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Tax reforms and top incomes

Enrico Rubolino, Daniel Waldenström 13 April 2017

The link between tax progressivity and the income distribution is the subject of intense debate. This column presents new evidence from tax reforms during the 1980s and 1990s to examine how reduced progressivity affects top income shares. Reduced progressivity boosted top incomes, particularly for those in the top 0.1% of earners. Income tax changes are therefore a plausible candidate for explaining the recent surge in income inequality.

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Understanding the relationship between tax progressivity changes and pre-tax income inequality has become important following the recent reductions in income tax progressivity carried out in most developed countries. Studies have examined cross-country evidence or within-country variation (Slemrod 1996, Brewer et al. 2010, Piketty et al. 2014, Duncan and Sabirianova Peter 2016, Saez 2017). Because of the complex interdependence between income taxation and income inequality, however, the relationship is still not clear.

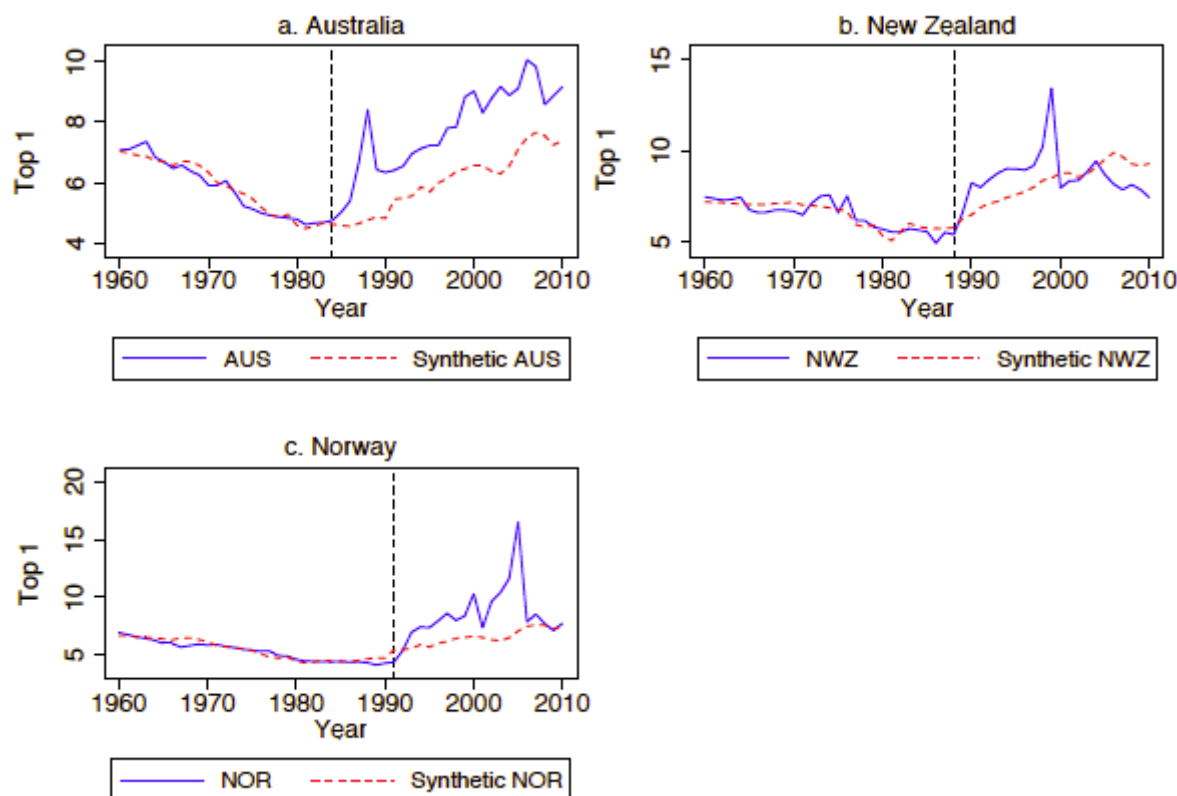
Lower tax progressivity increases top income shares

In a new paper, we take a different approach to studying the link between tax progressivity and income inequality (Rubolino and Waldenström 2017). We examine all major personal income tax reforms in developed countries since the 1970s and their impact on top income shares. While these reforms differed in scale and scope, most of them led to a reduction in progressivity by lowering top marginal tax rates, broadening tax bases and having fewer tax brackets (see Brys et al. 2011 for a survey).

For identification, we focus on the largest reductions in progressivity, which were the reforms in Australia and New Zealand in the mid-late 1980s and Norway in the early 1990s. Analysing the effect of single events puts specific requirements on the statistical methods used. We tackle this challenge by estimating synthetic control groups (Abadie et al. 2010) and complemented it with standard difference-in-difference estimation.¹

Our main finding is shown in Figure 1. It depicts the top percentile income share around the time of the reform in the countries in which the reform occurred, compared to the same income share in their respective 'synthetic' controls. While pre-reform top shares are almost identical, there is a notable divergence after the tax reform. Top shares in treated countries increased by between 15% and 30% more than in the synthetic controls. The effects were not short-lived – the gap remains for at least ten years in all cases.

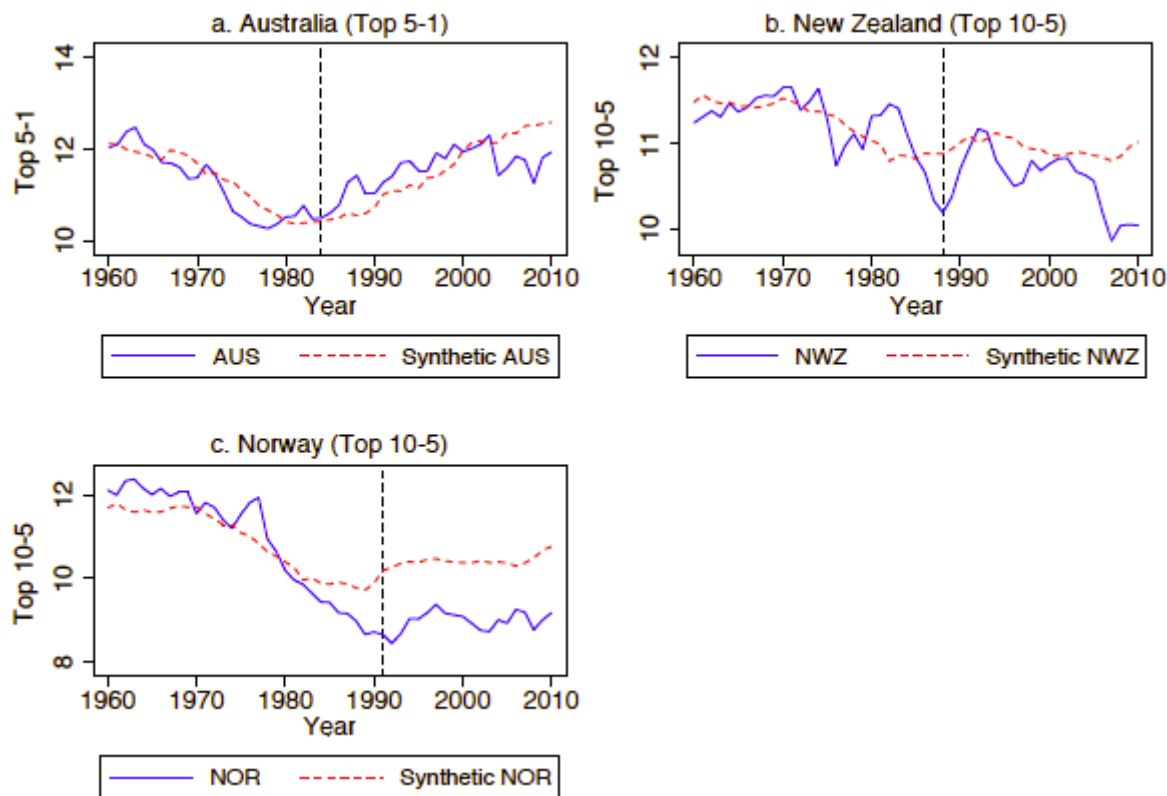
Figure 1 Income share of top percentile



The role of capital income and top marginal tax cuts

We also find that the progressivity effect differs among top groups. Figure 2 shows that earners in the top income decile that are below the top percentile were almost not affected by the progressivity reforms. By contrast, looking within the top percentile, the effects increase in size. The top 0.1 percentile share did twice as well from the reforms as the top percentile share did, taken as a whole.

Figure 2 Income share of the groups below the top percentile



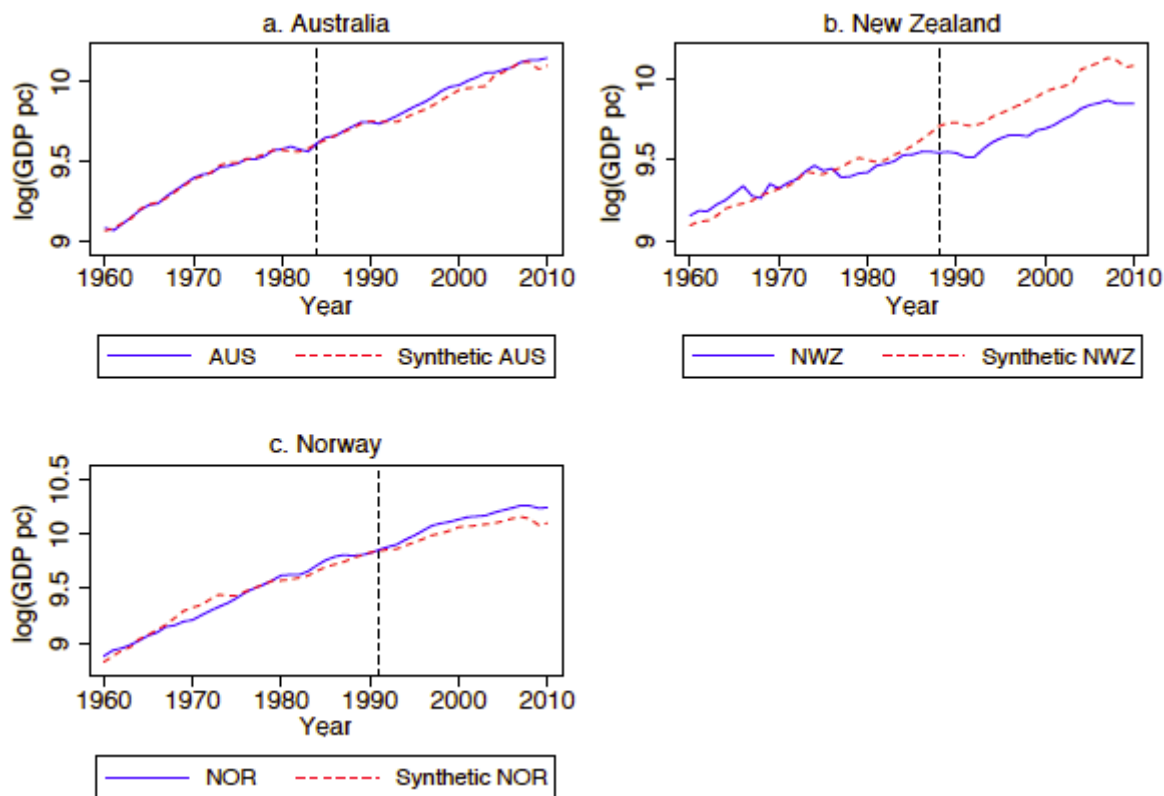
How can we account for these findings? One answer is the relative importance of capital income in total income. Capital incomes, such as dividends or realised capital gains, offer more ways to manage income streams to avoid paying income taxes. Earners in the top percentile get a much larger share of their income from capital returns. We also link the reform effects to the cuts in top marginal tax rates, and found that the responses in the top 0.1 percentile were much higher.

Tax reforms did not increase the size of the cake

Tax progressivity was reduced in the 1980s on the argument that there would be a positive impact on economic activity and efficiency (Auerbach and Slemrod 1997, Gale and Samwick 2014). Therefore it could be that the estimated boost in top shares reflects new resources created in top groups, rather than a redistribution of incomes away from the bottom and middle. We evaluate this hypothesis by running similar synthetic control method estimations, but replacing top income shares by three indicators of real activity: GDP per capita, number of registered patents per capita, and total tax revenues divided by GDP.

Figure 3 shows that GDP per capita was not significantly affected by the tax reform treatments in any of the three countries that we studied. Likewise, we do not find any significant effect on the number of patents or tax revenues. Although these variables are aggregate, and therefore only offer a coarse estimate of the true effect, this analysis does not show large real income responses to reductions in progressivity.

Figure 3 Effects of tax reforms on GDP per capita



Taxation and inequality

Our findings suggest that tax progressivity changes influence pre-tax income inequality. Focusing on large, progressivity-reducing tax reforms in the 1980s and 1990s, we can show that they had a positive, increasing effect on top income shares in all the countries we studied. The nature of our top income data means that it would be impossible to make a detailed inquiry into the precise mechanisms behind this result, but our examinations point to a role for tax avoidance rather than real responses. We hope that our study will stimulate further research into the behavioural responses to tax reforms, so that we can improve our understanding of the relationship between taxation and inequality.

References

- Abadie, A, A Diamond and J Hainmueller (2010). "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program." *Journal of the American Statistical Association* 105(490): 493–505.
- Auerbach, A J and J Slemrod (1997). "The economic effects of the Tax Reform Act of 1986." *Journal of Economic Literature* 35(2): 589–632.
- Brewer, M, E Saez and A Shephard (2010). "Means-testing and tax rates on earnings." in Mirrlees, J (ed.), *Dimension of Tax Design: The Mirrlees Review*. London: Institute for Fiscal Studies. Oxford and New York: Oxford University Press.
- Brys, B, S Matthews and J Owens (2011). "Tax Reform Trends in OECD Countries." OECD Taxation Working Papers No. 1. OECD Publishing, Paris.
- Duncan, D and K Sabirianova Peter (2016). "Unequal inequalities: Do progressive taxes reduce income inequality?" *International Tax and Public Finance* 23(4): 762–783.
- Gale, W G and A A Samwick (2014). "Effects of income tax changes on economic growth." The Brookings Institution.

Piketty, T, Saez, E and S Stantcheva (2014). "Optimal taxation of top labor incomes: a tale of three elasticities." *American Economic Journal: Economic Policy* 6(1): 230–271.

Rubolino, E and D Waldenström (2017). "Tax progressivity and top incomes: Evidence from tax reforms". CEPR Discussion Paper No. 11936.

Slemrod, J (1996). "High Income Families and the Tax Changes of the 1980s: the Anatomy 22 of Behavioral Response." in Feldstein M. and J. Poterba (eds.), *Empirical Foundations of Household Taxation*. University of Chicago.

Endnotes

[1] The synthetic control method creates a 'synthetic' counterfactual treated country by weighting together bits of other, similar countries. This synthetic country is intended to be identical to the reformed country except the tax reform.

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