

Mobilising alternative futures: generational accounting and the fiscal politics of ageing in Australia

BEN SPIES-BUTCHER* and ADAM STEBBING*

ABSTRACT

Economists typically argue population ageing generates fiscal pressures by restricting the tax base while increasing demands for social spending. Alongside other economic pressures associated with neoliberalism, this dynamic contributes to a politics of ‘enduring austerity’ that limits governments’ fiscal discretion. The politics of population ageing reflects modelling techniques, such as generational accounting (GA), which, anticipating future deficits, create demands for policy action today to address projected intergenerational inequalities. Taking Australia as a case study, this paper explores the politics of GA in public budgetary processes. While existing critiques reject GA by arguing it relies on ‘apocalyptic’ or unreliable demography, we focus on a different kind of contestation, which applies the techniques and even the categories of GA to frame different problems and promote different solutions. We identify three sites of partisan contest that refocus fiscal modelling: including the tax side of the budget equation; comparing the cost of public provision to public subsidies for private programmes; and including the costs of environmental damage. At each site, the future-orientated logic of GA is mobilised to contest the policy implications of austerity. This complicates analysis that financialisation and neoliberalism necessarily ‘de-politicise’ policy by removing state discretion. Instead, we identify an increasingly important, if technocratic, form of political contestation that offers the possibility to promote more egalitarian responses to population ageing.

KEY WORDS—social policy, population ageing, generational accounting, financialisation, intergenerational inequality, pension reform.

Introduction

Population ageing is often identified as a cause of fiscal austerity. Older citizens continue to be the primary beneficiaries of the two largest components of social spending in affluent countries: age pensions and health care. The demographic transition associated with ageing is widely believed to reduce

* Department of Sociology, Macquarie University, Sydney, Australia.

the proportion of potential workers, while increasing the population reliant on government payments. Economists have noted that these dynamics, combined with growing political resistance to rising taxation, reduce the scope for political discretion in fiscal policy, creating a politics of enduring (or permanent) austerity (Iversen and Wren 1998; Jessop 2014; Pierson 1998; Streek 2014). Through new accounting technologies, population ageing is projected to generate *future* fiscal challenges, which modellers claim will create intergenerational inequalities that require policy action today.

The most influential of these technologies is generational accounting (GA). Associated with the work of US economist Laurence Kotlikoff (1992), GA attempts to model the relative level of taxes paid and social benefits received by each generation. While influential, it is also controversial. Reforms to pensions, housing and health care in many welfare states have reflected the logic of GA, incorporating elements of financial markets into the regulation of social provision in order to protect public finances and taxpayers from future risks. In this sense, GA operates as an instrument of austerity, bringing forward the discipline of a 'debt state' (Streek 2014) by mobilising the future in advance of the predicted fiscal pressures being experienced. While most advanced economies have adopted some form of GA as part of their policy and budgetary process, critics argue these models constitute a form of 'apocalyptic demography' or point to the sheer unreliability of long-term forecasts (Gee and Gutman 2000; Robertson 1996). Critics of GA claim that by reinforcing a politics of austerity GA diverts attention from other important social and economic challenges.

Previous research has identified limitations in using GA to evaluate and address concerns for intergenerational equity. Scholars have identified important omissions and biases (Gutman 2010), pointed to alternative measures of intergenerational transfers (Lee and Mason 2011) and often challenged the category of generations as important to distributional politics (Higgs and Gilleard 2010; Walker 1990). Others have focused on the influence of GA within public budgeting, identifying how it and other private-sector accounting techniques have been central to changing policy orientations in favour of private-sector actors and finance markets over direct public provision (Barton 2001; Lemoine 2017). We draw on these literatures to explore how GA has become subject to political contestation within public budgetary processes. Unlike many critiques of GA that reject the categories or methods of GA, this contestation centres on redefining the parameters used to account for and model the impacts of population ageing. Thus, we focus on how accounting practices are used to mobilise alternative futures, which are then used to invoke different contemporary policy responses.

The paper begins with a discussion of the development of GA and its association with political austerity internationally. Here we frame the critique of ‘apocalyptic demography’ as a challenge to political austerity. The bulk of this paper then focuses on the Australian case study to examine how partisanship influences, and is influenced by, the applications of different accounting techniques. By tracing the use of GA-type techniques, particularly through a series of official Intergenerational Reports (IGRs), we explore how these techniques have been mobilised to frame policy debates around population ageing. We then identify three sites of partisan contest that have increasingly refocused fiscal modelling, producing different political dynamics; including the tax side of the budget equation; comparing the cost of direct provision to public subsidies for private programmes; and including the costs of environmental damage. In each area, we argue, the future-orientated logic of GA is mobilised to contest the policy implications of austerity. This complicates analysis that financialisation and neoliberalism ‘de-politicise’ policy by removing state discretion, and instead suggests politics has been reshaped to reflect financialised logics based on projections of the future.

The fiscal politics of ageing: a brief overview

The widespread adoption of GA techniques shadowed a broader shift in international debates from a preoccupation with eliminating aged poverty to future-orientated claims about the fiscal sustainability of social policy. Surfacing on the international agenda in the late 1970s, concerns about ageing were informed by earlier debates in the United States of America (USA) (Gee and Gutman 2000). US debates about ageing in the 1960s were associated with efforts to eliminate poverty by expanding social provision, partly justifying the ‘Great Society’ programmes Medicare and Medicaid (Hudson 1978). By the late 1970s, these debates came to focus on the long-term fiscal costs of the ‘greying’ of social expenditure (Hudson 1978: 432; 2014: 7). This shift reflected and reinforced concerns about limits to the fiscal capacity of the state from economic stagnation and the growing influence of neoliberal ideas. While these concerns impeded new social provisions, social expenditures on existing programmes to support older people continued to grow (Hudson 2014: 7).

International concerns about the future costs of ageing featured prominently in the 1980s and 1990s (Gutman 2010: 25). This followed growing awareness of declining fertility after the post-war ‘baby-boom’ and increasing longevity over the 20th century, as well as the experience of economic crisis in the early 1970s (Gee 2002: 751; Hudson 2014: 7). Concern was

particularly pronounced in liberal welfare states, such as the USA, Canada, Australia and New Zealand. Most affluent countries were already allocating about two-thirds of social expenditure to programmes mainly benefiting older people, such as age pensions and public health services (Castles 2004: 6). Population ageing was framed as threatening generational equity because the taxes of a dwindling pool of younger workers would need to be increased to finance benefits for larger older age groups (Minkler and Robertson 1991). It followed that failure to curb existing public programmes would (almost certainly) lead to fiscal crisis in future decades. Transnational actors, including the World Bank and the Organisation for Economic Co-operation and Development (OECD), played lead roles in promoting concerns of impending fiscal crisis (Orenstein 2008: 71). Notably, the World Bank (1994) advanced pension privatisation to avoid looming fiscal crisis. Presenting privatisation of age pensions as the solution, the crisis of population ageing was constructed as a welfare state crisis (Castles 2004: 4).

Framed as a crisis of the welfare state, future-orientated concerns about the costs of population ageing feed into a fiscal regime that promotes what Pierson (1998) terms ‘permanent austerity’. Permanent austerity has also been fuelled by the lower productivity growth and rising unemployment associated with the shift to the service economy, and larger recurrent social expenditures arising from the maturation of post-war welfare states (Pierson 1998). These transitions have made it increasingly difficult for governments to concurrently increase employment, pursue social policies that reduce inequality and exercise fiscal constraint (Iversen and Wren 1998). While Pierson (1998) focuses on how these processes within nation states promote austerity, Streeck (2014) stresses the contribution of global processes in reinforcing the same dynamic. Even before the financial crisis, Streeck (2014) argues that the ‘tax state’, reflecting the concerns of citizens expressed through elections, was being transformed into a ‘debt state’ disciplined by creditors in global financial markets via interest rates. We refer to this dynamic using Jessop’s (2014) term ‘enduring austerity’ to dispel impressions of permanence; and to include country-level and global processes as both undermine the state’s fiscal capacity.

The Global Recession of 2008 and its unfolding aftermath have rekindled enduring austerity in affluent countries (Farnsworth and Irving 2015; Schafer and Streeck 2013). With few exceptions, public debt has risen rapidly in OECD countries as governments bailed out flailing financial institutions, stimulated employment and/or maintained social provision in the face of collapsing revenue (Schafer and Streeck 2013: 4). Interestingly, rising public debt has only rarely conjured up concern about the tax base being too small, rather the typical explanation is that public expenditure

is too high and the appropriate response is further austerity (Schafer and Streeck 2013: 10). Paradoxically, the greatest concerns have been expressed in liberal welfare regimes with comparatively low tax rates (Farnsworth and Irving 2015). Population ageing continues to reinforce enduring austerity, fuelling concerns that the state faces impending fiscal crisis.

Forecasting the apocalypse? Demographic projections and the fiscal politics of ageing

Generational budgeting models have played a central role in reinforcing perceptions that ageing will foment future fiscal crisis. Although widely presented as neutral scientific devices, these models have increasingly been critiqued as political tools that rely on pessimistic assumptions to advance enduring austerity. We draw on this ‘apocalyptic demography’ critique to demonstrate how the selective assumptions of GA bring forward enduring austerity, although we later suggest that contestation over accounting models remains.

Since the 1990s most affluent countries have commissioned generational budgeting models to forecast long-term demographic, fiscal and economic trends, and inform policy responses. GA, developed by Auerbach, Kotlikoff and colleagues in the USA, is the most popular of these forecasting models – particularly in English-speaking countries (Kotlikoff 1992; Williamson and Rhodes 2011). Promoted as an alternative to the short-term time-frame of deficit accounting, GA innovatively focuses on the long-term impact of policies (and potentially proposed reforms) on both fiscal balance and generational equity. Proponents of this approach contend that it is less open to political manipulation over how policies are accounted for than deficit accounting, it includes unfunded liabilities (such as future pension costs) that are excluded from other fiscal modelling, and it projects the cost of current proposals and policies to future generations taking into account demographic change (Williamson and Rhodes 2011: 41). Underpinning GA is an understanding of generational equity that ‘generations born in the future should not pay a higher share of their lifetime incomes to the government than today’s new-borns’ (Auerbach Gokhale and Kotlikoff 1994: 84). Assessing policy against this normative criterion reflected broader concerns about the contribution of social policy to generational inequalities, such as Thomson’s (1991) study of New Zealand.

As with other long-term forecasts, GA models are highly sensitive to assumptions made about the future rate of social and economic change. These models assume that social policy settings do not radically alter from the base-year

(usually the current year) and that both taxes (as a percentage of Gross Domestic Product (GDP)) and economic conditions remain relatively stable in coming decades (Fine 2014; Williamson and Rhodes 2011: 37). Applying these assumptions, GA calculates the ratio of taxes paid to benefits received by current and future age cohorts over their lifecourses (Bessant, Emslie and Watts 2011: 151; Fine 2014: 222).

GA models consistently project that increases in public expenditure will outstrip tax revenue in coming decades as the population ages. These models project that the fiscal imbalance will grow – particularly from the cost of social provision for older people – and have the potential to threaten the future viability of the state if action is not taken. Proponents of GA tend to frame the projected fiscal imbalance as a future fiscal crisis and argue that cutbacks to expenditure are required to prevent future generations from having to pay higher taxes than current generations (Williamson and Rhodes 2011: 41). This framing has featured in GA literature in the USA and across Europe (Raffelhüschen 1999).

Projections that existing social provisions are unsustainable due to future public debts yet to be incurred contributes to enduring austerity. In affluent countries, states increasingly rely on credit to meet a large, and potentially growing, portion of their expenditure (Streeck 2014: 72). The legitimacy of the state has come to rest on the confidence of creditors in the state's capacity to meet loan repayments; as well as citizens through democratic processes (Streeck 2014: 77). This places further political constraints on the capacity of the state to finance existing policies and respond to new demands. GA models reinforce enduring austerity by presenting the spectre of an insolvent future state to justify policy action in the present, which typically entails improving fiscal sustainability by curbing social provisions or proffering privatisation.

There is, nonetheless, considerable variation in how OECD countries have applied GA. The frequency of official long-term forecasts ranges from three reports each year in the USA to *ad hoc* reporting in Canada, Japan and Korea (Treasury 2010: 87). The projection periods of long-term forecasts vary from a nominated time period from publication to a designated year (Treasury 2010: 87); and, the coverage of tax and expenditure programmes included in long-term projections is patchy and inconsistent. Belgium, Finland and Italy are among those countries that include only health, pensions and age care programmes, whereas Australia, Sweden and the USA are among those including a wider array of welfare programmes (Treasury 2010: 87). Denmark even forecasts likely environmental costs (Treasury 2010: 87). Although no standardised approach has been adopted, GA models are widely portrayed in public discourse as neutral scientific tools that have reasonable accuracy (Williamson and Rhodes 2011: 39).

GA models have increasingly been subject to academic critique. Critics have faulted GA for focusing on public expenditure rather than the broader implications current trends have for future wellbeing (Williamson and Rhodes 2011: 47). Notably, GA models overlook potential benefits from government spending and current debt (Williamson and Rhodes 2011: 46). By focusing attention on projected differences between the taxes generations will pay and the benefits they receive, these models also homogenise generations and fail to account for intragenerational inequalities and transfers (Williamson and Rhodes 2011: 47). These models are sensitive to decisions about which public expenditures, generational transfers and taxes are included, as well as the assumptions chosen about future economic and demographic trends.

In a systematic critique, GA models have been labelled ‘apocalyptic demography’ because forecasts of impending fiscal catastrophe rely – conveniently or otherwise – on exceedingly pessimistic assumptions (*see* Gee and Gutman 2000; Robertson 1996). Importantly, for our purposes, the critique of GA’s apocalyptic demography highlights that the assumptions of GA that reinforce enduring austerity dynamic rest on faulty foundations.

This critique shows that GA models are liable to exaggerate future public debts. The assumption that tax and spending policies will operate unchanged for the projection period rules out tax increases, even if overall economic prosperity rises as most long-term forecasts predict (McDonald 2005). This assumption also fails to consider the bearing that a country’s current level of tax revenue, public spending and public debt has on its capacity to adjust policy settings as populations age (OECD 2006). The assumption that economic conditions remain stable neglects the considerable impact of unpredictable booms and busts – such as the recent Global Recession – on public finances and private pension funds. Also the fiscal gaps that GA models project between taxes and spending are distorted by the incomplete coverage of public programmes.

The critique of apocalyptic demography also postulates that GA exaggerates the potential for ageing to induce fiscal crisis. From this perspective, Gee (2002) contends that these models are overly reliant on the dependency ratio as a measure of economic productivity. By equating ages of 65 years and above with dependency and non-productivity, this ratio arbitrarily ignores the social and economic contributions of older people (Fine 2014). Critics further argue that long-term fertility, mortality and migration rates cannot be assumed stable and are sensitive to minor short-term changes (*see* Gee 2002: 751). Uniform predictions of an ageing crisis also ignore demographic variation among affluent countries; the portion of the population aged 65 and over in 2050 is projected to range from one-fifth in Turkey and the USA to over one-third in Italy, Japan and Spain (OECD 2009: 19).

Highlighting the exaggeration and imprecision of GA, the apocalyptic critique shows how these models advance enduring austerity. This critique has had some success, but another implicit critique that internalises the logic of generational budgeting has arguably been more effective at producing policy change. Recently, Australia has witnessed a sustained period of contestation centred on the aspects of the welfare state most associated with population ageing and which are the focus on intergenerational accounting. This political contestation, we argue, has not been the result of rejecting intergenerational modelling or the logic of ‘mobilising the future’, but rather reflects a contest of accounting technologies. In turn, we suggest the politicisation of accounting, especially public-sector accounting, itself reflects changes in the political economy, both to a financialised economy and a politics of enduring austerity.

Intergenerational reporting and the fiscal politics of ageing in Australia

Intergenerational reporting in Australia has developed since the mid-1980s, alongside the rise of market-orientated economic restructuring. Regular IGRs were first officially recommended in 1996 and began in 2002, with three subsequent reports in 2007, 2010 and 2015. Reflecting the fiscal dominance of the national government within the federation, our focus is on national reporting processes and politics. Since 1983 Australia has seen seven Prime Ministers, with the governing party changing three times. The period began with the longest period of Labor government in the country’s history, under Prime Ministers Bob Hawke (1983–1991) and Paul Keating (1991–1996). Government changed in 1996 to the conservative parties, known as the Coalition, comprising the Liberal Party and rural National Party, who governed under Prime Minister John Howard until just before the Global Recession (1996–2007). Labor governed again under Prime Ministers Kevin Rudd (2007–2010, 2013) and Julia Gillard (2010–2013), before the Coalition returned to power in 2013, under Prime Ministers Tony Abbott (2013–2015) and Malcolm Turnbull (2015–) (*see* [Figure 1](#)). Thus, the period allows for useful comparison of partisanship in the application of GA techniques.

Under Labor governments, early attempts to model intergenerational fiscal effects in Australia were not influential. The Cass Social Security Review, a major official review of social provision in the 1980s, found that claims that future generations would be unable to afford pension costs relied on overly pessimistic assumptions (Foster 1988: 51). Similarly, the Economic Planning Advisory Council’s (EPAC 1994) ‘Australia’s Ageing Society’ report found that the future costs associated with ageing would

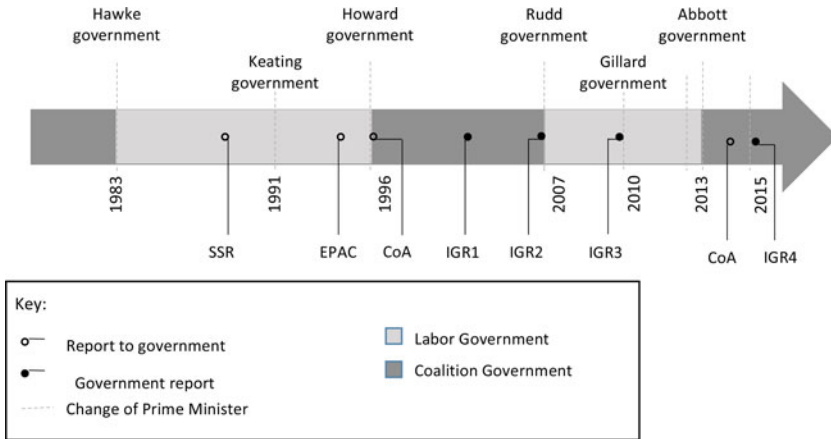


Figure 1. Timeline of intergenerational accounting in Australia.

Notes: SSR: Social Security Review. EPAC: Economic Planning Advisory Council. CoA: Commission of Audit. IGR: Intergenerational Report.

be manageable; and, applying Kotlikoff's GA approach to retirement incomes policies, Ablett initially found younger generations would benefit (Ablett 1996a), before identifying a modest cost (Ablett 1996b), depending on the base year used. Instead, pension policy reflected other political pressures.

The union movement, a formal partner with the Labor government through an Accord, focused considerable attention on expanding workers' access to retirement income during the 1980s and 1990s. Initially unions prosecuted the case through wage negotiations, expanding access to occupational superannuation schemes funded by employer contributions (Stebbing 2015). This model suited the Labor government, both because it did not require higher taxation, and because it facilitated wage suppression by trading wage gains for employer superannuation, thus reducing the wage–price nexus that contributed to high inflation (Stebbing 2015).

Having voluntarily adopted strong fiscal constraints, the Labor government thus instituted pension reforms that anticipated what would become the World Bank's (1994) 'three pillar' prescription. A flat-rate pension with eligibility determined by a generous form of means-testing called 'affluence-testing' (Wilson *et al.* 2013), was supplemented by a second pillar of compulsory private retirement savings funded by employers – superannuation – comprising individual, market-based accounts for most workers administered by private (although union-influenced) funds. Voluntary superannuation contributions and other private savings form the third pillar of retirement savings. Union campaigning did see the reintroduction of universal public health insurance, but even here Labor emphasised the efficiency of a single-payer insurance system (Spies-Butcher 2014).

Only in 1996, with the election of a conservative Liberal–National Coalition government, did GA become influential in policy making. Having campaigned strongly on the large deficit after the severe recession of the early 1990s, the government established an *ad hoc* Commission of Audit to re-examine the fiscal impact of demographic change, among other fiscal challenges (National Commission of Audit 1996). The Commission’s membership was dominated by pro-market business leaders and its findings reflected a form of apocalyptic demography. Using more pessimistic assumptions than either EPAC or Ablett, it urged governments to ‘moderate community expectations of government assistance’, given the ‘radical and lasting change’ to Australia’s demography (National Commission of Audit 1996: chap. 6). As discussed above, the demographic modelling used by the Commission of Audit and subsequently by the IGRs has been subjected to systematic critique. Over time, these initial predictions have also proven overly pessimistic, leading to changes in the modelling parameters (McDonald 2005). Projections of future deficits in IGR₂ were substantially lower than in IGR₁ as fertility, migration and income growth rates proved less pessimistic than projected. Thus, IGR₂ projected the deficit for 2042 (the final year of IGR₁) to be half that of the first report (Treasury 2010: xxiii). Even after the impact of the Global Recession, IGR₃ predicted the deficit would be lower than predicted in IGR₂ by approximately 1 per cent of GDP from 2020 (Treasury 2010: xi). However, based on the initial analysis, the Commission recommended reducing the indexation of the age pension; tightening the means test and increasing co-payments for age care; greater support for private superannuation to increase self-provision in retirement; and limiting public health funding (National Commission of Audit 1996: chap. 6). The Commission also recommended that a new Charter of Budget Honesty require IGRs at least every five years (Gallagher and Rothman 2006: 2).

The IGRs are now a regular part of Australia’s budgetary processes, produced by the Treasury. The reports have consistently highlighted potential future fiscal problems. Yet, like other liberal welfare states, Australia’s vulnerability to population ageing is less pronounced than other advanced economies. Australia’s population is among the youngest in the OECD (Treasury 2015a: 9), and is projected to remain relatively young (United Nations 2015: 64). By 2002, when the first IGR was released, Australia’s fiscal position had also improved. A small surplus was further strengthened by a sustained mining boom, fuelled by rapid economic growth in China. Unlike the Commission of Audit, the IGRs released in 2002 and 2007 explained the need for continued fiscal constraint in the absence of any apparent budgetary pressure. Both IGRs charted how the initial surpluses recorded in the forward estimates would eventually give way to sizeable and growing deficits in decades

to come. The ability for GA to mobilise the future may even play a more important political role in liberal regimes like Australia's precisely because it can invoke austerity where ordinary budgeting does not.

The Commission of Audit and subsequent IGRs have consistently identified three areas of spending as the main source of the fiscal gap: pensions, health care and aged care. Howe and Healy (2005) have outlined how both the Commission of Audit and IGR1 were used by the Coalition government to initiate aged care reforms. IGR1 was also used to frame changes to superannuation, which included co-contributions for low-income earners and lower tax rates for all superannuation contributions (Treasury 2002: Statement 1). Later, taxes on withdrawals of superannuation in retirement were abolished entirely (Costello 2006). The Commission of Audit and IGR1 also emphasised the importance of encouraging, and subsidising, private health insurance coverage. While the changes to health were not directly linked to the IGR, public rebates for private health insurance were increased on the rationale that higher private coverage would reduce future pressures on public health spending (*see* Spies-Butcher 2014: 34–5).

The changes to health and pensions in particular highlight the politics of mobilising generational arguments. In both cases, changes were fiscally expansionary – involving increased spending or reduced taxation. Such measures were facilitated by Australia's strong fiscal position, but were also justified as mechanisms to limit future liabilities. The result was a reorganisation of welfare that increasingly created a dual system of provision (Stebbing and Spies-Butcher 2010) with growing fiscal support for private welfare alternatives. This 'dual welfare state' is most apparent in areas targeted in the IGRs (Spies-Butcher and Stebbing 2011), reflecting its narrow focus on the level of public expenditure. The expansionary nature of policy change suggests that the relationship between forecasting and austerity is not clear cut, but contingent on the forms of forecasting used.

Challenging the boundaries of taxation and expenditure

GA has previously been criticised for focusing exclusively on government spending, effectively ruling out raising taxes as a potential response. This is also the case with the Australian IGR. However, this traditional critique has found little purchase. Instead, the defence of public provision has drawn on an alternative accounting concept, namely tax expenditures. By identifying and measuring tax expenditures, the impact of demography on government revenues is more easily identified and challenged.

The IGRs obscure consideration of tax reform by only modelling changes in social spending, while changes in the level of tax receipts are not subject

to modelling but instead are assumed to remain stable as a proportion of the economy.¹ The asymmetric treatment of spending and taxation in the IGRs has political dimensions. The IGRs' assumption that tax revenues will remain stable in proportion to the economy rules out discretionary tax increases – a political judgement – and implicitly assumes regular tax *cuts*. Australia's tax revenues are dominated by individual income tax receipts (Treasury 2017: Appendix B), which are based on a progressive scale that is fixed in nominal terms. Thus, an increase in nominal incomes results in tax receipts growing as a proportion of the economy, a process known as 'bracket creep'. Even if tax rates were held constant in real terms, the assumption of rising real per capita incomes implicitly assumes discretionary cuts in tax rates as incomes rise. The IGR framework also does not consider selective tax subsidies that reduce revenue and create incentives to change behaviour.

Critics of the IGRs have identified these limitations in assuming tax receipts remain at a set proportion of GDP to reject the IGRs and shift the policy debate (*see* Doughney and King 2006: 32). However, this general critique has not been most influential. Instead, opponents of welfare retrenchment have drawn on alternative accounting technologies to critique GA. From the 1980s, a growing consensus has emerged within the accounting and policy literatures that selective tax subsidies should be treated in a similar way to social spending, that is, as *tax expenditures*. Tax expenditures are policies that deliver benefits to individuals (or other categories of taxpayers) who purchase private provision or belong to certain groups (Surrey 1973). In the 1980s, the Hawke Labor government established an annual Tax Expenditure Statement (TES), which catalogues these selective tax breaks and estimates their fiscal cost (Smith 2003). The TES remains separate to budget processes and amounts to a list of tax expenditures rather than a systematic review (Auditor General 2008). It has, nonetheless, had some success at boosting the profile of tax expenditures and enabling comparison of year-on-year estimates of particular measures.

Although widely accepted, the tax expenditure concept is not without controversy. Critics argue that by equating the potential revenue foregone in tax expenditures with cash transfers, the concept assumes that the state is entitled to collect all income as tax (Davidson 2007; Hacker 2002: 33; Howard 1997: 3). This objection is easily dismissed because tax expenditures compare the difference between the preferential treatment received by eligible taxpayers and not others, which neither presupposes nor requires the government to have a claim to tax all income or even a certain proportion of income (Fleming and Peroni 2008: 492; Hacker 2002: 33). Fleming and Peroni (2008: 450) argue that the concept is

‘grounded in three fundamental tax policy principles – ability-to-pay, the Schanz-Haig-Simons definition of income, and neutrality’. While we do not consider criticisms of the tax expenditure concept insurmountable, acceptance of the concept is not crucial for our argument. Rather, it is important that this concept has been mobilised in political debate.

The TES received relatively little attention during the Coalition government of the late 1990s and 2000s. However, in the wake of the global financial crisis and the collapse of the mining boom, the TES has gained prominence, both as a means to identify fiscal savings and growing inequality. At the behest of a new Labor government elected on the eve of the global financial crisis, Treasury began to model superannuation tax concessions and other tax expenditures related to retirement. These studies significantly changed the basis of evaluating retirement policy. Focusing on tax expenditures, Treasury (2012) concluded that the tax concessions for superannuation were not only expensive, but also inefficient in reducing future public spending, costing significantly more in forgone revenue than they saved in future pension spending. This inefficiency largely results from inequitable distribution of benefits. Treasury estimated that over 55 per cent of benefits from the superannuation tax concessions were received by the top quintile of income earners, meaning most benefits flowed to taxpayers whose retirement incomes were already above the pension means test (Treasury 2012).

With the budget in deficit and facing a more obvious fiscal challenge, the Labor government targeted retirement incomes for reform. Armed with Treasury analysis, and a growing critique of tax expenditures more broadly, the superannuation tax concessions became a key government target. Its argument for doing so was remarkably similar to that initially mobilised through GA in support of subsidies for private savings. The Treasurer argued the concessions were unaffordable (Swan 2014: 293–4), and used the fiscal crisis to justify retrenchment. Changes were made to the concessional arrangements in 2012 and 2013. These did not amount to a reversal of the initial Coalition concessions, but were estimated to raise Aus \$2.4 billion over the four-year forward estimates (Australian Government 2013). Some of these savings were to be redirected into the superannuation system, allowing a reduction in tax rates paid by low-income workers. Superannuation has traditionally been taxed at a uniform rate of 15 per cent, meaning both that high-income earners receive a substantial tax discount compared to other earned income, while low-income earners can pay a tax premium (Stebbing 2015).

The subsequent politics of tax concessions for superannuation reflects evolving partisanship. Progressive parties have consistently advocated for more extensive reform to the tax concessions, with the left-wing Greens

Party taking a generally more radical position than the centre-left Labor Party. The Coalition has been more hostile to reform. In opposition, the Coalition parties opposed Labor's reforms to the superannuation tax concessions, arguing that continuous incremental reforms would create uncertainty and confusion for retirees. The Coalition took this position to the 2013 election, promising among a suite of retirement incomes measures that included not making 'unexpected detrimental changes' to superannuation and repealing the low-income superannuation contribution (Liberal Party 2013). The Coalition's opposition was maintained through the Prime Ministership of Tony Abbott. However, the institutionalisation of the tax expenditure concept had already begun to shift the broader terms of the fiscal debate.

The growing recognition and acceptance of the tax expenditure concept within the Commonwealth bureaucracy appears to have shifted the focus of budgetary advice. The report of a new Commission of Audit established by the incoming Coalition government in 2013 claimed that compulsory superannuation would not significantly reduce future pension costs, pointing to separate generational modelling undertaken by the Treasury that projected 80 per cent of retirees would still receive a full or part pension in 2050 (Murray 2014: 2). Initially the Coalition government ruled out reforming the concessions, equating reform to a tax increase, with Treasurer Hockey claiming, 'There will be no new taxes on superannuation under this government' (Jericho 2015). However, following a change of Prime Minister, the Coalition made reform of the superannuation tax concessions a centrepiece of its pre-election 2016 budget, to distance itself from the controversial and unpopular policies of its predecessor. The government committed to limit the benefits received by those with the most superannuation savings (Morrison 2016). This led to an unprecedented degree of support for reforming the superannuation tax concessions. The 2016 election saw a shift across the political spectrum. All parties supported reductions in tax concessions, with the degree of reduction increasing with the party's leftward positioning (Australian Government 2016; Australian Labor Party 2015; Parliamentary Budget Office 2015), although some Coalition parliamentarians remain opposed to reform.

As support for reform of superannuation tax concessions grows, political conflict has increasingly focused on housing-related tax expenditures. These concessions reduce the rate of capital gains tax for assets held for over 12 months, and allow investors to claim interest (mortgage) costs against their non-investment income (a concession colloquially known as 'negative gearing'). While technically applying to all investments, these tax expenditures have been particularly linked to increases in house prices by researchers (Treasury 2015c; Yates *et al.* 2008) and the media

(Coorey 2017). In a series of reports and official inquiries, housing-related tax expenditures emerged on the policy agenda (Henry 2009; Yates *et al.* 2008). This directly preceded the inclusion of the housing-related tax expenditures in the TES from 2009, which increased their profile further. Again, these reports adopted similar methods and assumptions to the IGRs, highlighting the growing cost of the housing-related tax expenditures and their inequitable distributive effects for different age cohorts (Daley and Wood 2014, 2016; Yates *et al.* 2008). Following this increased scrutiny and concerns about their scale, the Labor Party announced reforms to two housing-related tax expenditures (negative gearing and the capital gains tax discount) as part of its policy platform in the lead-up to the 2016 election. Initially, the Turnbull government appeared receptive to reforming both policies, but proposals were blocked by Cabinet (Coorey 2015). At the time of writing, the Coalition remains opposed to reform of housing tax concessions, however, policy change continues to be considered, with the Reserve Bank highlighting concerns over the current settings (Coorey 2017).

Taking superannuation and housing together, the incorporation of the accounting concept of tax expenditures into budgetary processes appears to have been an effective mechanism for shifting the policy debate. The tax expenditure concept is now well established and has been seen to reframe policy deliberations, even of otherwise pro-market bodies like the Commission of Audit. In superannuation policy the result has been to shift the positions of all political parties to support more radical reform, and in housing to shift Labor's position towards reform. At the same time, partisan differences remain on both issues. Thus, not only is the adoption of different accounting techniques, whether GA or tax concessions, itself subject to forms of partisanship, but once adopted, these techniques then shift the ongoing terms of partisan contest.

Challenging the boundaries of public and private provision

The focus of intergenerational accounting on *government spending* not only obscures the fiscal costs of concessional tax arrangements, it potentially obscures the costs of private alternatives to public provision in response to population ageing. Changes in the methodology of the IGRs over time highlight an emerging contest over the reporting of public funds to subsidise private provision. Initially the IGRs focused on the *aggregate* impacts on public expenditure in areas like health or aged care. The expected rise in public spending was then cited by the Coalition government as evidence of the need to support private alternatives, particularly private health

insurance, to ease cost pressures within the public sector (Encel and Ozanne 2007). However, more recent reports have distinguished between public spending on public health schemes and public subsidies of private health insurance, revealing greater cost pressures in the later. A Labor government has cited the more recent figures to support alternative policy proposals. As with tax expenditures, these arguments rely on similar generational concepts, modelling techniques and fiscal constraints, yet use relatively small differences in accounting methodologies to suggest alternative policy responses.

Outside pensions, the biggest cost pressure identified in all IGRs has been health care. While much of the rise in health spending is likely to relate to technological rather than demographic change (Treasury 2010: 51), health has been a key focus of both the reports and the commentary surrounding them. In the mid-1990s, the government identified falling private health insurance coverage as a fiscal risk and a threat to the future viability of Medicare (the universal health insurance scheme).² In the late 1990s, following the Commission of Audit, the government justified the Private Health Insurance Incentives Scheme and the Private Health Insurance Rebate, both subsidies of private health insurance, as necessary to strengthen Medicare (Elliot 2006: 136–8). The first IGR, in 2002, explicitly advocated a strong role for private health care (Treasury 2002: 1). Future health costs were disaggregated between hospital, pharmaceuticals and medical benefits, but the costs of public spending on private provision was subsumed within the ‘other’ category (Treasury 2002: 9). In the second IGR, the private subsidy schemes were moved from ‘other’ to be included within the ‘hospitals’ category alongside funding for public provision (Treasury 2007: 96). The reporting categories used by the IGRs made it difficult, if not impossible, to distinguish between the cost pressures in the public and private sectors, while emphasising the overall increase in future spending. This framing served to reinforce the government’s efforts to limit new demands on the state in the favourable budget conditions of the mid-2000s’ mining boom.

There were subtle but significant differences in how the Rudd Labor government framed public and private provision in the third IGR. Interestingly, the case for establishing a single-payer model of universal public health insurance in Australia was initially advanced by health economists critical of the lack of cost restraint within the private health insurance sector (Spies-Butcher 2014). The ability for public insurance to limit *total* health spending through lower administrative costs and monopsony power became an important rationale for Labor pursuing policy reform in the early 1980s (Spies-Butcher 2014). During the 2000s, health economists criticised the newly instituted Private Health Insurance Rebate on similar

grounds, as well as for being poorly targeted to more affluent citizens (McAuley 2005). The Rudd government had committed to restricting the benefits received by higher-income earners, but the legislation had failed to pass the upper house of Australia's bicameral parliament. IGR₃ reinforced the case for reform by disaggregating the cost of the Private Health Insurance Rebate from other public health spending (Treasury 2010: 53–4); and projecting that Labor's proposals would save Aus \$100 billion over the projection period (Swan 2010). IGR₃ identified the rebate as the fastest growing component of health spending, a fact the government used to argue it was fiscally unsustainable in the longer term. At the same time, the long-term projections of potential savings reinforced the Labor government's claims that it was making decisions to reduce the budget deficit. As with superannuation tax concessions, Labor used projections of future fiscal pressures to advocate change, but with the aim of limiting support for private, rather than public, provision.

Disaggregating public and private cost dynamics appears to have shifted the partisan dynamics of health funding in a similar way to the discussion of tax expenditures. The incoming Abbott Coalition government remained more committed to supporting private health insurance than its Labor counterpart. However, it did reform the private health insurance rebate to freeze indexation of the income thresholds in 2014–15 (Australian Taxation Office 2016). This served to limit the growth of the rebate, partly decoupling public spending from increases in insurance premiums, which consistently outpaced the inflation rate. Reflecting this, IGR₄ projected that the rebate would remain closer to the general inflation rate and account for a declining proportion of health spending in the longer term (Treasury 2015b: 64, 122). Thus, while partisan differences remained, disaggregating cost pressures between sectors supported a shift in the policy positions of both major parties.

A similar shift has begun in discussions of housing, where rising rents and property prices have gained growing public and policy attention. Housing is an important component of Australia's retirement income system as the relatively low-cost public pension is predicated on high rates of home-ownership. Australia has among the highest aged poverty rates in the OECD before housing costs are taken into account, but one of the lowest poverty rates after they are incorporated (Yates and Bradbury 2010). Yet, housing funding is excluded from the IGRs. The most significant omission is Rental Assistance for renters of private housing, which at Aus \$3.0 billion in 2012 is the government's major form of housing assistance for low-income households (Groenhart and Burke 2014: 130). Spending on Rental Assistance is growing rapidly, as rents increase and the provision of social housing falls further behind demand.

Recent research from Australia's government-funded housing institute has used generational modelling techniques to highlight the fiscal implications of Rental Assistance as rents increase (Yates *et al.* 2008). This research reframes the debate in two ways. First, it highlights the relative inefficiency of shifting public funding from public provision through social housing to subsidising private rental housing. Second, it highlights the implications of broader macro-economic trends, such as falling home-ownership rates for younger households, for fiscal sustainability (Yates *et al.* 2008). As noted earlier, similar research has also identified changes in tax policy to encourage private savings as a key driver of rising house prices (Treasury 2015c: 59), thus focusing attention on how efforts to encourage private provision, instead of averting future challenges, are driving new fiscal pressures and generational inequalities.

Challenging the boundaries: beyond the budget

The component of the IGRs that has been most widely framed as politicised does not directly relate to the budget. GA approaches have focused overwhelmingly on fiscal flows – taxation and social spending – and this is also true of the alternative accounting techniques we have highlighted so far (social tax expenditures and comparisons of public spending on public and private welfare alternatives). However, concern for generational equity is not confined to GA. Alongside the fiscal concerns of GA, environmentalists and environmental economists have developed a surprisingly similar critique of generational equity. These environmental concerns have occupied a changing and contested place in the IGRs. While sharing many of the concepts, tools and questions of GA, concerns for environmental sustainability shift the boundaries of analysis from the budget to macro-economic outcomes. In doing so, the environmental version of generational equity raises very different policy concerns, leading to an almost inverse set of political pressures and alliances.

Environmentalism has mobilised the future in similar ways to population ageing. The very concept of sustainability presupposes a future-centred orientation, and key contributions to environmentalism, from Malthus ([1798] 1826) through to the reports of the Club of Rome (Meadows *et al.* 1972) and more recently the Intergovernmental Panel on Climate Change (2014), advocate policy action on the basis of predicted challenges that are yet to be strongly felt. Environmental economists have developed similar conceptual tools to those found in GA, such as discount rates (*see* Markandya and Pearce 1988; Padilla 2002). Likewise, similar critiques have emerged of 'apocalyptic environmentalism' – although in this case,

predominately from market advocates, rather than opponents (Bolch and Lyons 1993). Yet, these ecological concerns over generational equity have been peripheral to GA.

The Australian IGRs have always been framed as budget statements connected to fiscal policy, rather than a broader examination of intergenerational equity. The first report confined explicit discussion of the environment to a single page (Treasury 2002: 52), with mention in the second report only slightly expanded. IGR1 claimed that spending on the environment is ‘not demographically driven’ (Treasury 2002: 8) nor of fiscal consequence (Treasury 2002: 52). Although omitting any modelling, the IGR2 did respond to the recent release of the Stern Review, claiming attempts to model the economic costs of climate change at a country level were ‘highly complex and speculative at this stage’ (Treasury 2007: 73); a criticism of long-term modelling similar to those previously levelled at the IGR itself. The most detailed discussion in the 2007 IGR is of an ‘illustrative’ example of the fiscal impact of emissions abatement, funded by government. It highlights both the likely cost increases over time, and that costs increase if governments seek to regulate emissions directly rather than employing a market mechanism (Treasury 2007).

It is only in the third report, released by the Rudd Labor government, that the profile of the environment in the IGR grew substantially. Climate change had been an important election issue for Labor, which proposed an emissions trading scheme based on a report by senior economist, Ross Garnaut, similar to that undertaken by Nicholas Stern. IGR3 claimed climate change ‘represents one of the most significant challenges to our economic sustainability’ (Treasury 2010: 71). Delaying an effective policy response would therefore impose substantial costs on future generations. The report shifted focus from ‘fiscal’ to ‘economic’ sustainability. Reflecting the methods of the Garnaut and Stern Reviews, there is no discussion or estimation of the costs climate change will impose directly on government spending or revenues. Instead, the modelling is designed to assess the impact on overall economic output – measured as changes in Gross National Product (GNP). While clearly designed to bolster the case for the government’s preferred policy solution, the inclusion of climate change as a substantive issue of concern, and its framing as an issue of intergenerational equity, represents a very different conception of intergenerational accounting.

Importantly, traditional forms of economic modelling remain central to analysis of ecological questions. The Garnaut Review explicitly employed general equilibrium modelling and cost–benefit analysis to determine the extent of mitigation that ‘provides the greatest excess of gains from reduced risks of climate change over costs of mitigation’ (Garnaut 2008: 1). The

Garnaut Review estimated that climate change would lower projected GNP by 2 per cent by mid-century and over 7 per cent by 2100. It then estimated that appropriate mitigation policies would reduce this loss, creating a net benefit of 1 per cent of GNP by 2060, and increasingly larger gains thereafter (*see* Spies-Butcher 2010). IGR₃ drew heavily on the Garnaut model and findings. However, the IGR framework limited the time horizon to 2050. As a result, the models included in IGR₃ actually show a net *cost* of mitigation against inaction across the entire time horizon. Thus, it is left making the relatively weak claim that GNP per capita ‘would be only 0.1 of a percentage point slower’ with mitigation than without (Treasury 2010: 77). The following chapter, also included in 2010 for the first time, went further. Entitled ‘A Sustainable Society’, it sketched out a methodological approach to forecasting ‘wellbeing’ and incorporating human and natural capital into estimates of economic welfare. Such an approach marks a radical departure from the original narrow focus on social spending, and mirrors the broader shift within economics to incorporate non-price measures of development (Costanza *et al.* 2007; Frey and Stutzer 2010). It is also consistent with the strategy of extending economic forecasting to reflect alternative values and support alternative policy trajectories.

By 2015, after the return of the Coalition to office, the IGR reverted to type. Discussion of the environment was similar to that in 2007, contained as a subsection within a broader chapter outlining changes over the next 40 years; and as with the initial two reports, the exclusion of any serious analysis of environmental impacts is justified on the basis that the fiscal impacts of the environment are ‘not directly linked with demographic factors’ (Treasury 2015*b*: 40). However, the absence of discussion drew significant adverse media, and was presented as evidence of the partisan political nature of the 2015 report (Knott 2015). In this sense, broadening of the scope of the IGR in 2010 appears to have been more effective at highlighting the potentially political implications of GA than more explicit critique of ‘apocalyptic demography’.

Conclusion

The history of GA has long been tied to the politics of enduring austerity. Advocates of GA have used generational equity arguments to claim that rising government spending on a proportionately larger retired population would place an unjust burden on future generations of taxpayers. We suggest the claims of generational inequality are based on a particular kind of argument, one that uses modelling techniques to ‘mobilise the future’. Such techniques are overtly technically and ideologically neutral, in that

they purport only to make mathematical deductions based on the initial assumptions. Rather than making moral arguments about choice, equality or security, quantifications assess future trends. Notionally, such estimates could be positive or negative, much like budget outcomes. Yet, consistently, GA has underpinned support for enduring austerity and retrenching social provision. A critical literature has explored how such conclusions are obtained, pointing to pessimistic assumptions and political choices made in selecting categories for analysis. Here we have focused on a different kind of contestation, which applies the techniques and even the categories of GA to frame different problems and promote different solutions.

Australia, we have argued, offers a useful lens through which to observe the changing nature of political contestation over population ageing. Initially, the application of GA reflected the politics of the critique of apocalyptic demography. The first applications of generational modelling revealed no significant problem and were seen as unreliable by a left-of-centre government. Only when a conservative government was elected did GA gain traction. This initially involved, through a Commission of Audit, overt changes to model parameters, combined with an explicit policy agenda focused on privatisation and the retrenchment of social spending. The Audit was then used to legislate regular generational reporting. While the relationship between the subsequent reports and individual policy initiatives was rarely straightforward, the IGRs served the function of 'mobilising the future'. Enjoying some of the most favourable fiscal conditions of any developed economy in the early 2000s, Australia's government cited the IGRs as evidence that the consistent surpluses predicted in the budget estimates could not be relied on, and that future fiscal constraint remained necessary.

Once established, however, a different, less overt, form of politics has emerged. Over time and across governments, the IGRs have been used to advance different policies. What is most interesting about the emerging nature of political contestation is that alternative policy positions have been advanced by operating within the framework of GA, mobilising both the future and fiscal (and economic) constraints as a means to justify policy change. This article has identified three sites of this emerging contestation; first, the extension of analysis to taxation as well as spending; second, the application of forecasting cost pressures in public subsidy schemes for private provision; and finally, in extending forecasts to economic rather than fiscal outcomes via the environment. Each of these types of contestation, we argue, accept much of the GA framework; that modelling over long periods generates useful estimates; that generations are a sensible category of analysis; and even that fiscal sustainability and economic growth are the ultimate policy goals. Thus, the most ambitious modelling has been

undertaken to argue new climate policies will aid growth, while increasing the progressivity of superannuation taxation and reducing private health subsidies have been framed as a response to fiscal pressures.

In conclusion, we note two related implications of this analysis for our understanding of the politics of population ageing. First, we confirm the growing influence of economic modelling and thinking in debates over population ageing – and social policy in general. This reflects the broader influence of neoliberal politics and financialisation. Developing long-range forecasts of future revenues and liabilities mimics the type of accounting practices typical of private corporations, which rely on such estimates to construct net present value. Unsurprisingly, the rising influence of GA coincides with a much broader transformation of accounting practices within the public sector that apply aspects of private-sector ‘capital accounting’, a trend also linked to competition policy and the rise of New Public Management (Barton 2001; Guthrie 1998; Lemoine 2017). Our research confirms the importance of this broader trend and the centrality of market rationality at the heart of policy thinking.

Second, however, our analysis also complicates our understanding of neoliberal politics by challenging the claim that neoliberalism is inherently depoliticising. Reflecting work by Jane Gingrich (2011) and others on the partisan application of marketisation within social provision, our work suggests that as economic models have been imported into the state, so they have re-created political contest in new ways. This is not to suggest that these new sites are equally amenable to all policy proposals – they seem, for example, to militate against claims explicitly based on rights or the normative transformation of society in favour of those based on rationalisation and cost–benefit – but rather that there remains important space to advance alternative positions. Given that one of the most significant features of austerity politics is the lack of space it provides for alternative political visions – what Streeck (2014) described as replacing the politics of the ‘tax state’ with that of the ‘debt state’ – this signals potential for greater democratic engagement. Where population ageing has been used to demonstrate the limits to democratic discretion, the emergence of new sites of contestation suggests even within the dominant economic paradigm alternative futures are possible.

Acknowledgement

The authors wish to acknowledge the valuable comments of Professor Gabrielle Meagher on an earlier version of this paper. No ethical approval was required for this research.

NOTES

- 1 The deterioration in the fiscal balance caused by the Global Financial Crisis has complicated this assumption somewhat. Both the 2010 and 2015 IGRs were produced with the budget in deficit. In both cases the government was committed to restoring the budget to balance, largely by allowing bracket creep to increase revenues gradually. To ensure consistency between the IGR and the budget, the models assumed a gradual rise in the ratio of tax to GDP before stabilising.
- 2 In the early 1990s, a Labor government also expressed concern about the fiscal implications of falling rates of private health insurance (Spies-Butcher 2014: 33–4).

References

- Ablett, J. 1996a. Generational accounting: an Australian perspective. *Review of Income and Wealth*, **42**, 1, 1–15.
- Ablett, J. 1996b. Generational accounting and intergenerational balance. *Agenda*, **3**, 4, 407–18.
- Auditor General 2008. *Preparation of the Tax Expenditures Statement*. Australian Government, Canberra.
- Auerbach, A.J., Gokhale, J. and Kotlikoff, L.J. 1994. Generational accounting: a meaningful way to evaluate fiscal policy. *Journal of Economic Perspectives*, **8**, 1, 73–94.
- Australian Government 2013. *Budget Overview 2013–14*. Australian Government, Canberra.
- Australian Government 2016. *Budget Overview 2016–17*. Australian Government, Canberra.
- Australian Labor Party 2015. *Fairer Super Plan*. Australian Labor Party, Canberra.
- Australian Taxation Office 2016. *Medicare Levy Surcharge and Private Health Insurance Rebate Thresholds Frozen*. Australian Government, Canberra. Available online at <https://www.ato.gov.au/General/New-legislation/In-detail/Direct-taxes/Income-tax-for-individuals/Medicare-levy-surcharge-and-private-health-insurance-rebate-thresholds-frozen/> [Accessed 1 June 2017].
- Barton, A. 2001. Public choice theory and economic rationalism: the basis of new public management. In Jones, L., Guthrie, J. and Steane, P. (eds), *Learning from International Public Management Reform*. Emerald Group, Amsterdam, 571–88.
- Bessant, J., Emslie, C. and Watts, R. 2011. Accounting for future generations: inter-generational equity in Australia. *Australian Journal of Public Administration*, **70**, 2, 143–55.
- Bolch, B.W. and Lyons, H. 1993. *Apocalypse Not: Science, Economics, and Environmentalism*. Cato Institute, Washington DC.
- Castles, F.G. 2004. *The Future of the Welfare State: Crisis Myths and Crisis Realities*. Cambridge University Press, Cambridge.
- Coorey, P. 2015. Tax options put back on table. *Australian Financial Review*, 22 September.
- Coorey, P. 2017. Scott Morrison resisting pressure on CGT, negative gearing. *Australian Financial Review*, 5 April.
- Costanza, R., Fisher, B., Ali, S., Beer, C., Bond, L., Boumans, R., Danigelis, N.L., Dickson, J., Elliott, C., Farley, J., Gayer, D.E., Glenn, L.M., Hudspeth, T., Mahoney, D., McCahill, L., McIntosh, B., Reed, B., Rizvi, S.A.T., Rizzo, D.M., Simpatico, T. and Snapp, R. 2007. Quality of life: an approach integrating opportunities, human needs, and subjective well-being. *Ecological Economics*, **61**, 2, 267–76.

- Costello, P. 2006. *A Plan to Simplify and Streamline Superannuation*. Australian Government, Canberra.
- Daley, J. and Woods, D. 2014. The wealth of generations. Grattan Institute Report 2014-1, Grattan Institute, Melbourne.
- Daley, J. and Woods, D. 2016. Hot property: negative gearing and capital gains tax reform. Grattan Institute Report 2016-8, Grattan Institute, Melbourne.
- Davidson, S. 2007. *Comment 20/07/2007*. Available online at <http://andrewnorton.info/blog/2007/07/20/don't-tax-and-spend/> [Accessed 1 February 2008].
- Doughney, J. and King, J. 2006. Rhetoric and reality: neo-liberal ideology and ageing in Australia, 2003-2050. *Journal of Australian Political Economy*, 58, 25-43.
- Economic Planning Advisory Council (EPAC) 1994. Australia's ageing society. Background Paper 37, EPAC, Canberra.
- Elliot, A. 2006. 'The best friend Medicare ever had'? Policy narratives and changes in Coalition health policy. *Health Sociology Review*, 15, 2, 132-43.
- Encel, S. and Ozanne, E. 2007. The politics of ageing. In Borowski, A., Encel, S. and Ozanne, E. (eds), *Longevity and Social Change in Australia*. UNSW Press, Sydney, 296-315.
- Farnsworth, K. and Irving, Z. (eds) 2015. *Social Policy in Times of Austerity: Global Economic Crisis and the New Politics of Welfare*. Polity Press, London, 87-112.
- Fine, M. 2014. Intergenerational perspectives on ageing, economics and globalisation. *Australasian Journal on Ageing*, 33, 4, 220-5.
- Fleming, C. and Peroni, R. J. 2008. Reinvigorating tax expenditure analysis and its international dimension. *Virginia Tax Review*, 27, 3, 437-562.
- Foster, C. 1988. Towards a national retirement incomes policy. Social Security Review Issues Paper 6, Department of Social Security, Canberra.
- Frey, B. S. and Stutzer, A. 2010. *Happiness and Economics: How the Economy and Institutions Affect Human Well-being*. Princeton University Press, Princeton, New Jersey.
- Gallagher, P. and Rothman, G. 2006. *Australian Government Research on Ageing: Potential Impacts and Policy Responses*. ANU, Canberra.
- Garnaut, R. 2008. *The Climate Change Review*. Australian Government Printing Service, Canberra.
- Gee, E. M. 2002. Misconceptions and misapprehensions about population ageing. *International Journal of Epidemiology*, 31, 4, 750-3.
- Gee, E. and Gutman, G. M. 2000. *The Overselling of Population Ageing: Apocalyptic Demography, Intergenerational Challenges, and Social Policy*. Cambridge University Press, Cambridge.
- Gingrich, J. 2011. *Making Markets in the Welfare State: The Politics of Varying Market Reforms*. Cambridge University Press, Cambridge.
- Groenhart, L. and Burke, T. 2014. What has happened to Australia's public housing? Thirty years of policy and outcomes, 1981 to 2011. *Australian Journal of Social Issues*, 49, 2, 127-49.
- Guthrie, J. 1998. Application of accrual accounting in the Australian public sector - rhetoric or reality. *Financial Accountability & Management*, 14, 1, 1-19.
- Gutman, G. M. 2010. Population ageing and apocalyptic demography: separating fact from fiction. In Knudsen, L. B. and Olsen, A. L. (eds), *Our Demographic Future - A Challenge: On the Need for Demographic Analyses*. Scandinavian Population Studies 14, Aalborg Oest, Denmark, 11-36.
- Hacker, J. 2002. *The Divided Welfare State: The Battle Over Public and Private Social Benefits in the United States*. Cambridge University Press, Cambridge.
- Henry, K. 2009. *Australia's Future Tax System: Final Report*. Australian Government, Canberra.

- Higgs, P. and Gilleard, C. 2010. Generational conflict, consumption and the ageing welfare state in the United Kingdom. *Ageing & Society*, **30**, 8, 1439–51.
- Howard, C. 1997. *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*. Princeton University Press, Princeton, New Jersey.
- Howe, A. and Healy, J. 2005. Generational justice in aged care policy in Australia and the United Kingdom. *Australasian Journal on Ageing*, **24**, June supplement, S12–18.
- Hudson, R. B. 1978. The ‘graying’ of the federal budget and its consequences for old-age policy. *The Gerontologist*, **18**, 5, 428–40.
- Hudson, R. B. 2014. Contemporary challenges to aging policy. In Hudson, R. B. (ed.), *The New Politics of Old Age Policy*. Third edition, Johns Hopkins University Press, Baltimore, Maryland, 3–20.
- Intergovernmental Panel on Climate Change 2014. *Climate Change 2014: Synthesis Report*. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Core Writing Team, Pachauri, R. K. and Meyer, L. A. (eds). Intergovernmental Panel on Climate Change, Geneva.
- Iversen, T. and Wren, A. 1998. Equality, employment, and budgetary restraint: the trilemma of the service economy. *World Politics*, **50**, 4, 507–46.
- Jericho, G. 2015. Joe Hockey’s budget has wrecked the chances of a fair tax review. *The Guardian*, 18 May. Available online at <https://www.theguardian.com/business/grogonomics/2015/may/18/joe-hockeys-budget-has-wrecked-the-chances-of-a-fair-tax-review> [Accessed 4 October 2017].
- Jessop, B. 2014. Neoliberalism, finance-dominated accumulation and enduring austerity: a cultural political economy perspective. In Farnsworth, K. and Irving, Z. (eds), *Social Policy in Times of Austerity: Global Economic Crisis and the New Politics of Welfare*. Polity Press, London, 87–112.
- Knott, M. 2015. ‘Deep regret’: Dr Karl Kruszelnicki to hand over Intergenerational Report pay. *Sydney Morning Herald*, 16 April. Available online at <http://www.smh.com.au/federal-politics/political-news/deep-regret-dr-karl-kruszelnicki-to-hand-over-intergenerational-report-pay-20150415-1mm3io.html> [Accessed 4 October 2017].
- Kotlikoff, L. 1992. *Generational Accounting: Knowing Who Pays, and When, for What We Spend*. The Free Press, New York.
- Lee, R. D. and Mason, A. 2011. Generational economics in a changing world. *Population and Development Review*, **37**, supplement, 115–42.
- Lemoine, B. 2017. Measuring and restructuring the state. In King, D. and Le Gales, P. (eds), *Reconfiguring European States in Crisis*. Oxford University Press, Oxford, 313–30.
- Liberal Party 2013. *The Coalition’s Policy for Superannuation*. September, Brian Loughnane, Canberra. Available online at http://parlinfo.aph.gov.au/parlInfo/download/library/partypol/2717533/upload_binary/2717533.pdf;fileType=application%2Fpdf#search=%22library/partypol/2717533%22 [Accessed 4 October 2017].
- Malthus, T. R. [1798] 1826. *An Essay on the Principle of Population: or, a View of its Past and Present Effects on Human Happiness*. Sixth edition, John Murray, London.
- Markandya, A. and Pearce, D. W. 1988. *Environmental Considerations and the Choice of the Discount Rate in Developing Countries*. World Bank Policy Planning and Research Staff, Environment Department, Chicago.
- McAuley, I. 2005. Private health insurance: still muddling through. *Agenda: A Journal of Policy Analysis and Reform*, **12**, 2, 159–78.
- McDonald, I. 2005. Intergenerational equity. *Agenda: A Journal of Policy Analysis and Reform*, **12**, 1, 3–18.

- Meadows, D. H., Meadows, D. L., Randers, J. and Behrens, W. W., III 1972. *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. Potomac Associates, Washington, DC.
- Minkler, M. and Robertson, A. 1991. Generational equity and public health policy: a critique of 'age/race war'. *Journal of Public Health Policy*, **12**, 3, 324–44.
- Morrison, S. 2016. Budget speech. Australian Government, Canberra. Available online at <http://www.budget.gov.au/2016-17/content/speech/html/speech.htm> [Accessed 29 January 2018].
- Murray, D. 2014. *Financial System Inquiry: Final Report*. Australian Government, Canberra.
- National Commission of Audit 1996. *National Commission of Audit Report to the Commonwealth Government*. Australian Government, Canberra.
- Orenstein, M. 2008. *Privatizing Pensions: The Transnational Campaign for Social Security Reform*. Princeton University Press, Princeton, New Jersey.
- Organisation for Economic Co-operation and Development (OECD) 2006. *Live Longer, Work Longer*. OECD Publishing, Paris.
- Organisation for Economic Co-operation and Development (OECD) 2009. *OECD Factbook 2009*. OECD Publishing, Paris.
- Padilla, E. 2002. Intergenerational equity and sustainability. *Ecological Economics*, **41**, 1, 69–83.
- Parliamentary Budget Office 2015. *Removing Unfair Tax Breaks*. Parliamentary Budget Office, Canberra.
- Pierson, P. 1998. Irresistible forces, immovable objects: post-industrial welfare states confront permanent austerity. *Journal of European Social Policy*, **5**, 4, 539–60.
- Raffelhüschen, B. 1999. Generational accounting in Europe. *American Economic Review*, **89**, 2, 167–70.
- Robertson, A. 1996. Beyond apocalyptic demography: towards a moral economy of interdependence. *Ageing & Society*, **17**, 4, 425–46.
- Schafer, A. and Streeck, W. 2013. Introduction: politics in the age of austerity. In Streeck, W. and Schafer, A. (eds), *Politics in the Age of Austerity*. Wiley, London, 1–25.
- Smith, J. 2003. *Tax Expenditures: The \$30 Billion Twilight Zone of Government Spending*. Department of Parliamentary Library, Canberra.
- Spies-Butcher, B. 2010. The cost of a market solution: examining the Garnaut proposal for emissions trading. *Journal of Australian Political Economy*, **66**, 51–70.
- Spies-Butcher, B. 2014. Markets, universalism and equity: Medicare's dual role in the Australian welfare state. *Journal of Australian Political Economy*, **73**, 18–40.
- Spies-Butcher, B. and Stebbing, A. 2011. Population ageing and tax reform in a dual welfare state? *Social Policy & Administration*, **22**, 3, 45–64.
- Stebbing, A. 2015. The devil's in the detail: the shift to private retirement incomes. In Meagher, G. and Goodwin, S. (eds), *Markets, Rights and Power in Australian Social Policy*. Sydney University Press, Sydney, 115–52.
- Stebbing, A. and Spies-Butcher, B. 2010. Universal welfare by other means? Social tax expenditures and the Australian dual welfare state. *Journal of Social Policy*, **39**, 4, 585–606.
- Streeck, W. 2014. *Buying Time: The Delayed Crisis of Democratic Capitalism*. Verso, London.
- Surrey, S. 1973. *Pathways to Tax Reform: The Concept of Tax Expenditures*. Harvard University Press, Cambridge, Massachusetts.
- Swan, W. 2010. *Australia to 2050: Future Challenges – Launch of the 2010 Intergenerational Report*. National Press Club, Canberra.

- Swan, W. 2014. *The Good Fight: Six Years, Two Prime Ministers and Staring Down the Great Recession*. Allen & Unwin, Sydney.
- Thomson, D. 1991. *Selfish Generations: The Ageing of New Zealand's Welfare State*. Bridget Williams Books, Wellington.
- Treasury 2002. *Intergenerational Report 2002–03*. Australian Government, Canberra.
- Treasury 2007. *Intergenerational Report 2007*. Australian Government, Canberra.
- Treasury 2010. *Intergenerational Report 2010*. Australian Government, Canberra.
- Treasury 2012. *Distributional Analysis of Superannuation Taxation Concessions: A Paper to the Superannuation Roundtable*. Australian Government, Canberra. Available online at <http://www.treasury.gov.au/Policy-Topics/SuperannuationAndRetirement/Distributional-analysis-of-superannuation-taxation-concessions> [Accessed 24 May 2017].
- Treasury 2015a. *Tax Expenditure Statement 2015*. Australian Government, Canberra.
- Treasury 2015b. *Intergenerational Report 2015*. Australian Government, Canberra.
- Treasury 2015c. *Re:think: Better Tax, Better Australia*. Australian Government, Canberra.
- Treasury 2017. *Budget Overview 2017–2018*. Australian Government, Canberra.
- United Nations 2015. *World Population Ageing 2015*. United Nations, New York.
- Walker, A. 1990. The economic 'burden' of ageing and the prospect of intergenerational conflict. *Ageing & Society*, **10**, 4, 377–96.
- Williamson, J. and Rhodes, A. 2011. A critical assessment of generational accounting and its contribution to the generational equity debate. *International Journal of Ageing and Later Life*, **6**, 1, 33–57.
- Wilson, S., Spies-Butcher, B., Stebbing, A. and St John, S. 2013. Wage-earners' welfare after economic reform: refurbishing, retrenching or hollowing out social protection in Australia and New Zealand? *Social Policy & Administration*, **43**, 5, 508–25.
- World Bank 1994. *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. World Bank, Washington DC.
- Yates, J. and Bradbury, B. 2010. Home ownership as a (crumbling) fourth pillar of social insurance in Australia. *Journal of Housing and the Built Environment*, **25**, 2, 193–211.
- Yates, J., Kendig, H., Phillips, B., Milligan, V. and Tanton, R. 2008. Sustaining fair shares: the Australian housing system and intergenerational sustainability. AHURI Final Report 111, Australian Housing and Urban Research Institute, Melbourne.

Accepted 5 January 2018; first published online 13 March 2018

Address for correspondence:

Ben Spies-Butcher,
Department of Sociology,
Macquarie University,
Sydney, NSW, 2109, Australia

E-mail: ben.spies-butcher@mq.edu.au