

Economic

Roundup

Issue 2, 2013

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ISBN 978-0-642-74944-4

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Tax Policy Formulation in Australia

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This paper (with subsequent minor editing changes) was submitted to the Canadian Tax Foundation Tax Policy Roundtable held in Ottawa on 20 June 2013.

¹ The authors are from Revenue Group, the Australian Treasury. This paper benefited from comments and suggestions provided by Gerry Antioch, Graeme Davis and Andre Moore.

Introduction

Just as Australia's political system is a unique mix of elements, some drawn from other countries and others developed domestically, our tax system has a unique character. Australia's representative democratic system is key to that character² and informs the development and assessment of tax reform ideas.

In this regard, tax policy making is different to monetary policy making in Australia. There is no tax entity independent of Government that plays a role similar to that played by the Reserve Bank of Australia in setting monetary policy. In contemporary Australia, tax policy is an increasingly contested policy debate. Tax debates often concern trade-offs between different values and priorities and so tax policy making appropriately sits with elected officials.

Successive governments have introduced a range of innovative institutions and practices aimed at improving the quality of tax policy making in Australia, including greater involvement of the private sector, extensive consultations and accountability mechanisms.

This paper focuses solely on tax policy making by the Australian Government. This is not to suggest that an examination of tax policy formulation by the Australian states and territories would be unwarranted. The Australian states, territories and local governments levy a range of taxes in their own right (accounting for around 20 per cent of total tax revenue) and have undertaken important reviews and reforms in recent years. In the interests of brevity, however, the ensuing discussion will focus on the Commonwealth level.

Section 1: Stages in Tax Policy Formulation

1a Development stage

Under Australia's parliamentary system, government is formed by the party with control of the House of Representatives (the lower house or the 'house of government'). Ministers are appointed from both the House of Representatives and the Senate (the upper house or 'house of review') to form the executive government, with policy decisions made by Cabinet (see section 1b for a discussion of the Senate's role as a house of review). Ministerial responsibility for tax policy lies with the Treasurer, who also has a range of other Ministerial responsibilities, including for economic, fiscal and monetary policy. The Treasurer is supported by the other Treasury portfolio ministers.

² Australia is a federation, with three levels of government – the federal Australian Government (or the Commonwealth Government), the governments of the six states and two territories, and around 700 local government authorities. One of two major political groups usually forms government, federally and in the states – the Australian Labor Party (the centre-left party), and the Coalition, which is a formal grouping of the Liberal Party and its minor partner, the National Party (the centre-right parties).

Ultimately, the power to make tax laws rests with the Parliament. It is rare in Australia for the government to have a majority in the Senate and so legislation often needs the support of senators from the opposition or minor parties to become law.

Under Australia's cabinet system of government, the Cabinet (which is comprised of senior ministers) is the key decision-making body of government. While Cabinet's make-up and internal processes are subject to the Prime Minister's prerogative, and the shape and arrangements have changed over time, a core feature is that all major policy proposals are considered by Cabinet.

Tax policy development is a highly contested space. Reform, research, and policy options are generated by a multitude of sources, including electoral parties, Senate inquiries, academics, think tanks, lobby groups, tax representatives and the media. Governments have recognised this increasingly contested policy environment by ensuring the Treasury undertakes greater policy consultation, including early 'non-transactional' engagement, to be in a position to provide more comprehensive advice.³ The (former) Government also commissioned a comprehensive tax review and established an independent tax studies institute to improve the quality of public debate on tax reform. Section 4 outlines recent improvements in tax policy consultation processes. As the Department that serves the Treasurer, Treasury is the most influential public sector advising body on tax, but of course its influence varies according to the precise nature of each issue.

Other processes for generating ideas, information gathering and identifying solutions within government are discussed in detail in Section 2, which steps through the roles played by Treasury and the Australian Taxation Office (ATO), highlights recent efforts to improve communication between the two agencies, and discusses Australia's history of tax reviews.

The Australian Government requires that regulatory impact analysis be undertaken by responsible departments to inform all decisions, including tax policy changes, which are likely to have a regulatory impact on business or not-for-profit organisations, other than those with minor impacts. This analysis involves consideration of impacts, costs and benefits of proposed regulatory options and is provided to the relevant decision maker (for example Cabinet) along with the policy proposal, unless an exemption is granted by the Prime Minister for exceptional circumstances.

Tax proposals typically attract additional requirements, including that they are proposed by the Treasurer. In practice, the great bulk of tax policy is developed and

3 <http://www.treasury.gov.au/About-Treasury/OurDepartment/Strategic-Review-of-the-Treasury>.

evaluated during the annual Budget process, although significant policy measures are increasingly being introduced through the mid-year budget update process.

As outlined above, while the exact arrangements differ from government to government, it is fair to describe the budget process as an iterative one. Budget bids are first submitted to senior Ministers (typically the Prime Minister, Treasurer and the Minister for Finance and Administration) in October and costed proposals are considered by senior Ministers between February and April through the Expenditure Review Committee, a formal sub-committee of Cabinet with delegated authority to make decisions. By tradition, the Budget for the next financial year is delivered by the Treasurer to the Parliament on the second Tuesday of May.

It is worth noting here that while Budget decisions are classified until Budget night, targeted and confidential consultations with stakeholders are undertaken on more complex proposals prior to a final decision to ensure the proposed policy meets its objectives. These consultation processes remain confidential following the budget process.

Once a decision requiring legislative change is made, the Treasury is responsible for instructing legislative drafters in the Office of Parliamentary Counsel on tax matters, producing explanatory materials and regulation impact statements for tabling, conducting community consultation on tax policy, managing the legislation program, and assisting the Government to secure passage of bills through the Parliament. In short, the Treasury has a central role in ensuring that legislative products match their policy intent.

1b Legislative stage

For a tax bill to become an Act, it must be passed in the same form by the House of Representatives and the Senate and then assented to by the Governor-General. Section 53 of the Australian Constitution prevents bills which authorise the spending of money (appropriation bills) and bills imposing taxation from originating in the Senate, so all tax bills must originate in the House of Representatives.

Despite this constitutional restriction, the Senate's role in tax policy remains important. This is because the Senate performs a well-developed 'house of review' function through its committees, with tax policy considered by the Senate Standing Committee on Economics. Notwithstanding some fluctuations, the number of bills referred to Senate committees has trended upwards in recent decades.

1c Post-implementation review stage

As part of the regulation impact analysis, described above, departments are required to provide information on how the preferred regulatory option will be implemented,

monitored and reviewed. More formal post-implementation reviews, initiated within one to two years of implementation, are required for all regulation that initially proceeded without a compliant regulation impact statement.

In addition, specific post-implementation reviews on tax policy are conducted by the Board of Taxation. The Board of Taxation, which was established following the 1999 *Review of Business Taxation* (the Ralph Review), is a non-statutory advisory board charged with providing advice to Government from a business and broader community perspective on improving the design and operation of taxation laws. As part of its functions, the Board also conducts post-implementation reviews of legislation to assess their quality and effectiveness. Since its establishment in 2000, the Board of Taxation has conducted 29 reviews and consultations, with six of these reviews covering the post-implementation phase.

Section 2: Government departments with a role in tax policy formulation

Section 1 has already touched on the Treasury's role in developing tax legislation. More generally, the Treasury has primary responsibility for advising on tax policy. In advising on tax policy, the Treasury formulates and provides advice to government on options, produces regulation impact statements and prepares official costings, which together with the overall revenue forecasts underpin Government budgets. All of these activities are undertaken in close conjunction with the ATO, the statutory authority responsible for the administration of Australia's taxation and superannuation laws and the Government's principal revenue collection agency.

In recognition of the importance of the relationship between the ATO and the Treasury, in September 2012 the Secretary to the Treasury and the former Commissioner of Taxation substantially redrafted the *Treasury and the Australian Taxation Office – Tax and Superannuation Protocol*.⁴ The Protocol aims to improve the working arrangements between the Treasury and the ATO. It is applied in the design of new policies and laws that form part of these systems, and in the administration of that law once enacted.

Tax Policy Reviews

Australia has a rich history of tax policy reviews. The *Taxation Review Committee full report* (the Asprey review), released in 1975, was seminal and marked a watershed moment in the realm of tax policy reviews. Justice Ken Asprey's review shifted the emphasis away from tax policy motivated solely by revenue adequacy to fund

4 <http://www.ato.gov.au/General/New-legislation/In-detail/ATO---Treasury-protocols/ATO---Treasury-protocol/>.

growing public provision to a greater focus on improving the equity, efficiency and simplicity of the tax system.

A key theme of the Asprey Review was the need to broaden the tax base. Key reforms recommended by the Asprey Review were implemented over the next two decades, including capital gains tax and fringe benefits tax (in the late 1980s) and the goods and services tax (in 2000). Other reviews, including the 1999 Ralph Review and the 2002-03 *Review of International Taxation Arrangements* had more immediate policy impacts with reform packages announced alongside the review's public release or shortly thereafter.

More recently, a comprehensive review of the tax and transfer system, the *Australia's Future Tax System Review* (Henry Review), was conducted over 18 months in 2008 and 2009. The Henry Review added the design principles of policy consistency and sustainability to the principles identified by the Asprey review. The former requires that tax and transfer policy be internally consistent, while sustainability is about ensuring the tax system has the capacity to meet the changing revenue needs of government on a continuing basis without recourse to inefficient taxes.

Consistent with Australia's system of responsible government, tax reviews are provided to the relevant Minister. The Government decides on how to release the review and any policy decisions it wishes to make in response to the recommendations. While review panels do not make policy decisions, they do facilitate such decisions by identifying areas of concern in the tax system and promoting public discussion about tax reform.

Section 3: Resource allocation in Treasury

Within Treasury, Revenue Group formulates advice to the Government on taxation policy. The work of the group includes:

- analysis and the provision of advice to the relevant minister on tax and superannuation policy options and their economic and social impacts;
- the provision of revenue forecasts and costings of taxation policies;
- extensive policy-based and non-transactional consultations; and
- legislative support, including providing instruction to parliamentary counsel on the design of taxation laws and support for the passage of taxation legislation through Parliament.

Revenue Group accounts for over 20 per cent of Treasury staff members with nearly a sixth of Revenue Group staff engaged in preparing tax legislation. The group is

headed by an Executive Director and structured into seven divisions (Table 1), with almost half of the staff employed at the junior (that is, APS) levels.

Following a review last year into Revenue Group's capabilities, the Law Design Practice was established to better identify legislative priorities, and provide greater quality assurance of legislative products, as well as provide a clearer career pathway for specialist law design officers. Officers engaged in the Law Design Practice have legal qualifications and/or extensive experience in law design. In a similar vein, the overwhelming majority of officers engaged in Tax Analysis Division have specialist skills and are trained in economics and/or quantitative studies (mathematics, statistics or actuarial studies). Officers in the remaining divisions possess tertiary qualifications in law, economics, finance and/or statistics. As such Revenue Group employs both specialists and generalists, reflecting a need to strike a balance between both sets of skills. A few officers also have private sector experience.

Table 1: Staffing Resources in Revenue Group, Treasury^(a)

	Total Staff	SES	EL	APS
Tax System Division	19.87	2	5.27	12.6
Corporate and International Tax Division	30.4	5	11	14.4
Small Business Tax Division	17.88	0.8	6.8	10.28
Indirect, Philanthropy and Resource Tax Division	25.35	2	12.35	11
Personal and Retirement Income Division	31.55	3	14.64	13.91
Tax Analysis Division	45.47	3.6	19.87	22
Law Design Practice	30.25	1.73	12.52	16
Executive team	4.8	1	1	2.8
Revenue Group	205.57	19.13	83.45	102.99

(a) Full-time equivalent staff as at May 2013.

Note: SES=Senior Executive Service, EL=Executive Level, APS=Australian Public Service.

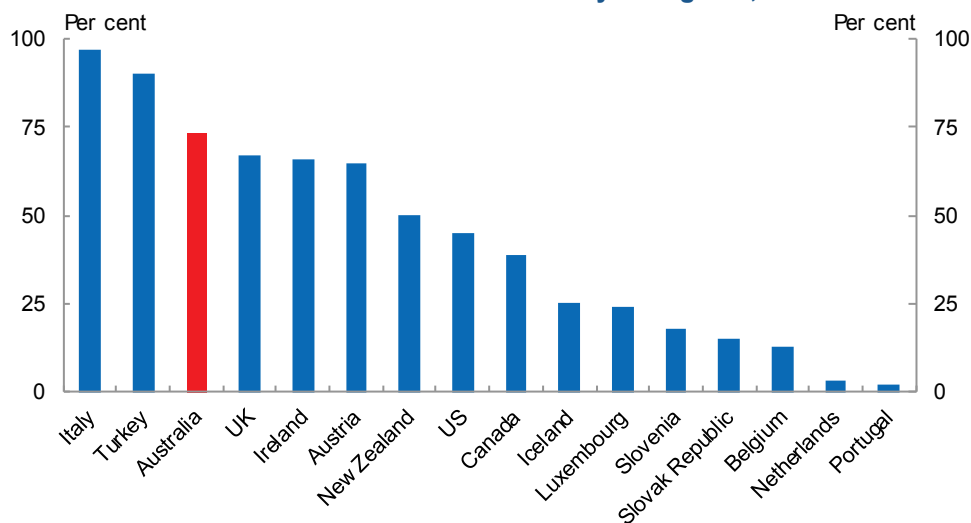
The Treasury has an active two-way secondment program with the ATO. This provides an opportunity for Treasury officers to gain direct experience of the administration of Australia's tax system and the implementation of tax policies, with the aim of enhancing an officer's overall skills in policy and legislative development. By the same token, ATO officers are routinely seconded to the Treasury to gain experience in tax policy development.

Revenue Group employs private sector consultants from time-to-time, most often to review existing processes or to provide technical assistance. Treasury has a program of temporary secondments from the private sector and also encourages such secondments in tax policy, particularly in the secretariat that the Treasury provides to the Board of Taxation. More generally, Revenue Group taps into the expertise of private sector tax specialists for specific projects on a paid consultancy basis.

Of course, it is not just government agencies that are devoting resources to the formulation of tax policy in Australia and the world more broadly. The 'Big Four' accounting firms derive between 20 and 30 per cent of their global revenues from the provision of taxation services and around 20 per cent of their workforce is employed in taxation – proportions that have remained broadly stable over the past few years. Based on their websites, similar magnitudes appear to apply to the Australian arms of these firms.

It is at least arguable that this extensive devotion of resources by the private sector results in more tax system complexity. While there is general confidence in the Australian tax system, a recent survey by Per Capita,⁵ which explored the public's attitude towards taxation and government expenditure, revealed that Australians find the tax system 'burdensome'. This finding seems consistent with the fact that over 70 per cent of Australian tax lodgers rely on tax agents to complete their personal tax returns – a proportion that has remained broadly unchanged over recent years. Among OECD countries, Australia has the 3rd highest rate of personal tax returns filed by tax agents (Chart 1).

Chart 1: Personal tax returns filed by tax agents, 2009



Source: OECD (2011) Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series.

Section 4: Consultation

Until the early 2000s, tax policy consultations in Australia were infrequent and largely confined to administrative matters. Today, consultation forms an integral part of the tax design process, with a large number of measures subject to consultation in both the policy design and draft legislation phases.

⁵ http://www.percapita.org.au/_dbase_upl/2012TaxSurveyFinal.pdf.

Tax consultations serve a number of purposes and are subject to diverse influences. The major aims of consultation are:

- to act as a discovery process to provide valuable input on the most effective way to implement government policy, and to assist in minimising compliance and administration costs, as well as to avoid (to the extent possible) unintended consequences;
- to elucidate on the policy intent of proposed changes;
- to serve as a vehicle to formulate current and future tax policy, and
- to improve situational and strategic awareness to better inform Treasury thinking.

Both Treasury and the ATO have an active consultation program that focuses on the particular areas of responsibility of each agency. The ATO is a full participant in consultation arrangements undertaken by Treasury.

In the normal course of events, consultation involves the public release of an initial discussion paper, followed by an exposure draft of legislation or regulation. From time to time, however, consultation is more targeted, either to a public audience or to a more confidential group. Consultation on some measures may include more than one approach.

In the case of confidential consultations, participants are required to sign an undertaking not to divulge details of the consultation. However, if participants wish to discuss a confidential consultation with someone who is not a party to the consultation they can request that this party also be given the opportunity to sign an undertaking and participate.

Participants in targeted consultations are generally chosen because they have expertise in the area or because they belong to a group that may be specifically affected by the legislation. Responses can be in the form of discussions at meetings or written submissions.

Public consultations are open to the general public, including individuals. Such consultations may be advertised in newspapers and posted on the Treasury website. For open public consultations, discussion (or policy) papers and/or exposure drafts of legislation are generally prepared and made available. Submissions are sought in response to these papers and these are also frequently made public on the website.

The nature of tax consultations can be characterised by the state of knowledge of a particular matter by the Treasury and the ATO on the one hand, and by stakeholders

on the other. The 3x3 matrix (Table 2) depicts this graphically. The rows indicate the state of information Treasury and the ATO have about industry conditions and the columns indicate stakeholders' understanding of policy.

Table 2: Tax Consultation Characterisation Matrix

		STAKEHOLDERS	
		KNOW	DON'T KNOW
TREASURY/ATO	KNOW	<p>A Implementing well-understood policy in ordinary industry conditions</p> <p>For example—Basic care and maintenance; possibly deadlocked policy</p> <p><i>Basic consultation effort</i></p>	<p>B Implementing newish policy in ordinary industry conditions</p> <p>For example—Complex care and maintenance; anti-avoidance</p> <p><i>Above basic consultation effort; policy dissemination</i></p>
	DON'T KNOW	<p>C Implementing well-understood policy in new or changing industry conditions; overlapping regulatory domains</p> <p>For example—Tax consolidation care and maintenance</p> <p><i>Well above basic consultation effort; private sector experts supplement Treasury's knowledge base; layered consultation ensure integrity of consultation process</i></p>	<p>D Implementing newish policy in changing industry conditions; overlapping regulatory domains; new judicial doctrine</p> <p>For example—Resource rent tax, tax measures for carbon pricing</p> <p><i>Significant consultation effort; private sector experts supplement Treasury's knowledge base; layered consultation ensures integrity of consultation process, including drawing on international experience</i></p>

Cell A represents fairly routine, basic 'care and maintenance' law changes. These may arise from Treasury's/ATO's law fix registers or from stakeholder consultations. It could also represent situations of policy deadlock; progress is possible only by compromise and not necessarily through further consultation.

Cell B reflects complex 'care and maintenance' law changes that may well reflect more fundamental problems in tax law. Tax avoidance issues could be present.

Cells C and D represent complex situations where Treasury and the ATO do not have a good enough appreciation of industry conditions. This will tend to occur at turning points in the economic cycle, during periods of structural change (as is the case now) and when policy change spans overlapping regulatory domains.

Cell C represents situations where stakeholders are better informed about certain tax practices, including those that seek to undermine the policy intent of a measure. In such situations Treasury should draw on contracted private sector expertise. Treasury should also undertake multi-layered consultations that cover a range of interests affected by the policy measure to manage the risk that certain vocal and possibly influential voices do not unduly distort the stakeholder experience.

Cell D represents mutual lack of information. This situation would apply particularly to new taxes or when a judicial decision throws open an established way of thinking about a tax issue. In both situations, Treasury and the ATO should be learning together with stakeholders and should seek to be informed through multi-layered consultations and international experience, as appropriate.

In practice, tax consultations often entail multiple stages and approaches. For example, consultations on the Minerals Resource Rent Tax (MRRT) legislation were conducted in two stages – the detailed policy design led jointly by a Government minister and a senior industry representative, the second (more detailed legislative implementation) led by Treasury and involving a broader industry and practitioner group. This is partly because, while Treasury may often lead consultations, its role in such consultations is to listen to participants, advise the government on the views of stakeholders and provide policy advice. Treasury does not take policy decisions – that is ultimately the role of Parliament.

In addition to the well-developed program of consultations on announced measures, Revenue Group has in recent years conducted a program of biannual non-transactional consultations and has increased early stage pre-policy consultations with stakeholders. The Revenue Group stakeholder consultation program aims to supplement Treasury consultations on specific tax measures and to engage the taxpayer community in a wider conversation about strategic tax policy issues.

Similarly, the early stage consultations facilitate broader conversations about tax policy trade-offs. In the past two years, pre-policy consultations have been undertaken on the business tax system, base erosion and profit shifting and not-for-profit sector tax concessions. Each of these groups has been composed of a range of business, union and community sector representatives. While this diversity might make it more difficult for groups to reach consensus on tax policy recommendations, it does expose sectional interest arguments to appropriate scrutiny.

Section 5: Role of tax bodies

The tax system in Australia operates with a number of tax governance bodies (Table 3), each serving a perceived need. The ATO plays a central governance role as the Government's principal revenue collection agency and administrator of tax and superannuation laws.

The Parliamentary Budget Office is the latest independent governance body to become operational and will give Parliament the ability to better evaluate tax policy measures. The Parliamentary Budget Office is intended to inform the Parliament by providing independent and non-partisan analysis of the budget cycle, fiscal policy and the financial implications of proposals. It is relatively well-resourced (with currently

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around 25 staff employed, with the intention of employing between 30 and 35 permanent staff), has experienced policy officers among its ranks, and has access to Treasury data and models.

The 2013-14 Budget provided funding for a tax studies institute, as a centre for excellence collaborating with academics and institutions across Australia and overseas. Once operational, the Tax and Transfer Policy Institute is expected to raise the quality of national debate on tax reform and the awareness of taxation policy issues.

Table 3: Tax governance bodies in Australia

Organisation	Type	Purpose
The Australian Taxation Office	Independent statutory agency	The Government's principal revenue collection agency, and part of the Treasurer's portfolio. The ATO administers the tax and superannuation laws.
Board of Taxation	Non-statutory advisory body	The Board advises the Treasurer on improving the general integrity and function of the taxation system. It provides business and broader community perspectives. Established in 2000.
Inspector General of Taxation	Independent statutory agency	Identifies systemic issues in tax administration and reports to the Government with recommendations for improving tax administration. Does not review tax policy. Established in 2003.
Taxation Ombudsman	Independent statutory agency	Investigates complaints from taxpayers and tax professionals about the administrative actions of the ATO. Also uses information from complaints to identify potential systemic problems in tax administration. Established in 1995.
Australian National Audit Office	Independent statutory agency	Undertakes financial statement audits and performance audits examining the economy, efficiency and administrative effectiveness of the ATO's administration of the tax system.
Tax Practitioners Board	Independent statutory board	The Board is responsible for the registration and regulation of tax practitioners and for ensuring compliance with the <i>Tax Agent Services Act 2009</i> . Replaces six state based Tax Agents' Boards.
Tax and Transfer Policy Institute	Independent research centre	The institute will be established in 2013 as an independent centre for excellence at the Australian National University Crawford School of Public Policy.
Parliamentary		
Parliamentary Budget Office	Parliamentary department	Informs the Parliament by providing independent and non-partisan analysis of the budget cycle, fiscal policy and the financial implications of proposals. Established in 2011.
Joint Committee of Public Accounts and Audit	Statutory Committee in Parliament	Since 2007, JCPAA has conducted public hearings with the ATO Commissioner with respect to the administration of the tax system.
Senate Economics Committee	Statutory Committee in Parliament	Investigate specific matters of policy, government administration or performance.

Conclusion

The tax system is a fundamental part of Australia's social and economic infrastructure. This paper has outlined the role of key agencies, such as the Treasury and the Australian Taxation Office, as well as some of the more significant developments in governance and consultation arrangements in Australian tax policy formulation over the past decade. In all of that discussion, Australia's system of responsible government remains central. As such, tax policy decisions are always made by the democratically elected government of the day, and not by bureaucratic, academic or other elites.

Tax-to-GDP: Past and prospective developments

John Clark and Adam Hollis¹

This article will analyse the structural and cyclical factors affecting past and expected future Australian Government tax receipts. As a share of the economy, taxes are expected to remain well below the levels of the mid-2000s.

1 The authors are from Tax Analysis Division, the Australian Treasury. This article has benefited from comments and suggestions provided by Angela Baum, Roger Brake, Hayden Dimes, Carol Gisz, Alexander Kelly, Amy Leaver, Timothy McGuire and Jyoti Rahman. The views in this article are those of the authors and not necessarily those of the Australian Treasury.

Introduction

Since the early 2000s, the Australian economy and hence tax collections have undergone large structural and cyclical changes. After increasing to record highs and then falling to its lowest point since the early 1990s recession, the tax-to-GDP ratio is expected to recover to slightly above its long-run (30 year) average by 2014-15, but will remain below its pre-Global Financial Crisis (GFC) highs, notwithstanding continued solid real economic growth.

This article will analyse the structural and cyclical factors affecting past and future Australian Government tax receipts.

One component of the lower tax-to-GDP ratio is cyclical, primarily where high prices in equity markets and commodities helped increase the ratio to unprecedented levels in the mid-2000s. These prices subsequently fell, particularly during late 2007 and 2008, generating a large decline in the ratio which has extended at least until 2013. Given that these prices are not expected to rise so quickly again in the foreseeable future, capital gains tax receipts as a share of GDP are expected to remain substantially lower than in the mid-2000s.

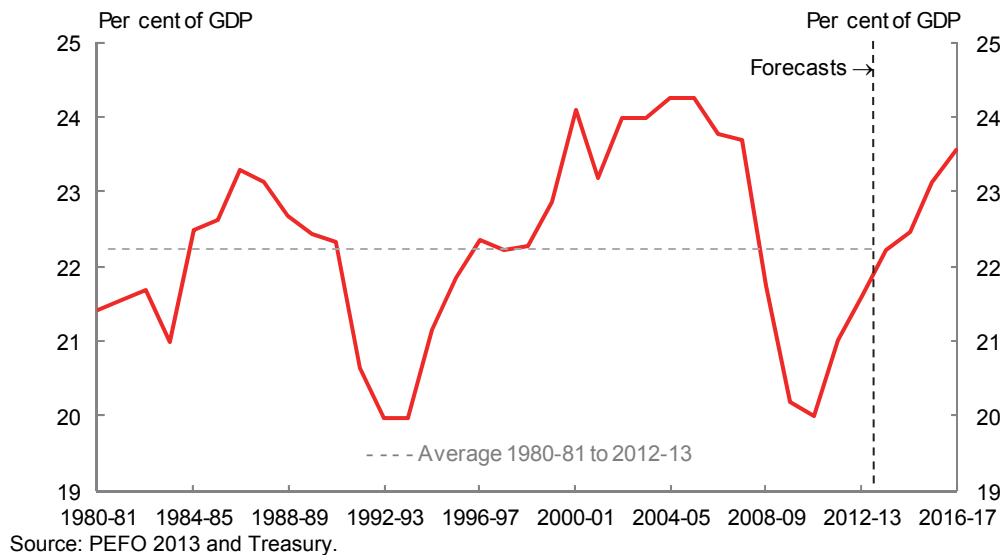
The other component is structural, through the changing composition of the tax base through both explicit government policy (such as large personal income tax cuts, increased concessional treatment of super, the non-indexation of fuel excise and specific narrowing of the corporate tax base largely designed to reduce the tax burden on foreign investment), and the changing composition of the economy to more reliance on the capital intensive resources sector.

These structural and cyclical factors have been of interest for many years and will significantly impact fiscal strategy over the next decade and beyond.

Tax-to-GDP ratio

The ratio of tax-to-GDP is often used as a measure of tax paid which can be compared across years. GDP is a useful comparator for tax because most tax bases are related to economic activity, and an increase in economic activity will generally result in an increase in tax (and a decrease in activity will result in a decrease in tax). Through the 2000s, the Australian Government tax-to-GDP ratio first rose to its record high of 24.2 per cent, before falling during the GFC. The tax-to-GDP ratio has fallen during previous economic downturns; however, the severity of the fall experienced during the GFC and its longer term implications are for the most part unprecedented. From its pre-crisis level in 2007-08, the tax-to-GDP ratio fell 3.7 percentage points (around 16 per cent) to 20.0 per cent in 2010-11, the biggest decline in the ratio since the mid-1950s.²

Figure 1: Tax-to-GDP ratio

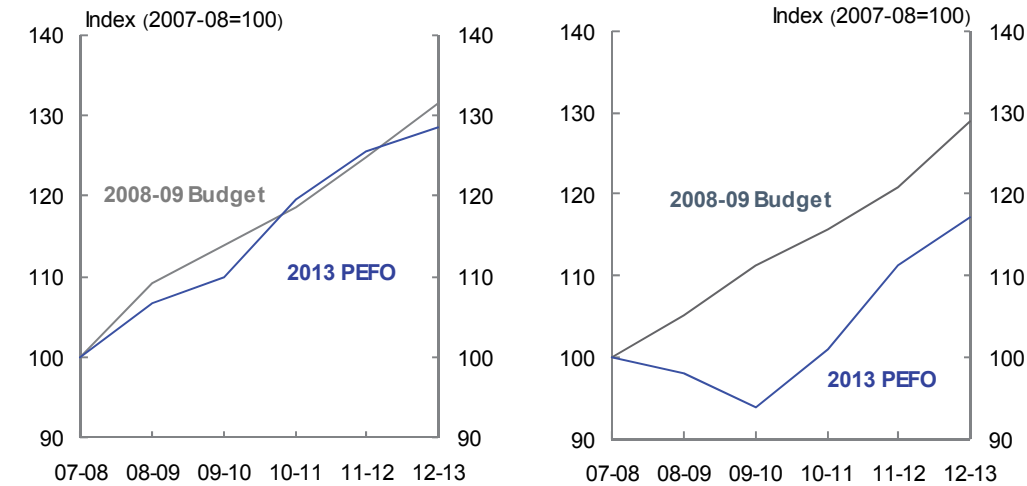


The GFC adversely affected all heads of revenue, as it affected all aspects of the economy – production, consumption, profits and employment. While taxes have been recovering since the post-crisis trough, the recovery in tax receipts has not matched that of nominal GDP. Even though nominal GDP had recovered by 2010-11 to the level

² The Australian System of National Accounts (ASNA), including measurements of GDP, begins in 1959-60 so comparisons before then are only approximate, created by splicing pre-ASNA historical estimates of GDP. Even allowing for some uncertainty in the data, the decrease in the tax-to-GDP ratio of around 4.8 percentage points over the three years from 1951-52 to 1954-55 is still considerably greater than the decrease during the GFC. A key difference, however, is that the 1950s decrease was largely driven by a one-off peak in the tax-to-GDP ratio in 1951-52 of 20.9 per cent, which was nearly three percentage points higher than any of the four years before or after.

projected at the 2008-09 Budget – the last Budget before the crisis – tax receipts in 2012-13 were well below their pre-crisis projection levels (see figure 2).

Figure 2: Change in GDP and tax receipts estimates
Nominal GDP Tax receipts



Source: PEFO 2013 and Treasury.

When economic conditions deteriorate, tax receipts generally fall by a greater percentage than the decline in the economy (and rise by a greater percentage in an upturn). Contributing factors include the progressivity of personal income tax, capital gains tax behaviour and the tendency of the tax system to tax volatile components of GDP rather than the more stable components.³ In the case of 2008-09 to 2010-11, other factors contributing to the decline include a series of consecutive income tax cuts for individuals and a long run decline in indirect taxes as a share of GDP. As an economy recovers from a downturn the tax-to-GDP ratio tends to rebound. The tax-to-GDP ratio was 21.6 per cent of GDP in 2012-13, a rise of 1.6 percentage points (around 8 per cent) relative to 2010-11 levels as a share of the economy (see figure 1). The rebound is partly a function of timing features within the tax system (mainly related to company tax) as tax receipts rise by a greater percentage than the change in the economy.⁴

The ratio is estimated to recover to its long-run average of around 22.2 per cent of GDP by 2013-14. The ratio increases to 23.6 per cent by 2016-17, slightly higher than the average over the last 30 years, but still below its 2000-01 to 2007-08 average of 23.9 per cent. The lower tax-to-GDP ratio is in part due to an unwinding of some of the

3 As an example, the Australian Government does not explicitly tax the gross operating surplus (GOS) derived from private dwellings (housing), a relatively stable component of GDP. Rather the tax system taxes private financial GOS (for example incorporated business income), a highly volatile component of GDP.

4 A stylised example of company tax timing was provided in the 2012-13 Budget, Statement 5, Box 3: The company tax payments system during a downturn, pp. 5-22.

factors that characterised the pre-crisis period. Very strong capital gains tax (CGT) receipts owing to steep rises in equity prices and a maturing CGT system, rapidly rising commodity prices, rapid credit growth, and a low household savings rate are not expected to be repeated in the post-crisis period. Further, some of the weaker recovery in tax receipts relative to the economic recovery is due to a structural erosion of the tax base.

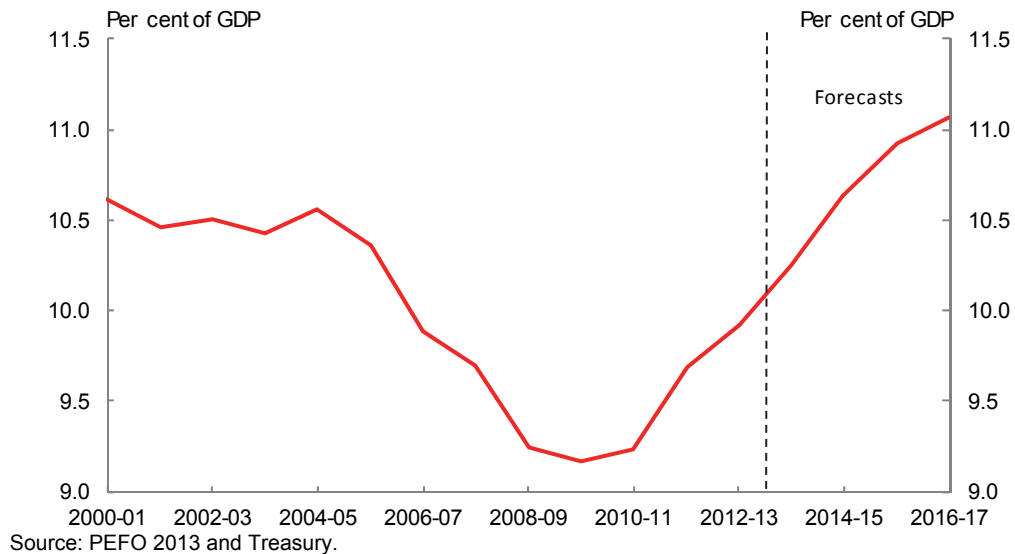
Key factors contributing to the evolution of tax receipts over the past decade, as well as factors constraining a return to the pre-GFC tax-to-GDP ratio in the future, are discussed in turn. This article will focus on the main elements of the Australian Government tax system: income tax, both personal and company, a separate discussion on CGT, and finally, indirect taxes.

Personal income tax

Income tax withholding (ITW) is the primary form of taxation on wage income.⁵ ITW fell significantly as a share of GDP between 2004-05 and 2009-10 (see figure 3). This was largely structural, driven by a succession of personal income tax rate reductions. Taxes on wages fell from 10.4 per cent of GDP in 2003-04 to 9.2 per cent of GDP in 2010-11, a decrease to the tax-to-GDP ratio of around 1.2 percentage points (11 per cent). The ITW-to-GDP ratio is forecast to approach the level from before mining boom mark I (2003-04 to 2007-08) in 2014-15. While the falls in ITW as a share of GDP contributed to the falls in total tax as a share of GDP between 2007-08 and 2010-11, it was relatively small. ITW contributed around 0.5 of the 3.7 percentage point (around 13 per cent) fall in the tax-to-GDP ratio between 2007-08 and 2010-11.

5 A small fraction of ITW (around 2 per cent for the 2010-11 income-year) is derived from interest, dividend and foreign income.

Figure 3: Income tax withholding-to-GDP



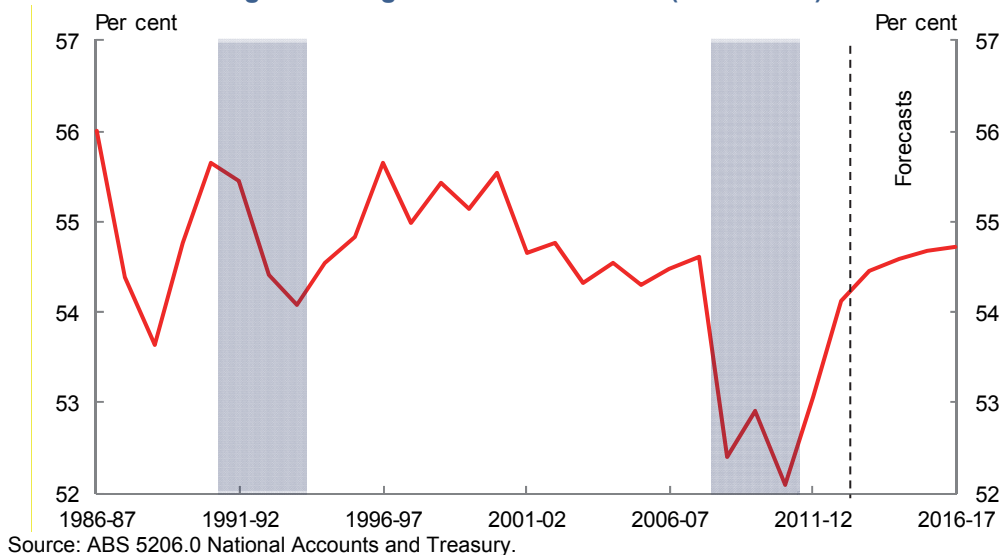
Between 2003-04 and 2010-11, a succession of cuts to personal income tax rates reduced the average rate of personal income taxation. The average rate fell from 24.3 per cent of taxable income in 2003-04 to 21.2 per cent of taxable income in 2010-11, a fall of around 3.1 percentage points. The average rate is expected to increase as bracket creep – a feature of a non-indexed progressive taxation system – driven by wage inflation moves individuals to higher average tax rates. The tax cuts through this period were significantly more than what was required to return bracket creep, as illustrated by the size of the fall in the average rate. Whilst providing tax relief for individuals, the succession of tax cuts beyond returning bracket creep structurally changed the personal income tax base relative to levels observed in the early 2000s. The average tax rate is not expected to approach 2003-04 levels until around 2016-17 (see figure 4).

Figure 4: Average rate of personal income taxation (income-year basis)



Wages declined as a share of the economy in the decade preceding the GFC (see figure 5) and this also contributed to the decline in ITW relative to GDP. However, the decline in the tax-to-GDP ratio was primarily due to the sustained tax cuts highlighted above.

Figure 5: Wages as a share of GDP (factor cost)



Interestingly, the movements in the wage share during the GFC were different to the 1990-91 recession. During an economic downturn the wage share normally increases as business profitability falls. Only after the downturn becomes entrenched do businesses shed labour, such that the wage share falls back. The decrease in the wage share in

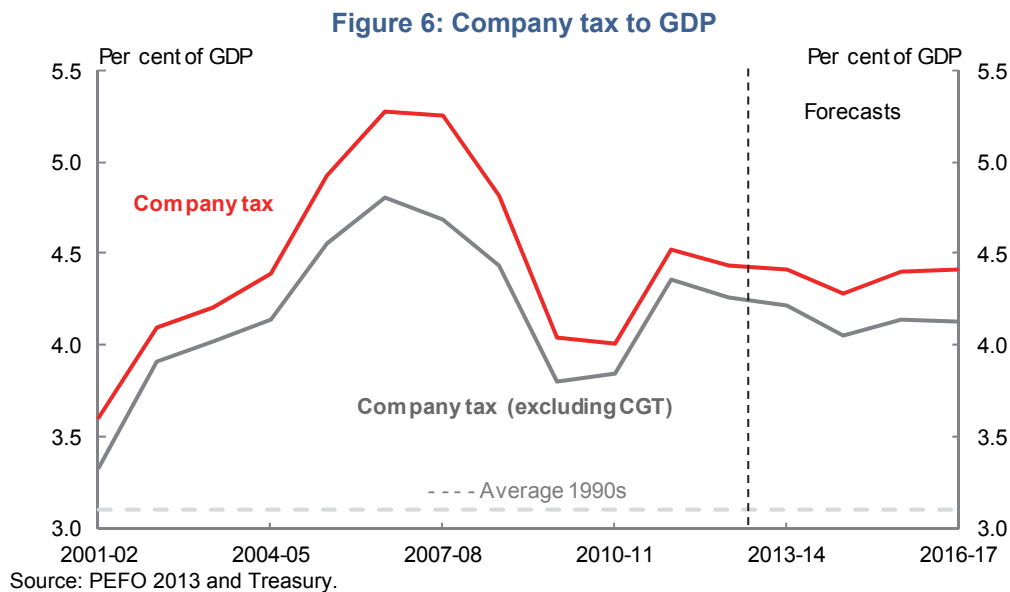
Tax-to-GDP: Past and prospective developments

2008-09 is consistent with a decline in working hours during the GFC rather than a decline in employment.

Following the introduction of the superannuation guarantee, a share of wage income has been taxed at the concessional rate of 15 per cent. While the concessional rate has generated less tax than what would have been the case had the income been taxed at marginal personal rates, the share of wage income being diverted to superannuation has not changed markedly since 2000-01. The concessional tax rates on this component of employee compensation have therefore not been a significant driver of the reduction in the tax-to-GDP ratio over the past decade.

Company tax

Company tax, another source of income tax, is levied at a fixed rate (from 2001-02 at 30 per cent) on taxable company profits. The ratio of company tax receipts to GDP over the forward estimates is expected to soften relative to mining boom mark one levels (2003-04 to 2007-08), but remains significantly higher than its long term average.



Company tax (excluding CGT) peaked during mining boom mark one, rising from an average of 3.1 per cent of GDP over the 1990s to 4.8 per cent in 2006-07. This high point largely reflected gains to the mining industry from high commodity prices. As the exchange rate simultaneously increased from US\$0.59 in 2003 to US\$0.96 in 2008, profitability in many other corporate sectors weakened. As the GFC hit, corporate profitability fell rapidly, with corresponding falls in corporate tax liabilities as a share of GDP. Company tax (excluding CGT) fell from 4.7 per cent of GDP in 2007-08 to 3.8 per cent of GDP in 2009-10, a fall of around 20 per cent. Following the GFC,

company tax (excluding CGT) recovered strongly in 2011-12 to be around 4.4 per cent of GDP.

Despite this resurgence in growth, company tax (excluding CGT) receipts in 2012-13 as a share of GDP remained around 0.4 percentage points (9 per cent) below 2007-08 levels. Weaker commodity prices and the persistently high Australian dollar, which has put pressure on domestic prices, have hit company profits across most of the economy, including the resources sector.⁶ Company tax (excluding CGT) is forecast to be around 4.1 per cent of GDP in 2016-17. These forecasts are significantly higher (around 30 per cent) than the 1990s average of around 3.1 per cent of GDP. Investment in the mining sector and consequent large capital deductions are expected to have a prolonged dampening impact on receipts growth over the next few years.⁷

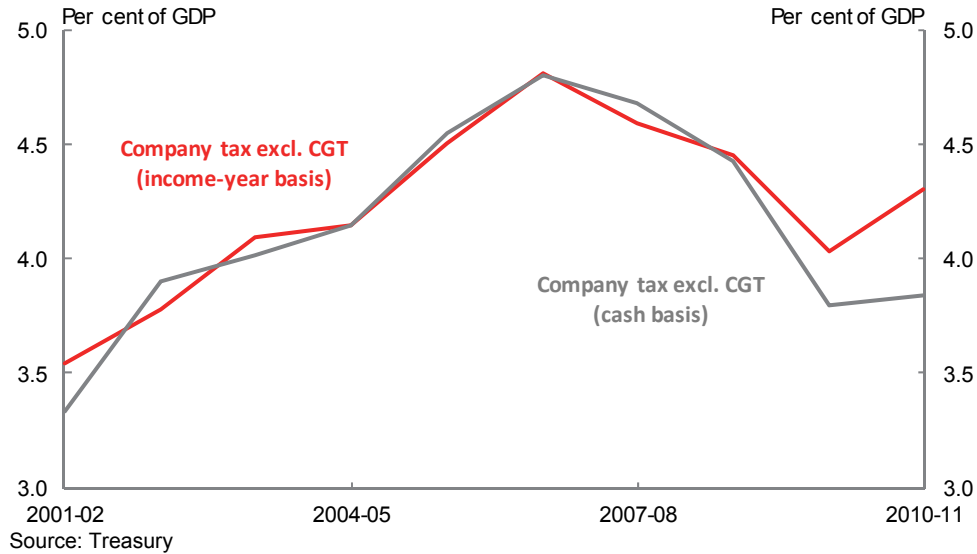
Trends in company tax can be better linked to the economy by abstracting from payment system effects and considering the tax on an income-year basis. This approach assigns the tax to the year in which the income was earned, rather than the 'cash' system where the tax is recorded in the year the liability was paid. The disadvantage of this approach is that income-year tax data comes with a significant lag and can be accurately determined only for 2010-11 and earlier.

Figure 7 shows company tax (excluding CGT) on an income-year and cash basis. The cash amounts generally 'lag' the income-year amounts as the payments are made some time after the income is earned. During the GFC the cash amounts fell further than the income-year amounts, as described above. The ratio of company tax to GDP increased steadily until its peak in 2006-07, before falling markedly, partly due to the GFC.

6 Further discussion is available in the 2013-14 Budget, Statement 5, pp. 5-9 and 5-10.

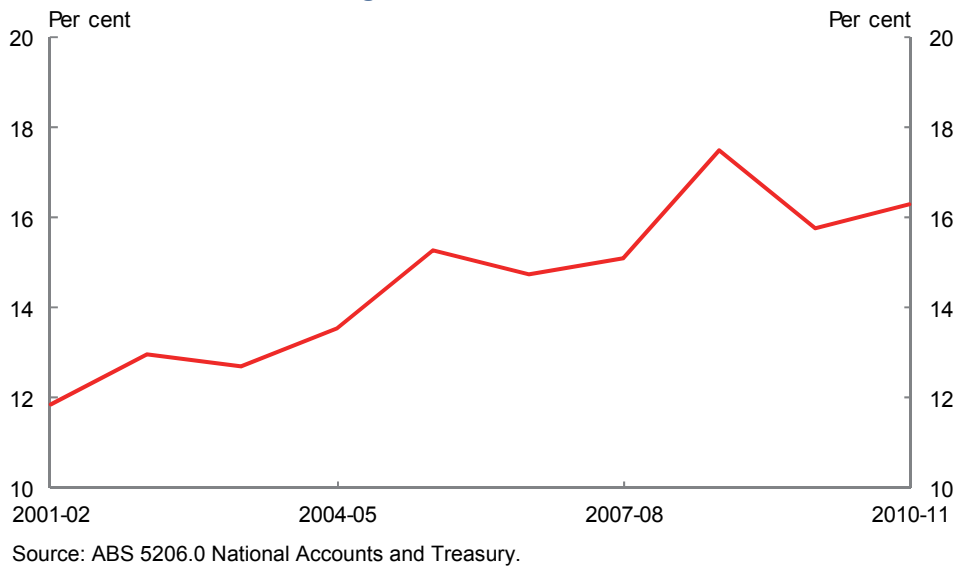
7 Further discussion is available in the 2012-13 Budget, Statement 5, Box 2: The mining sector and tax, pp. 5-9.

Figure 7: Company tax: income-year and cash basis



The main reasons for the rise and fall are threefold. Firstly, the company tax income base increased as a share of GDP over the 2000s, and remains close to historical highs, even post GFC. A useful measure of the company tax base is net operating surplus (NOS), a National Accounts derived amount equal to gross operating surplus (the National Accounts measure of corporate profits) less consumption of fixed capital (the National Accounts measure of economic depreciation). NOS-to-GDP can be seen in figure 8. Company tax broadly follows NOS in history. The increase in the ratio of NOS-to-GDP is consistent with growth in the profit share of GDP.

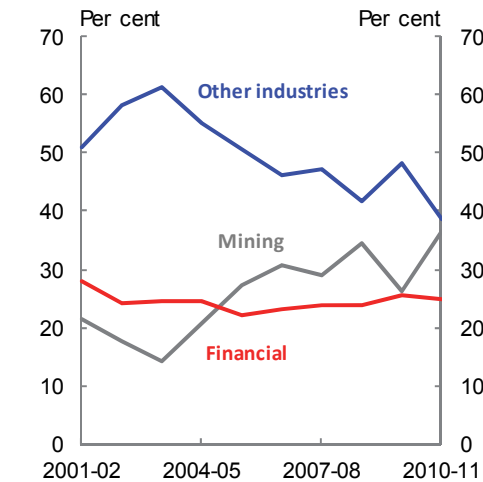
Figure 8: NOS-to-GDP



Secondly, the composition of the company tax income base has changed over time. Ten years ago the mining sector contributed less than 20 per cent to the company tax income base (see figure 9a). By 2010-11, the mining sector contributed around 37 per cent of the company tax income base. Over the same time, the financial sector has made a relatively consistent contribution to the company tax income base, while the share from everything else has fallen.

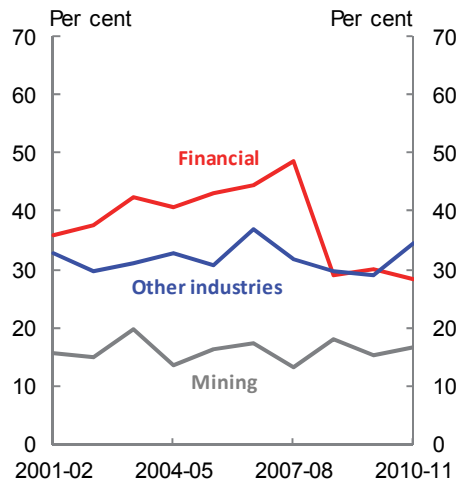
The changing shares are important for company tax collections because the mining and 'other' sectors each have stable but different rates of tax collections compared to their income bases. The rates are shown in figure 9b below. The different rates do not necessarily mean that the different sectors are not paying the appropriate amount of tax. Rather, the different rates reflect the extent that the mining sector utilises, for example, particular capital deductions or deductions for state royalty payments. Nevertheless, the different rates of tax mean that as mining's share of the economy increases, the resultant company tax will decrease for the same amount of GDP. If GDP in 2010-11 had the same shares of corporate income from 2001-02 to 2003-04, then company tax for the 2010-11 income-year would have been over \$5 billion higher, all else being equal.

Figure 9a: Industry shares of NOS



Source: Treasury.

Figure 9b: Company tax-to-NOS ratio



Given that mining's share of the economy is likely to continue to increase as the sector moves from the 'investment phase' to the 'production phase', this effect may continue into the future. Potential large increases in capital deductions following the investment phase may exacerbate the effect further.

The third reason for the rise and fall in the company tax-to-GOS ratio is the GFC. The GFC had a marked effect not only on CGT, as discussed below, but also on the financial sector more generally, where the ratio of tax to the company income base fell

from highs of around 45 per cent in the mid-2000s to around 28 per cent by 2010-11. The high ratio reflects the fact that a significant amount of corporate income in the financial sector is unrelated to GDP. For example, for companies whose core business is financial asset trading, these amounts are not recorded as capital gains but as normal operating revenue. These companies suffered heavy losses from the falls in global share markets starting from late 2007, which are reflected in the decline in the ratio of financial industry tax to economic income.⁸

Unlike the recent decline in corporate tax due to the changing composition of corporate income (see figure 6), this decline is likely to reverse somewhat over the next few years as losses are used up and asset prices grow. The ratio is not, however, expected to return to the heights of the pre-GFC period.

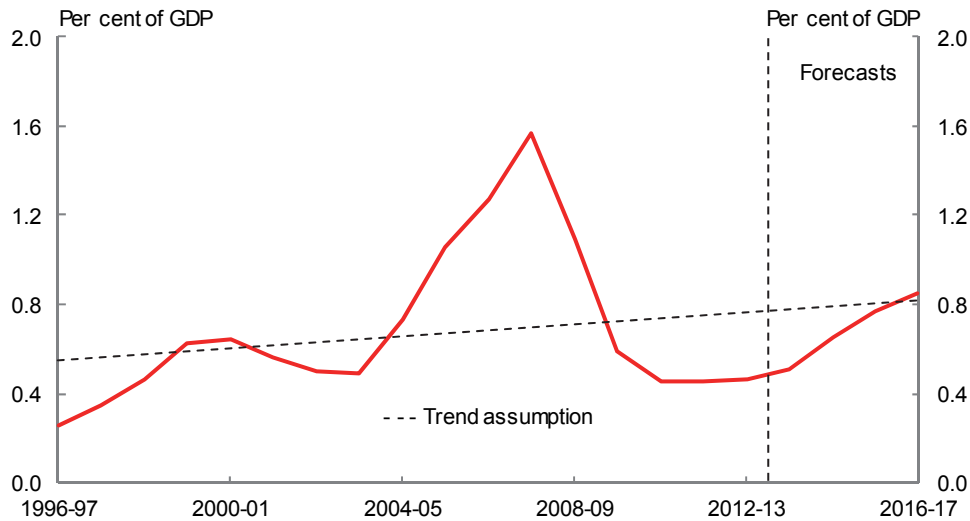
Capital gains tax

Capital gains tax (CGT) is paid by companies, individuals and superannuation funds on the realisation of assets held. CGT is not itself a separately identifiable tax, rather, a net capital gain, which can be realised by companies, individuals and superannuation funds, is a component of taxable income. CGT is calculated by applying the taxpayer's average tax rate to their net capital gains income.⁹

8 Another part of the explanation for the high ratio in the early 2000s is the difficulty in consistently assigning companies to industries, particularly in the case of generally non-financial companies having financing services as a part of their business. The difficulties are likely to be greatest during the period of tax consolidation, approximately between 2001 and 2005. With the 'other' sector being much larger than the finance sector, a re-assignment of tax to the 'other' sector, such that the rate increases by one percentage point, results in the rate for the finance sector decreasing by around five percentage points.

9 Net capital gains income is the amount after allowing for the use of current and prior year losses and the CGT discount (if applicable).

Figure 10: CGT-to-GDP



Source: PEFO 2013 and Treasury.

CGT peaked at 1.6 per cent of GDP in 2007-08, driven by strong asset price growth in the period before the GFC. The ASX 200 index had risen rapidly to around 6800 in October 2007. Had CGT remained at 1.6 per cent of GDP, CGT would be around \$17 billion higher in 2012-13 (or 1.1 per cent of GDP).

The trend line shown in figure 10 represents a hypothetical amount of CGT generated from constant growth in relevant asset prices. The mild upward trend is due to the ongoing maturing of the CGT system.¹⁰ The trend line provides a useful simple method to isolate the structural and cyclical components of the CGT collections base. Assuming the trend line is an underlying 'steady state', 2005-06 to 2007-08 represented a period of above trend CGT collections driven by surging equity prices. CGT dipped to 0.4 per cent of GDP in 2010-11 following the GFC. The ratio of CGT to GDP in 2012-13 is estimated to remain around 0.3 percentage points (40 per cent, or over \$5 billion) below underlying trend estimates.

This data illustrates how much tax receipts were temporarily inflated by between 2005-06 and 2007-08 due to the asset price boom. At the peak, CGT was contributing around 0.9 per cent of GDP to tax receipts above what would have been expected under long-run conditions in asset markets.

Over the forecast period, even as equity prices recover, other factors will continue to subdue CGT receipts. A significant stock of capital losses were generated during the GFC, which will continue to suppress CGT receipts growth over the near term. The stock of capital losses more than doubled from \$104 billion in 2007-08 (8.8 per cent of

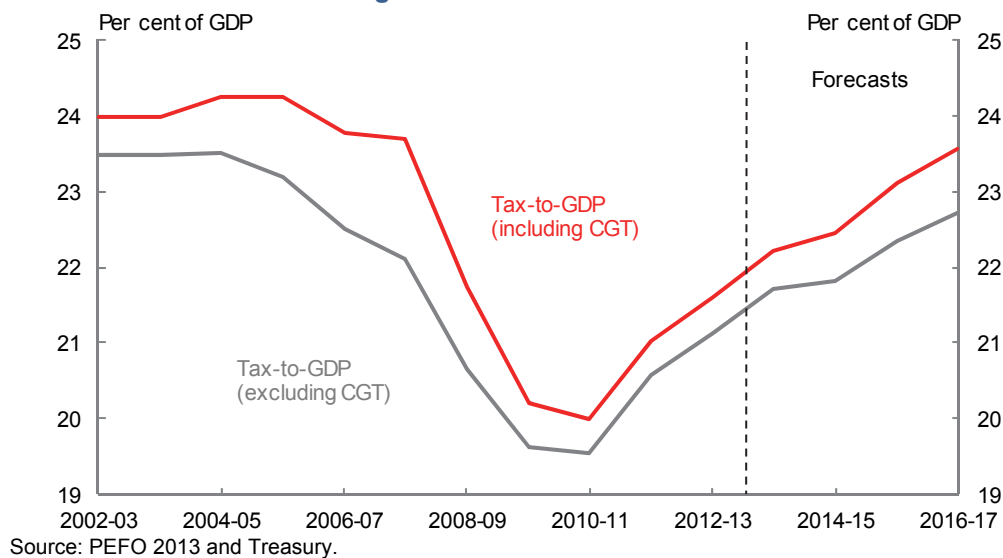
¹⁰ The maturing CGT system reflects, in particular, the diminishing proportion of pre-1985 assets (which are exempt from CGT).

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GDP) to \$260 billion in 2008-09 (20.8 per cent of GDP). The stock of losses was around double the average over the period 2000-01 to 2007-08.¹¹ Looking forward, despite these dampening factors CGT is expected to increase significantly as a share of GDP – although still small in relative magnitude – as the stock of losses is absorbed and the ASX 200 rebounds in the long run. However, the CGT ratio is not expected to reach the heights of 2007-08 and is unlikely to reach its underlying trend at least until 2016-17.

In addition to CGT, a significant amount of tax is paid on income earned by businesses engaged in financial asset investing on their own behalf, as their core business operations. Most of this income is not reported as capital gains for tax purposes but as ordinary income or expenses. This income is also likely to have fallen during the GFC. The tax associated with this income should be accounted for in determining the effect of the asset price movements on the tax-to-GDP ratio, but calculating the precise amount is difficult from available tax return data.¹²

Figure 11: Tax-to-GDP ratio



CGT receipts temporarily boosted the tax-to-GDP ratio from the early-2000s to 2007-08. Abstracting from CGT, the tax-to-GDP ratio fell steadily for six consecutive years between 2004-05 and 2010-11 (see figure 11). These falls were driven by both structural factors, as discussed above and below, and the onset of the GFC.

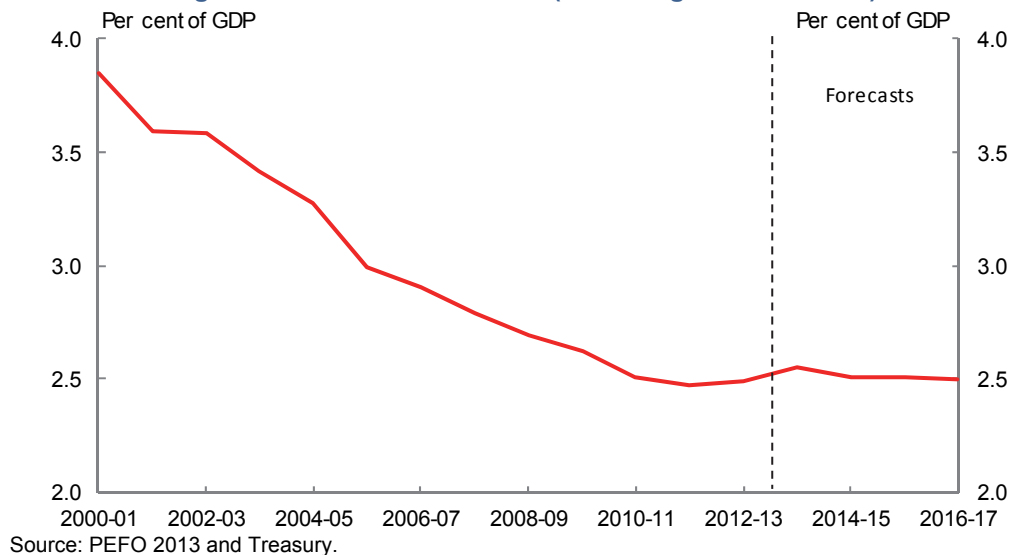
11 Further discussion is available in the 2011-12 Budget, Statement 5, Box 2: Capital Gains Tax, pp. 5-9.

12 ATO *Taxation Statistics* reports these businesses within the 'Financial Asset Investors' category. Profit reported in this category moves broadly with asset price fluctuations, other sources of income are also important. The component of profit (and tax) from asset price fluctuations is estimated from this data. The error margin on the calculation is likely to be significant.

Indirect tax

Indirect taxes are a form of tax that increases the price of goods (or services) so that consumers are essentially paying the tax by paying more for the products they consume. Indirect tax collections (excluding goods and services tax (GST) and the effect of the carbon pricing mechanism (CPM)) have fallen from 3.8 per cent of GDP in 2000-01 to 2.5 per cent of GDP in 2012-13, a fall of around 1.4 percentage points (around 35 per cent). Structural factors surrounding alcohol, fuel and tobacco excise as well as customs tariffs have contributed to this long run decline. We have not discussed the GST, as these receipts are collected by the Australian Government on behalf of state and territory governments.

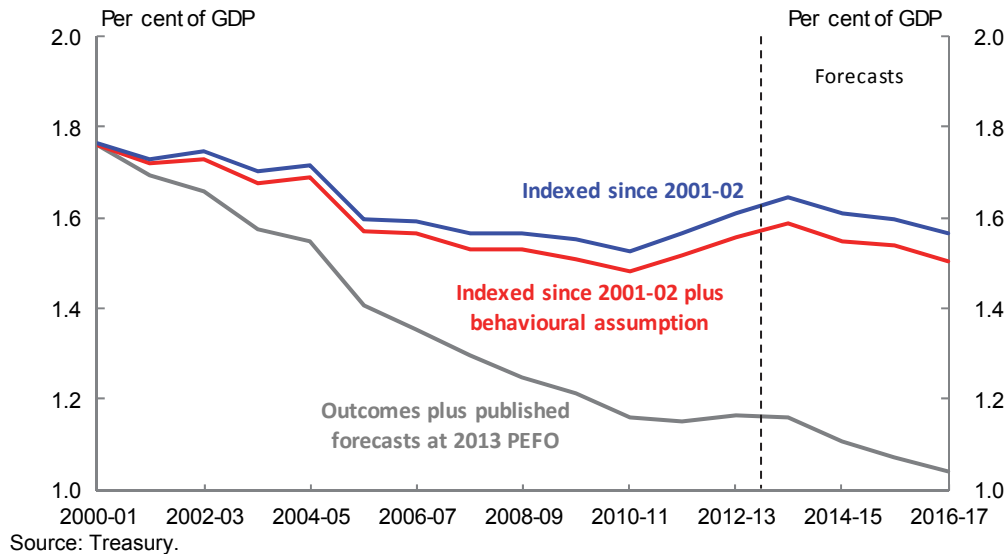
Figure 12: Indirect tax to GDP (excluding GST and CPM)



Fuel and petroleum products

A 2001 policy change resulted in the cessation of indexation of fuel excise rates. This change is the largest contributor to the structural deterioration of the indirect tax base. In real terms the level of fuel excise is reducing over time. Fuel excise was already falling as a proportion of nominal GDP in the lead up to 2001 (fuel excise receipts were growing slower than nominal GDP), but the end of indexation accelerated this decline. As illustrated in figure 13, fuel excise receipts fell from 1.8 per cent of GDP in 2000-01 to 1.2 per cent of GDP in 2012-13, a fall of around 0.6 percentage points (around 34 per cent).

Figure 13: Fuel excise to GDP



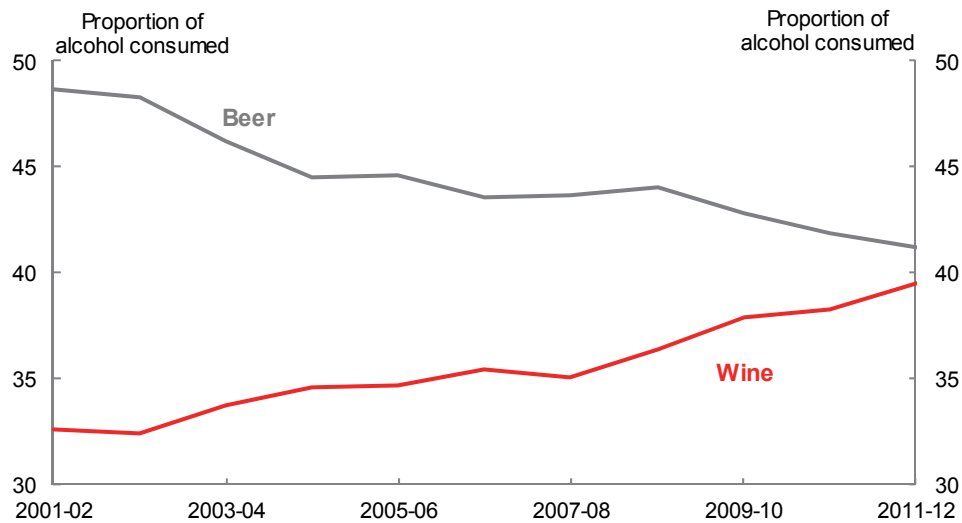
Looking forward, fuel excise receipts are estimated to fall from 1.2 per cent of GDP in 2013-14 to 1.0 per cent of GDP by 2016-17, a further fall of around 0.1 percentage points (around 10 per cent). Hypothetically, had fuel excise indexation continued and given fuel is inelastic; collections would be around \$6.7 billion higher in 2013-14.¹³ This estimate increases over the forecast horizon, as nominal GDP grows, rising to approximately \$8.4 billion for the 2016-17 financial year.

Alcohol

As different rates of tax apply to different types of alcohol, the amount of tax collected varies both with aggregate consumption and the pattern of consumption, particularly between beer and wine. Alcohol consumption per capita remained largely unchanged between 2001-02 and 2011-12, but there was a noticeable change in the type of alcohol consumed. Figure 14 shows a clear move away from beer consumption towards the consumption of wine.

¹³ A demand response to the hypothetical increase in retail prices has been simulated, using a long run price elasticity of -0.3 (see Breunig and Gisz 2008). Fuel excise is therefore inelastic. Indexation of fuel excise rates is assumed to apply continuously between 2001-02 and 2016-17.

The indexation simulation suggests fuel excise would rise as a proportion of GDP between 2010-11 and 2013-14. The rise is a function of excise rate indexation and strong growth in taxable diesel consumption, largely due to recent and projected strong growth in the mining sector. Given that many diesel consumers are eligible for fuel tax credits (an expense item for the Australian Government), this would partly offset this impact from a budgetary perspective.

Figure 14: Alcohol consumption per capita

Source: ABS, *Apparent Consumption of Alcohol, 2011-12* and Treasury.

The consumption of beer has fallen as a portion of total alcohol consumption per capita. Beer has an excise rate which is indexed bi-annually. Beer consumption was 48.7 per cent of alcohol consumed in 2001-02, falling to 41.2 per cent in 2011-12, a fall of around 7.5 percentage points (around 15 per cent). Wine consumption was 32.6 per cent of all alcohol consumed in 2001-02, rising to 39.5 per cent in 2011-12, a rise of around 6.9 percentage points (around 21 per cent).¹⁴ Wine is subject to the wine equalisation tax (WET), a tax on wholesale value as opposed to alcoholic content. The consumption of spirits has remained broadly unchanged at around 20 per cent of alcohol consumption.

The notable change in consumption has implications for Australian Government revenue. Taxes on alcohol have fallen from 0.43 per cent of GDP in 2006-07 to 0.39 per cent of GDP in 2012-13, a fall of around 0.04 percentage points (around 9 per cent).¹⁵ Alcohol collections are growing slower than nominal GDP growth and consequently have become an incrementally smaller component of GDP. Hypothetically had alcohol receipts remained at 2006-07 levels as share of the economy (0.43 per cent of GDP), alcohol collections would be around \$580 million higher in 2012-13.¹⁶

¹⁴ Alcohol consumption estimates derived from ABS, *Apparent Consumption of Alcohol, 2011-12*.

¹⁵ Includes alcohol related tax collections from the Australian Taxation Office as well as the Australian Customs and Border Protection Service.

¹⁶ A comprehensive discussion of alcohol taxation policy can be found in *Australia's future tax system* (AFTS) pp. 431-443.

Tobacco

Consistent with a long run decline in smoking rates, tobacco receipts have fallen as a proportion of GDP. Australian Taxation Office tobacco collections have fallen from 0.50 per cent of GDP in 2006-07 to 0.31 per cent of GDP in 2012-13, a fall of around 0.19 percentage points (around 39 per cent), despite a 2010-11 Budget decision in 2010 to increase excise on tobacco products by 25 per cent.¹⁷

Customs duties

Successive Australian Governments have reduced customs tariffs, which have also contributed to a decline in the indirect tax base.¹⁸ More recently tariff collections have fallen from 0.26 per cent of GDP in 2006-07 to 0.18 per cent of GDP in 2012-13, a fall of around 0.08 percentage points (around 32 per cent). From 1 January 2015, the tariff rate on clothing and finished textiles will be reduced from 10 per cent to 5 per cent, further reducing customs receipts as a proportion of GDP. Despite tariffs declining as a share of the Australian Government revenue base, lower customs duties are expected to have positive economic benefits more broadly.

Conclusion

The rise and fall of the tax-to-GDP ratio during the 2000s was due to a combination of cyclical and structural factors.

There has been a significant change in the composition of taxes as a share of GDP, relative to 2001-02 levels, illustrated in figure 15. Receipts from income tax withholding (ITW) as a share of the economy fell significantly between 2004-05 and 2010-11, largely due to a series of personal income tax rate cuts beyond returning fiscal drag, ITW receipts are not expected to approach the levels of the early 2000s until 2014-15. The recovery in the tax-to-GDP ratio is largely driven by ITW receipts increasing as a share of GDP. Company tax (excluding CGT) and CGT receipts peaked during the mid-2000s, they are both expected to stabilise as a share of GDP over the forward estimates, but will remain below the levels of the mid-2000s. Indirect taxes have fallen significantly as a share of GDP, as the non-indexation of fuel excise has resulted in fuel excise receipts growing slower than nominal GDP.

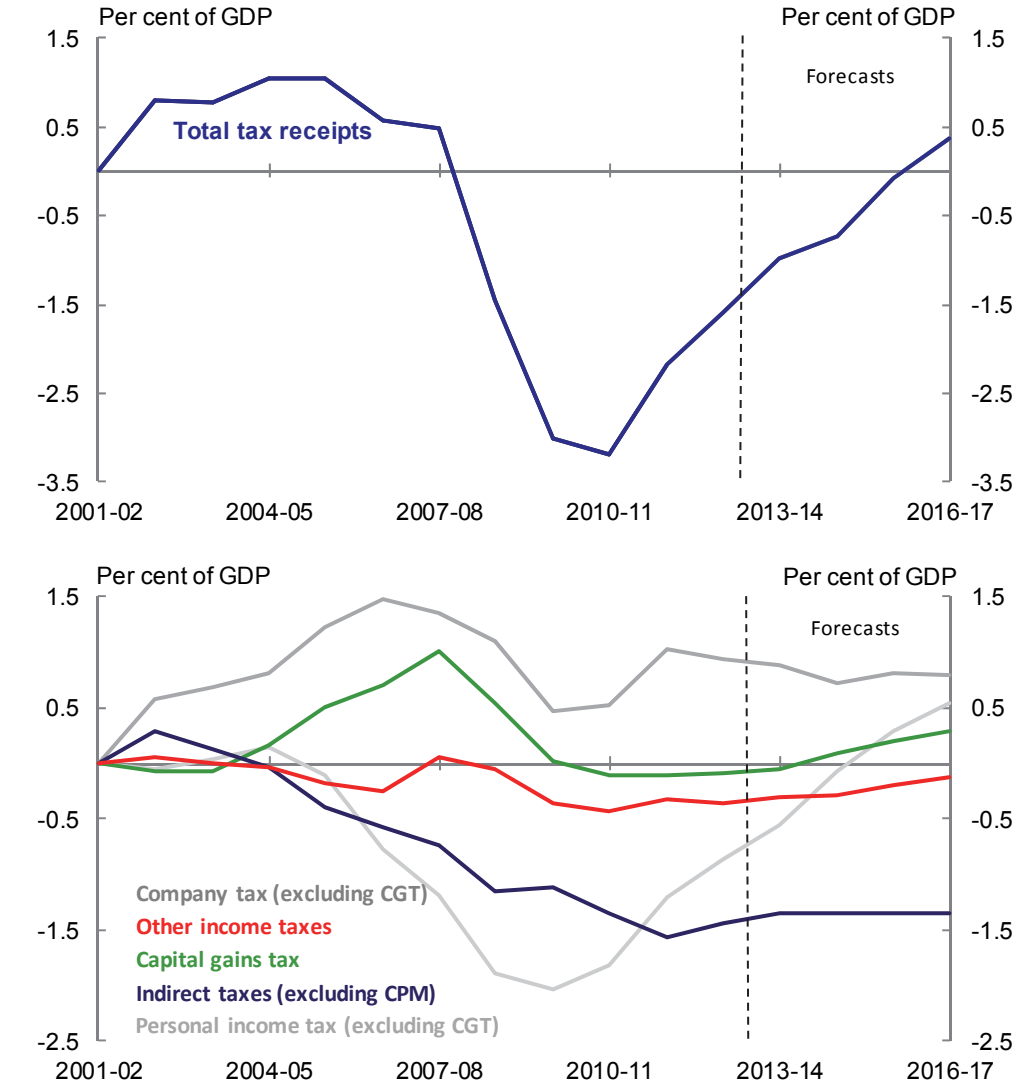
This analysis has shown that the peak in the tax-to-GDP ratio was underpinned by temporary, higher incomes from the high terms of trade and share market prices. The decline in the tax-to-GDP ratio since 2007-08 is partly due to an unwinding of those factors, and partly due to the changing composition of the economy and policy

17 Receipts from tobacco excise are collected by the ATO and the Australian Customs and Border Protection Service. The amounts cannot be disclosed due to commercial-in-confidence issues.

18 *Australia's future tax system* (AFTS) pp. 477 provides a figure illustrating reductions in tariff rates in Australia since 1990.

decisions in personal income tax and indirect tax (with indirect tax remaining on a long run structural decline).

Figure 15: Change in tax-to-GDP ratio composition
(relative to 2001-02 levels)



Source: PEFO 2013 and Treasury.

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Income Inequality in Australia

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¹ The authors are from Social Policy Division, the Australian Treasury. This article has benefited from comments and input from Amanda Cattermole, Darren Kennedy, Anthony King, Susie Kluth, Cecilia Karmel and Mark Bott.

Introduction

There is a keen national and international interest in the topic of income inequality. The release by the Organisation for Economic Co-operation and Development (OECD) of their reports *Growing Unequal* (OECD 2008) in October 2008 and *Divided We Stand* (OECD 2011) in December 2011 sparked international commentary and led the World Economic Forum to declare that inequality was a top economic risk.

Over the past twenty years, Australia has experienced a period of sustained economic growth. This has resulted in an increase in earnings from both labour and capital, which has benefited households across the income distribution (Greenville et al. 2013) and has led Australia to have the second highest 'average' income growth between the mid-1990s and the late 2000s amongst OECD nations. During this period, Australians in the bottom 10 per cent of the income distribution have experienced the fifth highest income growth in the OECD, at 3 per cent per annum.

It is this strong growth across the income distribution that sets Australia apart from other OECD countries.

Nevertheless, while labour income inequality has been on the decline, overall income inequality in Australia has been rising since the mid-1990s. Measures that focus on the very top income earners show a strong gain in their share of national income, as is the case in most OECD countries.

Despite all the research by the OECD and many others, the policy implications of income inequality remain unclear. For example, a more equal income distribution does not necessarily lead to a higher standard of living for any group in society, and rising or falling income inequality by itself cannot be categorically labelled as bad or good without an understanding of the underlying causes. This is particularly pertinent in the Australian context, given that an upward trend in income inequality since the mid-1990s has also coincided with a period of sustained economic growth.

We do know that there are complex trade-offs between equity and efficiency objectives in policy settings, and that a singular focus on equity without regard to efficiency can be counterproductive for both. In this article we take a broad perspective by looking at aggregate trends in income inequality, rather than trying to disaggregate the effects of individual policy changes.

In addition, income, while valued because of its ability to support consumption choices, is not the only thing that matters when considering inequality. Equality of access to health, education, housing and community safety – just to name a few – are also important, especially at the lower end of the income distribution. This makes

measures of poverty in Australia also relevant when considering the implications of changing trends in income inequality.

This paper examines income inequality in Australia, how we compare with other countries and what might be driving our results. In doing so, the paper aims to contribute to a better understanding of income inequality by drawing on a variety of measures.

We then ask the questions: ‘How much should we care about income inequality?’ especially in circumstance such as Australia’s where most people are doing better, and ‘what are the implications for policy makers?’

Measuring income inequality

There are a number of different definitions of income, different sources of income data, and several different ways in which income inequality can be measured.

It is important to be aware of these differences, particularly the advantages and disadvantages of the different data sets and measures, as, by themselves, individual measures can be misleading. A clearer picture of income inequality can only be obtained by using a broad range of measures.

Income data by household is collected around every two years by the Australian Bureau of Statistics (ABS) Survey of Income and Housing, and adjusted or equivalised by the ABS to take into account the fact that larger households need a higher income to achieve the same standard of living as smaller households.

The question of what should be included in a definition of income is a challenging one, as there are many ‘non-cash’ benefits provided by governments – such as public health and education – which are also important for comparisons of household consumption and wellbeing.

Unless otherwise specified all the charts and analysis in this paper are based on ‘equivalised household disposable income’, since this is the definition of income that most closely represents the income in people’s pockets that is available to support their consumption choices. Equivalised household disposable income is made up of market income plus cash transfers provided from the government, less direct taxes.

These income surveys are used to construct a range of measures of income inequality.

The most common measure of income inequality in the literature is the Gini coefficient which is generally used to examine changes in income inequality over time and

Income Inequality in Australia

between countries. The Gini coefficient has a value between zero and one, where zero is perfect equality and one is perfect inequality. The Gini coefficient is particularly sensitive to changes in the definition of income and to changes at the level of median income as this is where most of the people in the distribution are. However, it does not tell us about changes in the distribution of inequality between income groups, such as the top and the bottom.

Another common measure is to compare the income of households at particular positions in the income distribution. This can be done by using income ratios, such as the P80/P20 which compares the income received by those at the 80th income percentile (a person who is at the top 20 per cent of the income distribution) with those at the 20th income percentile (a person who is at the bottom 20 per cent of the income distribution). These point-to-point estimates enable us to compare the distribution of income at different points in the distribution (rather than across the whole distribution like the Gini coefficient).

It is also possible to calculate the share of national income that goes to high, middle and low income earners, or alternatively, to compare the level and growth in income for particular income deciles, such as the top and bottom 10 per cent.

Incorporating analysis on income levels at different points in the distribution is vital to understanding inequality since a reduction in the Gini coefficient could result from a fall in incomes at the top, without a corresponding rise in incomes at the bottom (that is people becoming more equally poor). By analysing income levels, we can get a better understanding of the possible explanations for movements in the Gini coefficient. Additionally, while relative incomes do seem to matter for wellbeing, we should not discount that absolute income provides the basis for a particular standard of living (see for example Stiglitz 2012).

While the use of income surveys to estimate measures of income inequality is widespread, they have limitations. For example, the surveys on which they are based tend not to represent well those people at the top and bottom of the income distribution, as these people are less inclined to participate. In addition, like all surveys, the results are based on a sample of the population at a particular point in time. Changes in income definitions can also make comparing results over time difficult. In particular, the ABS's decision to include some cash and non-cash benefits provided to employees (such as termination payments, irregular overtime and bonuses) from 2003-04, has had the effect of increasing measured income inequality over this period.

In addition to income survey data, taxation data can also be used to measure income inequality. Taxation data tends to be used to calculate measures of income inequality at the top of the distribution. This data is more comprehensive and provides a longer

time series than survey data for those individuals who submit tax returns; however, its key disadvantage is that it does not include those at the lower end of the income scale who do not pay income tax. Tax data is also subject to changes in the definition of taxable income from time to time.

As mentioned above, measures of income inequality do not necessarily illuminate changes in absolute income that is required for a minimum standard of living. This is especially true at the bottom end of the income distribution where we may be concerned about poverty.

This paper does not examine measures of poverty and entrenched disadvantage, which while related to aspects of income inequality, is a separate and substantial topic in its own right. A discussion of how poverty and other concepts of disadvantage are measured and a summary of results for Australia are contained in the recent Productivity Commission staff working paper entitled *Deep and Persistent Disadvantage in Australia* (McLachlan, Gilfillan and Gordon, 2013).

What does the data show for Australia?

In this section we explore a range of measures of income inequality to present as comprehensive a picture as possible of trends in income inequality in Australia.

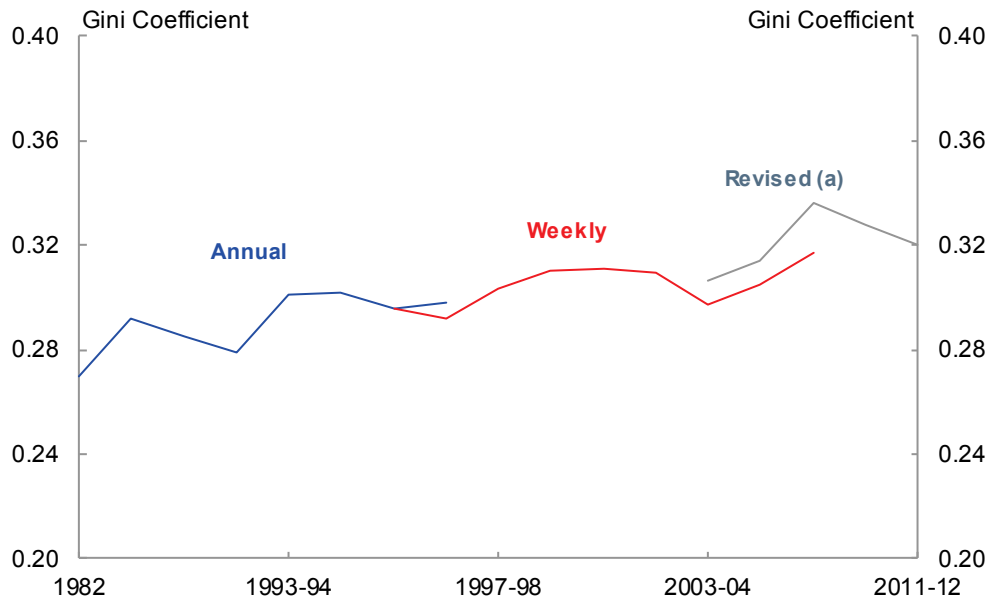
Chart 1 shows the Australian Gini coefficient from 1982 until 2011-12. As noted earlier, the income definition used is household disposable income, sourced from the ABS Survey of Income and Housing, and equalised for family size.

The blue line shows the old ABS annual income measure, while the red and grey lines use a weekly income measure (with the grey line using a broader income definition which includes the changes since 2003-04 discussed earlier).

Although the three lines are not directly comparable because of changes in the income definition, and noting that there have been both upward and downward movements, over the long term we can see a slight positive trend in the Gini coefficient. This suggests that the income distribution in Australia has become more unequal over the last 30 years.

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Chart 1: Gini Coefficient in Australia from 1982 until 2011-12



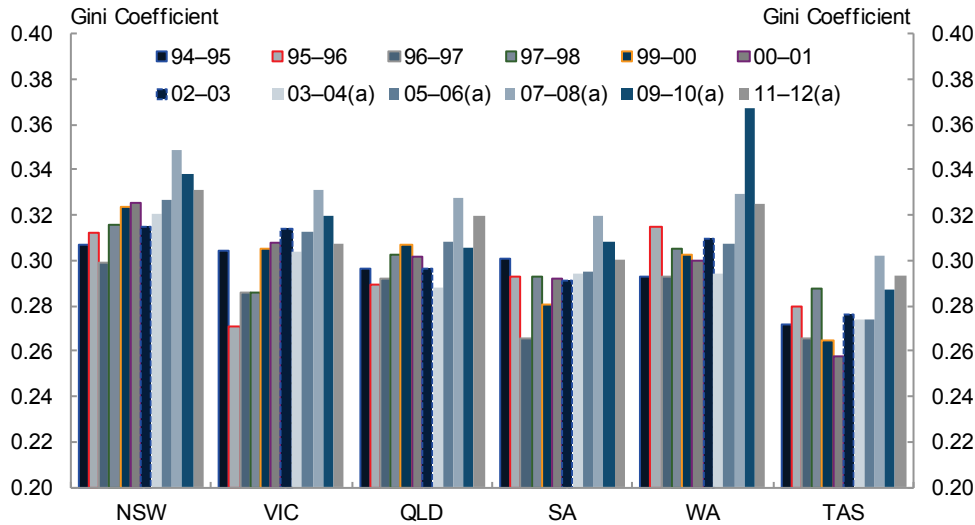
(a) The Revised trend uses a different definition for income and is therefore not directly comparable.

Source: Jonson and Wilkins (2006), Whiteford (2013) and ABS (2013).

Note: Horizontal axis corresponds to survey release dates. The interval between surveys varies.

Chart 2 sets out the Gini coefficients for each state in Australia. It shows that the Gini coefficient trends for all the states except Western Australia follow the same pattern as the overall measure. Western Australia has continued to experience rising income inequality since 2007-08. While further work is needed to better understand this trend, it is likely that the increase in income inequality in Western Australia is due to the impact of the mining boom in that state.

Chart 2: Gini Coefficient for the States



(a) The revised trend uses a different definition for income and is therefore not directly comparable. Source: Australian Bureau of Statistics (ABS cat no. 6523.0). Note: Horizontal axis corresponds to survey release dates. The interval between surveys varies.

Chart 3 contains a comparison of income for households using three ratios: the P90/P10 which is the ratio of income at the top (90th percentile) and bottom (10th percentile), the P80/P20 which is the ratio of income at the 80th and 20th percentiles, and the P80/P50 which is the ratio of income at the 80th and 50th percentiles.

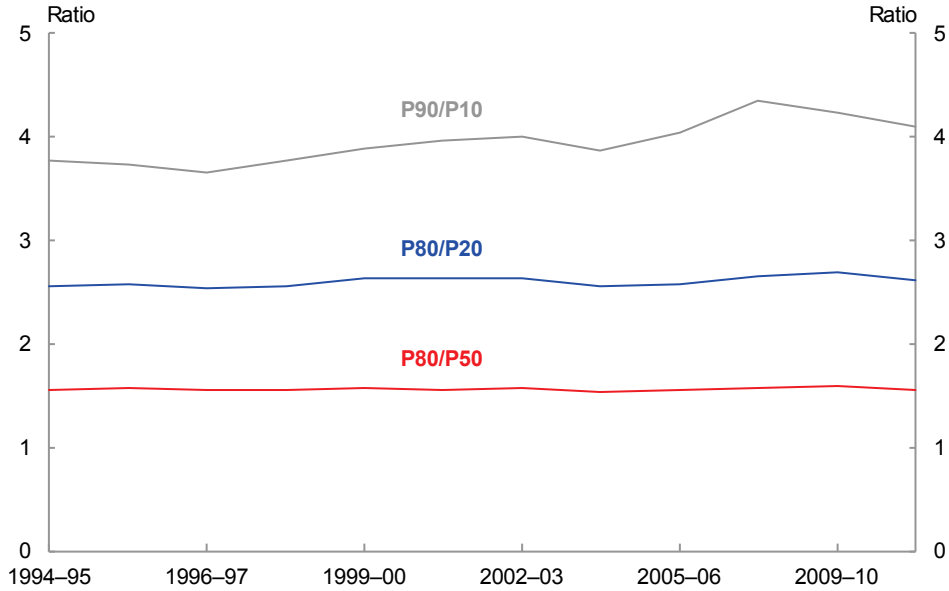
The chart shows that in 2011-12, a household at the 80th income percentile had around 2.61 times the weekly household disposable income of a household at the 20th percentile and around 1.56 times the income of a household at the 50th percentile. A household at the 90th percentile had around 4.1 times the weekly household disposable income of a household at the 10th percentile.

Overall, between 1994-95 and 2011-12 the P80/P20 and the P80/P50 ratios have been fairly steady, with periods of small variation.

The P90/P10 line shows a steeper upwards trend than the other two data lines, with a pronounced drop occurring from 2007-08 to 2011-12. These findings are similar to the trend in the Gini coefficient, and are probably due to rises in investment incomes over this period which accrued mostly to those at the top of the income distribution. This correlation continues with the onset of the global financial crisis (GFC) and the subsequent fall in asset prices, particularly on the stock market, which shows up as a reduction in the P90/P10 ratio.

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Chart 3: P90/P10, P80/P50 and P80/P20 ratios in Australia from 1994-95 to 2011-12

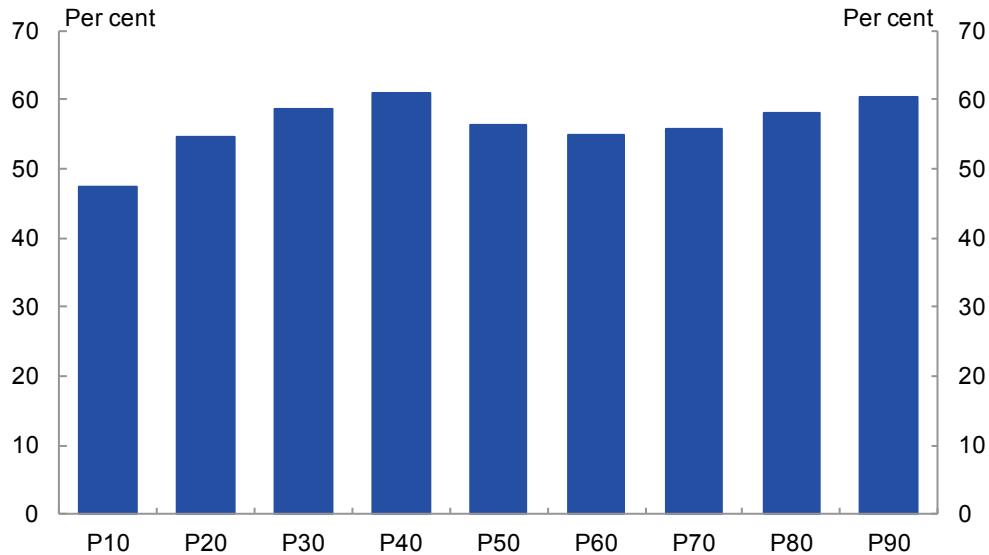


Source: Australian Bureau of Statistics (ABS cat no. 6523.0).

Note: Horizontal axis corresponds to survey release dates. The interval between surveys varies.

In order to put the changes in income inequality that have occurred in Australia in context, it is important to have an understanding of how real incomes have changed over the same period.

Chart 4: Real income growth in Australia at certain percentiles from 1994-95 to 2011-12



Source: Australian Bureau of Statistics (ABS cat no. 6523.0).

Chart 4 shows that from 1994-95 until 2011-12, there has been real household income growth across the income distribution, with the biggest gains going to those at the 40th, 80th and 90th percentiles. Greenville et al. (2013) conclude that the increase at the lower end is mainly due to the 'growth in labour force earnings, arising from employment growth, more hours worked (by part-time workers) and increased hourly wages', while those at the top end have benefited most from large gains in investment returns.

A key driver of real household disposable income growth in recent years has been the income effect arising from our terms of trade. Strong world demand for Australia's mineral exports has resulted in increased profits and real wages in the resources and related sectors, and increased revenues for governments, with flow-on effects across the economy. This has contributed to higher real disposable incomes overall than would otherwise have been the case.

We can further extend our analysis by looking at changes in income inequality by household type.

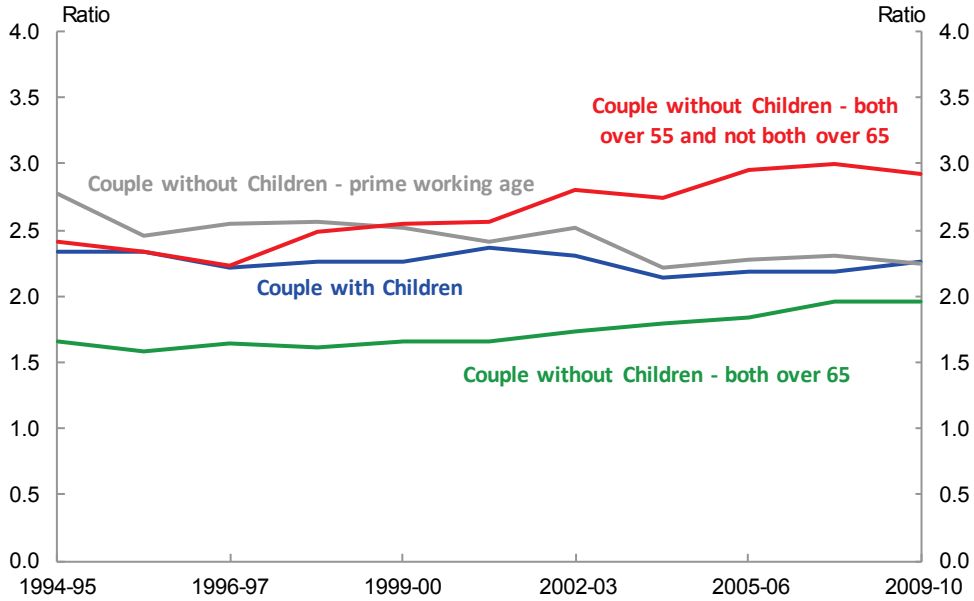
Charts 5 and 6 contains the P80/P20 ratio for a number of different household types (Chart 5 contains households with couples while chart 6 contains households with singles).

We can see a clear increase in the ratio for those households in the 55 to 64 year old age group. There are a number of possible factors which influence these findings. These

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include: increases in the rate of return on investments; changes in the tax-transfer system which have benefited high income earners; increased access to the labour market, especially for women; changes in education patterns; and people having children later.

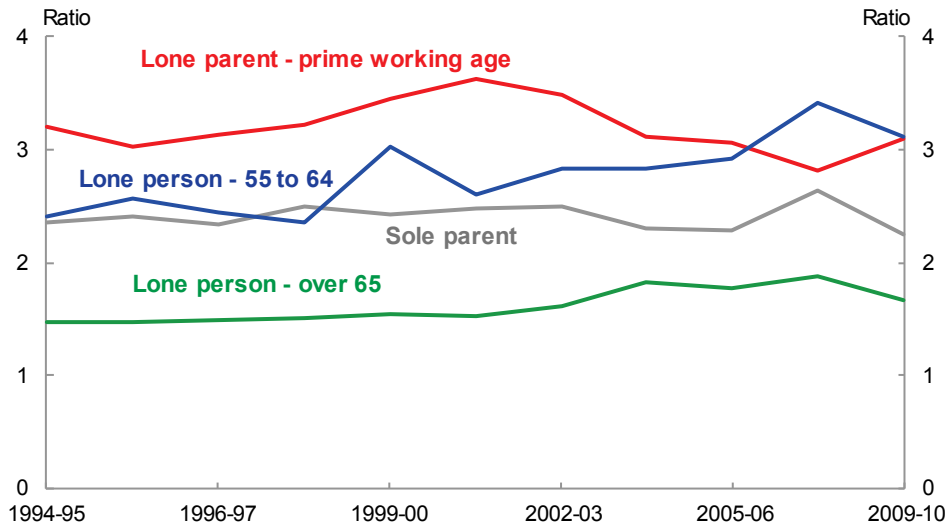
Chart 5: P80/P20 for different couple household types in Australia from 1994-95 to 2009-10



Source: Australian Bureau of Statistics (ABS cat no. 6523.0) and Treasury.

Note: Horizontal axis corresponds to survey release dates. The interval between surveys varies.

Chart 6: P80/P20 for different single household types in Australia from 1994-95 to 2009-10



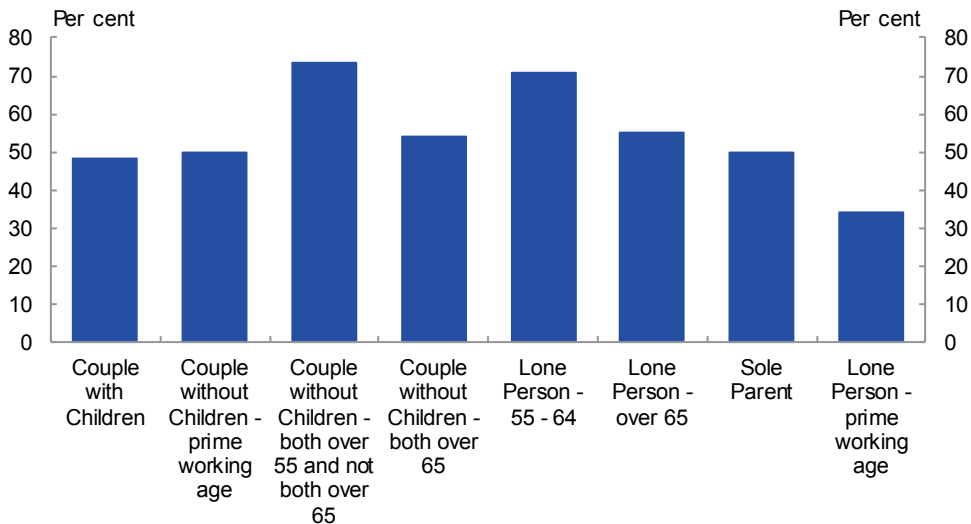
Source: Australian Bureau of Statistics (ABS cat no. 6523.0) and Treasury.

Note: Horizontal axis corresponds to survey release dates. The interval between surveys varies.

Chart 7 brings together changes in real income growth and household specific outcomes by breaking down changes in real disposable household income by household type for the period from 1994-95 to 2009-10.

While all of the household categories have experienced significant real income growth, the biggest gains have gone to singles between the age of 55 and 64 and couples without children, where both members are 55 or above and at least one member is below 65. However, these age group categories also experienced the biggest increases in income inequality (charts 5 and 6). As outlined above, this period of strong income growth for those between the ages of 55 and 64 coincides with a period of strong growth in investment income and increased labour force participation, suggesting that people in this age bracket have particularly benefited from these trends.

Chart 7: Real growth in disposable household income in Australia by household type from 1994-95 to 2009-10



Source: Australian Bureau of Statistics (ABS cat no. 6523.0) and Treasury.

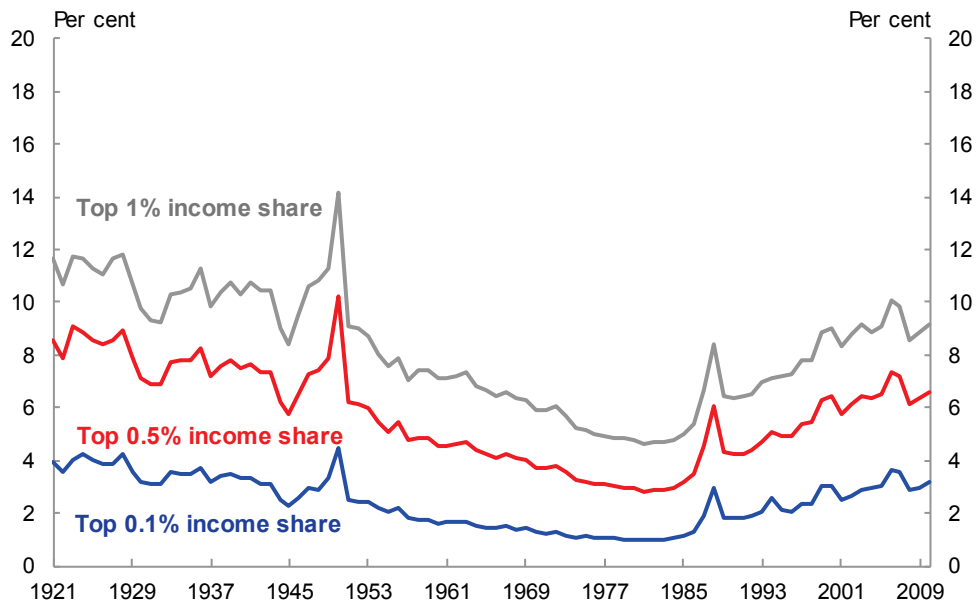
In addition to looking at relative incomes at different points on the income distribution, we can also examine the share of income which goes to individuals at different levels of the income spectrum.

Chart 8, which is reproduced from Atkinson and Leigh (2006), shows changes in the share of income received by the top 1, 0.5 and 0.1 per cent of income earners in Australia from 1921 until 2010. This chart, which is constructed from taxation data, shows a gradual reduction in the share of income held by the top 1 per cent from the 1920s until the 1980s at which point it starts to increase again. The authors suggest that the change in the trend may be caused by a number of factors: higher executive pay, caused by the internationalisation of the chief executive market; the reduction in top

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income tax rates in the 1980s and 1990s; skill-biased technological change; and changes in societal norms relating to inequality.

Chart 8: Income share of top 1, 0.5 and 0.1 per cent in Australia from 1921-2010



Source: Atkinson and Leigh (2006).

Note: Data has been updated from <http://www.andrewleigh.com/blog/?cat=29>.

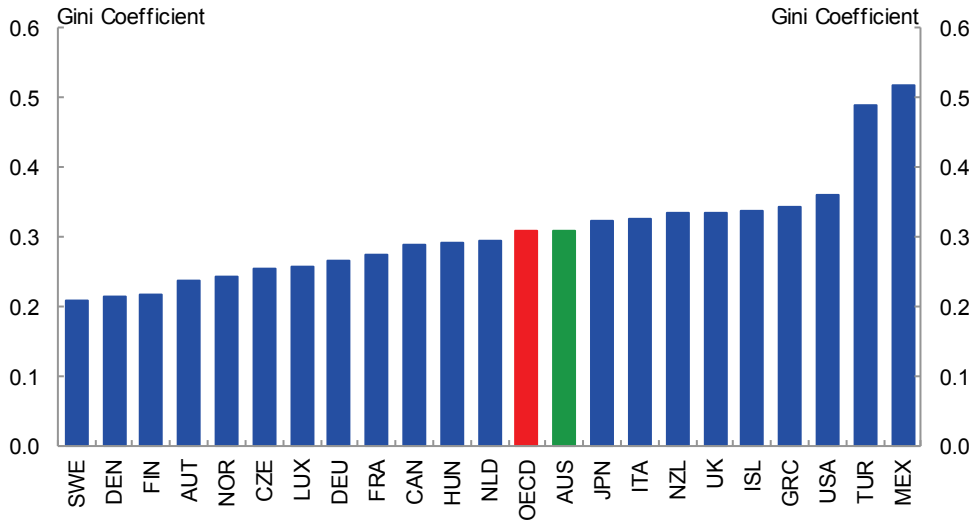
Putting Australian trends into an International perspective

In this section we consider how changes in the distribution and growth of income in Australia compare with other OECD nations.

In the next two charts we can see that income inequality in Australia looks to have increased relative to the OECD average, between the mid-1990s and today.

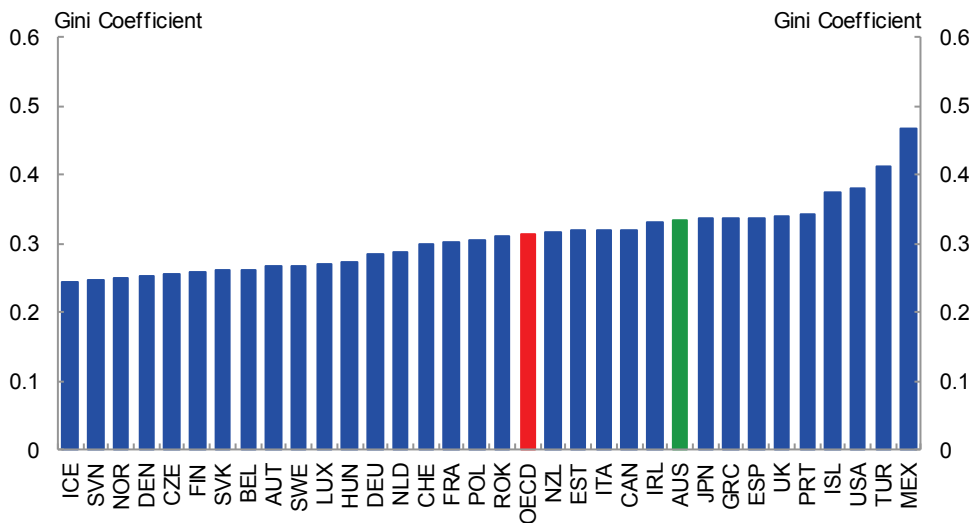
Our Gini coefficient (at 0.309) was the same as the average in the OECD in 1995 (chart 9), but at 0.334, it was above the OECD average in 2010 (Chart 10). This increase is larger than the average increase across the OECD from 0.309 to 0.314. However, some of this increase is due to the change in the ABS definition of income that was discussed earlier.

Chart 9: Gini coefficient for OECD nations at around 1995



Note: Gini coefficient is from 1994 for Greece, the United Kingdom, Turkey and Mexico and from 1996 for Denmark, Austria, the Czech Republic, Luxembourg and France.
Source: OECD.stat Database.

Chart 10: Gini coefficient for OECD nations at around 2010



Note: Gini coefficient is from 2009 for Hungary, Ireland, Japan, New Zealand, Switzerland and Turkey and from 2011 for South Korea and Chile.
Source: OECD.stat Database.

As stated earlier, it is important to have an understanding of the level as well as the distribution of income, in order to understand changes in income inequality.

Chart 11 plots average annual disposable household income growth against the difference in income growth between the top and bottom income deciles. This chart

Income Inequality in Australia

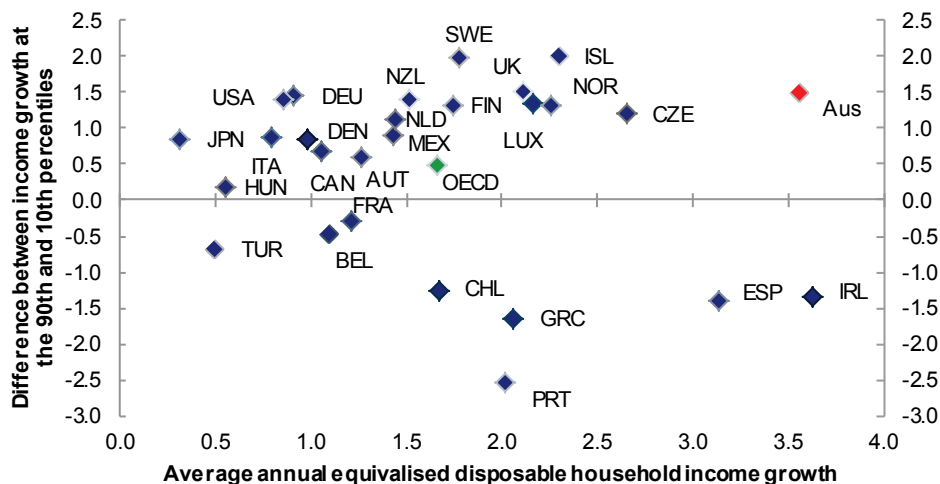
suggests that there is no correlation between the magnitude of income growth and how it is distributed across the income spectrum.

A limitation of this chart is that the data for some countries does not cover the entire time period. Additionally, this chart involves a number of point-to-point estimates which need to be treated with caution. Nevertheless, based on the most consistent data available we see that over this period, Australia has experienced considerably higher average annual income growth at 3.5 per cent (from 1995 to the late 2000s), compared to the OECD average of 1.7 per cent (from mid-1980s until late 2000s).

The only other countries which experienced similar levels of average income growth over the period are Ireland and Spain.

While Australia experienced relatively high disparities in growth between the bottom and top deciles (at 1.5 per cent), we also had the fifth highest growth for the bottom decile at 3 per cent per annum from 1995 until the late 2000s. Again, Australia was only outperformed on this measure by countries which started from a lower base and whose economies are now much weaker, namely Portugal, Ireland, Greece and Spain. Since then, these countries have all experienced deep recessions while Australia's economy has continued to grow.

Chart 11: Average annual income growth for OECD nations plotted against the difference between income growth at the 90th and 10th percentiles from 1985 to 2008

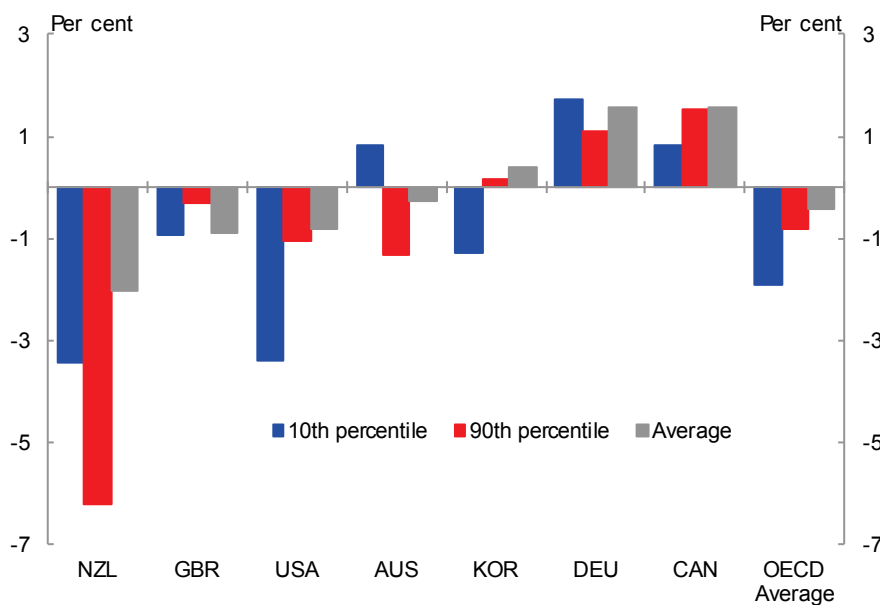


Note: Average annual changes are calculated over the period from 1985 to 2008, with a number of exceptions: 1983 was the earliest year for Austria, Belgium, and Sweden; 1984 for France, Italy, Mexico, Turkey and the United States; 1986 for Finland, Luxembourg, and Norway; 1987 for Ireland; 1988 for Greece; 1991 for Hungary; 1992 for the Czech Republic; 1995 for Australia and Portugal and 1996 for Chile. The latest year for Chile was 2009; for Denmark, Hungary, and Turkey it was 2007; and for Japan 2006. Changes exclude the years 2000 to 2004 for Austria, Belgium, Ireland, Portugal and Spain for which surveys were not comparable.

Source: OECD.stat Database and Greenville et al. (2013).

Chart 12 shows how income growth has fared in selected OECD nations between the onset of the GFC in 2007 and 2010. Over this period, Australia is one of only two countries which have seen income growth at the tenth percentile (approximately 0.8 per cent per annum) outperform income growth at the ninetieth percentile (approximately minus 1.3 per cent per annum). While these are only preliminary numbers and are dependent on when exactly the data were collected, it does appear that Australian households towards the bottom end of the income distribution fared better than equivalent households in other OECD countries (average income growth in the OECD at the 10th percentile was approximately minus 1.9 per cent per annum) (OECD 2013).

Chart 12: OECD household income growth between 2007 and 2010 for select OECD countries



Note: Changes are calculated from 2008 for Australia, New Zealand, Germany and the United States.
Source: OECD stat Database.

What might be driving the Australian results?

As we have discussed in this paper, Australia has experienced a sustained period of solid real income growth across the distribution, along with a modest increase in income inequality. A working paper by the Productivity Commission on *Trends in the Distribution of Income in Australia* looked at the various components of income and how changes in these have affected the Gini coefficient up until 2009-10 (Greenville et al 2013).

Labour earnings are the largest component of income for most Australians, and therefore the most important driver of income inequality. Unlike equalised final

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household income, labour earnings inequality has been falling in Australia at a household level since 1998-99.

This is because greater access to and participation in the workforce at the low end of the income distribution has more than offset the disproportionate increase in wages at the top (Greenville et al. 2013).

When Greenville et al. include capital and other income we see that market household income inequality (which includes labour, capital and other income) increased from 2003-04. The authors propose that the skewed distribution in earnings arising from capital investment more than offsets the reduction in inequality from labour income (Greenville et al. 2013). This trend of increasing labour and capital earnings over this time is due to the strong economic growth that Australia has experienced over the last two decades.

When the authors include direct government payments to give gross household income, the market income Gini coefficient for 2009-10 falls from 0.522 to a gross income Gini of 0.426 (Greenville et al. 2013). This is because direct government payments tend to be targeted to low income earners (Whiteford 2013). However, the extent to which direct government payments have reduced the Gini coefficient has fallen from 0.122 in 1993-94 to 0.096 in 2009-10. This is most likely due to the increase in employment rather than the effectiveness or targeting of the payments themselves (Greenville et al. 2013).

The inclusion of direct taxes (to give disposable household income) and the inclusion of government services and indirect taxes (final household income) reduce income inequality further. This is because individuals who earn more on average pay more taxes and because government benefits and services are of higher importance to people at the lower end of the income distribution. Overall, these resulted in a reduction in the Gini coefficient for 2009-10 from 0.426 for gross income, to 0.389 for disposable income and to 0.341 for final income (Greenville et al. 2013).

The extent to which direct taxes reduce inequality has lessened, with the difference between gross and disposable income falling from 0.047 to 0.037 from 1998-99 to 2009-10. This is due to the average share of taxes paid on income falling over the period, with the greatest reductions going to those towards the top end of the distribution (Whiteford 2013).

Lastly, Greenville et al. take into account the effect of household size and composition. This results in the Gini coefficient for 2009-10 decreasing further from 0.341 for final income to 0.270 for equivalised final income, since households with higher incomes on average have more members than households with lower incomes.

The ABS estimate of the Gini coefficient for equivalised disposable household income for 2009-10 is 0.328. We note that this is larger than the equivalised final household Gini estimated by Greenville et al. as the ABS definition does not include indirect taxes and government services in their estimate of income.

In terms of the potential policy implications of these developments, it is difficult to disentangle and quantify the impact of longer-term structural developments, such as demographic changes, cyclical impacts, such as the GFC, and specific policy changes.

However, it is our view that, overall, the economy has been the largest factor in driving change in income inequality. Employment growth has helped to reduce wage income inequality, while growth in investment income (at least up until the GFC) has tended to increase income inequality (particularly for groups such as retirees where investment income can be significant). These developments have meant that Australia's tax and transfer system has been gradually playing a reduced role in determining the level of income inequality – partly because there is less work for it to do.

With this in mind, the next section takes a higher level view of the income inequality debate by asking the question 'Should we care about income inequality?'

Should we care about income inequality?

There is no clear consensus on what an acceptable level of income inequality is. Societies will choose how much inequality they allow according to the institutions, norms, laws, policies and programs they adopt.

In Australia, like other OECD nations, there has been a trend towards greater income inequality since the mid-1990s, but there has also been very strong growth in incomes across the board, including the bottom decile of households.

As Stiglitz, Sen and Fitoussi (2009) from the *Commission on the Measurement of Economic Performance and Social Progress* have said: 'If average income is increasing but at the same time inequality is increasing, it is not clear whether societal well-being is increasing or decreasing'.

Australia uses income-testing more than any other OECD nation, which allows for the greatest share of benefits to be targeted towards low income earners compared to any other OECD nation. The poorest 20 per cent of households in Australia receive 12.4 times the amount of cash benefits than the richest 20 per cent of households – the highest ratio in the OECD and about 50 per cent more than the next most targeted country, New Zealand (Whiteford 2013).

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Additionally, according to the OECD (2008), Australia has one of the most progressive systems of direct taxation amongst OECD nations, mostly because lower income individuals pay lower amounts of income tax compared with other nations. This combination of factors had led Whiteford (2006) to argue that Australia has one of the most efficient tax and transfer systems of all OECD nations, although his definition of 'efficient' does not take into account behavioural effects from high effective marginal tax rates.

In terms of the extent to which we should be concerned about income inequality, the OECD has noted that simply shifting large amounts of money from high income earners to low income earners through the tax and transfer system is 'neither an effective or sustainable way in which to lower income inequality over the long term'. (OECD 2011).

The OECD's conclusion in *Divided We Stand* was that ensuring equal access for all of the population to high quality public services such as education, health and family care will help to reduce inequality and provide equal opportunities of personal and professional development for all citizens.

This suggests that some refocusing of the debate is required away from those at the very top of the income distribution towards those at the very bottom. Measures of income inequality do not do this well – lying beneath the averages are households that experience greater disadvantage than others. The Australian Social Inclusion Board estimates (using a variety of indicators) that 5 per cent (around 640,000 people) of Australians aged between 18 and 64 have multiple disadvantages. A greater focus on understanding and tackling multiple and entrenched disadvantage is critical in terms of improving overall wellbeing in Australia, notwithstanding that sustained economic growth and strong real income growth across the spectrum has delivered a great deal to Australians in recent years.

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Slowing productivity growth — a developed economy comparison

Christine Carmody¹

Australia's recent productivity slowdown is not an isolated occurrence. Developed economies have experienced slowing productivity growth in recent decades, particularly during the 2000s. While developed economies share a number of common features, these appear to have had varying influence on individual country performance, tempered by domestic factors. In particular, Australia's recent productivity performance appears to be driven by domestic factors rather than factors common to developed economies.

¹ The author is from Macroeconomic Group, the Australian Treasury. This article has benefited from comments and suggestions provided by Ben Dolman, Simon Duggan, Harry Greenwell, David Gruen, Mitch Pirie, and Duncan Spender. The views in this article are those of the author and not necessarily those of the Australian Treasury.

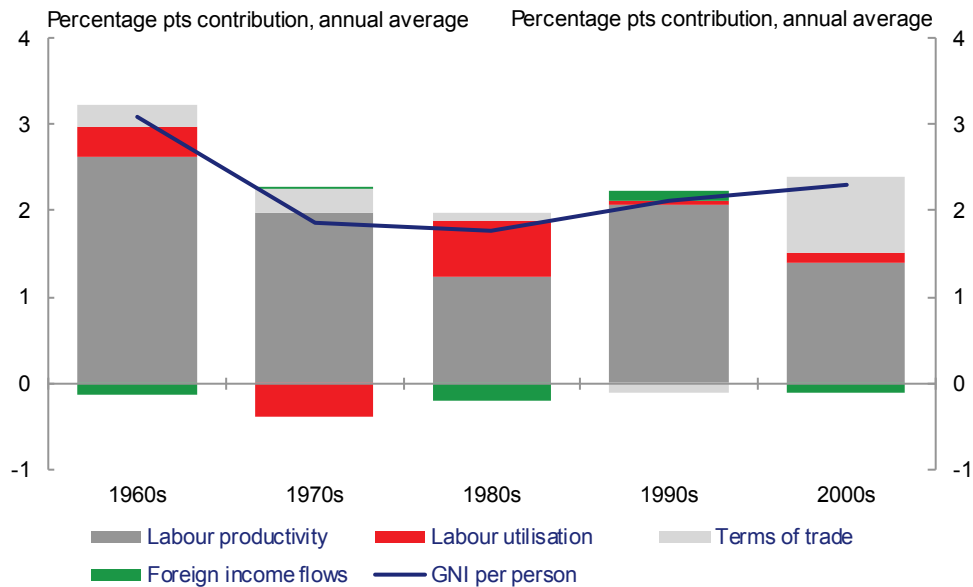
Introduction

Productivity growth is fundamental to economic growth (see Box 1), though it is not the only driver. In Australia, labour productivity growth has been historically important in supporting real income growth, while contributions from labour participation and foreign income flows have remained small by comparison (Chart 1). Indeed, the dominant contribution of labour productivity growth was only challenged in the 2000s by the contribution from a record terms of trade, which has ensured strongly rising income despite slower labour productivity growth.

In coming decades, Australia's terms of trade is projected to detract from income growth as the mining boom transitions from a period of higher prices and investment into a period of higher production. Productivity growth is once again likely to be the key source of ongoing growth in incomes and living standards. Strong productivity performance is also desirable in helping Australia to respond to developments in the international economy, the fiscal pressures of an ageing population, and climate change.

While research into the decline in Australia's productivity growth since the 1990s has focused on domestic causes, comparison with Australia's international peers can provide valuable perspective. As such, this paper examines the evolution of developed economy productivity growth, reviews possible common drivers and reflects on implications for Australia.

Chart 1: Contributions to growth in average incomes by decade



Source: Treasury calculations based on ABS cat. no. 5206.0, 6202.0 and unpublished ABS data.

Box 1. Productivity and economic growth

The Solow-Swan model (Solow 1956, Swan 1956) is the starting point for most theoretical analyses of economic growth. Its main conclusion is that the accumulation of physical capital and labour cannot drive sustained, long run growth in output per person, and that this is instead driven by the rate of technological change (productivity growth). The model assumes that the production function takes the form

$$Y = f(A,K,L),$$

where A represents technology, and K and L represent capital and labour, respectively. A is chosen as an input to the model, rather than being determined within it, and can be interpreted in terms of the stock of knowledge or innovation, disembodied education and skills, the strength of property rights, the quality of infrastructure and cultural attitudes to entrepreneurship and work. New growth theories build on the Solow-Swan concepts so that technological growth, human capital, and institutions are determined within the model (Solow 2005). Microeconomic theory has additional insights regarding a country's position on its production possibilities frontier, which represents the most efficient means of producing a range of goods and services. These concepts suggest ways by which a country can improve its economic growth.

Firstly, a country can move to a more optimal position on its domestic production possibilities frontier by changing the combination of products it produces for a given set of inputs. Secondly, a country can 'catch up' to the global production possibility frontier, by adopting more efficient processes and technologies that have been developed elsewhere. Finally, a country that is producing optimally on the global production possibilities frontier can push that frontier outward, through innovation.

Multifactor productivity (MFP) indicates the efficiency with which inputs are being used in the production process, and includes pure technological change A, along with changes in returns to scale. Labour productivity (LP) measures the level of output per unit of labour input (such as hours worked). The relationship between labour productivity growth and multifactor productivity growth is

$$\text{LP growth} = \text{MFP growth} + \text{a contribution from growth in capital deepening.}$$

In practice, measured productivity performance is influenced by all the factors that affect the level of production and the use of labour and capital. This includes competition, business cycles, trade, financial markets, technological change, weather, population growth and ageing, education, infrastructure, geography and structural change. Some of these factors are within the influence of government policy and reform to varying degrees, while others are not. The productivity performance of the private sector is ultimately determined by the actions of firms and individuals in that sector.

Long-term productivity growth in developed economies²

Over recent decades, declines have occurred in developed economy labour productivity growth, multifactor productivity growth, and – with the exception of Australia – capital deepening, although over varying timeframes.

Labour productivity

According to the Conference Board Total Economy Database, aggregate labour productivity growth in developed countries declined from a peak in the 1970s, stayed relatively unchanged during the 1980s and 1990s, and declined again in the 2000s (Chart 2).³ This encompasses the more varied behaviour of individual countries over that timeframe that can be roughly grouped into two types. In EU-15 countries, labour productivity growth has been declining steadily since the 1970s.⁴ By contrast, the United States (US), the United Kingdom (UK), Australia and Canada all experienced declining growth in the 1970s, a resurgence in the 1990s and a second decline in the 2000s. This is corroborated using OECD labour productivity data from 1971, for example as reported in Dupont, Guellec, and Martins (2011).

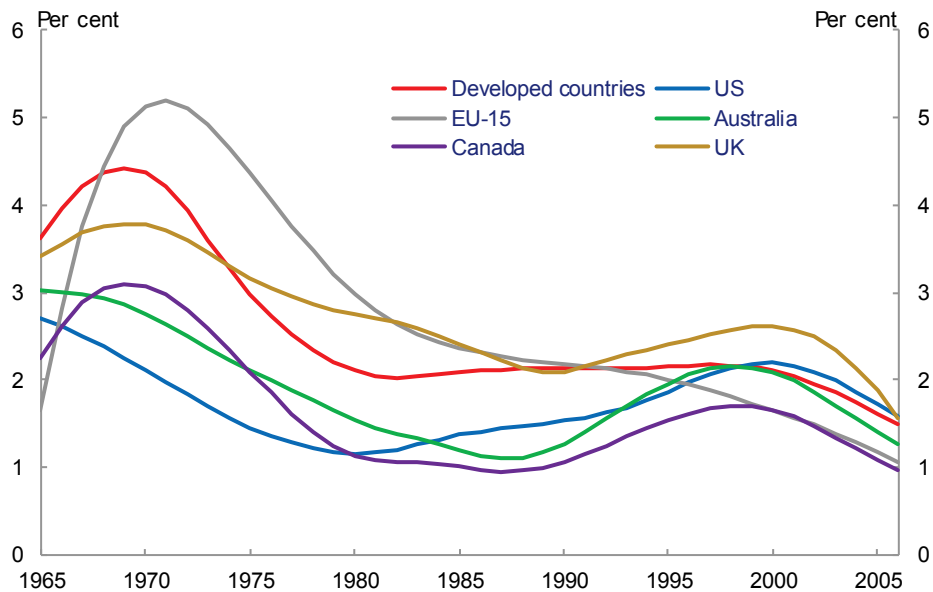
The peak in labour productivity growth in developed countries during the 1950s and 1960s has been associated with rebuilding from the World Wars and the Great Depression (Maddison 2001). In the US, rapid growth during this time was supported by an abundance of new technology that was not fully exploited during the Great Depression and World War II. Other countries took advantage of the new opening of trade and mobility of technology following the war to catch up to the US productivity level. Some slowing in the 1970s has been considered to be inevitable in developed economies after this period (Maddison 2001).

2 The focus of subsequent analysis is on empirical data. No assumptions are made about the pace of country convergence to the global production possibilities frontier, contrary to methods commonly used in forecasting international economic growth rates. The period following the global financial crisis has been omitted given its influence on the relationship between output and labour markets, and thus national productivity statistics.

3 Developed countries refers to the Conference Board definition of mature economies, which includes Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, Canada, United States, Australia, New Zealand, Japan, Singapore, South Korea, Taiwan, Israel, and Hong Kong.

4 EU-15 countries include members of the European Union prior to May 2004: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Chart 2: Labour productivity growth



Source: The Conference Board Total Economy Database, 2013. Treasury calculations. Trends are calculated using a Hodrick-Prescott filter for the period 1950-2012, however a shorter timeframe is shown in the chart to avoid uncertainty with endpoints.⁵

The reversal of this slowing for the US, UK, Canada and Australia in the 1990s has been attributed mainly to the effects of reform during the 1980s and 1990s and also the impacts of information and communications technology (ICT), as will be reviewed in subsequent sections of this paper. In particular, divergent approaches to reform generated widespread commentary of an emerging 'productivity gap' between Europe and the US in the 1990s. In continental Europe, productivity growth continued to decline as product market reforms were slow and hesitant during most of the 1990s, when the diffusion of ICT was particularly intense. During the late 1980s and 1990s, several European countries also introduced labour market reforms and interventions to reduce unemployment and raise the participation rate, dampening labour productivity growth (Timmer and Inklaar 2011).

The decline in labour productivity growth common to developed countries during the 2000s requires more detailed explanation. Insights can be gained by looking at the contributions from multifactor productivity growth and capital deepening.

⁵ When making international comparisons of growth performance, differences in business cycle conditions across countries are often addressed by comparing average growth rates over sufficiently long time periods to minimise cyclical influences. However, the lack of country business cycle synchronisation, even over five-year periods, has made this approach difficult. Instead, long-term analyses can rely on trend series estimated using the Hodrick-Prescott filter (Bassanini, Scarpetta and Visco 2010).

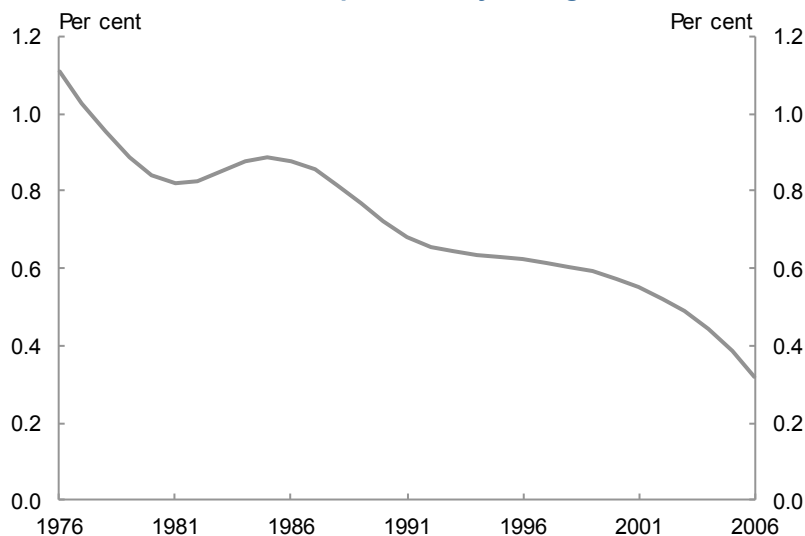
Multifactor productivity

Data from the Conference Board Total Economy Database show that aggregate MFP growth for developed countries has decreased steadily from the 1970s to the present day (Chart 3). The World Productivity Database also shows a general decline in MFP growth in many developed countries over the period from 1961 to 1998; exceptions include Ireland and Norway.

More detailed data from 1990 available from The Conference Board Total Economy Database enable decomposition into individual countries and regions. This shows declines in country MFP growth between the mid-1990s and mid-2000s (Chart 4). Alternative data sources (OECD and EU KLEMS data) also indicate falls in MFP growth during this period.

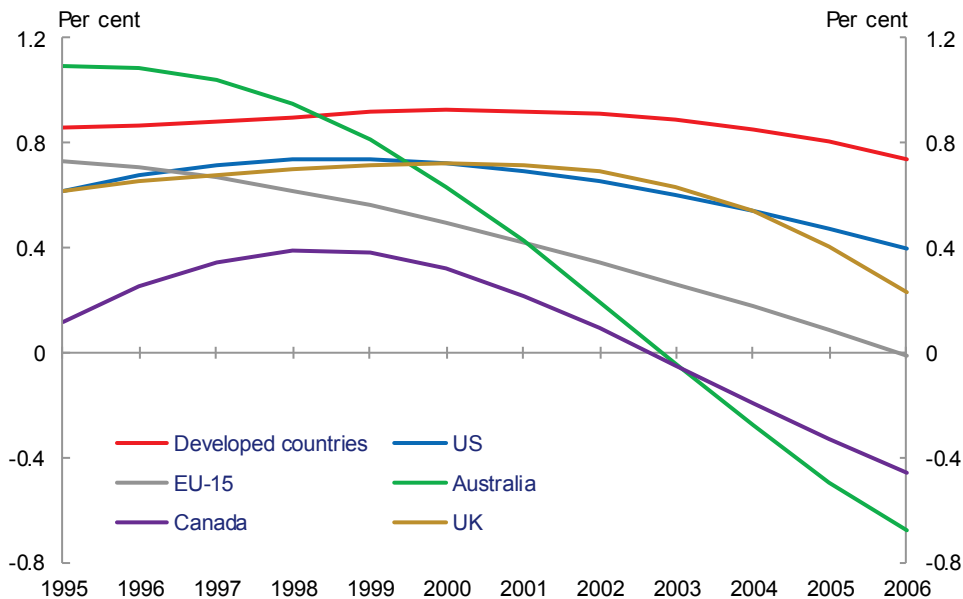
Distinct industry developments contributed to developed country MFP slowdowns in the 2000s, although the underlying reasons for this may be disparate. While detailed industry by industry analysis would be required to further explore the reasons for this, the fact that different groups of industries have been affected in different countries points to the role of domestic factors.

Chart 3: Developed country MFP growth



Source: Content reproduced with permission from the Conference Board, Inc. © 2013 The Conference Board, Inc. <http://www.conference-board.org/data/economydatabase/>. Trend is calculated using a Hodrick-Prescott filter for period 1971-2013; however, a shorter timeframe is shown to avoid uncertainty with endpoints.

Chart 4: Multifactor productivity growth



Source: The Conference Board Total Economy Database, 2013. Trends are calculated using a Hodrick-Prescott filter for period 1990-2012, however a shorter timeframe is shown in the chart to avoid uncertainty with endpoints.

In Australia, all market sectors except for accommodation and food services experienced lower MFP growth between 2000 and 2007 than in the 1990s, with slowdowns particularly marked in mining and utilities (ABS 2013). This broad-based slowdown has been attributed to lost momentum for reform; delays in output from investment associated with the commodities boom; drought; lumpy investments in utilities; and adjustment pressures as businesses respond to the high Australian dollar and higher prices (Parham 2012, Eslake 2011, Dolman 2009).

In the US, the post-2004 MFP slowdown has manifested in manufacturing, construction and distributions services and a declining role of ICT following the dot-com crash of 2000s, while MFP in financial and business services grew strongly (van Ark 2010, Jorgenson, Ho, and Stiroh 2008). It should be noted however that the productivity performance of the financial services industry is partly attributable to the activities and regulatory environment which subsequently led to the global financial crisis.

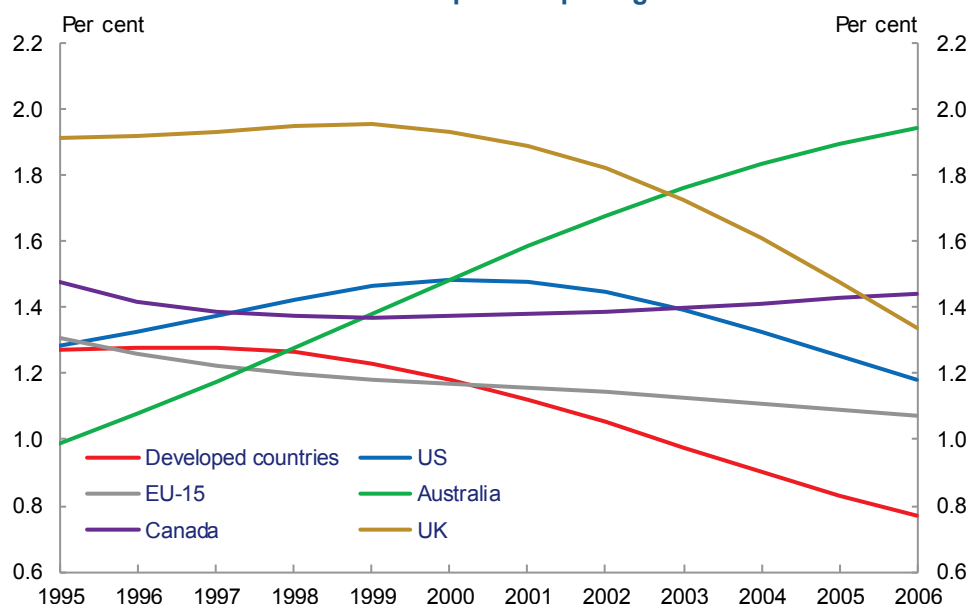
The European MFP slowdown since the mid-1990s has some similarities with the more recent slowdown in the US, in that it has included declines in manufacturing and construction, as well as motor vehicle trade. In contrast to the US, MFP growth in financial and business services fell along with trade following rapid growth in the early 2000s, while MFP growth in ICT production, telecommunication services and utilities was positive (Timmer, Inklaar, O'Mahoney and van Ark 2011).

Capital deepening

Capital deepening has been a significant component of developed country labour productivity growth in recent decades (see for example Chen, Gupta, Therrien, Levanon and van Ark 2010). Indeed, increasing contributions from capital deepening have been a key feature of Australian labour productivity growth since the early 1990s, in contrast to gradual declines in the contribution from capital deepening in developed countries in aggregate, the US, and European countries (Chart 5).

Despite this, the slowdown of labour productivity growth in OECD countries over the period 1985-2008 has been found to be driven more by a deceleration in MFP growth than by reduced contributions from capital deepening (Dupont, Guellec and Martins 2011). This trend includes Australia, where a decline in MFP has actually outweighed an increase in capital deepening.

Chart 5: Capital deepening



Source: The Conference Board Total Economy Database, 2013 and Treasury calculations. Trends are calculated using a Hodrick-Prescott filter for period 1990-2012; however, a shorter timeframe is shown in the chart to avoid uncertainty with endpoints.

Factors relevant to declining productivity growth in developed economies

Possible explanations for simultaneous developed economy productivity growth declines include a falling pace of innovation, the fading impact of breakthroughs in ICT technology, a similarly fading impact of past economic reforms, and sectoral shifts to lower productivity sectors. These will be discussed in turn.

Innovation

As a small open economy, Australia is not expected to play a major role in pushing the production possibilities frontier outward, except in specific areas of comparative advantage such as mining. Rather, our ongoing potential for productivity growth will be supported by adoption of a variety of innovations developed overseas.

The question is whether the global pace of innovation, and thereby the pace at which the global production possibility frontier is pushed outward, is linked to the observed slowdown in developed economy productivity growth.

The impact of global innovation is not likely to be immediate, given that it can take some time for new innovations to be converted to production methods, which then must be taken up by many businesses or individuals to affect national productivity performance in a substantial way. This means that a given innovation, leading to new technology, will have variable impacts on production, over variable timescales. Some innovations have been very important for global or national productivity growth, while others have had a small to negligible impact.

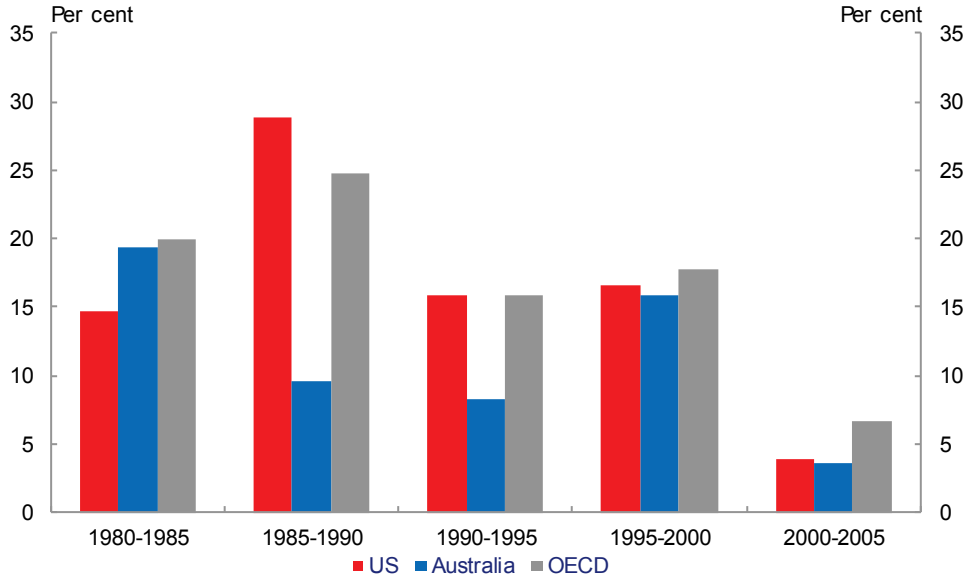
Slowing innovation is a thesis of Robert Gordon (Gordon 2012), who has argued that periods of slow and rapid growth at the global frontier have resulted from three industrial revolutions, manifesting in a growth peak in the middle of the 20th century and a decline ever since.⁶ One of Gordon's conclusions is that there are no remaining opportunities to improve the pace at which the global frontier moves in the way that past industrial revolutions have. Similarly, Tyler Cowen has argued that the American economy has reached a historical technological plateau and the factors which drove economic growth for most of America's history are mostly spent (Cowen 2011).

These arguments align with the observed long-term decline in aggregate developed economy MFP growth shown in Chart 3. However, their accuracy is difficult to foresee given that it is not possible to know what new technologies will be developed and what their impact will be on production.

⁶ Gordon defines the three revolutions as steam and railroads between 1750 and 1830; electricity, the internal combustion engine, running water, indoor toilets, communications, entertainment, chemicals and petroleum from 1870 to 1900; and computers, the internet and mobile phones from 1960 to the present.

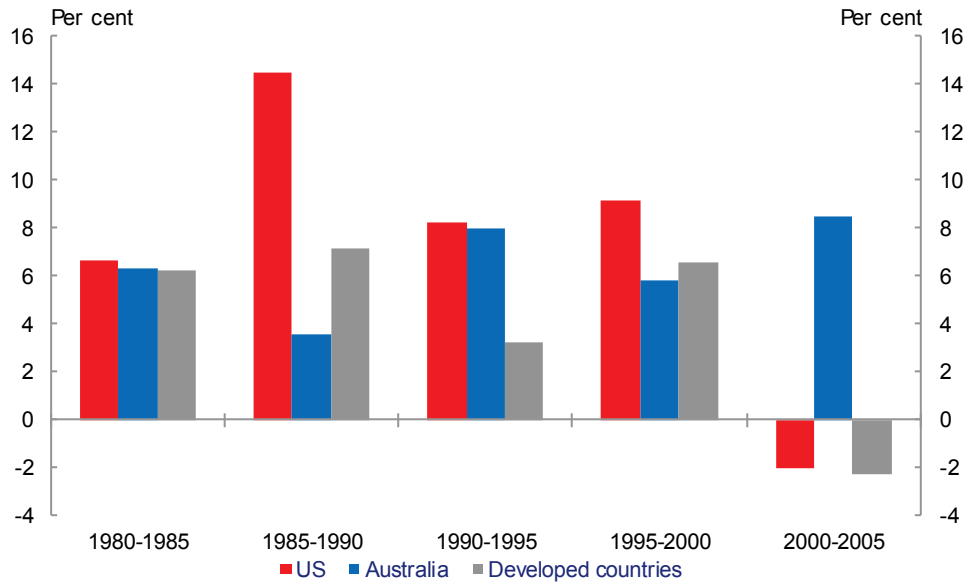
Slowing productivity growth - a developed economy comparison

Chart 6: Annualised growth in patent applications



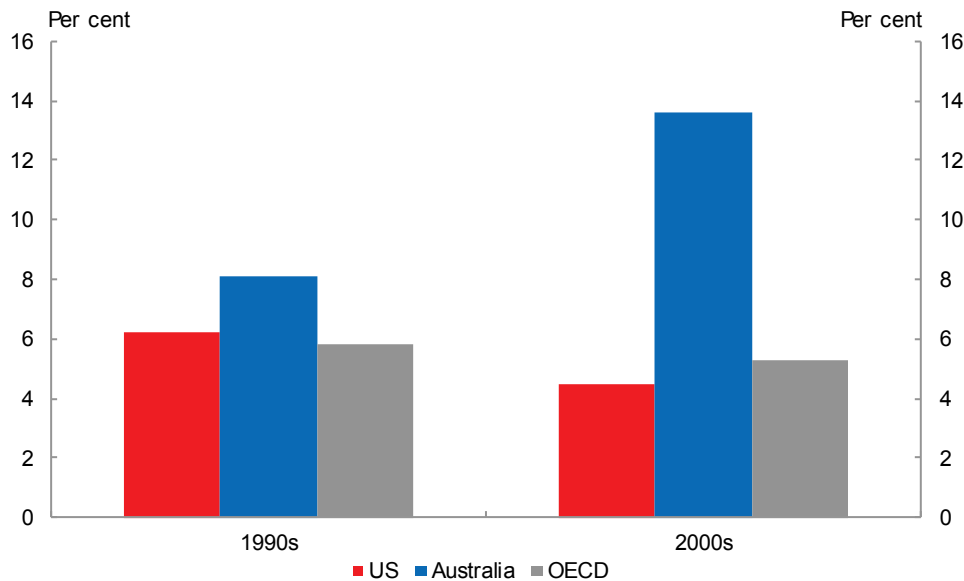
Source: OECD Science, Technology and R&D Statistics 2013. Applications under the Patent Cooperation Treaty by inventor country.

Chart 7: Annualised growth in trade-mark applications



Source: World Intellectual Property Organisation 2012.

Chart 8: Annualised growth in business R&D expenditure



Source: OECD Science, Technology and R&D Statistics 2013.

It is interesting to compare the result of Chart 3 with a rough assessment of the rate of global innovation. This can be done using a range of indicators, which test innovation activity but not the quality of that activity in terms of its impact on productivity growth. A commonly-used indicator is the number of patents applied for or granted, since patents have previously been associated with accelerations in inventions.⁷ Expenditure on R&D by government or business is also correlated with inventions, although loosely because an amount of expenditure does not necessarily reflect the amount of innovation that is produced. Trade-mark activity measures the introduction of new goods and services into the market, or changes in marketing strategies for existing products, and thus reflects a more immediate impact on productivity. However, business innovation encompasses much more than these measures. Australian firms undertaking innovation are more likely to invest in purchasing new equipment, training and marketing than investment in R&D or acquiring intellectual property (AG 2011). Innovation surveys in the EU, US and Japan have also found that firms consider patents to be less important than many other means of appropriating their investments in innovation (Arundel 2001).

⁷ The highest growth of patent numbers ever occurred in the 1880s, when electrical technology was invented and modern chemistry discovered. Patents are applied to and granted by national or regional offices, to applicants coming from any country and seeking protection in the relevant market for their invention.

Slowing productivity growth - a developed economy comparison

Acknowledging these issues, the pace of innovation activity in developed countries indeed looks to have lessened in the 2000s, though a slowdown is not obvious for the 1980s or 1990s. Patent applications, trademark applications, and business funded R&D growth in developed economies and the OECD have also declined in the 2000s, although the latter two indicators remained strong for Australia (Charts 6, 7 and 8 and Dupont, Guellec and Martins 2011).

Australia's relatively strong performance in the latter two indicators reflects the effects of the commodities boom and strong income growth in the 2000s. Primary and resource-based industries account for a much larger share of business expenditure on R&D than the OECD median and play a significant role in the recent increases (OECD 2012).

The recent declines in innovation indicators do not match the long-term MFP growth decline of Chart 3. This is not necessarily inconsistent, given that MFP reflects the final impact on production efficiency, and thus is linked to both the quality of innovation as well as its quantity.

Information and Communication Technology

During the 1990s, the results of innovation in information and communication technology (ICT) became widely available, bringing expectations of a widespread positive contribution to productivity growth. Some countries were better able to take advantage of new technological breakthroughs than others, leading to variable uptake of ICT and increased dispersion of productivity performance in developed economies (OECD 2007). Despite this, most of country output and labour productivity growth between 1995 and 2008 has been attributed to non-ICT capital services.

The contribution of ICT to output and productivity growth can occur through:

- ICT production, with an acceleration of MFP and labour productivity growth in the ICT-producing sectors and an increase of their weight in the economy; and
- ICT use, comprising capital deepening where rapid investment in ICT equipment boosts production and labour productivity and also boosts MFP where production rises more than overall inputs. Sectors that are the most intensive users of ICT are ICT production and finance and business services, while goods production and personal services are the least ICT intensive (Jorgenson and Timmer 2011).

ICT *production* made large contributions to productivity growth in the United States and the UK in the 1990s, whereas the contributions were moderate for continental European countries and very small for Australia and Canada (Inklaar, Timmer and van Ark 2007). This result is consistent with only a few OECD countries being

specialised in those ICT sub-sectors characterised by rapid technological progress, such as the production of semi-conductors and computers.

ICT *use* strengthened labour productivity and MFP growth in the US and Australia during the 1990s (Pilat, Lee, and van Ark 2002, Gretton, Gali and Parham 2004). ICT played a critical role in the post-1995 productivity growth resurgence in the US while other forms of capital deepening and labour-quality growth made insignificant contributions in this period (Jorgenson, Ho and Stiroh 2008). The US market services sector in particular benefited from the increase in ICT use, particularly wholesale and retail trade and financial services (see for example van Ark, O'Mahoney and Timmer 2008).

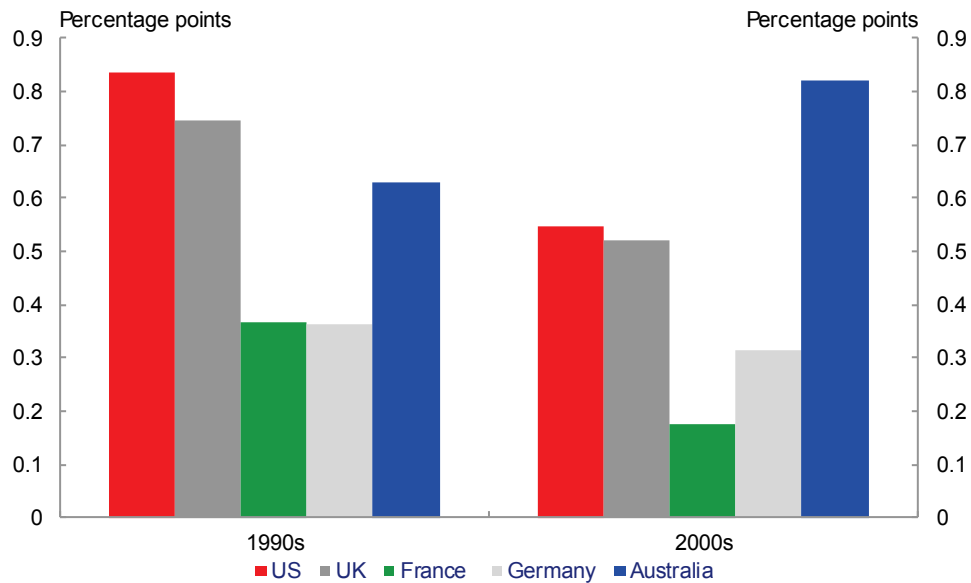
For most other OECD countries, there is little evidence that ICT-using industries experienced a consequent improvement in labour or total factor productivity growth. ICT investment and the productive use of ICT in Europe generated less productivity growth during the 1990s because of the slower pace of reform (Pilat, Lee and van Ark 2002).

ICT investment continues to increase in all sectors and regions (Jorgenson 2011). In the OECD, the share of ICT investment rose from 10 per cent of total investment in 1985 to 20 per cent in 2002. It was substantially higher in relatively lightly regulated economies such as Australia, Finland, Sweden, the UK and the US, compared to more heavily regulated continental European economies (OECD 2007).

Despite this, more recent data suggest that ICT capital is not providing an ongoing contribution to developed country productivity growth, consistent with the concept of diminishing returns (see Chart 9, Gordon 2010, and Jorgenson, Ho and Stiroh 2008). In most OECD countries, the contribution of ICT capital to GDP growth rose between 1985-1994 and 1995-2001, but fell subsequently (Dupont, Guellec and Martins 2011). In the United States, the contribution of ICT to productivity growth fell significantly after 2000, although it still accounted for one third of productivity growth between 2000 and 2006 (Jorgenson, Ho and Stiroh 2008). Unlike other developed countries, the contribution of ICT capital services to Australian GDP growth increased during the 2000s, however the experience of other countries raises questions about whether this will continue.

Slowing productivity growth - a developed economy comparison

Chart 9: Contribution of ICT capital services to GDP growth



Source: The Conference Board Total Economy Database 2013.

Economic reform

Economic reform is considered to be a key contributor to the mid-1990s productivity growth resurgence of countries such as the US and Australia relative to their continental European counterparts. Labour productivity growth has increased in lightly-regulated economies but either grew more slowly or decelerated in highly regulated countries (OECD 2007b).⁸

Reforms can affect productivity through several channels, as outlined in Box 2. Those that impact on the functioning of markets are expected to deliver a short term boost to productivity growth as the economy moves to a new productivity level, followed by a longer-term and smaller contribution to growth to the extent that innovation is supported by new policy settings. Given this, a waning of the effects of previous reforms has been offered as a reason for declining Australian productivity growth in the 2000s (Dolman 2009).

⁸ New Zealand remains a puzzle. It undertook a wide range of reforms similar to those in Australia, but did not experience a revival in productivity growth.

Box 2. Reform and the timing of impacts on productivity

The impact of reform on productivity can occur on a range of timescales.

Theory suggests that regulation and reforms which liberalise or improve the functioning of markets can positively affect productivity through three different channels (Nicodème and Sauner-Leroy 2004):

- A reallocation of scarce resources (allocative efficiency).
- An improvement in the use of production factors by firms (productive efficiency).
- An incentive for firms to innovate to move to the production possibilities frontier (dynamic efficiency).

Gains through allocative and productive efficiency generally represent one-off changes to the level of productivity and changes occur in the short run. However, an increase in competition may also stimulate firms to develop product and process innovations and hence to speed up the move to the production possibilities frontier. The corresponding impact on productivity is likely to take much longer as successful innovations eventually raise the level and growth rate of total factor productivity in the long run.

Efficiency-enhancing public sector reforms aimed at reducing slack in public sectors or state-owned enterprises, trade liberalisation and reforms affecting inefficient industries are likely to materialise relatively quickly.

By contrast, education and innovation reforms, the effects of lighter product market regulation on technology adoption, and financial market liberalisation impacts on more efficient capital allocation, might take time to materialise. Price or wage stickiness is likely to delay the full impact of a reform, all else equal (Bouis, Causa, Demmou, Duval and Zdzienicka 2012).

Institutional settings can also affect the dynamic impact of reforms. For example, settings that favour labour reallocation such as well-designed active labour market policies or housing policies can speed the adjustment to long run equilibrium. On the other hand, where job protection increases employment persistence and impedes labour reallocation, it may also slow down the impact of some other reforms.

Slowing productivity growth - a developed economy comparison

Reforms across the OECD over the past two decades have resulted in policy convergence in areas including macroeconomic stabilisation and more market-oriented product market regulation, however GDP per capita and productivity performance have diverged in that time (OECD 2007). As outlined in Box 1, reform is only one of many factors that can influence measured productivity and economic growth performance. Nevertheless, it has been suggested that the relationship between the timing of policy reforms and the timing of technological change is also important. Because relatively liberal countries benefit from improvements in the world production possibilities frontier more quickly than countries with more restrictive policy regimes, the effect of product market regulation on the speed of catch-up is amplified when the frontier moves outwards rapidly, such as may have occurred with ICT in the 1990s (Conway and Nicoletti 2007).

Opportunities for reform have not been exhausted, and there are a number of areas where significant policy differences remain between countries. The OECD considers that annual productivity growth could have been at least $\frac{3}{4}$ of a percentage point higher between 1995 and 2003 in half of OECD countries if regulations had been at the level of the most lightly regulated in the OECD for each sector. Gains in labour productivity growth of at least half a percentage point per annum over a decade would also be possible if countries further reformed their product markets (OECD 2007).⁹

Because the timing of reform and impacts on the economy can vary substantially, it can be difficult to pin down specific effects, and in some cases it may be too early to expect any impacts. Dolman (2009) noted that important factors underpinning Australian productivity growth over the long term and specifically in the 1990s – investment in ICTs, education and skills, R&D activity and infrastructure spending – had not diminished in the 2000s. Nevertheless, the waning effects of previous reforms cannot be discounted as a contributor to the slowdown in productivity growth in developed economies.

Sectoral shifts

The movement of resources between sectors can contribute to aggregate productivity growth. If resources move from industries with high productivity levels to those with

9 Following the global financial crisis, the OECD notes that reforms have been continuing, particularly in the areas of wage bargaining and job protection as countries seek to boost job creation and facilitate the reallocation of resources towards growing sectors. Pension reforms were already occurring at the onset of the crisis and have accelerated under the pressures to ensure debt sustainability. The need to put public budgets on a sustainable path and regain competitiveness has also been a major driver of productivity-enhancing reforms in a number of OECD countries. Governments have increased the efficiency of taxation, encouraged competition in product markets and improved cost-efficiency in the public sector (OECD 2013).

low productivity levels, this would be reflected in a negative contribution to aggregate productivity growth, even if productivity within individual industries is unchanged.

Detailed analysis of whether developed economies have shifted resources to industries with high or low measured productivity levels is a task beyond the scope of this paper.¹⁰ Nevertheless, recent evidence of productivity performance in services relative to manufacturing does not conform to a simple prediction that a move of resources from manufacturing to services could be detrimental to developed country productivity growth. Rather, the shift to services has resulted in mixed impacts. The productivity performance of individual services sub-sectors is also not uniform, suggesting that it is inappropriate to consider them in aggregate (Inkelaar, Timmer and van Ark 2007).

Conclusion

Australia's productivity slowdown in the 2000s is not isolated among developed countries. As for our international peers, it has been driven by declining MFP growth. However, the size of Australia's MFP decline suggests the importance of domestic drivers alongside factors common to developed economies. The role of domestic factors is also indicated in the way that MFP growth declines in different developed economies are playing out in different groups of sectors.

Potential common drivers of developed economy productivity growth slowdowns include falling rates of innovation, the fading impacts of ICT and past economic reforms, and sectoral shifts to lower productivity sectors. In addition to long-term declines in developed economy MFP growth, there is some suggestion that the pace of global innovation has slowed in the 2000s alongside a fading of the positive contribution of ICT to productivity growth. The waning effect of past reform is relevant for countries that have not maintained reform momentum through the late 1990s and into the 2000s, although it is difficult to determine to what degree given that the size and timing of reform impacts are not clear-cut. Finally, a sectoral shift to services does not necessarily mean a reduction in productivity growth performance and prospects.

There is also a question as to whether lower multifactor productivity growth rates should be expected in advanced economies. Declines in advanced economy multifactor productivity growth over preceding decades remain unexplained by the evidence collected in this paper; however, there may be some merit in the arguments concerning

¹⁰ This would involve consideration of: methods for determining productivity levels, which industries have grown (such as various service industries) and which have shrunk (such as manufacturing), and which industries are measured to have high and low productivity levels (with results differing between individual countries).

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the declining quality of innovation made by Robert Gordon and Tyler Cowen. As such, the fate of our overseas peers will be of ongoing interest as the domestic factors currently influencing Australia's productivity performance run their course.

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China's Unfinished State-Owned Enterprise Reforms

Dong Zhang and Owen Freestone¹

The changing role and position of State-Owned Enterprises (SOEs) in China's economy provides an insight into China's market oriented reforms since the initial opening up of the late 1970s. While past reforms to the SOE sector were a catalyst for China's rapid economic rise over recent decades, SOEs now lag well behind the non-state sector in terms of their productivity performance, contribution to economic growth and their role in China's broader economic development. However, China's state sector remains powerful; it continues to dominate many key areas of the economy, commanding a disproportionate share of the country's financial resources through its privileged position in the political system. Further market oriented reforms to the SOE sector will therefore be crucial if China is to achieve ongoing gains in productivity and to maintain a swift pace of economic development. Looking ahead, the government is expected to pursue further corporatisation and public listing of SOEs, better public asset management, while broader economic reforms to China's financial markets and government administration is likely to subject SOEs to an increasingly competitive operating environment.

¹ The authors are International Economy Division, the Australian Treasury. The article has benefited from comments and suggestions from Jason McDonald and Paul Hubbard and editorial assistance from staff in the China Policy Unit. The views in this article are those of the authors and not necessary those of the Australian Treasury.

Introduction

China's State-Owned Enterprises (SOEs) have been on a long and yet-to-be accomplished journey since the late 1970s; from affiliates to China's previous command economy, to independent commercial entities. The market-oriented reforms introduced to the SOE sector over the past two decades have seen the government loosen its control over SOEs, the shedding of a large number of loss-making enterprises, and significant restructuring of remaining enterprises, including by public listing. SOEs are now subject to greater market discipline, enjoy more autonomy, and are more accountable for their performance. However, these achievements still fall short of making SOEs 'modern enterprises', an explicit goal set by the Government in 1992 for SOEs to become fully capable of making business decisions free of administrative interference. So far, the Government retains considerable influence over SOEs, through the exercise of its owner's rights as well as multiple regulatory channels.² SOEs have also become a strong vested interest in a system that treats them favourably.

Undertaking further market-oriented SOE reforms has again become an important policy task, as China faces a structural slowdown associated with a declining working age population and the fading benefits of past economic reforms. China's new leaders agree that growth has to increasingly come from productivity gains driven by improved resource allocation (rather than through simply agglomerating large amounts of capital and labour). Nowhere is reform more important than in the allocation of capital, which is dominated by the state sector. Reform will also be hard to accomplish without the government redefining its own role to be the provider of public services while refraining from interfering in the economy through SOEs.

This article discusses China's approach to SOE reform as part of the effort to grow the economy out of its centrally planned origins. Reform of SOEs has been evolutionary, not revolutionary; the non-state sector has been allowed to grow faster than the state sector. However, this model will face difficulties in the future as China's overall economic growth slows and the need to make efficiency gains across all sectors of the economy becomes more acute. The article discusses China's future SOE reform options and the challenges in carrying them out.

An incremental reform approach

China's economic reform policies since the late-1970s have balanced the dual objectives of enhancing economic efficiency and strengthening the position of the ruling

2 The Chinese Communist Party is China's ruling party and, as such, discussions in this paper on SOE issues treat the Party's role in, and relationship with, SOEs as those of the government.

Communist Party. SOE reforms, which began thirty years ago, are case in point. While these reforms were designed to tackle the obvious inefficiencies inherent in state enterprises, they needed to be done slowly in order to preserve China's political and social stability.

The important role for SOEs was a worldwide phenomenon during the post-war period. Their presence in national economies was justified on various grounds, including: the necessity to provide public goods; regulating (or benefiting from) natural monopolies; acting as 'national champions'; and being the fundamental production unit in the case of centrally planned economies as in China from the 1950s until the economic reforms of the 1980s.

It is widely recognised that SOEs generally operate less efficiently than private firms, for a range of reasons: governments provide 'softer budget constraints' than markets³ (Kornai 1980, 1986; Kornai, Maskin, and Roland 2003), the policy burden from achieving various costly social goals (Lin and Li 2008);⁴ agency issues; and/or a lack of competition.

In undertaking SOE reforms, policy makers face at least three options: changing ownership (mainly through privatisation) (Shirley 1997, 1999, Zhang 1999), introducing competition (Cook and Kirkpatrick 1998, 1995, 2000, Lin *et al* 2003; Carlin *et al* 2001), or managerial and institutional reforms (Stiglitz 1994, Farazmand 2001, Qian 2000; Hassard 2005). Privatisation involves selling off inefficient, unprofitable, or loss-making SOEs to non-state owners. Greater exposure to competition requires market-oriented reforms that expand the reach of the market economy, through breaking up state monopolies, removing barriers to entry for non-state players and exposing SOEs to market-determined input prices. Corporatisation and corporate governance reforms include the setting up of internal governance structures (decision making procedures and standards) so that management will have incentives to pursue profit and be accountable for their business decisions.

In reality, these options are not mutually exclusive, with different countries trialling different combinations. Although privatisation often seems the first-best option for enhancing efficiency, non-economic considerations have often led policy makers to

3 Under a soft-budget constraint, state-owned enterprises did not have to worry about survival, and therefore were subject to various moral hazard problems, being lax about firm costs, sales, revenues, and ultimately profits.

4 Because the SOEs are owned by the state, both in theory and in reality, the government may be able to require the SOE to deviate from the goal of profit maximization so as to fulfil policy goals of the state, such as employment and social services. There is another reason to have SOEs, which is that provision of social services through SOEs may be more efficient than other delivery channels despite that SOEs are less profitable than private firms.

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avoid a comprehensive programme of privatisation. In China, while the overhaul of the SOE sector from the mid-1990s occurred with a large scale sell-off of loss-making SOEs,⁵ only partial privatisation was pursued, as the government kept the majority stakes in large SOEs. Fears of falling tax revenue, social and political instability have all been cited as reasons for avoiding an all-out privatisation programme (Li and Liu 2004). In the meantime, the Government pushed remaining SOEs towards corporate governance reforms and greater exposure to competition.

China's mixed approach to SOE reform also reflects that markets and the broader non-state sector were almost non-existent when China began its reform process. This is in contrast to Australia and other western market economies prior to the programme of de-regulation and privatisation of the 1980s, where vibrant markets and market-oriented private firms already co-existed with state-owned companies. Instead, the authorities recognised that China needed time to develop markets, market-friendly institutions, and market-compatible norms, ideas, practice, and enforcement.⁶

China's approach towards SOE reform also reflects its broader incremental strategy in reforming the centrally planned economy. This contrasts with the more radical and wholesale approach in the former Soviet Union and East European countries following the collapse of the communist regimes (Wu 2012; Lin et al 1998:307-337, Nolan 1995). In introducing economic reforms, the Chinese Communist Party (CCP) has been careful to make policies that strengthen, rather than undermine, its political rule (Zhang 1998). Relying on existing political and administrative institutions to carry out reform policies also means that the government was more likely to push change through in areas where institutional resistance was the weakest (Shirk 1993). China's leaders carefully crafted reform measures and implemented them through trial-and-error to ensure desirable outcomes, broad-based support, and minimum risks from taking on powerful groups.

Market forces were first introduced into areas where economic problems were most acute, vested interests supporting the status quo were weak;⁷ and tangible benefits

5 While privatisation in China in the late 1990s was conducted in many quasi forms and in a quiet fashion, it was arguably the largest ever in scale in human history (Guo *et al* 2008).

6 One example is the spread of modern economics in China when pre-reform was dominated by Marxist political economy theories. Through the thirty years of reforms and opening up, modern economics (as opposed to the pre-reform Marxist political economy) has now become the dominant paradigm and policy framework among China's economists and economic policy makers (Wu 2012a).

7 This explains why market-oriented reforms were first introduced in the rural sector where, pre-reform, the commune system was broke, farmers' incentives to work was sapped, and growth also stalled. Compared with numerous powerful industrial ministries, only the ministry of agriculture looked after rural issues, and it was a weak one in the late 1970s and early 1980s.

were immediately achievable.⁸ Reforms to China's industrial sector progressed more slowly than other reforms (for example, in agriculture) because of its political importance as a stronghold of the socialist system and the complexity of the sector, with progress in this sector contingent upon success in other areas. Indeed, the government only began serious SOE reform in the 1990s, when widespread loss-making among SOEs could lead to an economic crisis. Even then, resistance to SOE reform was assuaged by the Government's commitment to a continued important role for SOEs, rather than complete privatisation.

However, this approach also means that the transition from a centrally-planned to market economy has become protracted. While the economy has gradually become more market-based, the government retains considerable economic power. The Chinese economy nowadays is a hybrid, with growing market-oriented sectors co-existing with a shrinking, yet still powerful, state sector. This dual track system initially helped to break the economy free from the iron grip of the central planners, and could eventually help it to evolve into a fully-fledged market economy (Naughton 1995). However, the powerful and entrenched interests that remain in the state sector are likely to provide stubborn resistance to further market-oriented reforms, which could risk de-railing the completion of China's economic transition.

SOE reforms: an overview

China's SOE reforms have been a mixed experiment of quasi-privatisation, corporate governance reform, and greater exposure to competition, resulting in a significant change in SOEs' role and position in the economy.

Thirty years ago when China was a centrally planned economy, the government directly ran SOEs, set their annual output targets, and left SOEs with little autonomy in making commercial decisions, including what to produce, where to invest, who to sell to, how to price, and where to get finance. SOEs had no right to hire and fire, and any profits they made had to be handed over to the government. Each SOE acted as a mini-society in providing life-time employment – the so-called 'iron rice bowl' – and some basic social services (clinics, schools, age pension equivalent) for its employees and their families. As a result, pre-reform SOEs were highly inefficient.

Reform policies in the 1980s focused on loosening government control, particularly by giving SOEs more decision making autonomy and incentives through profit sharing. These efforts did not succeed, as SOEs, plagued by soft-budget constraints and agency issues, had every incentive to maximise their own gains while letting the government take the losses.

⁸ One could point to the opening up to foreign trade and investment as such a case.

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By the early to mid-1990s, the SOE sector was in crisis – SOEs were bleeding financially, the sector as a whole was on the verge of loss making. Due to the rigid internal management structures, SOEs were uncompetitive against more nimble, market-oriented non-state firms. In the mid-1990s the government undertook more radical reforms. By redefining the reforms as market-oriented, the government undertook a large-scale de facto privatisation program of loss making or less strategically important businesses⁹ and withdrew SOEs from more labour-intensive sectors. At the same time, the government encouraged rapid expansion of the non-state sector – an ideological breakthrough that accorded private enterprises equal political status with the state sector – to help absorb tens of millions of workers laid off from the privatisation of small and medium SOEs.

From the mid-1990s, Chinese leaders increasingly realised that the state sector did not need to be involved in every sector of the economy. However, the Government decided to keep the majority of large SOEs in its ownership, reflecting its fear that full privatisation might lead the Government to lose its overall control over the economy.¹⁰ Instead, the government pushed large SOEs for consolidation through mergers and restructuring and into 'strategic and pillar' industries and industries with a natural monopolistic nature. Official slogans capturing the gist of these policies were 'grasping the big and letting go of the small' (SOEs) and the state sector 'advancing (in some areas) while retreating (from other areas)'.

In China, as elsewhere, SOE reforms were foremost a political decision. Chinese leaders faced the difficult choice of balancing the short-term political cost of reform against the longer-term prospect of slower growth without reform. At the same time, China's leaders cautiously traversed this path amid a challenging domestic and international environment, including the unfolding Asian financial crisis in the late 1990s that hit China's export and economic growth, and preparation for China's entry into the WTO in 2001 which required necessary market-oriented reforms. There were other constraining factors at the time, including China's (largely absent) macroeconomic policy framework and financial markets. Businesses' limited access to capital from under-developed financial markets may have been one reason why SOE investment remained important for economic growth through this time (Musacchio 2012).

9 During the mid-1990s and the mid-2000s, the state sold around two-thirds of SOEs and state assets to non-state owned firms. From 1998 to 2004, six in ten SOE employees – totalling tens of millions of workers – were laid off (Liu, March 2005).

10 However, not all large SOEs were safe. During 1998 and 2003, there were about 5000 loss-making large and medium SOEs went bankrupt, involving nearly 10 million workers (RBRB 2013).

It is not surprising then that SOE reform slowed from the early 2000s, or may even have reversed during the global financial crisis (GFC) (Wu 2012b). By then, a large number of small and medium SOEs had already been sold and non-profitable large SOEs restructured. There was also a public backlash against privatisation given a myriad of scandals of asset stripping and rising unemployment. In response, China's State Council established the State-owned Assets Supervision and Administration Commission (SASAC) in 2003, with the mandate of SOE reforms, growing state assets, and optimising their sectoral allocation. SASAC has taken measures to strengthen its supervision of SOEs, such as streamlining SOEs' reporting structures (Box 1), and has pushed for corporate governance reforms and diversification of ownership structure for SOEs. SOE consolidation has continued through merger and acquisition. However, in reality, SASAC put more emphasis on its mandate of growing and supervising state assets, rather than on reforming and restructuring SOEs (Wu 2012a).

Box 1: Overview of SOEs' Reporting Structures

SOEs are nowadays no longer attached to, or directly run by, state ministries, as was the case under China's centrally planned economy. SOEs report to the state owners who are various government agencies at the central, provincial, or local level.

SOEs fall into three groups. The first group contains industrial SOEs and, at the end of 2011, there were 144,700 such enterprises with total assets of RMB 85.37 trillion (US\$13.55 trillion), revenue of RMB 39.25 trillion, and profits of RMB 2.58 trillion, in turn accounting for 35 per cent of total industrial and business revenues and 43 per cent of the total profits (Xinhua 2012).

All these SOEs, except a very few, report to provincial and local governments. These very few (currently at 113) are under the direct supervision of the State-owned Assets Supervision and Administration Commission (SASAC), set up by the State Council in 2003 to represent the state through its rights and responsibilities as a major or sole shareholder, with the objective of allocating state assets into the 'right' sectors and growing their value. The central SOEs are all conglomerates, clustered around China's 'strategic', 'emerging' and 'pillar' industries, and are also the largest overseas investors.

Provincial and local SOEs are typically much smaller in size, scale, and business operations. While association with different state agencies at local levels makes LSOEs more likely to operate locally, they also extend their operations into other jurisdictions. As a result, they compete fiercely among themselves, and with private companies in China's domestic market.

The second group consists of banking and financial companies, including China's major state-owned commercial banks, which are governed by banking, securities and insurance regulators. The third group consists of media, publications, culture, and entertainment companies, run by various government agencies.

A key SOE reform objective has been to establish a 'modern enterprise system'. The modern enterprise system, as sanctioned in 1993, consists of four pillars: clarification of property rights; clarification of rights and responsibilities; separation between government administration and corporate business; and 'scientific' management. Over time, a growing number of SOEs have adopted modern corporate structures with boards of directors responsible to shareholders and for supervising the management of business operations. This has led to the administrative functions being stripped off from SOEs' business operations. SOEs' corporate governance has also been strengthened through shareholding reforms, with a growing number of SOEs being publicly listed. SOEs' ownership structure has become more diversified, involving the participation of non-state (private and foreign) firms as majority or minority shareholders. These reforms have moved SOEs away from being direct affiliates to the central planning system, with the government no longer involved in most SOEs' day-to-day operations.

By the end of 2010, about half of the large SOEs have undergone various kinds of shareholding reforms, resulting in a more diversified ownership structure across the sector (Table 1). Large SOEs are no longer purely state-owned, with non-state investors taking partial ownership through joint ventures, joint partnership, joint business operations, or public listing. The head of SASAC was quoted in late 2012 as saying that 90 per cent of CSOEs under its supervision had become corporations and some of them had undergone shareholding reforms (Xinhua 2012). Publicly listed SOEs now account for over 60 per cent of SOEs' total revenues and over 80 per cent of SOEs' total profits.

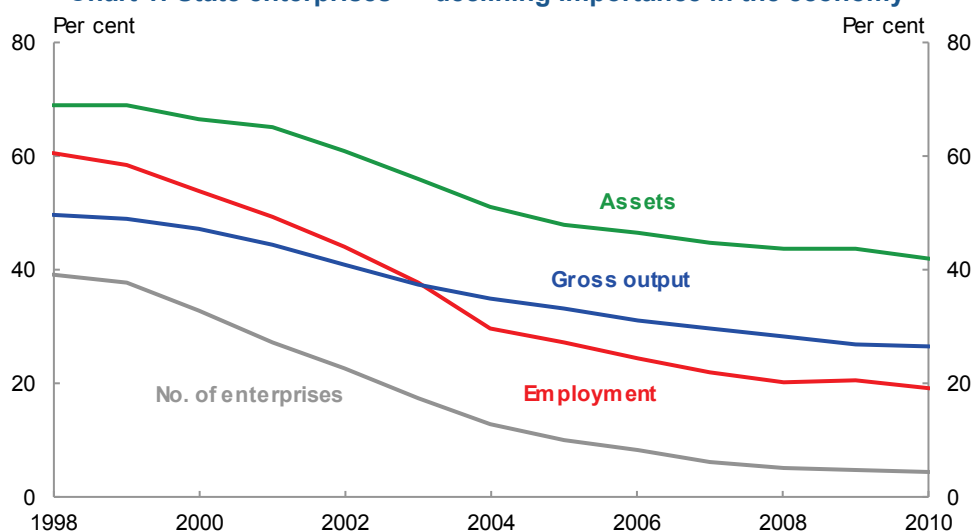
Table 1: A more diversified state ownership structures

State-ownership types	Share of state enterprises (per cent)
State-owned Enterprise (SOE)	43
State Sole Funded Corporations	7
State Joint Ownership Enterprises	1
Total state-controlled SOEs	51
Joint State-collective Enterprises	1
Unspecified	48
Total state holding enterprises	49
SOE and State-holding Enterprise (SHE)	100

Source: National Bureau of Statistics of China.

SOEs: no longer as important but still powerful

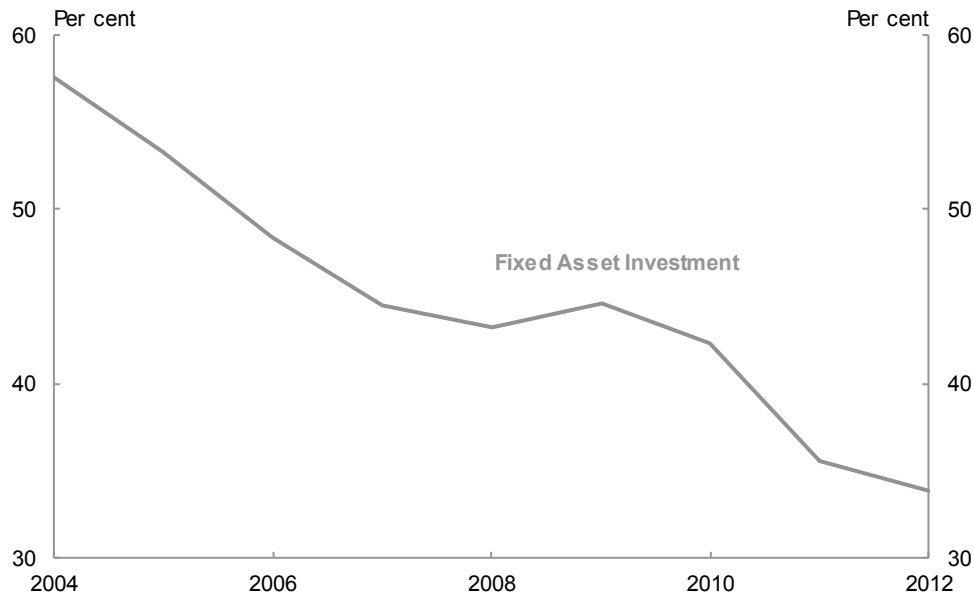
SOEs nowadays are significantly different from what they were 15 years ago when serious reforms began, let alone 30 years ago when reforms were first introduced. In particular, SOEs' importance in the economy has been in a constant decline since the mid-1990s, which can be seen across a range of metrics (Chart 1).

Chart 1: State enterprises — declining importance in the economy

Sources: CEIC China Database and Treasury.

First and foremost, SOEs' share of gross output — which measures their combined contribution to China's economic output — almost halved between 1998 and 2010, to be only slightly more than a quarter. Mirroring this, in 2010, SOEs accounted for only slightly over a quarter of the industrial sector's total profits. While the state sector's *share* of the economy has fallen over time, it is worth noting that its absolute size has continued to rise in terms of gross output and total assets. Indeed, the relative decline of SOEs in China's economy simply reflects that the non-state sector has grown at a much faster rate, and has been the true drivers of China's industrial production and profit growth.

Second, SOEs' share of fixed asset investment (FAI) — which is often touted as a sign of China's state-led growth — has continued a long-term decline, from 58 per cent in 2004, to below 45 per cent in 2009, to below 35 per cent in 2012 (Chart 2). Again, this does not mean that FAI by SOEs did not grow during the period of time. It simply means that FAI undertaken by the non-state sector outpaced that of the state sector. According to the National Development and Reform Commission, private investment grew by 32.5 per cent in 2010, 34.3 per cent in 2011, and 24.8 per cent in 2012. Its growth rates were 8.7, 10.5, and 4.2 percentage points higher than the growth rates in total FAI during these three years. The private sector's share of FAI also increased, from 55.9 per cent in 2010, to 61.4 per cent in 2012. In the first half of 2013, private investment grew by 23.4 per cent to reach RMB 11.6 trillion, with its share rising further to 63.7 per cent (The People's Daily 2013). Interestingly, despite evidence of an SOE revival following the global financial crisis (GFC), the investment data suggest any rise was merely temporary. Moreover, any success in moving away from investment-led growth and towards the more efficient use of capital would be likely to reinforce this downward trend.

Chart 2: State enterprises — declining share in total fixed asset investment

Source: CEIC China Database and Treasury.

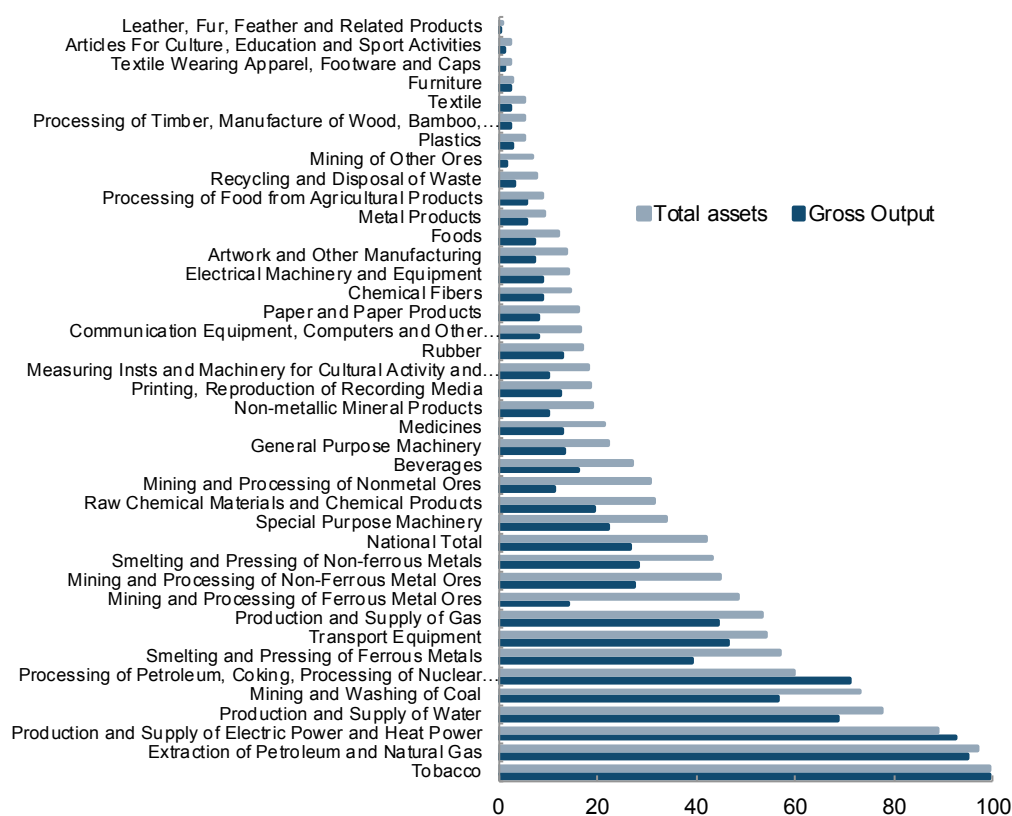
Other measures are equally telling. SOEs accounted for 20 per cent of total industrial employment in 2010, falling from around 60 per cent in 1998. After shedding tens of millions of workers while undergoing various reforms, SOEs are no longer China's major employer. The share of workers employed by SOEs have more than halved between 1998 and 2010. The non-state sector is, and will continue to be, the main source of employment.

A majority of firms in China are already non-state owned, with SOEs accounting for less than 5 per cent of the number of industrial firms, dropping from slightly below 40 per cent in 1998. This should be read together with SOEs' share of assets, which, while falling from about 70 per cent in 1998, still hovered above 40 per cent in 2010.

Taken together, these metrics suggest that SOEs tend to be much larger and more capital-intensive than non-state firms. In 2010 on average, a SOE had five times more workers, produced nearly eight times more output value, and used 15 times more asset than a firm in the non-state sector. As previously discussed, larger-scale and more capital-intensive SOEs are direct policy outcomes of the government pursuance of SOE reform since the mid-1990s.

Indeed, some SOEs have become industrial behemoths on a global scale. In 2012, 54 of the largest SOEs entered into the Fortune 500, with the largest reaching the 5th place. In the mid-1990s, by contrast, the total combined revenue from China's top 500 SOEs was less than that of General Motors.

**Chart 3: State enterprises — sectoral distribution
(share of total assets and gross output)**



Source: National Bureau of Statistics: Statistical Yearbook of China, 2011.

The sectoral distribution of SOEs has also changed markedly since the reforms began. SOEs have almost completely abandoned labour-intensive industries such as textile and footwear. They are now heavily concentrated in the production and distribution of natural resources, materials, and energy, with a large presence in transport equipment and machinery production – industries earmarked as ‘strategic and pillar’ (Chart 3). State-owned companies continue to dominate key utility and infrastructure sectors, such as electricity, aviation, telecommunications, banking, railway and shipping.

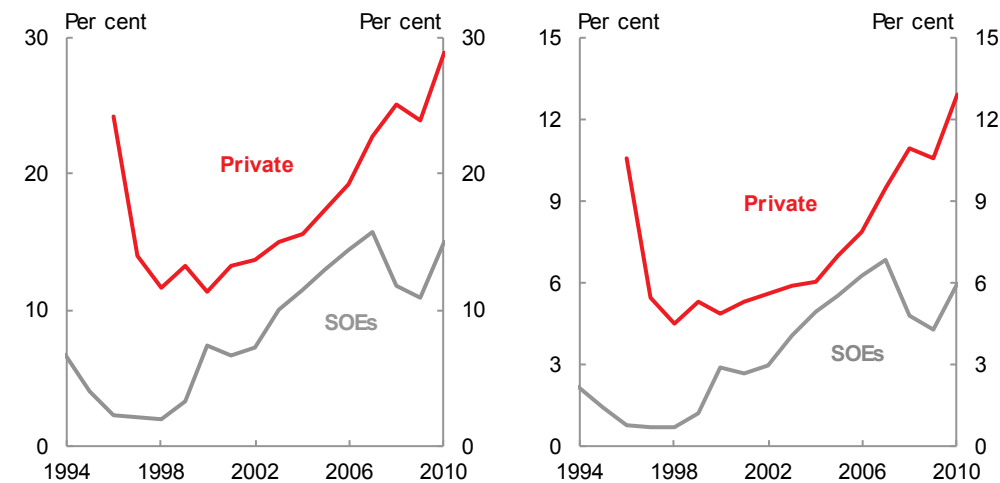
In a sense, this represents a clear success for the government in realising their policy objective of ‘seizing the big and letting go of the small’, with SOEs making a retreat from the more competitive sectors to the more strategic sectors. However, what constitutes a ‘strategic’ industry is an evolving concept, and the 12th Five Year Plan for 2011-15 lists seven strategic industries: new-generation information technology, energy-saving and environment protection, new energy, biology, high-end equipment manufacturing, new materials and new-energy cars.

Favourable policies towards SOEs

But has the financial performance of SOEs improved? Normally this would be an important indicator of whether the reforms have also succeeded in making SOEs more productive.

On the surface, SOEs have made a turnaround in financial performance since the late 1990s, when the sector was on the verge of loss-making. The return on equity (ROE) of SOEs rose from below 2 per cent in 1998 to above 15 per cent in 2007. After a two-year fall following the onset of the GFC, the ROE in 2010 recovered to just below the pre-GFC level. While this apparent reversal in fortunes has been hailed by the government as a success in SOE reforms, policy favouritism, rather than their economic performance, has played an important role (Chart 4).

Chart 4: State enterprises — improving profitability but still lagging behind non-state firms (left panel: return on equity and right panel: return on asset)



Source: CEIC China Database and Treasury.

Indeed, the remarkable change of financial fortune for SOEs has been significantly aided by policies and regulations to help SOEs take the 'strategic heights' of the economy. SOEs continue to enjoy a privileged status in natural monopolistic sectors such as utilities. Further, the government has effectively created administrative monopolies that restrict entry and competition from non-state firms in a wide range of activity in services and other industries that it regards as strategically important (World Bank 2012). Moreover, a disproportionate share of SOE profits come from a few state monopolies that earn artificially high rates of return. For example, SOEs in the resource and energy industries accounted for around 55 per cent of SOEs' total profit.

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In addition to protection from competition, SOEs continue to receive explicit and implicit government subsidies, including low effective tax rates, low dividend payouts, and little or no royalties on resource extraction. Compared to non-state firms, SOEs are in a much better position to benefit from under-pricing on key inputs such as energy, water, land, and capital derived from China's distorted factor markets (Huang 2010). SOEs are also in a more favoured position than non-state firms in accessing credit from banks because of the implicit backing they have from the government.

These protections, subsidies, and preferential treatments have artificially propped up SOEs' profitability. Based on the costs of doing businesses faced by non-state firms, SOEs' profitability would be much lower or even negative. Unirule (2011), an independent Chinese think tank, estimates the average real ROE of SOEs from 2001 to 2009 to be -6.29 per cent, rather than the 8.16 per cent reported. The figure is derived from stripping the benefits of various preferential policies and fiscal subsidies from SOEs' reported profits, and adding back the real cost of financing, land and resource rent to their expenses.

An important source of economic distortions

Understandably, these favourable policies mean that SOEs remain a source of economic distortion, which is manifested in different forms.

First, SOEs are run considerably less efficiently than non-state firms. Even using the inflated SOE profit figures, private firms were still more than twice as profitable as SOEs in terms of ROA in 2010. Resources keep pouring into SOEs, while non-state firms still face discriminations in access to finance, inputs, and entering certain industries. A report released on the 2013 *Boao Forum* said that based on its survey of 1000 small and medium enterprises (SMEs) across China, 62 per cent of them do not have bank loans (Zheng 2013, *China Daily*).

The majority of SOEs' profits have been retained for internal uses. Until 2007, SOEs were not required to distribute any dividends to their shareholders. While this is changing, the payout rates remain low. Moreover, most dividends that the government receives have been funnelled back into SOEs in the name of supporting their development. Of the anticipated RMB 108.3 billion that SOEs will pay the government in 2013, over 90 per cent is expected to be used to support SOEs, for the purpose of either their restructuring and research and development (RMB38 billion), major investment projects (RMB 37billion), industrial upgrading (RMB 17.7 billion), or foreign investment and economic cooperation (RMB 6.7 billion). Only 7 per cent (RMB 76 billion) is scheduled to be transferred either to the government budget or for

social security purpose.¹¹ Therefore, raising dividend payout ratios alone does not guarantee that SOEs will ultimately provide a larger dividend to the government.

Excessive retained profits and access to cheap credit enable SOEs to keep investing in areas with non-economic returns. Because of their access to cheap capital, SOEs also tend to maintain a higher level of inventories, and are able to undertake long-term investment. This in turn exacerbates the issues of excess production capacity already confronting many industries.

Because they are in competition for factors of production, these distortions limit the growth of China's more efficient and profitable non-state firms. It is difficult to determine whether the distortions are worsening or not. The declining share of SOEs in the economy suggests that their distortions may also be declining. However, they are also concentrating in certain sectors and competing for increasingly scarce factors of production, which may be increasing their economic cost. Their constraining influence over the broader reform agenda may also have become more costly.

The entrenched SOE-government nexus

Despite years of reforms to free SOEs from government interference, China's current institutional settings continue to provide the government with multiple channels to influence SOEs. SOEs are also in a strong position to influence the process of policy making. The SOE-government nexus has, in varying degrees, entrenched the economic distortions that favour SOEs.

The government can exert its influence on SOEs through the appointment of board directors and chief executives, which are the legitimate rights that any majority owner is able to exercise. The government has also appointed independent boards of directors on some occasions, which has reportedly played a positive role in improving the quality of corporate governance and management in such SOEs.

There are further policy channels through which the government can influence SOEs, including administrative guidance in implementing macroeconomic policies and industrial policy. The government also gains influence through compliance requirements for SOEs in regard to business regulations, licensing, and bank lending.

11 According to China's Ministry of Finance, there are five different payout ratios applying to industries: 20 per cent for the tobacco industry, 15 per cent for industries with monopolistic nature, such as petroleum, petrochemical, electricity, telecommunications, and coal production, and 10 per cent for steel, transport, electronics, trade, and construction industries; 5 per cent for ministry enterprises, science research institutes, China Post, and 0 per cent for policy companies, including companies in engaged in food and cotton reserves (see http://yss.mof.gov.cn/2012zyczys/201303/t20130322_784806.html).

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The role of local governments is particularly important. Decentralisation of economic power during the reform period has generally made local governments an important driver for growth. The performance assessments of local officials and therefore their promotions are closely linked to the performance of their local economy. This has given local officials every incentive to push local SOEs to implement a variety of goals – growth, employment, or social stability. Backed up by local governments, local SOEs have often been compelled into activities which would not be undertaken on a purely commercial basis, which has drawn the government into shouldering the associated cost and risks of such activities.

Their stake in the success of local SOEs means that local governments have an incentive towards industrial favouritism, rather than promoting the market economy through greater competition and enhanced consumer protection.¹² Central government agencies, particularly SASAC, have been making some progress in reining in these types of government interference through more centralised supervisions and coordination. However, progress is slow, often hampered by strong and differing local interests.

Influence goes both ways. SOEs shape government policy priorities, often advancing their own interests. Lack of effective supervision means that the balance of the relationship is often tipped in the favour of SOEs away from their state owners. With insider information and a strong interest in protecting SOEs' interests, senior managers in state enterprises are often in a much better position in dealing with officials from the supervisory agencies who may not have the same strong incentive to enact supervision.

SOEs can also derive influence from their ranking vis-à-vis the government. Despite SOEs no longer being part of the bureaucratic system, SOEs retain their state and party ranking, which often see the heads of major CSOEs ranked as equal to a minister or vice-minister, with a few heads also members or alternates of the Chinese Communist Party (CCP) Central Committee. This link is reinforced by the rotation between government and SOE positions, and a more common practice by the government of promoting heads of SOEs into key government positions. In this context, it is not surprising that SOEs are an integral part of the policy making process, routinely consulted throughout policy deliberations.

¹² However, there are different views as to whether local governments have become more or less partial in promoting competition. Coarse and Wang (2013), for instance, argue that, due to strong inter-regional competition for business investment, local governments have increasingly become public service providers that contribute to the improvement of overall business environment and fairer competition.

As a beneficiary of the existing system, SOEs have strong interests in maintaining the status quo. Their strong voice in the system means that the government has to take into account their interests when undertaking future SOE reforms. SOEs' entrenched position in the policy making process has given rise to concerns that the government has even become a captive of SOEs (Yao 2010). This leads to the fundamental question of whether the government is able to push forward necessary economic reforms.

Renewal for market-oriented SOE reforms

Against this backdrop, there emerged a robust debate within China's policy circle on the need for further market-oriented reforms in the lead up to the CCP 18th National Congress in late 2012 and the 12th National People's Congress in March 2013.¹³ The World Bank-Development Research Centre report, *China 2030*, jointly released by China's Finance Minister and the President of the World Bank in Beijing in March 2012, was another trigger of the debate.¹⁴ The report contains in-depth analysis and practical recommendations for further market-oriented SOE reforms as a cornerstone to China's rise to a high income economy.

China's renewed push for broad-based reforms is occurring against a background of slowing growth and a search for new growth drivers. While the recent moderation in China's economic growth is partly a result of the withdrawal of government stimulus applied during the GFC and weak demand from developed countries, it also reflects ongoing structural shifts in the economy (Kong *et al* 2012). The benefits from previous reforms are dissipating, China is approaching closer to the technological frontier, and the working age population has peaked.

In policy circles, there has been a clear recognition of the limit to continuing to use credit and investment to drive growth. Many accept that there is an urgent need to transition towards a new growth model, driven mainly by productivity gains, innovation, and private sector participation (Lu 2013). The key to this transition, the government believes, is to liberalise the still-tightly controlled portions of the economy, including the SOE sector (World Bank 2012).

Almost immediately following the inauguration of the new administration, in which reform-minded officials have taken key policy making positions, market-based reform programs have begun rolling out (Naughton 2013a, 2013b). [Box 2: Major reform as announced by the State Council for 2013.]

13 This debate is ongoing. While views defending SOEs' position are loud, calls for trimming their influence have gained some ascendancy in the policymaking process.

14 The report involved an extensive collaboration between the World Bank and the Chinese Government, with its coordinator Liu He now sitting as the head of the Secretariat for the CCP's Leading Small Group for Finance and Economy.

Box 2: Major reform areas approved by the State Council for 2013

On 24 May 2013, China's State Council approved recommendations made by the National Development and Reform Commission (NDRC) on reforms in seven key areas: administrative system; fiscal system; financial system; investment system; resources and energy prices; social security; and urbanisation, as part of China's efforts to transition to a more sustainable growth model.

The administrative system reforms aim to reduce government interference in the economy and transform it into a public service provider. The State Council announced that it reformed 133 administrative approval processes (107 were removed) in the government's first two months in office. Continued regulatory efficiencies are noted in this reform plan.

Fiscal system reforms aim to establish an open, transparent, standardised budget system. Tax reform is a key element, including expansion of the pilot value-added tax (VAT) into transportation, shipping, certain service sectors, coal and other heavy polluting products, and recommendations for improved management of dividends from state assets, and fiscal support for SMEs.

Financial system reforms include the pushes for more market-determined interest rates and exchange rates and progressing RMB convertibility under the capital account. The reforms will also allow for greater foreign investment in China – Premier Li told a German audience recently that the rest of the world has an 'enormous' opportunity in this reform package. Private sector firms will also gain from the removal of barriers to investment in hitherto protected sectors such as energy, railways and telecoms. Implementing deposit insurance is also recommended.

Other reforms include measures for more market-determined prices for commercial and residential use of electricity, coal, water and LNG; establishment of social security, food security, and environment protection; and pushing for further urbanisation, including reforms of the *hukou* system (household registration), which so far has disadvantaged urban migrant workers in access to government services.

More broadly, the State Council notes that this reform package supports ongoing reforms in state-owned-enterprises, economic opening up, and other social services.

The clear direction of the reform programs is to use market-based principles to reshape the economy, including pushing for de-regulations (cutting red tape) to encourage private sector-led growth, allowing the market to set prices for land, resources, energy, and capital (through interest rate and exchange rate liberalisation). While discussion of large-scale economic reforms by Chinese leaders is not new, the strength of rhetoric used by top leaders and official statements and the level of detail for implementation suggest this time may be different. If successfully implemented, these reforms will consequently change China's business environment and make SOE reforms easier to undertake.

Discussions by leading academics and officials indicate that the government is likely to continue pushing SOE reforms along the following three fronts. First, given the existence of so many inefficient and loss-making SOEs, there seems to be significant room to resume the process of privatisation, which has stalled since the early 2000s. By the end of 2012, one quarter of SOEs were loss-making and continued to be viable only through state support. While privatisation remains politically sensitive, it is likely that any further privatisation would proceed quietly and in a gradual manner away from the public limelight.

Second, the government is likely to stimulate SOE reforms by increasing domestic competition, through: providing support to private firms; lowering barriers to entry and exit; breaking up state monopolies or oligopolies in key industries (such as petroleum, chemicals, electricity distribution, telecommunications, and banking and financing areas); and promoting SMEs and increasing their access to finance. These reforms will help force SOEs to be efficient and competitive. Allowing private participation in the existing state monopoly sectors could also help lower production and distribution costs, and broaden the revenue bases for the government.

Third, there is much room for further corporatisation and corporate governance reforms. The government has clearly indicated that, wherever conditions are met, SOEs will be pushed for public listing in either domestic or international stock markets. The government hopes that public listing could facilitate the separation of ownership from management and the introduction of modern corporate governance practices. As a result, SOEs will be forced to face direct market disciplines, further diversify their ownership structure with broader private sector participation, and better allocate their assets.

These reforms would eventually help the government securitise its implicit equity in SOEs. For that purpose, it could consider establishing one or more state asset management companies (SAMCs) to represent the government as shareholder and professionally manage and trade these assets in financial markets where feasible. This would facilitate a portion of state assets being transferred to the national pension fund with the flow of returns being used to help fund future pension obligations. In the meantime, SASAC would confine itself to the role of policy making and oversight of state assets.

Concluding remarks

Our discussions so far do not suggest radical changes but point to a continuation and deepening of the reforms that started in the mid-1990s. While China's leadership appears determined to push forward market-oriented SOE reforms, the delivery of these reforms will continue to rely on the existing system, institutions, and policy making process, in which SOEs have a strong voice. Any reforms affecting SOEs'

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interests will likely be carried out through internal negotiations, with outcomes likely to reflect a compromise, possibly including compensation for potential losers. It is therefore likely that the outcomes may not be exactly what the leadership has planned for in its current roadmap for reform.

Moreover, SOE reforms cannot proceed alone, but are interdependent with other key major reforms, including those of the administrative and fiscal (particularly transfers) systems, and capital and other factor markets. Together, these reforms are the major steps that the government must take to withdraw from being a direct player in the economy. This will allow the market to play a much larger role in determining factor prices, for land, labour, capital, and energy, and thus provide a more level-playing field for firms to compete with one another, regardless of their ownership.

Of course, implementing these reforms involves great uncertainties and risks. These reforms are highly complex, interconnected, and their implementation entails 'top-level design' – a buzzword frequently used by China's leaders nowadays in referring to the need for a coherent reform strategy that coordinates reforms in each of these major policy areas. Acutely aware of these risks, the Chinese leadership will continue to pursue reforms gradually to minimise the chances of instability, be it economic or political.

The outcomes of these reforms, whatever they might be, will have profound implications for China's growth prospects, the shape of its economy, and for the international economy more broadly. For example, if market-oriented reforms are successfully implemented, growth in China is likely to become less resource and perhaps less energy intensive. Moreover, SOEs' share of investment, both domestically and internationally, is also likely to decline further, although at least some of this slack will be picked up by private sector investment. While the impact on China's aggregate investment may be unclear, there is little doubt that a larger role for private sector will be a critical step in driving China's transition to a higher income economy.

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Frank Crean: a long wait for a turbulent tenure

John Hawkins¹

Frank Crean was effectively shadow treasurer for a decade or more before becoming treasurer. But soon after achieving the post he was facing the most turbulent global economic conditions since the depression as the quadrupling of oil prices saw the emergence of stagflation in almost all advanced economies. Crean was a decent man and technically competent but not politically strong enough for the challenge.



Source: National Library of Australia²

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- 1 The author formerly worked in the Domestic Economy Division, the Australian Treasury. This article has benefited from comments and suggestions provided by Selwyn Cornish, Simon Crean, Alex Millmow and John Wanna. The views in this article are those of the author and not necessarily those of the Australian Treasury.
 - 2 Wolfgang Sievers, 1974, *Portrait of Frank Crean, Minister for Trade*, National Library of Australia, pic-vn4464153.

Introduction

Frank Crean was an 'amiable, tolerant man of calm temperament'.³ His hobbies were gardening and reading.⁴ He had some old-fashioned habits, wearing a hat, often staying in the Hotel Kurrajong used by Ben Chifley and sometimes travelling by car between Canberra and Melbourne.⁵ Nicknamed 'the woodpecker' for his habit of nodding his head to make a point, Crean possessed 'no tricks of oratory', being an 'almost monotonous' but sincere speaker.⁶

Crean was admired for his 'real depth of economic and financial knowledge'.⁷ He saw himself as the 'best qualified' Australian treasurer.⁸ He was 'the one who diligently read the technical material'⁹ and so 'always knew what he was talking about'.¹⁰ But most saw him as 'temperamentally unsuited for the role of treasurer in an

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- 3 'Crean was almost invariably easy-going and unflappable as it was simply not in his make-up to shout, rant and bombard colleagues with expletives to get his way'; McMullin (1991, pp 240, 356). Similar views are given by Edwards (1974a, p 35), Hocking (2012, p 102), Reid (1976, p 70), Schedvin (1992, p 482), Snedden (1985, p 21:4) and Whittington (1964, p 107). A previous treasurer, Leslie Bury, expressed 'nothing but admiration for him' calling him distinguished, solid and reliable; *Hansard*, 21 April 1966, p 1103. A later treasurer, John Howard (1980, p 39) called him 'a man of conviction and sincerity'.
 - 4 Whittington (1964, p 108). His reputation as a wine connoisseur was exaggerated: 'I was never a teetotaller ... but I am not a bon viveur'; Crean (1983, p 19:2).
 - 5 This sometimes annoyed Whitlam. Once when he needed to speak to Crean urgently and was told how long ago he'd left Canberra, Whitlam exclaimed 'the bastard's in Benalla' and arranged for the local police to intercept him; Chalmers (2011, p 178).
 - 6 Whittington (1964, pp 107-8). Journalists described him as having a 'plodding, soporific manner'; *Sydney Morning Herald*, 17 December 1975, p 8, and being 'not a forceful, dramatic speaker'; Barnes (1971).
 - 7 Kevin Rudd, *Hansard*, 4 December 2008, p 12358. 'His qualifications and special interests are in economics and ... he keeps abreast of the latest books and journals' (*The Australian*, 6 February 1967). Crean cited as intellectual influences Fabian writer Tawney's *The Acquisitive Society* and Veblen's *The Vested Interests*; S. Crean (1998, p 55) and Crean (1993, chapter 3). *The Argus*, 5 February 1951, referred to him as 'a brilliant scholar'. Whitlam called him 'one of the great educators in the Labor Party, referring to his role as an economic teacher; Crean (1994a). Barnes (1971) called him 'the economic brain'.
 - 8 *The Australian*, 3 December 2008, p 11. Millmow (2011) agreed Crean was 'technically well qualified'. His colleague Clyde Cameron ranked him 'the best qualified treasurer and the best treasurer this country has seen over the past generation'; *Hansard*, 8 November 1977. *The Australian Financial Review* editorial of 14 August 1974 referred to him as 'probably the best treasurer Australia has had for quite a few years'.
 - 9 *The Age*, 3 December 2008, p 11. As shadow treasurer 'it was the detail that delighted him, not the concept', according to then treasurer Billy Snedden (1976).
 - 10 Whittington (1964, pp 107-8). Megalogenis (2012, p 32) says he 'knew his numbers'.

inexperienced government with ambitious spending plans'.¹¹ He 'lacked the drive, the ambition, the fire and the personality' to be a successful leader.¹²

Crean noted on one day three newspapers labelled him as respectively right wing, moderate and left wing.¹³ His own description of his beliefs was 'a little more day to day or prosaic'.¹⁴ He described taxation as the means by which we 'buy civilisation'.¹⁵ He said he had an 'evolutionary rather than revolutionary approach to politics'.¹⁶

Crean's life before politics

Francis Daniel Crean was born in Hamilton, in western Victoria, on 28 February 1916. His father John had been a miner and sold, made and raced bicycles and his mother Alison had been a teacher. Francis was the third of their five children. He recalled his early years as 'uneventful and happy enough'¹⁷ as he attended the local schools (being dux of Hamilton High in 1932) before moving to board with some aunts in Melbourne to complete his secondary education, topping the state in accounting. In his early teens he was in bed for almost a year with rheumatic fever and he read a lot, including literature provided by an activist neighbour which fuelled his interest in politics. Soon after recovering in 1929 he attended a speech by ALP leader Jim Scullin.¹⁸

He worked for the Victorian government's taxation department and studied accounting, commerce, economics and public administration part-time, acquiring both a BA and a BComm from the University of Melbourne, as well as accounting qualifications and a diploma in public administration.¹⁹ Crean was the founding

11 Schedvin (1992, p 482). Edwards (1974a, p 35), Hocking (2012, p 102), Megalogenis (2012, p 32), Murphy (1980, p 78) and Uren (1994, p 251) give similar views.

12 Whittington (1964, p 107). Coombs (1981, p 302) opined that he 'was hard working and competent but lacked the fighting qualities necessary'. Whitlam (1985, p 210) observed that 'Crean did not like conflict'; Hocking (2012, p 102). Stubbs (1989, p 116) said he was 'neither strong enough to reject Treasury's advice nor effective enough to convince his fellow ministers it was right'. Uren (1994, p 229) 'never saw him make any dynamic decisions'. Treasury's deputy secretary John Stone called him a 'limp reed'; Hocking (2012, p 165). Courvisanos and Millmow (2006, p 115) call him 'not tough enough'.

13 Crean (1983, p 4:22), Crean (1993c).

14 Crean (1983, p 10:2). Catley and McFarlane (1974, p 71) refer to him as 'an old-fashioned Labor man ... holding out against the extremists of technocratic Laborism'.

15 Cited Ellis (1997, p 9). Crean attributes the line to Justice Holmes of the US in Crean (1993c).

16 Crean (1993c).

17 Crean (1993a, p 15 and 1993c, chapter 1).

18 Crean (1993c, chapter 1). In later life, as a Labor treasurer facing global economic difficulties and a hostile Senate, he may have identified with the luckless Scullin.

19 At the Federal Institute of Accountants examinations in 1935 Crean placed second in Australia. He admired one of his history tutors: Manning Clark, *Hansard*, 23 September 1976, p 1444.

chairman, and served for many years as Victorian president, of the Fabian Society and the Council of Adult Education.

Parliament

Crean was elected member for Albert Park in the Victorian parliament in 1945, after taking advice to change his name from Francis to Frank to avoid losing votes due to anti-Catholic prejudices.²⁰ In 1946 he married Mary Findlay and they lived modestly in inner Melbourne, never buying a car. He lost his seat in 1947 when the dominant issue was federal Labor's plans for bank nationalisation. After two years working as a private tax consultant and part-time university tutor, he returned to the Victorian parliament in 1949 as member for Prahan.

Crean switched to the federal seat of Melbourne Ports in 1951. His first speech was on a supply bill, where he cited the national accounts and emphasised the importance of how 'total productivity is shared among the various sections of the community'.²¹ He was appointed to a re-established Public Accounts Committee around 1954.

After the death of Chifley, Crean gradually became the Labor Party's principle spokesperson on economics.²² From the mid-1950's he chaired the caucus economics committee.²³ Crean was on the Labor Party's parliamentary executive from 1956 and referred to as 'shadow treasurer' by treasurer Holt as early as 1963.²⁴ Crean wrote regular articles for the *Australian Financial Review*.

20 Crean (1993a, p 17; 1993c).

21 *Hansard*, 26 June 1951.

22 Jim Cairns was the only other Labor member with significant economics training, but was more of an economic historian; Whittington (1964, p 107). Edwards (1974c, p 24) reports Crean claiming to have been Labor's economics spokesman for 20 years and Courvisanos and Millmow (2006, p 115) agree. As deputy leader, however, Calwell would have been expected to have been treasurer in an Evatt government; Crean (1983, p 4:4). Crean had been tipped as a future treasurer as early as 1951 when he was compared to Chifley for 'his ability for economics and his modest manner'; *Australian Post*, 26 April 1951. By one account he was brought into federal parliament to provide Labor with some economic expertise; Barnes (1971). Bury said 'for almost a generation he had been shadow treasurer'; *Hansard*, 11 September 1973, p 781. Paul Keating, interviewed in Henderson (1990, p 175), notes Crean was one of the few Labor MPs interested in economics and he 'used to do his number at the table on the economic bills as they came through'. Crean spent a lot of his own money on economics books and journals; Crean (1994a). This reading showed in his parliamentary speeches.

23 Crean interviewed in July 1998, cited in Martin (1999, p 49).

24 *Hansard*, 29 August 1963, p 696. Labor did not have a formal shadow cabinet until Whitlam became leader in 1967. Whitlam (1985, p 212) describes Crean as 'vaguely accepted' as shadow treasurer under Calwell, and says he 'had long been accepted as the most knowledgeable member of the Federal Parliamentary Labor Party on fiscal matters' (p 81).

Crean was regarded as a potential candidate for deputy leader in 1960 but decided not to stand. He contested the leadership in 1967, and after Kim Beazley and Fred Daly had been eliminated, the votes were Gough Whitlam 39, Jim Cairns 15 and Frank Crean 14. He was then beaten by Lance Barnard for the deputy leadership. Crean believed Labor could have won in 1969 with him as deputy as he 'could have presented far better cases on the economy'.²⁵

Crean looked back on the 1960s as 'lost years ... the illusion of apparent prosperity but a real failure to grapple with the problems that are now glibly described as structural'.²⁶

Shortly before becoming treasurer, Crean had described the tax system as 'a hotch-potch of concessions, exemptions, qualifications and subsidies'.²⁷ In particular he criticised the 'inequitable' deductions for children in the tax system as benefiting rich parents more than poor parents and advocated examination of a capital gains tax.²⁸ At the time, however, Crean supported Whitlam's view that the 1972 policy speech should include a promise not to increase taxation rates and this made it harder to reform the tax system.²⁹ On company tax, he remarked 'there is possibly a case for taxing smaller companies at a somewhat lower rate or you could not impose the present maximum rate until the profits get to a certain point'.³⁰ Crean was unenthusiastic about removing the means test on pensions and thought if it was done then the pension should be treated as taxable income.³¹

Whitlam promised in the 1972 election campaign to aim for 6-7 per cent economic growth. Crean believed 'economic stagnation' was an important reason for the victory.

25 Crean (1983, p 4:23).

26 Crean (1993b, p 21).

27 Crean (1972, p 73), repeated in Crean (1993c, chapter 12).

28 Byrt and Crean (1972, pp 44-45); McQueen (1972, p 9).

29 Bob Hawke and Clyde Cameron unsuccessfully argued against it but the majority of the federal executive supported Whitlam; Freudenberg (2009, p 232) and Whitlam (1985, p 197). The policy speech included the statement that 'the huge and automatic increase in Commonwealth revenue ensures that that rates of taxation need not be increased at any level to implement a Labor Government's program'. Crean (1993c, chapter 12) later called it 'a foolish promise'.

30 *National Times*, 11 December 1972, p 44.

31 Crean (1993c).

Treasurer

Early days

Whitlam was his own treasurer during the 'duumvirate' he formed with Deputy Prime Minister Lance Barnard from 5 to 19 December 1972, while the final election results were awaited.³² But Crean was a 'sort of pro-tem treasurer' and talked with Treasury during this period, before formally being appointed to the role.³³ Whitlam reputedly considered appointing Bill Hayden as treasurer but did not have the heart to deny Crean after his long service as shadow treasurer.³⁴ Crean recalled of his appointment by Whitlam; 'I think he knew I had talents he did not have and needed'.³⁵ During the duumvirate Whitlam regarded Crean as the third most important man in the government³⁶ but once the caucus had elected the ministry Crean ranked behind Cairns and Bill Hayden in cabinet seniority.³⁷ Some early press commentary referred to Crean as playing a role for Whitlam comparable to that played by Chifley for Curtin.³⁸

The Christmas Eve 1972 revaluation of the dollar was a decision taken just by Whitlam, Barnard, Crean and Cairns, on Treasury and Reserve Bank advice.³⁹ Also announced at this time was a 'variable deposit requirement', initially set to require 25 per cent of overseas borrowings with maturity of over two years to be deposited interest-free with

32 Whitlam later quipped it was his best ministry he ever led but twice as large as it need have been. Crean mildly rebuked Whitlam's priorities 'the wine tax and the contraceptive tax, which seem to me to be two rather curious things to be urgent about'; interview in *National Times*, 11 December 1972, p 44.

33 Crean (1993b, p 22; 1993c). The press quoted him as assuming he would soon be treasurer.

34 Whitlam (1985, pp 212-3), Oakes (2004, p 302). Whitlam also realised that establishing Medibank was an important and challenging role for which Hayden was the best suited.

35 *The Australian*, 21 January 2006, p 5. Crean recalled 'I was the only bloke who knew the realities of what the Treasury was about'; interview July 1998 cited in Martin (1999, p 49). Whitlam had little interest in economics and left economic matters to the ministers with economics training; Crean, Cairns and Hayden; Oakes and Solomon (1974, p 137). Whitlam (1985, p 184) himself said 'it is fair comment that my own preoccupations and predilections lay beyond the narrower field of economic theory', but argued that had been true of all prime ministers.

36 Hocking (2012, pp 14-15) says Whitlam instructed the governor-general that if anything happened to him and Barnard, Crean should be commissioned to form a government. Crean and Barnard were the Whitlams' first guests at the Lodge.

37 Cairns had outpolled him in the caucus ballot for the ministry while Hayden won the same number of votes but then won a coin toss'.

38 *Hobart Mercury*, cited in Crean (1983, p 7:19).

39 Crean (1993c). As Gruen (2011, p 5) notes, the Government 'aware of its unpopularity, timed its announcement for the Saturday two days before Christmas, confident that most people had other things on their minds at that time'.

the Reserve Bank.⁴⁰ It was lifted to 33.3 per cent in October 1973 before being wound down between June and November 1974.

As early as January 1973, Crean called for 'a pause for stocktaking' and in February was warning of conflicts between the new government's spending plans and economic management objectives.⁴¹ During his time in cabinet he was 'at the forefront of urging restraint where it was needed'.⁴² Crean recalled 'I had 23 ministers who each reckoned he could spend as much as the total budget was'.⁴³

Whitlam chose former Reserve Bank governor 'Nugget' Coombs to head a task force to find areas of government spending and tax concessions that could be cut to make room for Labor's priorities. This proved harder than expected.⁴⁴ The main changes to result were eliminating an investment allowance and some other business tax concessions and abolition of the phosphate fertilizer subsidy.

Relations with Treasury

Crean believed departmental experts should be 'on tap, not on top'.⁴⁵ Coming into the job, Crean had been 'always very highly impressed by the calibre both of Treasury staff and the Reserve Bank'.⁴⁶ He expressed sympathy for Treasury as 'everybody's favourite whipping boy'.⁴⁷ He observed 'Treasury had pretty good relations with industry when I came in and that was useful to me',⁴⁸ especially as Crean's own links with business and banking circles was limited.⁴⁹

40 Then Treasury deputy secretary John Stone (2012, p 14) claims it was introduced primarily on his advice.

41 Kelly (2004, p 4).

42 Simon Crean, *Hansard*, 4 December 2008, p 12587.

43 *The Australian*, 3 December 2008, p 11. Crean (1993c, chapter 14) described the cabinet as 'too large and too democratic'.

44 As Fred Gruen (1977, p 19) reflected 'however, unreasonable a [tax] concession has been made by government, once it is made it will be taken to be just and necessary. Its subsequent removal will arouse bitter opposition ...'.

45 It was a line he believed was first coined by Professor Harold Laski; Crean (1993c).

46 Crean (1983, p 7:10). McGuinness (1972, p 45) characterised the incoming treasurer's attitude to Treasury as 'friendly, cooperative and sceptical. And this indeed should be exactly what characterises the Treasury's attitude to a new treasurer'.

47 Crean (1993c, chapter 14).

48 Crean (1994b).

49 Snedden and Schedvin (1990, p 159) describe Crean's contacts with business as 'minimal'.

Frank Crean: a long wait for a turbulent tenure

Initially, Whitlam shared Crean's 'high regard for the capacity and integrity of Sir Fred Wheeler'.⁵⁰ But by 1974 Whitlam wanted to replace Wheeler with John Menadue, who declined, or Lenox Hewitt whom Crean rejected. Whitlam dropped the idea, deciding it would damage the Government's already poor relations with Treasury.⁵¹

Crean believed budget day was overemphasised, referring to it as 'one day of daily devotions that makes the economy holy for the rest of the year'.⁵²

Crean once said 'however, nice it is to try and identify the budget with the individual name of the treasurer bringing it before parliament it is – in fact must be – the collective responsibility of the whole cabinet, but it took the Labor Government three budgets to properly realise this'.⁵³

Crean aspired to publish Treasury forecasts and also supported the Melbourne Institute producing independent forecasts.⁵⁴ 'The Whitlam era marked the end of the Treasury's unrivalled dominance of economic advice', with rival sources of advice established in the Department of Prime Minister and Cabinet and the Department of Urban and Regional Development and Nugget Coombs and academics such as Fred Gruen, Eric Russell and Geoff Harcourt also influential.⁵⁵ Treasury opposed equal pay, increases in the minimum wage and then wage indexation but in all cases lost out to labour minister Clyde Cameron.⁵⁶ Whitlam and Cairns successfully put forward to the Labor Party's national conference a proposal to establish a Department of Economic Planning as a rival to Treasury but this was not enacted.⁵⁷

Crean as treasurer gradually became estranged from his department. By mid-1974 he 'failed to argue strongly or effectively for his department's views'.⁵⁸ Later he was reputedly dissociating himself from their views, claiming that papers brought before cabinet were the department's views not his own.⁵⁹ For its part 'Treasury had more or

50 Crean (1983, p 7:13). Whitlam's later contretemps with Wheeler, which almost led to Wheeler being charged with improper conduct, are described in the next essay in this series. Looking back much later Whitlam (1985, p 184) himself said 'I believed that the Australian Treasury could be relied on for loyal, disinterested and frank expert advice. I shared that mistake with my immediate predecessor and my immediate successor'.

51 Crean (1983, pp 16:5-6); Hocking (2012, p 130); Menadue (1999, p 124).

52 Interviewed in the *National Times*, 11 December 1972, p 44. He made similar remarks in *Hansard*, 25 August 1976, pp 559-560.

53 Crean (1993c, chapter 14).

54 *Australian Financial Review*, 7 December 1972, pp 1 and 9.

55 Whitwell (1993, p 43). In November 1974 Whitlam established an Economic Council as a formal alternative source of advice.

56 Guy (1999, p 285).

57 Hocking (2012, p 199).

58 Freudenberg (2009, p 309); Whitlam (1985, p 210); Edwards 1975, p 5).

59 *Australian Financial Review*, 27 August 1974, p 3; Hawker, Smith and Weller (1979, p 268).

less tolerated Crean'.⁶⁰ 'Treasury weakened its own influence with the Labor Government not because its advice was often unpalatable but because it was always monolithic'.⁶¹ By the time of the 1974 budget Treasury was regarded as sulking, preparing only a perfunctory draft of the budget speech and not helping explain it to the press.⁶²

The challenge of inflation in 1973

A conflict with the social programmes of the Whitlam Government arose from the rising inflation rate. The Reserve Bank was describing inflation as the 'most conspicuous problem' and made an unusually public call for a tight budget.⁶³ Crean identified inflation as the 'major economic problem'⁶⁴ and a cause of inequality.⁶⁵ The proposition that 'inflation of prices and costs can be cured by creating a pool of unemployed', however, he viewed as unacceptable as 'the cure would be worse than the disease'.⁶⁶ He argued instead that 'policies to contain inflation must be broad and multi-pronged'.⁶⁷

Among these anti-inflationary measures was the establishment of the Prices Justification Tribunal, which Crean saw as 'improving the functioning of the market' rather than replacing the market with controls.⁶⁸ Companies with revenue of over \$20 million a year were required to notify the Tribunal of price rises and the Tribunal could launch an inquiry to form a view on whether the rise was justified. The OECD judged that the PJT 'had met so far with somewhat greater success than might have been expected a priori'.⁶⁹ The PJT was complemented by a Parliamentary Joint Committee on Prices.

Labor's economic policy aimed at lifting productivity by utilising science and lifting research and development and 'transferring resources to those areas where productivity is high and rising'.⁷⁰ One means of achieving the latter was the 25 per cent

60 Freudenberg (2009, p 169), who notes by contrast that Treasury despised his successor Cairns.

61 Freudenberg (2009, p 285).

62 Mendaue (1999, p 123).

63 Reserve Bank of Australia (1973, p 4).

64 *Hansard*, 31 August 1973, p 32.

65 Crean (1974, p 7).

66 The highest acceptable unemployment rate in 1974 was generally regarded as around 2 per cent; Crean (1983, p 10:13).

67 *Hansard*, 9 May 1973, p 1888. He elaborated in *Hansard*, 31 August 1973, p 33. The Reserve Bank (1973, p 4) agreed, commenting 'it would not be prudent and probably not sufficient to rely only on monetary policy to achieve the desired restraint'.

68 *Hansard*, 9 May 1973, p 1888.

69 OECD (1974, p 6).

70 Beresford (1975, p 66).

across the board tariff cut in July 1973. This was recommended by a committee of experts including Tariff Board chair Alf Rattigan and Professor Fred Gruen, but Treasury opposed the idea.⁷¹ Quiggin regards the Whitlam Government as starting economic rationalism in Australia, albeit in a much more progressive form than it subsequently took, building on the Keynesianism of the Chifley Government.⁷² Whitlam had long supported cutting tariffs which he regarded as a hidden cost to consumers, an encouragement to industrial inefficiency and hurting workers in developing countries.⁷³ As well as a long-term reform it was equally seen as a short-term anti-inflationary measure, cutting the price of imports and allowing increased demand to be met through higher imports.⁷⁴

Cabinet agreed in early 1973 to a Treasury study on the reintroduction of land tax but nothing eventuated.⁷⁵

The 7 per cent appreciation in December 1972 was followed by further appreciations, in February 1973 and September 1973⁷⁶ and monetary conditions tightened a number of times during 1973. In December 1973 there were referenda to give the government power over prices and incomes.⁷⁷ Both were decisively rejected.⁷⁸

In October 1973, Cabinet asked Bill Hayden as acting treasurer to commission a paper from Treasury on responses to rising inflation. This was an early sign that Whitlam was losing confidence in Crean as treasurer and made Crean (unjustifiably) suspicious that Hayden was angling for his job. The paper's call for expenditure restraint was rejected.⁷⁹

71 Kelly (2004, p 4); Crean (1993c). Stone (2003, 2012) rejects the view that Treasury had been opposed to the cut.

72 Quiggin (2012, pp 210-211) said 'Whitlam's view of a modern social democracy was one in which governments would abandon piecemeal intervention in markets through tariffs, quotas, subsidies and arbitrary regulation, and would instead work more systematically through progressive tax and welfare systems, free health and education, and efficiently run government enterprises.' Megalogenis (2012, pp 33-35) viewed the decision as the start of deregulation.

73 Leigh (2002, p 493).

74 Whitlam (1985, p 192).

75 Cameron and Connell (1990, p 215).

76 All calculations refer to trade-weighted exchange rates.

77 The wages question was the price for DLP support for the prices referendum; Oakes and Solomon (1974, p 156); Edwards (1974, p 28).

78 The prices referendum was only supported by 44 per cent of voters and the incomes referendum by 34 per cent, neither having majority support in any state.

79 Kelly (2004, p 4); Megalogenis (2012, p 37).

The 1973 budget

Crean said of his 1973 budget that it 'incorporates far more decisions than any previous budget' and aimed 'to reconcile the Government's determination to carry out the whole of its program with wise management of the economy'.⁸⁰ He prompted opposition interjections by proclaiming 'the whole thesis of the Government's policies requires that there be some increase in the share of resources going to the public sector'.⁸¹ As examples of why this was necessary, Australia is 'much better at selling cars than providing decent public transport services; much better at building houses than providing sewage services for them'.⁸²

The budget included cuts to tax concessions for mining and 'Pitt Street' farmers and investment allowances. A uniform company tax rate and quarterly instalments were introduced. Duty free allowances were reduced and taxes increased on fuel and tobacco. Crean introduced a new functional classification of outlays, gave more attention to the development and presentation of forward estimates and announced a more ambitious system of programme budgeting.⁸³ Crean described education as 'a top priority'⁸⁴, with the government assuming full financial responsibility for tertiary education from January 1974.

To left wing critics the budget was 'a cold and dessicated exercise in economic planning, rather than a program to transform society'.⁸⁵

Crean budgeted for a larger increase in revenue than in outlays and delivered a budget surplus but mainly due to inflation boosting tax revenues (known as 'fiscal drag'). Accordingly, 'the extent to which the fiscal actions of the Whitlam Government stimulated the economy during 1973-74 has been a source of considerable debate'.⁸⁶ But they did not exercise the degree of restraint that many economists believed was required given the growth in demand and the rising inflation.

Treasury was upbeat in its August 1973 review of the economy, describing it as 'growing very strongly' and forecasting 1973-74 to be 'a year of above average growth'.⁸⁷

80 *Hansard*, 21 August 1973, p 32.

81 *Hansard*, 21 August 1973, p 33. This was reiterated in the next year's budget speech; *Hansard*, 17 September 1974, p 1276.

82 *Hansard*, 21 August 1973, p 33.

83 Wanna, Kelly and Forster (2000, p 62).

84 *Hansard*, 21 August 1973, p 34.

85 Catley and McFarlane (1974, p 17).

86 Whitwell (1986, p 208).

87 Treasury (1973, pp 7 and 36).

Crean inexplicably refused to go on television to promote the first Labor budget of the television era.⁸⁸

Other economic issues

Crean acknowledged that foreign investment 'has brought with it new technology, skills and managerial know-how' and without it Australia 'would have been a less prosperous nation' but while 'foreign capital can be a valuable servant, it is certainly a bad master' and he was particularly concerned about takeovers of real estate, mines and monopolies and purchases of assets at temporarily depressed prices.⁸⁹

Among measures blocked by the Senate were the Overseas Trading Corporation, the Australian Government Insurance Corporation, Petroleum and Minerals Authority and the National Investment Fund which aimed to increase the share of Australian ownership of industry. The frustration this caused was one impetus for investigating foreign loans to 'buy back the farm', later to result in the 'loans affair'.

Crean regarded economic growth as a goal but not population growth, and placed importance on equality and improving the standard of public services on which the poor relied.⁹⁰

In August 1973 Crean appointed Bob Hawke to the board of the Reserve Bank. In late 1973 Crean accompanied Whitlam on the first visit of an Australian prime minister to China.

Economic challenges of 1974

The outbreak of the Arab-Israeli war in October 1973 was followed by the OPEC oil embargo and the global price of oil quadrupled.⁹¹ This led to a spike in inflation around the world. Wages had accelerated under the previous government and this continued over the course of 1973 and 1974, partly due to the Government's push for equal pay but also due to the temporary fall in unemployment. To some extent the government was using the public services as a wages 'pacesetter'.⁹² The trade union

88 Oakes (1977, p 245). Crean did not see himself as a marketer; 'as far as the press was concerned I never refused to see anyone but I did not believe it was right for them or for me that I should seek them out'; Crean (1993c, chapter 14).

89 Crean (1973, p 809); Johnson (1989, p 61).

90 Crean (1974, p 2).

91 Macfarlane (2006, p 30) argues that ongoing inflation had eroded the real price of oil and a 'catch-up' was unavoidable.

92 Fred Gruen (1977, p 23) argues the influence of this was overstated.

movement pushed hard for wage increases under its leader Bob Hawke with little apparent regard for the problems it was causing the Labor Government.⁹³

Treasury was puzzled by the way that increasing job vacancies were not being matched by a corresponding fall in unemployment. Some argued that rising unemployment benefits, and in particular the abolition in March 1973 of the lower rate for those unemployed aged under 21, were a significant factor, while others argued for the importance of reduced immigration or high real wages.⁹⁴

In May 1974 there was an early election. Whitlam was not sorry as Treasury was warning unemployment and inflation were certain to increase.⁹⁵

The 1974 economic statement

Cairns successfully challenged Barnard for the deputy prime minister's job after the election, telling journalists 'I felt we needed an increase in the role of an economic thinker, an economic worker, in the councils of the party'.⁹⁶ The deputy prime minister was traditionally allowed to choose his portfolio but Cairns did not seek the treasurer's job, partly because he did not want the associated administrative burden and partly because of his liking for Crean.⁹⁷

In the campaign for the May 1974 election, under pressure on the issue of inflation, Whitlam had promised to budget for a domestic surplus. Once the Government had been narrowly returned, Whitlam brought Crean (along with Barnard, Cairns and Hayden) to a meeting with senior economic advisers to plan for the budget. Treasury, the Reserve Bank and Whitlam's economic advisers Coombs and Gruen all argued for a hard line against inflation, with cuts to government spending and tax rises. This 'short, sharp shock' strategy was taken to a full cabinet meeting where Whitlam was initially supportive but Crean was quiet, and the cabinet would not agree to it.⁹⁸

93 After Hawke had become prime minister himself, 'Crean himself wistfully commented that he wished Hawke had given him as much assistance in negotiating a prices and incomes accord as his son [Simon Crean, then ACTU president] had given Hawke'; Whitlam (1985, p 203).

94 Whitwell (1986, p 210).

95 Wheeler referred to the easing in inflation in early 1974 as a 'false dawn'; Freudenberg (2009, p 300) and Edwards (1974a, p 34). See also Chalmers (2011, p 120).

96 Oakes and Solomon (1974, p 527).

97 Oakes and Solomon (1974, pp 527 and 528).

98 Whitwell (1993, p 44), Edwards (1974a, p 35), Hawker, Smith and Weller (1979, p 255). The latter comment that 'reputedly there was considerable debate within the Treasury about the wisdom of the "short sharp shock". But it never reached the minister.'; Hawker, Smith and Weller (1979, p 264).

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Crean had planned to make a major economic statement in July 1974 but with cabinet not agreeing to major measures, it became little more than a concession that 'the Government's hopes that the rate of price increase was slackening have proved illusory'⁹⁹ and an announcement of an increase in the age pension. Crean's rhetoric about the need to fight inflation seemed unmatched by action, further damaging his credibility.¹⁰⁰

By 1974 the Reserve Bank was publicly warning that the acceleration of global prices was offsetting the impact of the stronger dollar and the tariff cut.¹⁰¹ Monetary policy appeared ineffective; 'there was still no clear evidence that the ... most protracted liquidity squeeze in Australia's post-war history had made any identifiable impact on the wage-price spiral'.¹⁰² Inflationary expectations appeared entrenched. The *Financial Corporations Act* of 1974 would have given power to control non-bank financial intermediaries but its major provisions have never been proclaimed.

Whitlam regarded the credit squeeze as his government's greatest mistake; it was 'begun too late; it was too severe; it lasted too long'.¹⁰³

The unemployment rate was rising, reflecting the turning of the inventory cycle, tighter monetary policy and the squeeze on profits from increased imports and the constraint on prices from the Prices Justification Tribunal.¹⁰⁴

The 1974 budget and the decline in Crean's influence

Crean called the 1974 budget the 'budget of too many hands'.¹⁰⁵ Cairns presented a paper on the budget to the caucus economics committee, drawing on input from a range of economists. It was said that 'Cairns and other ministers were being forced to go to outside experts because the Treasury, stubbornly intransigent, flatly refused to present the government with alternative options to its "horror budget" recommendations'.¹⁰⁶ The Cairns paper rejected Treasury's proposals to deal with inflation but did not offer a convincing alternative, beyond calling for wage restraint

99 *Hansard*, 23 July 1974, p 504.

100 Andrew Peacock interjected 'I think your speechwriter is setting you up'; *Hansard*, 23 July 1974, p 508. See also Schedvin (1992, pp 510-511). Crean narrowly avoided a greater humiliation; caucus rejected by 40-35 a motion that would have further watered down the package after it had already been distributed to the press gallery; Kelly (2001, p 114).

101 Reserve Bank of Australia (1974, p 4).

102 Schedvin (1992, p 508).

103 Whitlam (1985, p 204).

104 Gruen (1977, pp 24-25).

105 Crean (1983, p 9:17), Crean (1993c, chapter 14).

106 Oakes and Solomon (1974, p 541). Treasury's influence was weakened when a document they presented to cabinet appeared to have an incorrect number for the budget deficit; Hocking (2012, p 167).

and suggesting a penalty tax on excessive wage increases; but it was received more favourably than was the Treasury advice, which even Crean failed to advocate.¹⁰⁷ Whitlam failed to 'step in to take the side of the treasurer' against the spending ministers.¹⁰⁸ The underlying problem was that '1972 to 1975 was possibly the worst period in the last 25 years for the introduction of those reforms' the Labor Party had been waiting almost 25 years to introduce.¹⁰⁹ In this way the construction of the budget slipped out of Crean's hands and came more to reflect Cairns' approach.

Edwards (1974b, p 33) says Wheeler and Stone told cabinet 100,000 workers would need to lose their jobs in order to get inflation under control. Tight monetary policy was criticised by Lionel Bowen (1990, p 9:24) as a 'fatal decision' but 'not a cabinet decision'.

Crean noted in his budget speech that 'we share with all our major trading partners problems of economic management unparalleled in modern times'.¹¹⁰ Government spending rose by almost 20 per cent in real terms in 1974-75. At the time the resultant increase in federal government spending from 18½ per cent of GDP in 1971-72 to approaching 22 per cent shocked many, although the proportion has never been lower since.¹¹¹

There were further cuts in tax concessions for mining. Television licence fees were abolished. A 10 per cent surcharge was introduced on property income on the principle that 'unearned income' should be taxed more than 'income from personal exertion'.¹¹² A capital gains tax other than on a principle residence was foreshadowed,¹¹³ but to Crean's disappointment it was blocked by the party conference.¹¹⁴

Crean worried that the 1974 budget would 'give us the worst of all worlds' with both rising inflation and unemployment, but did not resign.¹¹⁵

An ad-hoc committee, chaired by 'Nugget' Coombs and including treasury secretary Sir Frederick Wheeler, Fred Gruen, Sir Edward Cain, Brian Brogan and Trevor

107 Hawker, Smith and Weller (1979, p 259).

108 Crean (1983, p 8:16).

109 Gruen (1977).

110 *Hansard*, 17 September 1974, p 1275.

111 Data from Treasury (2012, p 350).

112 *Hansard*, 17 September 1974, p 1278. Crean (1993c, chapter 15) described this as 'politically stupid and often economically unfair'.

113 *Hansard*, 17 September 1974, p 1289.

114 Crean (1983, p 10:17).

115 Nethercote (2005, p 14).

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Swan,¹¹⁶ was given three days to examine the exclusion of wage increases above an established norm as deductible expense for company tax, and found that while there would be administrative and other difficulties it was not impossible. Crean referred to the idea in his budget speech,¹¹⁷ but ultimately the idea was dropped.

In late 1974 the Mathews Committee was appointed to examine the effects of inflation on the tax system.

In September 1974 the Government announced a 12 per cent devaluation, against the advice of Treasury, and moved from the Australian dollar being tied to the US dollar to it being determined daily against a trade-weighted index.

November 1974 mini-budget

The November 1974 mini budget was devised by the Department of Prime Minister and Cabinet,¹¹⁸ and delivered by Whitlam, who described it as providing 'further fiscal stimulus',¹¹⁹ with cuts to income and company tax and a relaxation of monetary policy. The Government would support wage indexation but wanted the Arbitration Commission to regard the income tax cuts as a substitute for a quarter's indexation. The Prices Justification Tribunal would be asked to 'now give particular attention to the problem of sustaining and stimulating an adequate level of private investment and of maintaining rates of return on capital which will induce the new investment required to maintain economic growth and employment'.¹²⁰ He also announced there would be an inquiry into the interaction between inflation and taxation.

Whitlam commented 'employees can price themselves out of the market as effectively as business can. As the Treasurer said recently, in current circumstances "one man's larger pay packet can mean another man's job"'.¹²¹

Crean's departure from Treasury

Whitlam's failure to support Crean on a number of occasions reduced the influence of both treasurer and Treasury.¹²² By late 1974 Crean was 'depressed and

116 Cain was the commissioner of taxation, Brogan a political advisor and Gruen and Swan academic economists.

117 *Hansard*, 17 September 1974, p 1275.

118 Principally by Ian Castles, with input also from Professor Fred Gruen and Austin Holmes, a senior Reserve Bank economist on loan to the Priorities Review Staff; Menadue (1999, p 123).

119 *Hansard*, 12 November 1974, p 3360.

120 *Hansard*, 12 November 1974.

121 *Hansard*, 12 November 1974, p 3360.

122 Weller (2007, p 132).

disheartened'.¹²³ Hasluck had included Crean in a list of possible successors as governor-general in July 1974 but Crean (and Barnard) demurred and Whitlam made one of his worst decisions in appointing John Kerr.¹²⁴ Crean later asked Whitlam for the chairmanship of the Commonwealth Bank. Whitlam was initially sympathetic to the idea, which he saw as also allowing Bob Hawke to enter parliament, but Hawke rejected the approach believing he would not win the by-election and the idea lapsed.¹²⁵ Instead Whitlam replaced Crean as treasurer with Jim Cairns in December 1974, a decision Crean warned him he would regret.¹²⁶

Subsequent career

Crean served as minister for overseas trade from December 1974 to November 1975. He was also deputy prime minister from June to November 1975, after the resignation of Cairns. He unsuccessfully opposed the Government's involvement in the 'loans affair'.¹²⁷ He supported Bill Hayden in framing his budget.¹²⁸ He was acting treasurer in September 1975.

Crean ran unsuccessfully for the leadership after the 1975 election.¹²⁹ He retired from parliament at the 1977 election, but remained active in his local ALP branch. In 1975 his wife Mary was an unsuccessful candidate for South Melbourne council.

His son, Simon Crean, was president of the ACTU, has been shadow treasurer and leader of the opposition and held a number of cabinet posts. Like his father he served over two decades on Labor's frontbench, but unlike his father for about half of the time

123 Freudenberg (2009, p 311). Whitlam (1985, p 210) makes similar comments. By November 1974 there were stories in the press that Crean would be replaced and rumours he could be appointed governor of the Reserve Bank and in a bitter speech Crean said 'we already have too many headless chooks' and 'I do not believe that the answer to present difficulties lies in throwing the Government's policies completely into reverse', *The Age*, 2 November 1974, p 1.

124 Barnard (1983, p 7:1), Kelly (1995, p 67), Hocking (2012, pp 131-132).

125 Whitlam (1985, p 211). This was an unusual lack of self-confidence on Hawke's part given the seat of Melbourne Ports was held by a margin of 15 per cent.

126 Crean said 'you will be sorry you made Jimmy treasurer'; Hocking (2012, p 169). Mark Latham has suggested Cairns having a doctorate in economic history was a factor in Whitlam appointing him treasurer; interview July 1998, cited in Martin (1999, p 49).

127 Crean warned Whitlam when he was replaced as treasurer, 'for goodness sake don't have anything to do with this loan business'; Crean (1993c, chapter 16) and McMullin (1991, p 356). As will be described in more detail in the subsequent essay in this series, the 'loans affair' was a plan to raise finance through unorthodox channels for public participation in the development of natural resources. As Whitlam made clear, however, 'none of the moneys could have been spent except in accordance with parliamentary appropriations'; *Hansard*, 9 July 1975, p 3597. Crean (1993c, chapter 16) said 'it was certainly not corruption ... but was supreme folly'.

128 Crean (1993c, chapter 14).

129 The vote was Whitlam 36, Bowen 14 and Crean 13.

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he has been in government – and was one of Labor’s longest-serving ministers. His proud father helped prepare material for his speeches.¹³⁰ Another son, David, became Tasmanian state treasurer. His third son Stephen was a public servant and active in the union movement before dying in the snowfields.

Frank Crean, aged 92, was one of the oldest former members of the House of Representatives by the time he passed away on 2 December 2008.

130 S. Crean (1998, p 53).

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