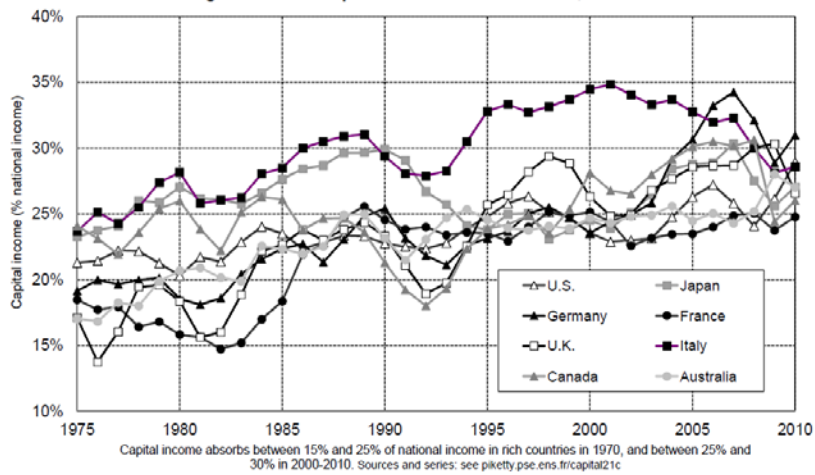


Figure 6.5. The capital share in rich countries, 1975-2010



## References

- Alvaredo, F., Chancel, L., Piketty, T., Saez, E. and Zucman, G. (2017), *World Inequality Report 2018*, Paris: World Inequality Lab.
- Australian Bureau of Statistics (ABS) (2017), *Household Income and Wealth, Australia, 2015-16*, Cat No. 6523.0.
- Atkinson, A. B. (2015), *Inequality*, Cambridge (Mass.): Harvard University Press.
- Crédit Suisse (2017), *Global Wealth Databook 2017*, Zurich: Research Institute Crédit Suisse.
- Gollin, D. (2002), Getting income shares right, *Journal of Political Economy*, 110 (2), 458-74.
- IMF (2018), *World Economic Outlook Database*, April 2018 edition, Washington D.C.: International Monetary Fund.
- Kreuger, A. B. (1999), Measuring labour's share, *American Economic Review*, 89 (2), 45-51.
- Leigh, A. (2013), *Battlers & Billionaires: The Story of Inequality in Australia*, Melbourne: Redback.
- Lübker, M. (2007), Labour Shares, *Technical Brief No. 01*, Geneva: International Labour Office.
- OECD (2015), *In it Together: Why Less Inequality Benefits All*, Paris: OECD Publishing.
- OECD (2018), Social spending (indicator). doi: 10.1787/7497563b-en (Accessed on 17 May 2018)
- Ostry, J. D., Berg, A. and Tsangarides, C. G. (2014), *Redistribution, Inequality and Growth*, Staff Discussion Note 14/2, Washington D.C.: International Monetary Fund.
- Oxfam (2018), *Reward Work, Not Wealth*, Oxford: Oxfam GB for Oxfam International.
- Piketty, T. and Zucman, G. (2013), Capital is Back: Wealth-Income Ratios in Rich Countries 1700-2010. Full paper and Appendices, Paris: Paris School of Economics.
- Piketty, T. (2014), *Capital in the Twenty-First Century*, Cambridge (Mass.): Belknap/Harvard.
- Piketty, T. (2014), Technical Appendix of the book, *Capital in the Twenty-First Century* (online).
- Sheil, C. (2015), Piketty's political economy: review article, *Journal of Australian Political Economy*, vol. 74, pp. 19-37.
- Sheil, C. and Stilwell, F. (2016), *The Wealth of the Nation: Current data on the Distribution of Wealth in Australia* Sydney: Evatt Foundation.
- Sheil, C. and Stilwell, F. (forthcoming), *The Greater Wealth of the Nation: Current data on the Distribution of Wealth in Australia*, Sydney: Evatt Foundation.
- Stiglitz, J. (2012), *The Price of Inequality*, New York: Norton & Co.
- Stiglitz, J. (2015), *The Great Divide*, New York: Norton & Co.
- Stockhammer, E. (2017), Determinants of the wage share: A panel analysis of advanced and developing economies, *British Journal of Industrial Relations*, 55 (1), 3-33.