

# **Future Funds or Future Eaters? The Case Against a Sovereign Wealth Fund for Australia**

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## **Executive Summary**

- A sovereign wealth fund (SWF) is a pool of government-owned or controlled financial or other marketable assets designed to finance future government spending in either the short term or the long term.
- There has been growing debate as to whether Australia should make greater use of a SWF to accumulate some of the benefits of the mining boom for future use by government on behalf of the community.
- It has been argued that Australia needs a SWF to better manage the macroeconomic consequences of the terms of trade boom, such as exchange rate appreciation and the so-called ‘Dutch disease,’ which occurs when export revenues drive up the exchange rate and depress other export industries and those that compete with imports.
- A SWF has also been advocated as a mechanism for sharing the revenue from the global commodity price boom with future generations.
- This monograph argues that the existing Future Fund is unnecessary and that greater use of a SWF will harm Australia’s current and future prosperity.
- The Future Fund is not a source of new saving in the financial system. It disintermediates the private sector from saving and investment decisions and risks politicising the process of capital allocation in the economy.
- The fungibility of assets in the Future Fund with other sources of revenue and government borrowing means there are no guarantees as to how these funds will be used in the future, even under existing legislation, which places various restrictions on the use of fund assets.
- The Future Fund eases the federal government’s future revenue and borrowing constraint, weakening incentives for responsible long-run fiscal management.
- The investment returns on the Future Fund’s assets are inadequate compensation for the foregone alternative uses of these funds.
- The federal budget should be well placed to withstand cyclical fluctuations in commodity prices and the domestic and international economy without the benefit of a SWF. The federal budget can and should run deficits and surpluses in response to revenue fluctuations, but this is an entirely separate issue from whether there should be a SWF. The government does not need a SWF to run surpluses.
- Australia’s low net debt to GDP ratio and well-developed capital markets mean that the federal government does not face significant borrowing or liquidity constraints in managing fluctuations in the budget between surplus and deficit over time.
- The floating exchange rate also insulates the economy from the positive external shock arising from the terms of trade boom.
- Far from being a problem for the Australian economy, exchange rate appreciation is the appropriate response to a terms of trade boom.
- Even if it were desirable, a SWF with substantial unhedged foreign currency-denominated assets would be ineffective in curbing exchange rate appreciation because the net foreign currency denominated assets of the Commonwealth would be too small relative to the depth and liquidity of foreign exchange markets and Australia’s large net capital inflows.
- Many of the desirable objectives of a SWF could be achieved through binding fiscal responsibility legislation, such as a beefed-up Charter of Budget Honesty.
- Overseas SWFs are typically backed by such legislation, but Australia’s Future Fund currently operates outside any broader fiscal policy framework.
- Unless governments are prepared to accept binding fiscal responsibility legislation, they cannot be trusted with a SWF.
- Australia should not make greater use of a SWF in the absence of a comprehensive and binding legislative framework for fiscal policy governance.
- We recommend that the Future Fund be wound up and its assets transferred to the trustees of existing public sector superannuation schemes to match the liabilities each scheme has accrued.

## Introduction

Sovereign wealth funds (SWFs) have become more prominent both in Australia and abroad since the term was first coined in 2005 by State Street's Andrew Rozanov.<sup>1</sup> A SWF can be defined as a pool of stated-owned or -controlled financial or other marketable assets designed to finance government activities in either the short or the long term.<sup>2</sup> SWFs can be broadly divided into pension and non-pension funds. The growth in state-controlled pension funds reflects government policies that have increasingly sought to anticipate the fiscal implications of ageing populations. The global commodity price boom since 2003 has increased the role of commodity stabilisation funds in commodity exporting countries, particularly oil-producing states. The accumulation of large foreign exchange reserves as a result of managed exchange rate regimes in East Asia, particularly China, has also seen SWFs emerge as adjuncts to the traditional reserve asset management role of central banks.

In Australia, the Future Fund was announced in 2004 and came into operation in 2006. Additional ad hoc funds were created by the Howard and Rudd governments for capital expenditure in the areas of health, education and other infrastructure, which are also managed by the Future Fund but governed by separate legislation. The Future Fund was notionally designed to pre-fund what would otherwise be unfunded public sector superannuation liabilities. However, it was also designed to address the problem of what to do with large budget surpluses after the Commonwealth's net debt had been repaid in April 2006. With gross Commonwealth debt issuance having fallen to levels that threatened the future liquidity and viability of the government bond market, the Howard government used the Future Fund to recycle budget surpluses into other financial assets instead of engaging in further gross debt redemption, tax cuts, or additional government spending.

The Rudd government initially undertook to place any budget surpluses in the Future Fund, but the financial crisis and fiscal stimulus of 2008–09 saw a return to chronic budget deficits and a positive net debt position. No contributions have been made to the Future Fund out of the budget since August 2007. The Future Fund remains available as a vehicle to warehouse future budget surpluses, although it is unlikely that future governments will again enjoy the series of positive revenue surprises and persistent budget surpluses of the period 2003–08. The federal government could contribute to a SWF without having fully repaid net debt. The accumulated assets would offset gross debt, but this would be equivalent to a leveraged acquisition of these assets. The risk-adjusted return on these assets would need to more than offset the associated borrowing costs for this to be fiscally and economically prudent.

There has been growing debate as to whether Australia should make greater use of a SWF to manage fluctuations in the federal budget balance due to commodity price cycles specifically and the business cycle more generally. It has also been argued that Australia needs a SWF to better manage the macroeconomic consequences of the terms of trade boom, such as exchange rate appreciation and the so-called 'Dutch disease.' A SWF has also been advocated as a mechanism for sharing the revenue from the global commodity price boom with future generations. The Greens<sup>3</sup> and Liberal MPs like Malcolm Turnbull<sup>4</sup> and Josh Frydenburg<sup>5</sup> support the greater use of a SWF, although the current Labor government has been resistant to the idea. Leading Australian business figures, including Ralph Norris, Mike Smith, and Roger Corbett, have also expressed some sympathy for making greater use of a SWF.<sup>6</sup> The Reserve Bank of Australia (RBA) and Treasury have been equivocal (see Appendix).

This monograph argues that the existing Future Fund is unnecessary and that a greater use of a SWF will harm Australia's current and future prosperity. The investment returns on the Future Fund's assets are inadequate compensation for the foregone alternative uses of these funds. The assets in the Future Fund may also

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undermine rather than strengthen incentives for long-run fiscal discipline. Greater use of a SWF would only compound these problems and create additional economic risks. The monograph evaluates the tax smoothing, intergenerational equity, budget, and macroeconomic stabilisation arguments for a SWF in the Australian context. Many of the desirable objectives of a SWF could be achieved through binding fiscal responsibility legislation. Foreign SWFs are typically backed by such legislation, but Australia's Future Fund operates outside any broad fiscal policy framework. Unless governments are prepared to accept binding fiscal responsibility legislation, as suggested by Robert Carling and Stephen Kirchner,<sup>7</sup> they cannot be trusted with a SWF. Following Anthony Makin,<sup>8</sup> we recommend that the Future Fund be wound up and its assets transferred to the trustees of existing public sector superannuation schemes to match the liabilities that each scheme has accrued. Australia should not make greater use of a SWF in the absence of a comprehensive and binding legislative framework for fiscal policy governance.

### What's wrong with the Future Fund?

The Future Fund was announced by the Howard government during the 2004 federal election and formally came into operation in 2006. It is no coincidence that the Future Fund came into being shortly after the onset of the terms of trade boom in 2003, which along with the tax reforms introduced in 2000, delivered a series of positive revenue surprises and large federal budget surpluses. The Future Fund is notionally designed to provide for otherwise unfunded liabilities in relation to public sector superannuation. These liabilities are projected to rise to around \$148 billion by 2020.<sup>9</sup> The Future Fund can only be drawn down when its accumulated assets cover these liabilities or after 1 July 2020. The arguments for and against the Future Fund can be evaluated under the following headings: fungibility and Ricardian equivalence; tax smoothing; intergenerational equity; disintermediation of the private sector; politicisation risks; transparency and accountability; and risks to free trade and investment.

### Fungibility and Ricardian equivalence

Even if the current Future Fund legislation is adhered to, all funds available to current and future governments are ultimately fungible. Pre-funding the government's future liabilities frees up future revenue for other purposes and eases the government's borrowing constraint, so it is not possible to guarantee that the Future Fund's assets will only be used for the purposes given in the legislation. The government retains full discretion over the money the Future Fund releases for other purposes. Then Treasurer Peter Costello conceded as much in announcing the establishment of the Future Fund in 2005:

Future Governments should not have to cut services or raise taxes in order to meet growing demographic pressures in areas like health and aged care. The Future Fund will also ensure that liabilities currently incurred will not be passed on to future generations, *freeing up resources from the budget that would otherwise not have been available*.<sup>10</sup> [emphasis added]

Without knowing the purposes to which these resources will be put, it is not meaningful to maintain that the assets in the Future Fund will only be used to meet public sector superannuation liabilities.

In announcing the Future Fund, Costello neglected to mention that accumulating revenue in the fund is equivalent to cutting services or raising taxes today (we assume throughout this monograph that, at least over time, the federal government adheres to a balanced budget constraint). The Future Fund does not change the current or

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future value of the liabilities associated with public sector superannuation schemes, which are now closed. From an inter-temporal budgetary standpoint, it does not matter whether these liabilities are met out of current or future tax revenue. The return on the Future Fund's assets is simply compensation for not using these funds today. The private sector should also be indifferent to the timing of the tax collections needed to meet these liabilities.<sup>11</sup> This is an implication of the equivalence of debt and tax finance for a given amount of government expenditure (also known as Ricardian equivalence). The conditions for full Ricardian equivalence to hold are rather strict, but there is evidence for a significant Ricardian offset to changes in public saving on the part of private saving in Australia.<sup>12</sup>

## Tax smoothing

Robert Barro famously showed that a constant tax rate over time would minimise the efficiency costs of taxation.<sup>13</sup> Raising taxes today to pre-fund future increases in government expenditure can yield a smoother and less distortionary rate of taxation over time compared to a situation in which taxes would otherwise have to rise more sharply in future. Barro characterised tax smoothing as a second-order consideration that is dominated by the first-order effects from Ricardian equivalence noted above.<sup>14</sup> It also assumes a public interest theory of government in which policymakers seek to minimise these efficiency costs. However, this is not necessarily inconsistent with Geoffrey Brennan and James Buchanan's private interest conception of government as revenue-maximiser, where the government seeks to maximise the size of its tax base by increasing the efficiency of the tax system.<sup>15</sup> However, as Barro notes, the tax smoothing model will be a poor description of government behaviour 'if the institutional structure were such that "political income" was directly related to the amount of deadweight loss generated by the government.'<sup>16</sup> The long-running tax reform process since 1985 suggests that Australian governments do care about reducing the efficiency costs of taxation, but the welfare gains from tax reform have often been reduced through redistributive compensation.

The tax smoothing argument for a SWF depends critically on the assumption that future taxes will indeed be lower relative to the path tax rates would take in the absence of any pre-funding of these liabilities. In the event, future governments are more likely to view the assets accumulated in the Future Fund as just another source of revenue or an easing in their borrowing constraint rather than an opportunity to lower the future tax burden. This is an example of the well-known political economy problem of time inconsistency: What may be optimal for government to promise to do today may not be optimal to do in the future when policymakers may face a different set of incentives.<sup>17</sup>

Increased government saving via a SWF sounds virtuous and fiscally responsible. However, it is important to recall that like all saving, government saving is just deferred government spending. There are no guarantees that future governments will spend the public saving accumulated in a SWF wisely or for the purposes for which they are notionally earmarked. A SWF actually weakens the incentive for future governments to reform the expenditure-side of the budget and to spend more wisely by easing their overall revenue and borrowing constraint. There is no reason to believe that future governments will spend money more wisely or responsibly than the governments we have actually had. Only a change in the incentives facing future governments, for example, through the introduction of binding fiscal policy rules, could be expected to change the behaviour of future governments relative to previous governments.

Tax smoothing could be more effectively achieved by investing in public infrastructure and other non-financial assets that enhance the productive potential of the Australian economy today and yield a positive stream of public services in the

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future, thereby alleviating future pressures on the budget.<sup>18</sup> This can be done directly out of the budget rather than a SWF and is not vulnerable to the time inconsistency problem because it does not create perverse incentives for future governments to squander today’s public saving. Instead, it binds future governments in relation to the future stock of physical and other assets, solving the dynamic inconsistency problem.

The Future Fund has a targeted real rate of return of 4.5–5.5%. As Table 1 shows, actual returns since the Future Fund’s inception in May 2006 have been below this target at only 5.2% nominal and 2.2% real after average CPI inflation of 3%. This compares to an average 2.5% real return to 90-day bank bills over the same period. Bank bills are a reasonable proxy for the returns available from leaving budget surpluses on term deposit with the RBA. The Future Fund has underperformed this return by 0.3 percentage points, but the underperformance would be even more pronounced on a risk-adjusted basis in more recent years. In the first two years of the Future Fund’s operation, returns were identical to those from 90-day bank bills because the fund was invested largely in cash. As the Future Fund has diversified into a broader range of assets, it has taken on more risk, as the volatility in returns since the 2007–08 financial crisis indicates. Whether this more diversified portfolio can meet the targeted rate of return in the long term remains to be seen.

**Table 1: Future Fund returns (ex-Telstra) and relative performance**

Year	Future Fund nominal return %	CPI %	Future Fund real return %	90-day bank bills %	90-day bank bills real return %	Future Fund real return relative to bank bills %
2005–06	6.0	4.0	2.0	5.9	1.9	0.1
2006–07	6.2	2.1	4.1	6.3	4.2	-0.1
2007–08	1.5	4.5	-3.0	7.3	2.8	-5.8
2008–09	-4.2	1.5	-5.7	4.8	3.3	-9.0
2009–10	10.6	3.1	7.5	4.0	0.9	6.6
2010–11	12.8	3.6	9.2	4.9	1.3	7.9
Since inception (p.a.)	5.2	3.0	2.2	5.5	2.5	-0.3

**Source:** Future Fund; Reserve Bank of Australia. 2005–06 returns annualised.

These returns are poor compensation for the opportunity cost of not using these funds for other purposes. For example, the accumulated funds could have been used for well-chosen, productivity-enhancing infrastructure projects. While some of the Future Fund’s assets are invested domestically in tangible rather than financial assets, this is less than one-third of the fund’s overall strategic asset allocation (see below). The funds could also be used to partially or fully finance the abolition of inefficient taxes, particularly those that raise relatively little revenue. This would yield economy-wide dynamic benefits, increasing the growth rate and size of the economy, expanding the future tax base, and providing greater resources for future governments to meet future obligations such as those arising from an ageing population. While tax smoothing has much the same objective, abolishing or reducing inefficient taxes today does not suffer from the dynamic inconsistency problem that could lead to higher current *and* future taxes.

### Intergenerational equity

Even if we accept that future governments will lower taxes, yielding a smoother tax rate over time, this creates intergenerational winners and losers. To capture the efficiency

gains of a smoother tax rate, earlier generations will lose through a higher tax rate. Tax smoothing requires making necessarily arbitrary judgments about the extent to which we should care about intergenerational equality. We might choose to discount the welfare of future generations on the grounds they will be much wealthier than the current generation due to technological progress leading to higher future real GDP per capita. A case could then be made for shifting the burden of currently unfunded and other prospective public sector liabilities on to future generations. However, as Tyler Cowen and Derek Parfit show, most arguments for applying a social discount rate to the welfare of future generations fail and are of little practical significance, despite its widespread use in public policy analysis.<sup>19</sup> If we accept that there is a case for intergenerational burden-shifting, these equity considerations need to be traded off against the efficiency gains forgone due to reduced tax smoothing. As Ross Guest shows, it is possible to calculate the optimal trade-off between these competing objectives under a set of restrictive assumptions.<sup>20</sup> Given a reasonable set of parameters for the social discount rate and aversion to intergenerational inequality, it is possible to show how the Future Fund might leave society modestly better off. However, if the tax smoothing argument fails and both generations suffer a higher tax burden, as suggested above, then both generations are left worse off, and the Future Fund makes us poorer because the tax burden is higher for both current and future generations.

Intergenerational equity arguments raise broader and more profound issues than the tax smoothing/intergenerational equity trade-off analysed by Guest. An argument sometimes made for the Future Fund is that it is unfair for the current generation to increase the debt burden on future generations. If future generations had a voice in today's political decision-making, they might favour a different set of policies. Cowen suggests a simple principle for how public policy should address intergenerational equity issues of this type: 'We should make political choices so as to maximise the rate of sustainable economic growth.'<sup>21</sup> Making the economy grow faster today increases the resources available for future generations to meet increased demands on the budget, including those associated with an ageing population. In the long run, maximising the sustainable economic growth rate dominates the distributional implications of almost all public policy choices.

### Disintermediation of private sector saving and investment

The assets in the Future Fund are largely invested in private securities and tangible assets by private sector fund managers. This begs the question as to why the Future Fund is necessary when the private sector and private capital markets are already performing the task of saving and investing for the future, free of the risk of politicising of investment decisions and future raids by spendthrift and irresponsible governments on the assets of the Future Fund. As Guest notes:

The issue is whether there is a sufficiently well-identified case of undersaving by the private sector to justify the government's boosting national saving through the Future Fund. If such a case cannot be made, then the welfare of future generations is maximised by leaving society's intertemporal consumption allocation to the private sector.<sup>22</sup>

Historically, most saving has been done by the private and not the public sector. Since 1970–71, when Commonwealth net debt was only 0.8% of GDP (that is, close to zero), the federal government has run cumulative underlying cash deficits of nearly \$75 billion.<sup>23</sup> This highlights the heavy reliance on asset sales rather than budget surpluses in reducing net debt. Asset sales contributed around \$61 billion to the reduction in net debt from its peak of \$96 billion in 1996–97.<sup>24</sup> As Table 2 shows, transfers into the Future Fund have relied heavily on the proceeds from the sale of

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Telstra. Apart from its initial seed capital, transfers into the Future Fund were made out of only two annual budgets.

**Table 2: Transfers to the Future Fund**

Date	Source	Amount (\$bn)
5 May 2006	Initial seed capital	18
22 Jan 2007	2005–06 Budget surplus, first instalment of T3 sale	18.639
16 Feb 2007	Remainder of 2005–06 Budget surplus	3.638
28 Feb 2007	2,104,657,933 Telstra shares	8.966
22 Jun 2007	Telstra 3 sale proceeds	0.151
28 Jun 2007	21,894,459 Telstra shares	0.102
24 Aug 2007	2006–07 Budget surplus	7
25 Jun 2008	Telstra 3 sale proceeds	3.9
21 Nov 2008	35,361,956 Telstra shares	0.141
<b>Total transfers</b>		<b>60.537</b>

**Source:** Department of Finance and Deregulation. Transfers of Telstra shares valued at time of transfer.

It is far from certain whether population ageing in itself requires an increase in national saving, either public or private. As David Cutler, et al. have argued in the US context, ‘the optimal policy response to recent and anticipated demographic changes is almost certainly a reduction rather than an increase in the national saving rate.’<sup>25</sup> One does not have to endorse their analysis or conclusions to recognise that the optimal saving rate in response to population ageing is at the very least an open question and one best left to decentralised private choice. While there may be policies that discourage saving, increasing public saving via the Future Fund is a second-best policy choice compared to directly increasing private incentives to save through measures such as tax reform. It is far from clear that increased public saving can increase national saving due to offsetting private sector responses discussed previously. To the extent that Ricardian equivalence holds, an increase in public saving by the Commonwealth via the Future Fund will be offset by reduced saving by the private sector, reducing any contribution to national saving.<sup>26</sup>

If the Future Fund fails to increase national saving, then its only effect will be to disintermediate the private sector from saving and investment decisions. The role of the Future Fund as a public sector financial intermediary is problematic for a number of reasons. Although its assets are managed by private fund managers, the return on the Future Fund’s assets still depends on the skill of the fund’s management in selecting these managers. Private fund managers underperform most asset return benchmarks over time, consistent with the predictions of the efficient market hypothesis. As already noted, the returns on the assets in the Future Fund to date have underperformed its own benchmark return and lower risk alternatives such as leaving funds on term deposit with the RBA. The Future Fund’s assets were heavily weighted to cash in the early years of its operation, enabling it to avoid the 20–30% declines in the value of its portfolio suffered by foreign SWFs such as Norway’s fund, Singapore’s GIC, and the Gulf states’ funds that were induced by political considerations to invest in US financial institutions at the height of the financial crisis.<sup>27</sup> The volatility in the Future Fund’s returns since 2007–08 highlights the increased risk it has assumed after it moved out of cash.

The Future Fund’s long-term target asset allocation is 35% equities, 30% tangible assets, 20% debt, and 15% ‘alternative investments,’ that is, ‘skill-based absolute return investments’ such as hedge funds.<sup>28</sup> As ‘stand-alone, unregulated pools of capital managed by investment professionals who are known to take large stakes,’

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SWFs are themselves indistinguishable from hedge funds.<sup>29</sup> Australian taxpayers have unwittingly become a captive investor base for a multi-billion-dollar, risk-laden proprietary trading operation on the part of the federal government. This is ironic given the Australian government's public vilification of hedge funds and investment professionals during the financial crisis.<sup>30</sup> If the Future Fund's assets were to be invested in accordance with the principles of modern finance and the efficient market hypothesis, they would be passively and not actively managed using similar principles to the index funds originally developed by Vanguard and other private sector fund managers. Passive management would enable the Future Fund to operate at a lower cost and thus yield higher relative returns for a given level of risk over time. In any event, the operating expenses of the Future Fund duplicate the costs of running existing public sector superannuation schemes. The Future Fund also duplicates the portfolio and reserve asset management functions of the Australian Office of Financial Management and the RBA.

### Politicisation risks

A large pool of publicly controlled assets is a tempting target for politicisation, for example, through poorly chosen investments in public infrastructure or 'socially responsible' investment mandates. The Future Fund divested itself of two of its three biggest defence holdings, Lockheed Martin and General Dynamics, because they are engaged in the supply chain for mines and cluster munitions.<sup>31</sup> Divestment took place even before Australia had ratified the relevant convention and even though the Future Fund is notionally free from political direction from Canberra. This shows that the Future Fund is looking over its shoulder at what politicians are doing in making investment decisions, regardless of the merits of divestment in this particular case.

Norway's SWF has divested itself of stocks as benign as Wal-Mart and the Australian-listed Rio Tinto on the advice of its Ethics Council.<sup>32</sup> The Norwegian SWF's divestments have consisted mainly of US stocks. This has led to allegations that Norway's SWF has become a vehicle for anti-Americanism and has damaged Norway's diplomatic relations with the United States.<sup>33</sup> With the political composition of future Australian governments necessarily uncertain, there is a danger that the Australian Future Fund could in future become subject to politicised investment mandates and a vehicle for the anti-American and anti-Israeli views of political parties like The Greens.

Alan Greenspan highlighted the dangers of such politicisation in discussing the implications of persistent budget surpluses for the United States in the early 2000s:

Once Treasury debt reaches its irreducible minimum, additional surpluses will, of necessity, lead to the accumulation of substantial private—that is to say, non-federal—assets either in the Treasury's general fund or in government trust funds. The decisions on how such funds should be invested by the government would necessarily be political ones, and would lead to efforts by some groups to obtain via the political process funding that they could not obtain, at least at the same price, in private markets ...

It is, regrettably, too easy to envision political pressure being exerted to use government financing of investments to offset perceived capital market imperfections. Experience suggests that in such cases the resulting returns earned on the investments are likely to fall short of market standards. Moreover, the social benefits of investment are likely to be very difficult to measure in practice, opening the door to political interference in the allocation of funds.<sup>34</sup>

**Passive management would enable the Future Fund to operate at a lower cost and thus yield higher relative returns for a given level of risk over time.**

Former Treasurer Peter Costello has also acknowledged the danger of the Future Fund being raided for political purposes:

By changing the legislation, the government could direct it to any purpose it chooses. It could even raid the fund to pay its current deficit, or to pork-barrel for an election. Which is why Parliament, the press, and interested taxpayers must be vigilant to repel any sign of financial trickery. In circumstances where the government is short of money, there will be a huge temptation to raid the savings of future generations.<sup>35</sup>

Such vigilance is only necessary because of the Future Fund's disintermediation of the private sector from saving and investment decisions. Given his acknowledgement of these risks, Costello's support for the Future Fund is difficult to explain. Norway's SWF, which is used in part to fund recurrent expenditure, also illustrates these risks. As Anders Åslund notes, 'since the Norwegian fund was established in 1990, every incumbent government has lost elections because the opposition has promised all kinds of popular expenditures from the abundant fund. Democratically, it is difficult to defend an excessive public reserve fund.'<sup>36</sup> Chile's Copper Stabilisation Fund was raided in the 1980s and 1990s to recapitalise Chile's central bank and to subsidise domestic petrol prices through loans to its oil stabilisation fund.<sup>37</sup> Numerous SWFs in the developing world have been raided and wound up.<sup>38</sup> It is not difficult to imagine the Future Fund's legislation being changed in the future to become a vehicle for directed investment, including the nationalisation of failed Australian businesses.

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### **Transparency and accountability**

In terms of governance, accountability and transparency, the Future Fund scores below Australia's developed country peers and even some developing countries' SWFs. It ranks 14 on the Peterson Institute's scorecard of SWF, below Timor-Leste and Trinidad and Tobago. Its overall score of 80 out of 100 is below the average score for all pension funds of 84. In terms of accountability and transparency, the Future Fund scores 75 out of 100, below the State Oil Fund of Azerbaijan. By contrast, New Zealand's Superannuation Fund ranks third overall with a score of 94 and a perfect score of 100 for accountability and transparency.<sup>39</sup> The Future Fund Board has been divided and fractious, with one journalist characterising board members as 'fighting like a schoolyard.'<sup>40</sup> The Future Fund needs to improve its performance on these governance, transparency and accountability indicators if it is to minimise the risks discussed above.

### **Risks to free trade and investment**

A major concern with SWFs is their capacity to promote hostile responses on the part of other countries receiving investments from SWFs. These responses can harm global trade and investment and strain diplomatic relations. These risks have been evident in Australia, where cross-border acquisitions on the part of foreign state-owned entities have sparked a protectionist backlash. Politicians like Peter Costello, Malcolm Turnbull, and Greens leader Bob Brown are among the most prominent supporting a SWF for Australia, but they also express concerns about foreign investment in Australia by state-owned entities such as Chinalco.<sup>41</sup> While there is an important distinction between direct investment by foreign state-owned enterprises and portfolio investment by SWFs, there is still a fundamental inconsistency in opposing the role of foreign state-owned entities in cross-border investment while at the same time standing behind efforts to enlarge the size and scope of Australia's own SWF.

## Fiscal and macroeconomic stabilisation

It has been suggested that a SWF could play a greater role in fiscal and macroeconomic stabilisation. The federal budget balance is subject to fluctuations due to cycles in commodity prices specifically and the economy more generally. Governments have an obvious temptation to turn cyclical budget surpluses into permanent spending programs that leave the budget in structural deficit and increase net debt. However, as has already been noted in the discussion on tax smoothing, there is no guarantee as to how the assets in the Future Fund will ultimately be spent, and the fund may weaken incentives for long-run fiscal discipline by easing the government's future revenue and borrowing constraint.

Given Australia's relatively low net debt to GDP ratio and well-developed capital markets, even very large cyclical fluctuations in the budget balance are unlikely to trigger borrowing or liquidity constraints. Unlike in some developing countries, our federal government can easily borrow in its own currency to meet a wide range of contingencies such as war, natural disaster, and economic or financial crises without having to rely on a SWF for smoothing the budget.

Changes in the federal budget balance also have minimal implications for domestic interest rates, which for a small, open economy like Australia, are determined in global markets.<sup>42</sup> Future Fund Chairman David Murray's claim that saving via the fund would lead to a lower cost of capital for Australian business is unconvincing.<sup>43</sup> The assets in the Future Fund are not a net source of new saving in the financial system. They are simply funds that have been disintermediated from private consumption, saving and investment decisions and then recycled through a public sector intermediary. This unnecessary re-intermediation of capital is more likely to raise rather than lower the cost of capital, especially if the Future Fund were to be enlarged.

Long-run fiscal discipline and sustainability is a more important issue than short-term management of cyclical fluctuations in the budget balance. The federal government can have a strong balance sheet and run structurally balanced budgets over time without the aid of a SWF. Equally, it can run cyclical surpluses (and should do so) without the aid of a SWF. Surpluses would then be reflected in the government's deposit balance with the RBA. The creation of a SWF by itself will not lead to more responsible fiscal policy. The creation of the Future Fund did not prevent the Howard government from converting cyclical budget surpluses into new spending programs, with contributions to the fund made only on an *ex-post* basis and not as part of a coherent long-term fiscal strategy. As previously noted, the assets accumulated in the Future Fund have relied heavily on the sale of Telstra, and there are few remaining asset sales of significant size left for future federal governments to privatise. In the absence of binding fiscal responsibility legislation, a SWF is unlikely to lead to better long-run fiscal outcomes. The IMF's review of international experience with SWFs concluded that the establishment of a SWF does not have an impact on government spending.<sup>44</sup>

It has also been argued that a SWF could help manage upward pressure on the exchange rate from the terms of trade boom and thereby avoid the so-called 'Dutch disease,' which occurs when export revenues drive real exchange rate appreciation that crowds out other export- and import-competing industries. The term was first coined by *The Economist* magazine, although it is questionable whether the Dutch ever suffered from this affliction.<sup>45</sup> In the Australian context, the Dutch disease is also known as the Gregory thesis after a well-known 1976 paper by Bob Gregory;<sup>46</sup> the idea was further developed by Max Corden and Peter Neary in the early 1980s.<sup>47</sup> The Gregory thesis overlaps with the broader 'resource curse' literature, which argues that resource rich countries tend to suffer lower average rates of economic growth.<sup>48</sup> However, the resource curse is more relevant to developing countries with undiversified economies and weak institutional

**The IMF's review of international experience with SWFs concluded that the establishment of a SWF does not have an impact on government spending.**

**An open and flexible economy can readily adjust to future trends and cycles in commodity prices.**

frameworks than to developed economies like Australia that are well diversified and have sound institutions. The Australian economy is dominated by service industries, and mining is still a small, if growing, share of overall GDP. Australia's institutional framework is relatively sound by international standards, ranking highly on measures of economic freedom, for example.

Appreciation of the exchange rate actually *moderates* the impact of the terms of trade boom on the local economy by reducing the Australian dollar incomes of commodity exporting firms and industries. Exchange rate appreciation aids rather than hinders the Australian economy in this context. It is appropriate for an economy experiencing a terms of trade boom to re-allocate resources in accordance with the price signals from commodity markets and the exchange rate. No one can say whether the recent terms of trade boom is permanent or temporary, but price signals from commodity and foreign exchange markets can be relied upon to guide long-run resource allocation in the Australian economy in the appropriate direction. However, this process also requires a flexible economy that is open to foreign capital and labour. Government can also reduce its call on resources and ease capacity constraints through reductions in its own spending. Other structural reforms could also add to the flexibility of the economy. These measures could be expected to make a much greater contribution to facilitating the Australian economy's adjustment to future changes in Australia's terms of trade than a SWF.

In the long run, real commodity prices will likely fall from their current historically high levels because it is not the commodities themselves that are scarce; rather, it is our ability to extract and use them more efficiently that is constrained. As these constraints are relaxed in the long run, the secular downtrend in real commodity prices is likely to be restored. Australia will contribute to this increase in long-run supply through increased output and export volumes, underpinning long-run economic growth even in the presence of declining real commodity prices. Public policy should not be conditioned on assumptions about future trends or cycles in the relative prices of traded goods because they are subject to too much uncertainty. However, we can be confident that an open and flexible economy can readily adjust to future trends and cycles in commodity prices.

Warehousing government revenue in foreign currency denominated assets would not have any effect on Australia's real effective exchange rate. Foreign exchange markets are too deep and liquid for even sizeable foreign exchange holdings on the part of the Australian government to be a significant influence in these markets. Australia's holdings of foreign currency assets would be a drop in the ocean of a global market with daily turnover of around US\$3 trillion. Average *daily* turnover in the Australian dollar against other currencies is around A\$100 billion. In the year ended June 2008, Australia saw net capital inflows sufficient to finance a \$73 billion annual current account deficit. As Edwin Truman notes, warehousing public saving in foreign currency assets is equivalent to 'engaging in sterilised foreign exchange market intervention. The sustained effectiveness of such intervention influencing exchange rates for advanced countries such as Norway, Canada and the United States is far from agreed upon within the economics profession.'<sup>49</sup> Australia is widely acknowledged to have benefited enormously from its floating exchange rate regime since 1983. Massive foreign exchange market intervention on the part of the federal government would mark a shift back towards a managed exchange rate and become a lightning rod for domestic political interests seeking more favourable exchange rate conditions.

An unhedged portfolio of foreign currency denominated assets could also result in significant unrealised valuation losses due to volatile exchange rate movements, even though these movements could be expected to be broadly offsetting over sufficiently long periods of time. In 2002, unrealised foreign exchange losses on cross-currency swaps in the federal government's debt portfolio were beaten up into

a faux political scandal.<sup>50</sup> The RBA has also made sizeable losses from time to time because it takes a net long position in foreign currencies as part of its management of official sector reserve assets. An even larger net long position in foreign currency denominated assets on the part of the Future Fund or an expanded SWF would quickly become a source of media beat-ups and political scandals, given Australia's immature media and political culture.

## Managing the return on Australia's resource endowment

The Commonwealth Constitution assigns ownership of Australia's mineral wealth to the states, but the federal government has increasingly sought to displace the states in capturing the revenue streams from the mining sector. It has been argued that some or all of the federal and state revenue streams from mining should be quarantined in national or sub-national SWFs to share this mineral wealth with future generations. This argument is partly based on the claim that Australia's resources are non-renewable and should not be consumed by the current generation at the expense of future generations.

Australia has proven reserves of key resources for up to a century or more. Geoscience Australia estimates that Australia's brown coal reserves will last 470 years.<sup>51</sup> However, as Julian Simon has shown, proven reserves are very unreliable as a guide to future resource availability and often understate the long-run exploitability of a given resource.<sup>52</sup> In any event, Simon showed that resources are not finite or non-renewable in any economically meaningful sense because of continual improvements in productivity and long-run substitutability on both the demand and the supply sides of commodity markets. This long-run substitutability means the supposed 'finiteness' or 'non-renewability' of Australia's resources is an economic irrelevance. The mining sector is still only a small share of the Australian economy on a gross value-added basis. The production side of the economy is dominated by service industries, and the services share of GDP will continue to increase as incomes rise. Unlike some oil producing and exporting countries, Australia's current and future prosperity is not hostage to the fortunes of a particular resource specifically or the mining industry more generally. There is no need to hoard revenue from the boom to underpin future prosperity. Price signals from commodity markets and the exchange rate will continue to guide long-run resource allocation in the Australian economy in the appropriate direction.

From an intergenerational equity perspective, the case for sharing the income flowing from mining with Australians living 100 years or more in the future through a SWF makes no sense. It is the equivalent of people in the late nineteenth century sacrificing their standard of living for the benefit of people in the late twentieth century. Assuming Australian real GDP per capita grows at its average rate since 1820 of 2.1%, the average Australian resident will in 100 years' time enjoy an annual income of \$469,210 in 2008–09 dollars compared to \$58,721 today. At the same growth rate, household sector net worth per capita will increase from \$232,000 to around \$1.9 million. As noted previously, the best public policy choices from an intergenerational equity perspective are those that maximise the sustainable rate of economic growth to maximise the income and wealth available to future generations. As already argued, greater use of a SWF would lower Australia's potential economic growth, harming the welfare of future generations.

## Policy recommendations and conclusions

Making greater use of a SWF has gained support from some politicians and commentators because it sounds fiscally responsible and prudent. Turnbull has even resorted to overtly nationalistic arguments, maintaining that a SWF 'would become a matter of real national pride.'<sup>53</sup> However, this monograph has shown that

**Unlike some oil producing and exporting countries, Australia's current and future prosperity is not hostage to the fortunes of a particular resource specifically or the mining industry more generally.**

**The Future Fund eases the federal government's future revenue and borrowing constraint, weakening incentives for responsible long-run fiscal management.**

the existing Future Fund harms Australia's current and future prosperity. The returns on the Future Fund are poor compensation for the alternative uses of these funds, including expenditure on productivity enhancing infrastructure and the elimination of inefficient taxes that raise little revenue but impose significant costs on the Australian economy. Any investment with an actual or expected rate of return of 5% or more would beat the targeted rate of return of the Future Fund. While the Future Fund seeks to invest in such projects, it is not a source of new saving in the financial system. It disintermediates the private sector from saving and investment decisions, and risks politicising the process of capital allocation in the economy. The fungibility of assets in the Future Fund with other sources of revenue and government borrowing means there are no guarantees as to how these funds will be used in future, even under existing legislation. The Future Fund eases the federal government's future revenue and borrowing constraint, weakening incentives for responsible long-run fiscal management. The best solution to this dynamic inconsistency problem is to bind future governments in relation to the stock of physical and other assets and to maximise the long-run growth rate of the Australian economy.

A SWF is of little value in promoting macroeconomic, fiscal and exchange rate stabilisation objectives. The Australian economy is well diversified and not dependent on a single, exhaustible resource for its current or future prosperity. Greater flexibility on the supply side of the Australian economy, including greater openness to foreign labour and capital, is the best policy approach to addressing the economic consequences of the terms of trade boom. The government also needs to reduce its call on resources and private saving through reductions in government expenditure.

The federal budget should be well placed to withstand cyclical fluctuations in commodity prices and the domestic and international economy without the benefit of a SWF. Australia's low net debt to GDP ratio and well-developed capital markets mean that the federal government does not face significant borrowing or liquidity constraints in managing fluctuations in the budget balance over time.

The floating exchange rate also insulates the economy from the positive external shock arising from the terms of trade boom. Far from being a problem for the Australian economy, exchange rate appreciation is the appropriate response to a terms of trade boom. Even if it were desirable, a SWF with substantial unhedged foreign currency-denominated assets would be ineffective in curbing exchange rate appreciation because the net foreign currency denominated assets of the Commonwealth would be too small relative to the depth and liquidity of foreign exchange markets and Australia's large net capital inflows.

Many of the desirable objectives of a SWF could be achieved through greater use of enforceable fiscal policy rules that would enable politicians to make long-term commitments to responsible fiscal policy outcomes and tie down expectations in relation to the future path of net debt. This is a fundamental feature of many overseas SWFs. For example, Alaska's Permanent Fund operates under constitutionally defined rules that can only be changed by a popular majority vote.<sup>54</sup> Since 2006, Chile's SWFs have been governed by a new Fiscal Responsibility Law. By contrast, the legislation governing Australia's Future Fund is completely ad hoc, operating outside any well-defined fiscal policy framework. Carling and Kirchner have outlined a detailed proposal for new fiscal responsibility legislation for Australia that would ensure better long-run fiscal management without a SWF.<sup>55</sup> Only enforceable fiscal policy rules can solve the fungibility problem inherent in a SWF by creating binding revenue and borrowing constraints to guide future government expenditure decisions. Politicians who are unwilling to support such binding fiscal responsibility legislation cannot be trusted with a SWF.

It would have been better to invest the saving accumulated in the Future Fund in productive non-financial assets and facilitate the removal of inefficient taxes. However, with the Future Fund having accumulated a large position in a variety of financial and other assets, it would now be too costly to dispose these assets and re-purpose the proceeds. Instead, the Future Fund should be wound up by transferring its assets to the trustees of existing public sector superannuation schemes in accordance with their future liabilities, as Makin has suggested.<sup>56</sup> This would avoid the duplication of investment management costs that currently occurs with the Future Fund and minimise the political and economic risks discussed in this monograph in relation to the current and future management of the fund's assets. Future budget surpluses should be left on term deposit with the RBA and governed by new binding fiscal policy rules.

The case for using a SWF to share Australia's mineral wealth with future generations is also weak. Future generations of Australians will enjoy much higher levels of income and wealth than the current generation due to the long-run technical progress that drives productivity growth and rising living standards. It makes no sense for the current generation of Australians to sacrifice their standard of living to transfer income and wealth to future generations. The best approach to intergenerational equity issues is to maximise Australia's sustainable rate of economic growth to increase the income and wealth available to future generations. A SWF is a distraction from this overriding public policy objective.

**Politicians who are unwilling to support binding fiscal responsibility legislation cannot be trusted with a SWF.**

## **Appendix: Australian economic policymakers on sovereign wealth funds**

Treasury Secretary Ken Henry, 'Fiscal Policy and the Current Environment,' Post-Budget Address to the Australian Business Economists (18 May 2010):

First, if the revenue surge is regarded as likely to be long-lived, the alternative of tax cuts—permitting the private sector to make its own saving and investment decisions—should always be considered first.

Second, of the various objectives, the proposition that a sovereign wealth fund can be used to impose discipline on government spending is most problematic. Sovereign wealth funds that have been in place around the world have not been as effective in imposing spending discipline as many seem to believe. IMF research has found that there is no statistical evidence that such funds impose any effective expenditure restraint. Even if rules are put in place to restrict access to the fund, in the absence of liquidity constraints, a government that wants to finance an increase in current spending can borrow against the security of the fund. Money is, after all, fungible.

Third, stabilisation, consumption smoothing and exchange rate sterilisation are not dependent upon having a sovereign wealth fund. That is to say, these objectives could just as well be achieved within the context of the overall budget strategy.

Fiscal stabilisation can be achieved without drawing on a sovereign wealth fund, as demonstrated in Australia's response to the global financial crisis and international recession.

Consumption smoothing can alternatively be achieved in the Australian context by investments in human capital and high quality public infrastructure or through contributions to individuals' superannuation accounts.

And a country experiencing large gross flows, both inward and outward, of both equity and debt, doesn't have to take an explicit decision to invest the proceeds of fiscal surpluses in foreign assets in order that those surpluses put downward pressure on the nominal exchange rate. That is, using budget surpluses to repay debt, or even to purchase another financial asset domestically, would have the same effect.

Treasury Secretary Martin Parkinson, 'Policy Challenges in a Changing World,' Address to American Chamber of Commerce in Australia (9 November 2011):

A key point to note about sovereign wealth funds is that the issue is not just about the establishment of a fund per se—a sovereign wealth fund is just like a bank account—but its combination with different fiscal strategies.

The act of paying down net debt out of future surpluses is identical to accumulating financial assets in a sovereign wealth fund. It has the same effect on the government's balance sheet and the level of public saving.

Efforts to reduce government net debt should be the immediate focus—whether this is done by reducing gross debt on issue, or maintaining gross debt but building up financial assets, in a sovereign wealth fund, is an important but second order issue.

Credible medium-term fiscal strategy can effectively guide budget policy outside of mining boom conditions. Accompanied by a firm understanding of how a mining boom is impacting on revenue, including ensuring an appropriate return from the extraction of these resources, such strategies can perform a similar role in the current environment.

I am not suggesting that a sovereign wealth fund is not without merit, just that we should be clear about the role that it can and should play.

Given the time that will be required to reduce net debt, we have time to consider further the merits of a sovereign wealth fund—our first priority needs to remain fiscal consolidation.

Reserve Bank Governor Glenn Stevens, *The Challenge of Prosperity*, Address to the Committee for Economic Development of Australia (CEDA) Annual Dinner Melbourne (29 November 2010):

Another approach would be to reflect the higher income variability in our saving and portfolio behaviour rather than our spending behaviour. We could seek to smooth our consumption—responding less to rises or falls in income with changes in spending and allowing the effects to be reflected in fluctuations in saving. In the most ambitious version of this approach, we could seek to hold those savings in assets that provided some sort of natural hedge against the variability of trading partners, or whose returns were at least were uncorrelated with them. Of course, such assets might be hard to find—the international choice of quality assets with reasonable returns these days is a good deal more limited than it used to be.

**It is possible that this behaviour might be managed through the decisions of private savers.** There might also be a case for some of it occurring through the public finances. That would mean accepting considerably larger cyclical variation in the budget position, and especially considerably larger surpluses in the upswings of future cycles, than those to which we have been accustomed in the past. There would also be issues of governance and management of any net asset positions accumulated by the government as part of such an approach, including whether it should be, as some have suggested, in a stabilisation fund of some sort. [emphasis added]

## Endnotes

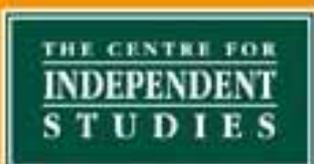
- 1 Edwin M. Truman, *Sovereign Wealth Funds: Threat or Salvation?* (Washington, DC: Peterson Institute for International Economics, 2010), 1.
- 2 As above, 10.
- 3 'Greens' Senate move on sovereign wealth fund' (The Greens, 8 May 2011).
- 4 Malcolm Turnbull, 'Another sovereign wealth fund for Australia—making sure we don't blow the bounty of the boom,' Speech to International CEOs Forum (Melbourne: 7 April 2011).
- 5 Josh Frydenberg, 'Sovereign wealth fund will secure our future,' *The Australian* (3 September 2011).
- 6 Malcolm Turnbull, 'Another sovereign wealth fund for Australia,' as above.
- 7 Robert Carling and Stephen Kirchner, *Fiscal Rules for Limited Government: Reforming Australia's Fiscal Responsibility Legislation*, Policy Monograph 98 (Sydney: The Centre for Independent Studies, 2009).
- 8 Anthony J. Makin, 'What Future for the Future Fund?' *Economic Papers* 28:2 (June 2009), 121–129.
- 9 John Freebairn, 'Some Macroeconomic Implications of the Future Fund,' *Australian Economic Review* 41:1 (March 2008), 114.
- 10 Treasurer and Minister for Finance and Administration, *Future Fund*, press release (Canberra: 10 May 2005).
- 11 John Freebairn, 'Some Macroeconomic Implications of the Future Fund,' as above.
- 12 Anthony J. Makin and Paresh Kumar Narayan, 'How Potent is Fiscal Policy in Australia?' *Economic Papers* 30:3 (2011), 377–385; Shane Brittle, 'Ricardian Equivalence and the Efficacy of Fiscal Policy in Australia,' *Australian Economic Review* 43:3 (1 September 2010), 254–269.
- 13 Robert J. Barro, 'On the Determination of the Public Debt,' *Journal of Political Economy* 87:5 (1 October 1979), 940–971.
- 14 As above, 941.
- 15 Geoffrey Brennan and James Buchanan, *The Power to Tax: Analytical Foundations of a Fiscal Constitution* (Cambridge, Mass: Cambridge University Press, 1980).
- 16 Robert J. Barro, 'On the Determination of the Public Debt,' as above, 944.
- 17 Fynn Kydland and Edward Prescott, 'Rules Rather than Discretion: The Inconsistency of Optimal Plans,' *Journal of Political Economy* 85:3 (1977), 473–491.
- 18 Ross Guest, 'Australia's Future Fund: A Social Welfare Analysis,' in Robert Clark, Naohiro Ogawa, and Andrew Mason (eds.), *Population Aging, Intergenerational Transfers and the Macroeconomy* (Cheltenham, U.K. and Northampton, Mass.: Elgar, 2007), 255.
- 19 Tyler Cowen and Derek Parfit, 'Against the Social Discount Rate,' in Peter Laslett and James S. Fishkin (eds.), *Justice Between Age Groups and Generations* (New Haven, CT: Yale University Press, 1992).
- 20 Ross Guest, 'Australia's Future Fund,' as above, 259.
- 21 Tyler Cowen, 'Caring about the Distant Future: Why It Matters and What It Means,' *The University of Chicago Law Review* 74:1 (1 January 2007), 16.
- 22 Ross Guest, 'Australia's Future Fund,' as above, 267.
- 23 Budget Paper No. 1, Statement 10, 2011–12. This calculation ignores Future Fund earnings and methodological breaks in the underlying cash balance series.
- 24 Katrina Di Marco, Mitchell Pirie, and Wilson Au-Yeung, 'A History of Public Debt in Australia,' *Economic Round-Up* 1 (2009).
- 25 David M. Cutler, et al., 'An Aging Society: Opportunity or Challenge?' *Brookings Papers on Economic Activity* 1 (1990), 2.
- 26 Anthony J. Makin and Paresh Kumar Narayan, 'How Potent is Fiscal Policy in Australia?' as above; Shane Brittle, 'Ricardian Equivalence and the Efficacy of Fiscal Policy in Australia,' as above.

- 27 Edwin M. Truman, *Sovereign Wealth Funds*, as above, 19.
- 28 Future Fund, *Annual Report 2008–09* (2009), 15.
- 29 Edwin M. Truman, *Sovereign Wealth Funds*, as above, 51.
- 30 Kevin Rudd, 'The Global Financial Crisis,' *The Monthly* (February 2009).
- 31 Robert Fenner and Gemma Daley, 'Australia's Wealth Fund Dumps Cluster Bomb, Mine Makers on Treaty,' *Bloomberg* (3 May 2011).
- 32 John Acher, 'Norway fund drops Rio Tinto on ethical grounds,' *Reuters* (9 September 2008).
- 33 Edwin M. Truman, *Sovereign Wealth Funds*, as above, 42.
- 34 Alan Greenspan, 'The Paydown of Federal Debt,' presented at the the Bond Market Association (White Sulfer Springs, West Virginia: 2001).
- 35 Peter Costello, 'Whether sovereign wealth or future, the fund needs funds,' *The Sydney Morning Herald* (13 September 2011).
- 36 Anders Åslund, 'The Truth About Sovereign Wealth Funds,' *Foreign Policy* (3 December 2007).
- 37 Ugo Fasano, *Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries*, IMF Working Paper (Washington, DC: International Monetary Fund, 2000), 9.
- 38 Edwin M. Truman, *Sovereign Wealth Funds*, as above, 39.
- 39 As above.
- 40 Pamela Williams, 'Future Fund power grab,' *The Australian Financial Review* (22 December 2011).
- 41 Peter Costello, 'Rio feathers should stay in our nest,' *The Sydney Morning Herald* (18 February 2009); Malcolm Turnbull, 'Power Balance in Asia: The Coalition Perspective,' speech to the Lowy Institute (1 May 2009).
- 42 As above.
- 43 Darin Tyson-Chan, 'Future Fund to play a fiscal policy role,' *Money Management* (18 May 2006).
- 44 Jeffrey M. Davis, *Stabilization and Savings Funds for Nonrenewable Resources: Experience and Fiscal Policy Implications* (International Monetary Fund, 2001).
- 45 Hilde Christiane Bjornland, 'The Economic Effects of North Sea Oil on the Manufacturing Sector,' *Scottish Journal of Political Economy* 45:5 (1998), 553–85.
- 46 Robert George Gregory, 'Some Implications of the Growth of the Mineral Sector,' *Australian Journal of Agricultural Economics* 20:2 (1976).
- 47 Max W. Corden and Peter J. Neary, 'Booming Sector and De-Industrialisation in a Small Open Economy,' *Economic Journal* 92:368 (1982), 825–48.
- 48 Jeffrey D. Sachs and Andrew M. Warner, 'The Curse of Natural Resources,' *European Economic Review* 45:4–6 (2001), 827–838.
- 49 Edwin M. Truman, *Sovereign Wealth Funds*, as above, 21.
- 50 Australian Treasury, *Foreign Exchange Exposure in Commonwealth Debt Portfolio* (Canberra: 2002).
- 51 Geoscience Australia, *Australia's Identified Mineral Resources* (Canberra: Commonwealth of Australia, 2010), 99.
- 52 Julian Lincoln Simon, *The Ultimate Resource 2* (Princeton, NJ: Princeton University Press, 1998), 41.
- 53 Malcolm Turnbull, 'Another sovereign wealth fund for Australia,' as above.
- 54 Ugo Fasano, *Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries*, as above, 12.
- 55 Robert Carling and Stephen Kirchner, *Fiscal Rules for Limited Government*, as above.
- 56 Anthony J. Makin, 'What Future for the Future Fund?' as above.

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