TARGET30
REDUCING THE BURDEN FOR FUTURE GENERATIONS

THE CENTRE FOR INDEPENDENT STUDIES

The case against tax increases in Australia: The growing burden

Michael Potter

Research Report | June 2016

National Library of Australia Cataloguing-in-Publication Data:

Potter, Michael, author.

The case against tax increases in Australia : the growing burden / Michael Potter.

9781922184665 (paperback)

CIS research report ; 15.

Subjects: Taxation--Law and legislation--Australia.

Tax administration and procedure--Australia.

Other Creators/Contributors:

Centre for Independent Studies (Australia), issuing body.

Dewey Number: 343.94052

The case against tax increases in Australia: The growing burden

Michael Potter

TARGET30
REDUCING THE BURDEN FOR FUTURE GENERATIONS

THE CENTRE FOR INDEPENDENT STUDIES

Research Report 15

Related CIS publications

Policy Monographs

PM 67 Peter Burn, *How Highly Taxed Are we?* (2004)

TARGET30

T30.08 Alexander Philipatos, Jennifer Buckingham, Jeremy Sammut, Robert Carling, Simon Cowan, Stephen Kirchner, Trisha Jha, Submission to the National Commission of Audit, 2014

T30.07 Robert Carling, States of Debt, 2014

T30.05 Alexander Philipatos, Jennifer Buckingham, Jeremy Sammut, Robert Carling, Simon Cowan, Trisha Jha, Emergency Budget Repair Kit,2013

T30.04 Robert Carling, Shrink Taxation by Shrinking Government!, 2013

T30.01 Peter Saunders, Robert Carling, Simon Cowan, Towards smaller government and future prosperity, 2013

ACKNOWLEDGEMENTS

I have been greatly assisted in the preparation of this report by comments and assistance from Robert Carling, Patrick Carvalho, Simon Cowan, Karla Pincott, and Matthew Stocks (internal) and Stephen Kirchner, Tony Makin, and Mikayla Novak (external). Matthew Stocks provided invaluable research assistance, particularly with the compilation and checking of data. Karla Pincott edited the report and Ryan Acosta provided the design and layout. I am grateful for all this assistance. Naturally, any errors or omissions remain my responsibility.

Contents

List of Figures

List of Tables

List of Boxes

Executive Summary

- The tax burden of the federal government is set to increase in real terms by 12.7% per person over the next five years, and the tax to GDP ratio is set to increase by almost 8% over the same period.
- This paper forecasts the tax burden to be $29.6 billion above the historical average in five years' time, which is $1,228 per person (in today's money). This is approaching the tax burden from the mining boom, which is inappropriate, given how much weaker investment, wages and the overall economy are today compared to the boom.
- This extra burden will be imposed even if there are no tax policy changes. The tax hikes will be exacerbated by any proposal to increase taxes, including policies to wind back tax concessions, or cancel proposed tax cuts.
- These forecast tax increases are occurring by default and are mainly due to bracket creep — the failure to adjust personal tax thresholds for inflation or wages growth.
- The tax burden imposed by all Australian governments is also well above the historical average and is set to increase further.
- An alternative measure of the tax burden includes the deficit, which is a form of deferred taxation, as well as the current tax burden. This measure is well above its historical average.
- Tax increases to reduce the budget deficit just shift the tax burden from future taxpayers to current taxpayers, so these tax increases are flawed.
- Historical evidence indicates that deficit reduction should occur entirely through spending restraint, not through the forecast tax increases:
    - Spending is currently well above historical average.
    - In periods when the budget was near balance, tax was around its current level and spending was much lower.
    - Spending was also much lower in periods when the state of the economy was similar to today, while tax levels were lower, particularly the combined tax level of all Australian governments.

- Comparisons with historical tax changes also argue against the forecast tax hikes or additional tax increases:
    - In periods when the tax burden has remained above average, governments have provided substantial tax cuts to limit the tax burden. In contrast, today the burden is set to go well above average and government decisions are doing little to offset this increase, even with proposed company tax cuts.
    - Successful major tax changes have not involved increases in the tax burden. Plans involving substantial tax increases have been abandoned or repealed.
- These historical comparisons show previous tax cuts have not caused the current deficit, or any revenue shortfall.
    - If tax cuts hadn't been delivered during the mining boom, tax would have increased beyond record highs. A higher tax burden would have encouraged an increase in the size of government, with little or no improvement in the budget.
- Tax avoidance does not support arguments that the tax burden should be higher. Higher taxes won't affect the most successful tax avoiders, will impose the greatest cost on those who don't avoid tax, and will just encourage more avoidance.
    - Instances of companies avoiding tax are not justification for taxes to be higher on other unrelated businesses paying the full rate of tax.
- The current budget deficit is almost entirely due to government policy, not the state of the economy — as indicated by official Treasury estimates. Removing the effect of the economy, we would most likely see that revenue and spending are both above historical averages.
    - The alternative approach is to analyse revenue writedowns. However, this measure largely reflects forecasting errors and deferring to this measure would lead to large tax increases in recessions.
    - Actual tax levels are more important than whether they were forecast correctly.
- Australia is not a low taxing country. IMF and World Bank data shows our tax burden is above the developed world average.
- Australia's personal and company tax revenue is above the averages for the globe and the developed world. These are the most inefficient taxes levied by the federal government.
- Countries with high tax levels have been performing poorly in recent years; Australia should avoid emulating these countries.
- The forecast increase in personal taxes of 9% over the next four years is estimated to cut GDP by up to 0.55% or $376 per person per year. This is consistent with other Australian and international evidence.
- By contrast, tax cuts to offset these forecast tax increases have substantial benefits with proposed company tax cuts forecast to increase yearly GDP by $750 per person. The estimated benefit to national income is $460 per person which is more than 2.6 times the net revenue cost.
- The relevant research also indicates that tax increases to fund growth in the size of government are detrimental to growth.

1. Introduction

Australia's tax burden per person is forecast to increase by almost 12.7% over the coming five years, based on research detailed in this paper. This tax increase is largely due to bracket creep — when average tax rates, and sometimes marginal tax rates, increase because tax thresholds aren't indexed to wages growth.[1]

There have been very limited attempts to offset these tax increases: the policy decisions in the 2016 Pre-Election Economic and Fiscal Outlook (PEFO), 2016–17 Budget, and the 2015–16 MYEFO have left the total tax burden largely unchanged to 2019–20,[2] and the reductions in previous years have also been small.[3] Even after 2019–20, the company tax cuts proposed in the 2016–17 Budget only slightly offset this tax increase (see Section 3.1 below).

This increased burden is being accepted or even promoted by some commentators. Some suggest that taxes need to increase to address Australia's budget deficits,[4] even though deficits could be addressed by limiting the growth in government spending. Other reasons provided for tax increases include addressing revenue shortfalls compared to forecasts[5] or to fund spending commitments.[6]

This report critically reviews the case for these forecast tax increases, or additional tax increases, in particular examining:

- Historical tax levels, including and excluding the budget balance, for all Australian governments, and for the federal government alone.
- Tax and spending levels in historical periods when the budget was at or near balance, and when the state of the economy was similar to today.
- Periods of tax increases, tax cuts, and tax reforms during the past 40 years.
- The impact of the economy on the budget.
- The revisions to revenue forecasts (so-called revenue writedowns).
- The concerns about tax avoidance, particularly by multinational companies.
- A comparison of Australia's tax burden with other countries.
- The effect of tax increases on the economy.

The conclusion of this analysis is that Australians should not be penalised with the scheduled tax increases, let alone additional tax hikes. Instead, Australia has a problem with government spending. Recommendations on how to control government spending are contained in numerous other publications by the Centre for Independent Studies (CIS), such as the CIS TARGET30 campaign reports listed in the related publications at the start of this report.

This paper uses the following methodology:

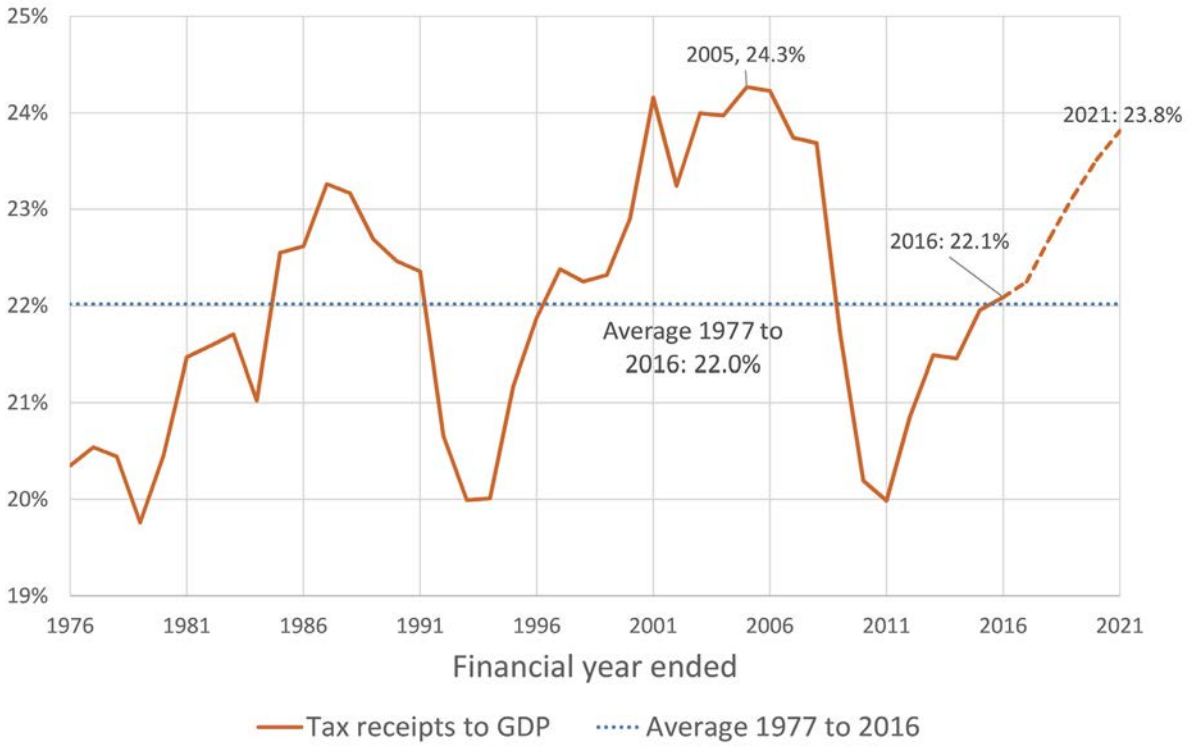
- It examines tax revenue, which excludes non-tax revenue. As a result, the figures do not represent the *total* revenue of governments, which is often substantially higher than tax revenue alone. The exclusion of non-tax revenue is discussed in the Appendix.
- Cash, not accrual, measures are used because accrual data is not available for sufficiently long periods. This is also discussed in the Appendix.
- The tax burden is examined using two measures: tax per person in real terms, and the tax to GDP ratio. Most of the paper uses tax to GDP as this measure can be used to compare to historical averages, and is used for most international comparisons.
- The figures for the federal government are current as at the 2016 PEFO.[7] The figures may change as a result of announcements during the election campaign, or as a result of the election.
- The PEFO figures include a number of policies of the current government that have not yet been legislated, and may never pass Parliament. According to a report by the Parliamentary Budget Office,[8] unlegislated tax measures as at February 2016 are small in total but unlegislated spending measures were more substantial — if none of these policies pass Parliament, spending levels will be around $3.9bn higher in 2018–19.[9]

2. Tax levels in Australia: history and forecasts

2.1 The taxation burden of the federal government

The tax to GDP ratio for the federal government is shown in Figure 1 below over the period 1975–76 to 2020–21, comparing this to the 40-year average up to 2015–16 (the choice of this average is explained in Box 1).

Figure 1: Federal government tax to GDP ratio



Sources: 2016 PEFO, and author's estimates based on Parliamentary Budget Office (PBO) for 2020–21. See Appendix for details.

The current federal government tax to GDP ratio of 22.1% is just above the 40 year average of 22.0% and is set to go well above this level over coming years — even with tax cuts included in the 2016 Budget. The tax to GDP ratio effectively adjusts the tax burden for the effect of inflation and economic growth.

The scheduled increase in this measure over the five years from today (2015–16 to 2020–21) is 7.8%. Several other comparisons are shown in Table 1 below, including a comparison with 2014–15, which is useful because the tax burden was right on the 40 year average in that year. Using official budget data only, the comparison goes to 2019–20.

The tax burden per person is increasing more quickly, with a growth rate of 12.7% in real terms over the next five years. This measure adjusts for inflation and population growth and is shown in the middle column in Table 1 below.

Regardless of the comparison chosen, the tax burden is increasing sharply from levels that are already above the historical average. This analysis argues against the forecast tax increases.

The remainder of this paper uses the tax to GDP ratio to measure the tax burden (see Introduction for discussion). This measure provides more conservative estimates of the change in tax burden, as shown in Table 1.

Some of the increased tax to GDP ratio in the recent past is due to the ongoing recovery from the GFC. However, there is now only a small impact on the budget from the GFC and the end of the mining boom, as discussed in Section 4.3 below. So the forecast strong increase in the tax burden cannot be excused as a result of recovery from the GFC; and tax increases can't be said to be necessary because the end of the boom is harming the budget.

The comparison of the tax burden with the historical average is shown in Table 2 below.

The additional tax burden in five years' time is $1,228 per person. According to CIS estimates based on PBO data, around 66% of this additional burden is caused by increases in personal tax, mainly due to bracket creep.[10] This is similar to the findings in the CIS research on bracket creep, Carling & Potter (2015).[11] The planned increase in the personal tax threshold of $80,000 will offset bracket creep only to a limited extent, as this is the sole threshold being adjusted and about 75% of taxpayers are below this threshold.[12] And tax cuts in the Budget have been offset by tax increases, leaving the tax burden largely unchanged (as outlined in the Introduction).

The federal government tax burden is currently just above the historical average, but spending is well above average. Current federal government spending is 0.9 percentage points (or $14.6 billion) above the 40-year average.[13]

So comparisons to historical averages indicate no need for the forecast tax increases, but instead a need to limit spending to levels at (or below) the historical average. Any additional tax increases (such as through winding back negative gearing) or the cancelling of proposed tax cuts for companies will exacerbate the problems highlighted in this Section. Taxes will grow at a faster rate and the total tax burden will be even further above its historical average.

The historical examples for how to close the budget deficit are discussed in Section 2.2.

Table 1: Forecast growth in the federal government's tax burden

Period	Real growth in tax per person	Growth in tax to GDP ratio
2015–16 to 2020–21	12.7%	7.8%
2014–15 to 2020–21 (growth from average year)	11.4%	8.5%
2015–16 to 2019–20 (using budget data only)	9.5%	6.5%
2014–15 to 2019–20	8.3%	7.1%

Sources: 2016 PEFO and ABS. See Appendix for details. Nominal growth in tax over the year to 2015–16 was 3.1%, which is why the tax to GDP ratio increased by only 0.1 percentage point over that year, and why tax per person declined in real terms.

Table 2: Additional tax burden imposed by federal government relative to historical average

Year	Gap between forecast tax burden and historical average		
	Percentage points of GDP	Total $bn	$ per person
2015–16	0.1pp	1.2	49
2016–17	0.2pp	3.8	159
2017–18	0.7pp	11.4	471
2018–19	1.1pp	18.5	765
2019–20	1.5pp	24.7	1,023
2020–21	1.8pp	29.6	1,228

Sources: 2016 PEFO, and author's estimates based on Parliamentary Budget Office (PBO) for 2020–21. See Appendix for details. Total and per person figures use 2015–16 dollars and population.

Box 1: What period should be used for calculating historical averages?

This paper compares tax levels to a 40-year average from 1976–77 to 2015–16 of 22.0% of GDP. This is a reasonable indicator of the tax burden Australians have become accustomed to.

The historical average would be substantially lower if the time period were extended before 1976–77, because tax levels were much lower in the years before that date.[14] So an average of more than 40 years would show current and forecast tax levels much further above this longer period average.

Taking an average over a shorter period could present a less representative view of the tax burden. Nevertheless, it does not make a substantial difference to the comparison: the current federal government tax to GDP ratio of 22.1% is above the 10 year average of 21.7%, somewhat below the 20 year average of 22.5% and just below the 30 year average of 22.3%. More importantly, the tax burden is forecast to go well above all of these averages. An average over a shorter period similarly does not make a major difference to the analysis of the tax burden of all Australian governments in Section 3.2.

Treasury in 2013 argued the long-run average federal tax to GDP ratio was around 22.2%.[15] The 2016–17 Budget compared current total revenue to a 30-year average.[16] Total revenue includes non-tax revenue which is excluded from this report (see Appendix for details).

Comparisons with a particular year (rather than an average of many years) are flawed. Often the year chosen is a year when taxes were unusually high — for example the former Secretary to the Treasury, Dr Ken Henry, argued in 2015 that the current tax level was well below the levels in 2002.[17]

However, tax levels in any one year can be heavily affected by one-off events and can be picked to provide the required answer. Instead, averages of multiple years are more appropriate.

Another flawed approach is to take an average that includes only the periods when taxes were high, such as 2000–01 to 2007–08, which is the average used in the 2015 Intergenerational Report[18] and a recent report from CEDA.[19] This generates a tax to GDP ratio of 23.9%, well above the average of 22.0% used in this paper. This is unjustified cherry-picking of the data, as it ignores the fact that this was an atypical period in Australia's economic history — the economy was benefitting from an enormous mining boom.[20]

During the boom, mining companies had sharp increases in tax payments[21] — yet they were investing at unprecedented rates.[22] Foreign investment was flowing into Australia[23] even with our dollar at record levels,[24] and national income was growing strongly.[25]

Australia is not even close to this situation now. Some mining companies are now losing money, non-mining investment is particularly weak,[26] national income is shrinking[27] and wages growth is at historical lows.[28] Given the differences with the mining boom, it is unreasonable to expect tax revenues to be the same — in particular, there aren't the large profits of mining companies to pay this tax.

Dr Henry and CEDA may have chosen their comparison periods because this was just after the introduction of the GST, which involved federal government tax revenue increasing as it replaced some state tax revenue. However, this corrects for one issue (adjusting for the introduction of the GST) while creating another one (only using periods when taxes were abnormally high). A better way to address the introduction of the GST would be to adjust for the net impact of the GST on federal tax revenue. However, an easier approach is to conduct a historical comparison of the tax burden of all Australian governments, which is done in Section 2.3 below. This approach also includes the net reduction in the State tax burden that occurred with the GST reforms.

If the goal is to move the budget towards balance or surplus, instead of cherry-picking a single period when this goal was achieved, a better approach is to look at all years since 1975 when the budget was at or near balance. This approach is taken in Section 2.2.

2.2 Should the deficit be reduced through tax increases or spending restraint?

As noted in the Introduction, many commentators argue the budget deficit is a significant problem and it should be reduced. More importantly, the major political parties have committed to keep the federal budget in balance on average over the economic cycle.[29] Reducing the budget deficit will particularly assist Australia in maintaining its credit rating,[30] which keeps economy-wide interest rates low[31] and enables Australia to address future financial disruptions and crises.[32]

Nevertheless, the federal government currently has a substantial deficit, a deficit that has existed since 2008–09 and is forecast to continue to 2020–21,[33] despite Australia having been without recession for 25 years to date.

One approach would be to move both tax and spending levels to their historical averages. However this change would still generate a budget deficit of about 1% of GDP. So if the goal is to move towards budget balance, an appropriate historical comparison would be with periods when the budget was at or near balance.[34] This excludes periods of significant deficit or surplus, focussing on the periods the budget should be aiming for.

- The state of the economy implies that the government should not be running either a large deficit or a large surplus. A substantial surplus might be appropriate in a booming economy, but we are not in that situation (see Box 1). Conversely, our economy is still growing and has been recession-free for many years, so neither is a substantial deficit warranted, given the risks of deficits stated above.

There were five years during the past four decades when the budget was within 0.25% of balance — the years when the budget was somewhere between a budget surplus of 0.25% of GDP and a deficit of 0.25% of GDP.[35] The average tax levels across those five years was 22.2%, which is just above the current tax ratio of 22.1% (as shown in the column A in Figure 2 below).

Revenue has been substantially higher only when the budget was further away from balance: the average tax burden was 22.7% in the 12 years when the budget was within 1% of balance (column D in Figure 2).[36] However, the point of this analysis is to move the budget closer towards balance, not further away.

Regardless, in all of these periods when the budget was close to balance, taxes were well below the levels they are forecast to be in 2019–20. This expected tax increase is in clear conflict with historical periods when the budget was near balance, or moving towards balance.

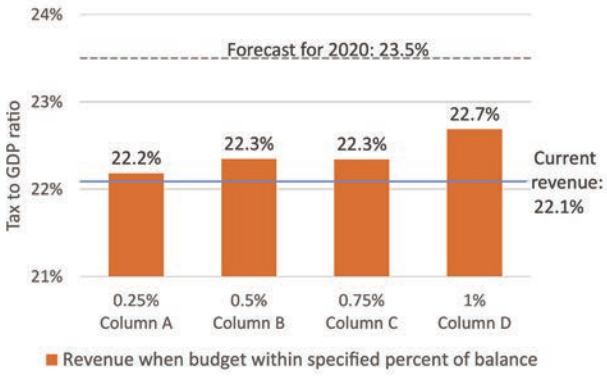
Figure 3 to the right shows the same analysis for spending. Column A shows average spending levels in the five years when the budget was particularly close to balance[37] was 24.1% of GDP; this is well below current levels of 25.8%. But even when the budget was much further away from balance, spending was still well below current levels.

Further, the forecast spending levels for 2019–20 are significantly above these historical periods when the budget was close to balance, noting that spending forecasts are subject to some uncertainty as discussed in the Introduction.

Comparable results come from analysis of periods when economic growth was similar to today's growth and periods when the unemployment rate was similar, as shown in Table 3 below.

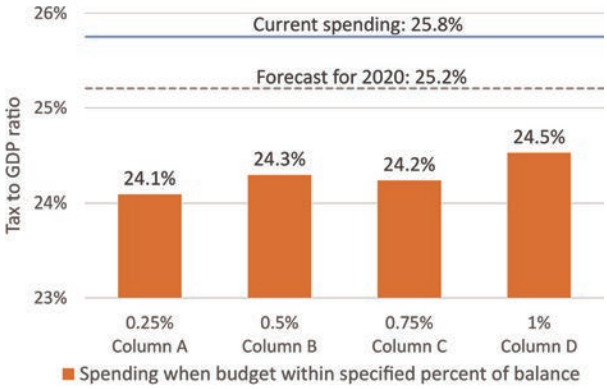
This table particularly shows that spending was much lower in historical periods when the unemployment rate was close to today's rate.

Figure 2: Federal government tax revenue when budget was close to balance



Source: 2016 PEFO.

Figure 3: Federal government spending when budget was close to balance



Source: 2016 PEFO. Note some uncertainty over spending levels in 2019–20, see Introduction for details.

The results for the total tax burden of all Australian governments is similar or even stronger. The total tax burden was around current levels when combined budgets were close to balance, while the burden was substantially lower when growth and unemployment were close to today's levels. In each case, the burden was much lower than the forecast burden in 2019–20 (see Appendix for details).

In summary, in the periods where the state of the budget and the economy were similar to today, tax revenue was at or below its current levels, and spending significantly below its current levels. This clearly supports the case against the forecast tax increases and instead argues for limits to spending growth.

Table 3: Federal government tax and spending levels when state of economy was similar to today

State of the economy	Tax to GDP			Spending to GDP	
	Average	Difference from today	Difference from 2019–20	Average	Difference from today
GDP growth between 2% and 3%	21.8%	-0.3pp (-1.2%)	-1.7pp (-7.1%)	25.3%	-0.4pp (-1.6%)
Unemployment rate between 5.25% and 6.25%	21.8%	-0.3pp (-1.3%)	-1.7pp (-7.3%)	24.6%	-1.2pp (-4.6%)

Source: 2016 PEFO. GDP growth is forecast to be 2.5% this financial year, and unemployment 5.75%. Similar results are obtained for historical periods when GDP growth was between 2.25% and 2.75%, and when unemployment was between 5.5% and 6.0%. Spending levels in 2019–20 are subject to greater uncertainty (as explained in Introduction) and are omitted from the table.

2.3 The taxation burden of all Australian governments

The tax burden from all Australian governments is another way to look at the tax burden, and has several advantages:

- It represents the total tax burden imposed on Australians: a tax is a tax, no matter which government is receiving the revenue.
- International comparisons generally use the total tax burden of all levels of government.
- The tax burden of all governments also deals with problems caused by the transfer of taxing powers between governments — such as when some state taxing powers were transferred to the federal government with the introduction of the GST in 2000.[38] The increase in the federal tax burden was partly offset by a reduction in state taxes, which complicates comparisons of periods before and after 2000. Adding the two tax burdens together addresses the complications caused by this offset.
    - This analysis nullifies the argument for comparing current tax levels to periods only after 2000 (see Box 1 for discussion of which historical periods to use).

Figure 4 below shows, similar to the earlier analysis, that total tax levels are currently above the long term average, and are set to go well above this average based on current forecasts.

The forecast increase in the tax to GDP ratio from the current financial year (2015–16) to 2018–19 is 3.0%. This is much smaller than the increase in the federal government's tax burden (see Section 2.1 above), mainly because the forecasts for the federal government extend for an extra two years to 2020–21.

The forecast increase in the tax burden above the historical average is shown in Table 4 below.

In comparison with the federal government tax burden, the total tax burden is currently further above the average, and is expected to be even more above this average by 2018–19. In every year, the gap between the total tax burden and the average is greater or equal to the gap for federal government taxes only. In particular, the federal tax burden is projected to be $18.5bn above the historical average in 2018–19; by contrast the overall tax burden is expected to be $25.3bn above the average in that year.

Again, this data supports the case against the forecast tax increases in Australia.

Table 4: Additional tax burden imposed by all Australian governments relative to historical average

Year	Gap between forecast tax burden and historical average		
	Percentage points of GDP	Total $bn	$ per person
2015–16	0.7pp	11.1	461
2016–17	0.5pp	8.8	364
2017–18	1.1pp	18.3	758
2018–19	1.5pp	25.3	1,047

Source: Author's estimates based on PBO; for details see Appendix. Projections for 2019–20 and 2020–21 are not included in the PBO data. Total and per person figures use 2015–16 dollars and population.

Figure 4: All Australian governments: tax to GDP ratio

Source: Reinhardt and Steel (2006), ABS, and author's estimates based on PBO for 2016 and later years. See Appendix for details. This figure does not include non-tax revenue, which would increase the figure to about 34% of GDP in 2015–16, based on data from the PBO.[39]

2.4 The long-run tax burden, including budget deficits

The tax burden arguably should include the budget deficit or surplus. A deficit is effectively either a deferred tax increase or spending cut; and conversely for a surplus. So as suggested by Smith (2007),[40] including the budget balance will provide a better measure of the long-run tax burden — the burden that is being imposed on both today's and tomorrow's population.

Conversely, leaving out the deficit can give a misleading view of the long-run tax burden that governments are imposing on their citizens: "a budget deficit implies that part of current spending will be paid by taxes at a later time, so current taxes underestimate the total burden" (Smith, 2007).[41] A spending increase financed by borrowing, rather than tax increases, won't show up as an increase in the current burden on taxpayers, when in fact the spending will have to be paid for at some point.

Making this adjustment, the current long run tax burden for the federal government[42] is much larger than the unadjusted tax burden, and much greater than the long term average, as shown in Figure 5 below.

This measure of the tax burden is currently 1.5 percentage points (or $24.6bn) above the 40 year average. In other words, the federal government budget is imposing a tax burden on the Australians of today or the future that is $24.6 billion above the average. This burden is forecast to decline to be 0.9 points above the average in 2018–19. However, as noted in the Introduction, some of this improvement requires spending cuts from measures that haven't yet passed Parliament and may never be passed. Based on a report from the Parliamentary Budget Office,[43] the value of these measures is at least $3.9 billion, or around 0.2 percentage points of GDP.

Therefore, similar to the other Sections of this paper, this analysis argues against the forecast increase in Australia's tax burden.

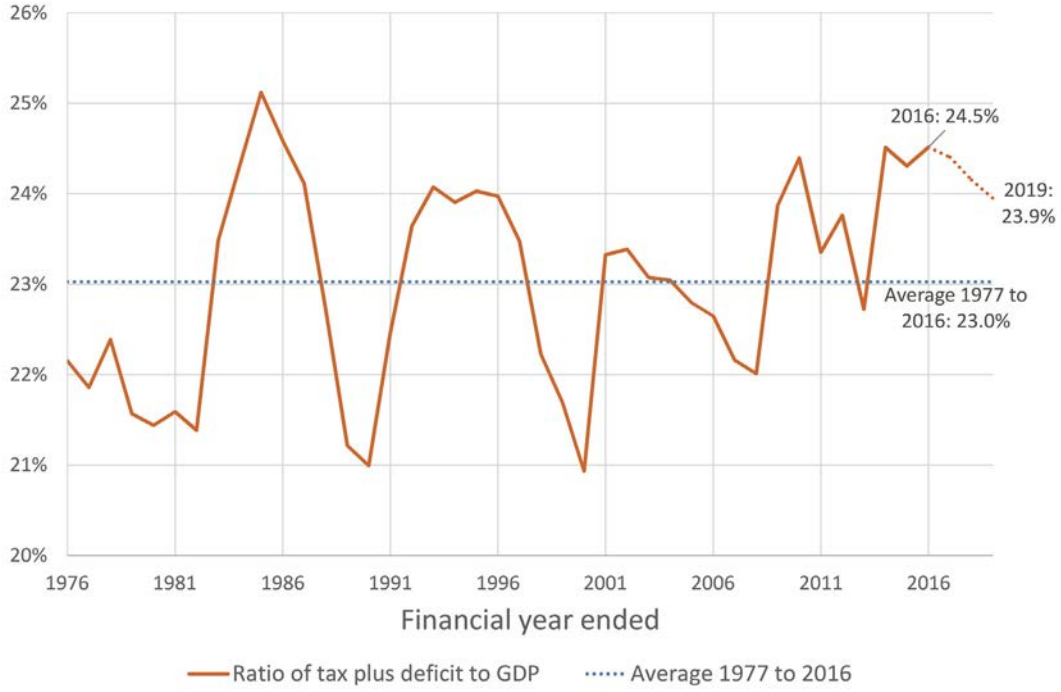
The long run tax burden does not change if taxes are increased to reduce a budget deficit, as proposed by CEDA.[44] These policies merely reduce the future tax burden by increasing the burden on current taxpayers. It is not clear that this is an improvement, as the total tax burden on current and future taxpayers is unchanged. In fact, the tax burden would actually be worse if this higher current burden makes it easier for governments to increase the burden in the future.

There is clearly no case for the forecast tax increases based on this analysis, let alone increases beyond those forecast. Instead there is a case for spending levels to be restrained.

Due to budget accounting, tax revenue plus the deficit equals government spending if non-tax revenue is also added.[45] So Figure 5 is slightly less than total government spending. Therefore, it is unsurprising that spending levels at 25.9% of GDP are currently well above their historical average of 24.9% (as noted in Section 2.1 above). This is a spending level that is 0.9 percentage points, or $14.6 billion, above its historical average.

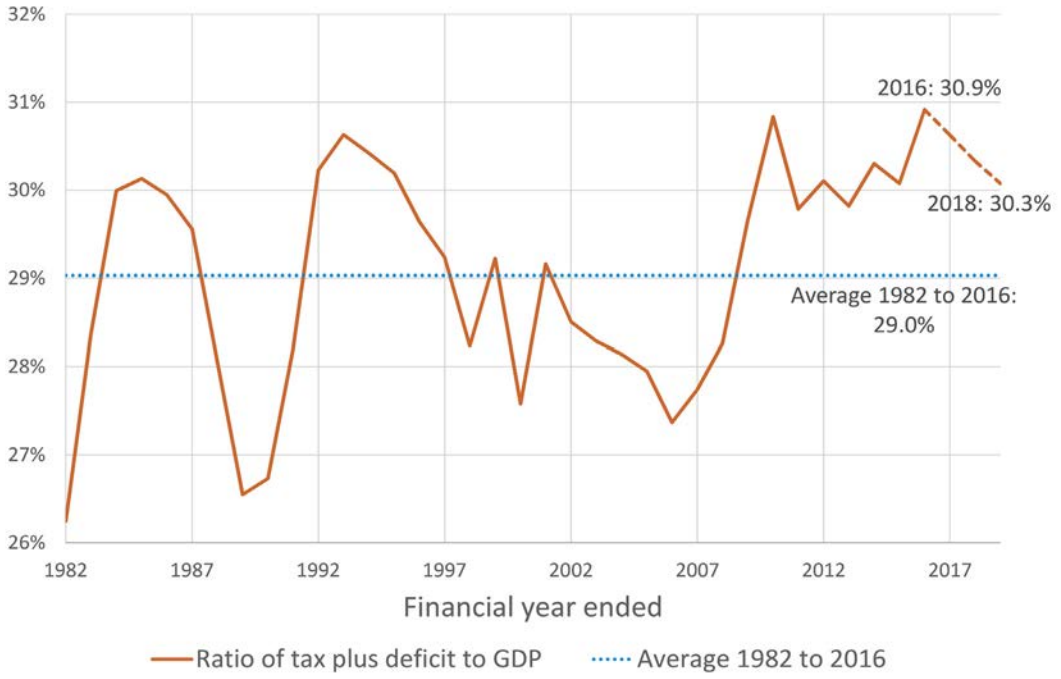
The long run tax burden can also be calculated for all Australian governments. The data available from the Reserve Bank of Australia for all Australian government budget deficits goes back to 1981–82, and is shown in Figure 6 below.[46]

Figure 5: Federal government long run tax burden



Source: 2016 PEFO. See Appendix for details.

Figure 6: All Australian governments: long run tax burden



Source: For tax figures: Reinhardt and Steel (2006), ABS, and author's estimates based on PBO for 2016 and later years. For budget balance figures: Reserve Bank of Australia. See Appendix for details.

As argued in Box 1, an average over the period since 1981–82 could be unrepresentative, and an average from 1976–77 might be lower (given the data shown in Figures 1, 4 and 5). Nevertheless, the average long run tax burden over this shorter period is 29.0% of GDP, and the current ratio is well above this average at 30.9%. The ratio is forecast to decline, but still remain above the average. However, some of this improvement is unlikely to happen as it is based on unlegislated measures of the federal government (see discussion earlier in this Section).

So this analysis as well supports the case against the forecast increases in Australia's tax burden.

3. Recent history of tax changes

3.1 Previously, governments acted to offset large increases in tax burden

The forecast increases in the tax burden are in sharp contrast to historical periods of tax changes.

As shown in Figure 1, the tax to GDP ratio for the federal government was at levels noticeably above the 40 year average in two periods: 1986 to 1988 and 2000 to 2007. In these years, there were significant personal tax cuts,[47] and sometimes company tax cuts.[48] The above average tax burden wasn't being imposed through policy changes to cover an increase in the size of government. Instead, the government took discretionary action to reduce the tax burden, or at least prevent its increase.

Similar to these periods, the tax burden is currently above average, and forecast to increase further, as shown in Figures 1 and 4 above. As noted in the Introduction, the increased tax burden is largely due to bracket creep, with no external shocks causing this tax increase (because the estimated impact of the economy on the budget is small in this period; see Section 4.3 below).

In contrast with the historical periods when tax was noticably above average, little or no corrective action is being taken to offset the forecast tax hikes to levels well above average (see Introduction).

After 2020, the company tax cuts will have a small additional impact in reducing the tax burden. Independent Economics estimates the cost of the full company tax cut (from 30% to 25%) will be $8.2 billion.[49] However, around $1 billion of this is already included in the budget in 2019–20, and there are several tax increases that offset this tax cut; particularly the tobacco tax hike, the superannuation tax changes, and the company anti-avoidance measures, which in total increase tax revenue by $5.2bn in 2019–20.

Converting these figures to 2015–16 dollars (using forecast growth in nominal GDP), the offsets and the value of the cuts already in the forward estimates are around $5.1bn. Deducting these figures, the net tax cut after the forward estimates would be about $3.1bn in today's money, or 0.2% of GDP. This will offset only a small portion of the net forecast tax increase shown in Figure 1 and Table 2 above. And this offset may be smaller if additional tax measures are thought to be funding the company tax cut.

In addition, passage of this tax cut plan through Parliament is not guaranteed.

So in historical periods, governments took explicit action to prevent the tax burden from going well above average; by contrast, the actions to prevent this outcome occurring in coming years have been minimal.

3.2 Successful tax reforms haven't increased the tax burden

An explicit decision for further substantial increases in the tax burden would also differ from previous major tax policy changes.

Major tax reforms have been successful only when they have not increased the overall tax burden on Australians, and major proposals to increase the tax burden have proven ultimately unsuccessful. The introduction of the GST in 2000 was accompanied by various tax cuts that reduced the overall tax burden.[50] The Ralph business tax reforms in the early 2000s were designed to have no overall effect on the budget balance.[51] The major tax changes of the Hawke government included the introduction of Fringe Benefits Tax and Capital Gains Tax. The revenue increases were expected to raise $1.7bn in 1987–88, but this was far outweighed by tax cuts worth $4.5bn, so the package as a whole cut the tax burden significantly.[52]

The carbon and mining taxes were not revenue neutral: the total tax burden was designed to increase, with other taxes being cut by less than the revenue raised by the new taxes.[53] However, both these taxes have been proven unsuccessful and have been repealed. Some other major tax increases that have been abandoned include proposals to tax trusts as companies,[54] and proposals to remove CGT grandfathering for assets purchased before 1985.[55] The major political parties that proposed these changes had to abandon them, either quickly or after prolonged public criticism.

In addition, recent proposals to increase the GST as part of a package that increased the overall tax burden[56] have been rejected by the current federal government.

This evidence suggests substantial tax policies that increase the tax burden are unacceptable to the Australian public. Small tax increases have in some cases been tolerated, particularly when dressed up as 'integrity measures' and applied to the 'easy' targets of large companies and the rich. However, larger tax hikes have not been tolerated. This is consistent with the argument in the 2007 Intergenerational Report that the "Australian community is reluctant to bear a higher tax burden"[57] and the fact that despite all the economic changes and tax reforms over the past 40 years, revenue has stayed within a band no more than 2.4% of GDP away from the 40 year average.[58]

The dividing line between acceptable and unacceptable tax increases is not always clear. Nevertheless, there is a substantial risk that any explicit tax increases will be seen as unacceptable by the Australian public and will need to be abandoned.

4. Other concerns about the tax burden

4.1 Have previous tax cuts been excessive?

Some argue that there were too many tax cuts in the period from 2000 to the GFC,[59] and this could be taken to imply that the forecast tax increases are acceptable, or even that taxes should increase more than forecast. However, any supposed revenue shortfall from these tax cuts has now been eliminated, with tax revenue today above its historical average on all the measures detailed earlier in this report.

Similarly, the deficit today isn't caused by these earlier tax cuts — instead high spending levels are responsible, given that both tax and spending are above historical averages (see Section 2.1) and spending was significantly lower in previous periods when the deficit was near balance (see Section 2.2).

If these tax cuts hadn't been given, the tax to GDP ratio would have been even further above average in the period 2000 to 2007 (see Figure 1 above). And the all-time high for this ratio of 24.3% reached in 2004–05 would have been higher still. The accusation at the time that the Howard government was the 'highest taxing government in Australia's history'[60] would have carried noticeably more weight.

In addition, the higher tax revenue would probably have just led to an increases size of government,[61] meaning the budget deficit would remain unchanged, but with a higher tax burden: a particularly flawed outcome.

A higher tax burden would exacerbate all the adverse effects outlined in the rest of this paper, including lower wages, employment, GDP and national income (see Section 6 below).

Further, if the history of tax changes is important, it operates in both directions: if previous tax cuts support the case for future tax increases, then past tax increases (including through bracket creep) should justify tax cuts today. The absence of tax cuts in recent years (since 2008–09 for some taxpayers) means bracket creep is causing substantial tax increases,[62] providing a case for tax reductions today, not tax increases.

4.2 Should taxes be higher because of tax avoidance?

Tax avoidance, particularly by companies, has been taken as evidence that taxes should be higher (either through explicit tax increases or cancelling of tax cuts).[63] But this is effectively arguing for higher taxes on taxpayers who aren't tax avoiders, with the greatest impact on those who avoid the smallest amount of tax, or the businesses who pay the full tax rate. By comparison, higher taxes won't affect the most successful tax avoiders who effectively don't pay any tax.

This is a perverse approach. It is particularly unclear why non-avoiders should be penalised for the actions of tax avoiders. Why should companies paying the full tax rate pay even more tax because other, unrelated, companies aren't supposedly paying enough?

This is a form of collective responsibility for the sins of others, which is surely an out of date philosophy in the twenty-first century. But even in historical examples of collective responsibility, we don't see the situation where the greatest punishment is imposed on those least at fault, and the smallest punishment is applied to those most at fault.

There are more problems with this approach. Higher taxes because of tax avoidance would actually *worsen* the problem. The evidence clearly indicates that the incentives to engage in tax avoidance are larger when rates are higher.[64]

So if taxes go up because of avoidance, it will:

- Impose the greatest cost on those who engage in the least tax avoidance;
- Have the smallest impact on those who most avoid tax; and
- Encourage an increase in avoidance that is supposedly the problem.

This does not make sense.

In addition, tax levels are currently above historical averages, regardless of how much tax avoidance is going on. Clamping down on tax avoidance, with no other changes, will only cause tax levels to grow further above average.

So if avoidance is an issue, then this should be a problem with who is contributing to the overall tax burden, not the size of the overall burden. Similarly, if some companies are not paying the appropriate share of the total tax burden (whatever that may mean), then this does not mean that the overall burden should go up — instead, the distribution of the burden needs changing.

As a result, any additional revenue from addressing tax avoidance should result in lower taxes on other companies, ensuring the overall tax burden does not increase further above its historical average. This is an element of the approach taken in the 2016–17 Budget, which used the added revenue from anti-avoidance measures to (partly) fund a proposed company tax cut.

Nevertheless, the actual extent of company tax avoidance does not appear to be large, as the 2016–17 Budget forecasts additional tax revenue of $1.6bn from anti avoidance measures in 2019–20,[65] which is about 0.1% of GDP.

4.3 Has the state of the economy caused the current budget position?

There is considerable interest in whether tax levels, government spending, and the budget balance are caused by government decisions or by the state of the economy.

The best way to examine this issue is to use the structural budget balance (SBB), which removes the temporary effects of events such as the mining boom, the 1990s recession, the GFC and so on. The SBB is the budget position if major economic parameters were around their average or trend levels, or the budget position that is caused by government decisions alone. The alternative approach — examining revenue writedowns or revisions — has major flaws, as detailed in Section 4.4 below.

The latest estimate of the SBB is in the 2016–17 Budget and is shown in Table 5, compared with the unadjusted budget balance.

The difference between the normal budget balance and the SBB shows the temporary impact of the economy on the budget (rightmost column in Table 5). From 2014–15 onwards, these temporary factors have only a small impact on the budget, so the budget balance can't be blamed on the ongoing recovery from the GFC or the end of the mining boom.

Conversely, this means that government taxing and spending decisions are causing almost all of the state of the budget.

We don't have separate estimates of structural revenue and spending in the 2016–17 Budget, but it would be reasonable to argue that the same argument applies as for the overall deficit: structural measures of tax and revenue are close to their actual values from 2015–16 onwards.[67]

Table 5: Impact of government decisions and the economy on budget

Year	Budget balance (% of GDP)		
	Underlying cash	Structural balance	Difference
		Impact of government decisions on budget	Impact of economy on budget
2013-14	-3.1	-3.9	0.8
2014-15	-2.4	-2.6	0.2
2015-16	-2.4	-2.2	-0.2
2016-17	-2.2	-2.0	-0.2
2017-18	-1.4	-1.4	-0.0
2018-19	-0.8	-0.7	-0.1
2019-20	-0.3	-0.2	-0.1
2020-21	0.2	0.4	-0.2

Source: 2016–17 Budget[66]

If this is the case, then structural revenue will be somewhat above its long run average while spending will be well above its average value (see calculations in Section 2 above). The obvious conclusion is the same as in the rest of this paper: there is a clear case against the forecast tax increases and Australia instead has a problem with growth in government spending.

It would be valuable for Treasury or the PBO to produce figures on structural levels of revenue and spending to confirm this analysis. This would also be a better way of analysing this issue than the use of revenue and spending revisions, which are misleading and are a poor guide to policy, as argued below.

4.4 Should taxes increase because of revenue forecast shortfalls and writedowns?

Tax revenues have fallen far short of forecasts ever since the GFC. A report from the Parliamentary Budget Office[68] has the total writedown of revenue in the years from the GFC to 2019 of $279 billion. Some argue[69] that revenue shortfalls indicate that there is a revenue problem and hence taxes should increase. However, the writedowns are misleading for several reasons, including the following:

- Writedowns likely reflect poor forecasting rather than any particular underlying issue with tax revenue, given that even with writedowns, tax levels are still at or above historical averages, and the impact of the economy on the budget is now small (see Section 4.3 above). Better forecasts would have had lower revenue estimates from the start, and writedowns would have been much smaller. It is completely unclear why tax increases should in any way relate to the size of forecasting errors.
- The measured writedowns cover only a four year window — revenue changes outside this period aren't measured (revenue in five or six years' time is not estimated, so isn't changed by any writedown).
- There were very large revenue writedowns from the Minerals Resource Rent Tax (one estimate is $15.8 billion[70]); but this tax has now been abolished — so the historical errors in forecasting revenue from this tax are not relevant for setting taxes today.[71] There were also smaller revisions in the forecast for the carbon tax,[72] which has also been abolished.
- The revenue writedown figure is in dollars, which means it is not adjusted for inflation or the size of the economy. The total of $279bn quoted above is added across 10 years, so it contains numbers that are not strictly comparable.
- Many writedowns have occurred at the same time as GDP has also been revised downwards. If the tax to GDP ratio remains broadly unchanged, the writedowns do not necessarily provide evidence that taxes should be higher.
    - It would be more appropriate to focus on the writedown in GDP, concluding that Australia has an economic growth shortfall. If this approach is taken, the clear response is tax reductions not tax increases, given the harmful effects that taxes have on the level and growth in GDP (see Section 6 below).

These flaws mean the structural budget balance is a better measure of the effect of the economy on the budget, as discussed in Section 4.3 above.

Further, mechanically following a rule that revenue shortfalls should be covered by tax increases would produce adverse results, including:

- It would mean taxes increase when growth is slowing,[73] and there would be even larger tax increases during a recession, clearly exacerbating the recession. This would undermine automatic stabilisers and be particularly harmful.
- Taxes would increase merely because of forecasting errors and not because of any underlying economic factors. This is the wrong way to approach tax policy.
- If actual tax revenues are high, but were forecast to be even higher, this approach would advocate a tax increase. This is in fact similar to Australia's current situation: taxes are above historical averages, but were forecast to be higher. Implementing further tax increases would raise our tax levels further above average.

In addition, during the mining boom, there were large positive revenue surprises — being consistent would mean these revenue 'write-ups' should be returned as tax cuts. But it is unlikely that those arguing for tax increases now due to revenue writedowns would have argued for tax cuts when there were these positive revenue surprises.[74]

Therefore it is better to make policy decisions based on the level of tax, not whether this tax level was forecast correctly or incorrectly. Similarly, the need for tax increases should not depend on the accuracy of revenue forecasts.

It is also illustrative to examine spending writedowns and writeups, noting that these figures have similar problems as the revenue figures, detailed above. Spending levels have not been subject to large revisions, in contrast to revenue. Since 2002–03, 96% of spending changes are due to explicit government decisions and only 4% are from writedowns and writeups.[75] This supports the arguments in Section 4.3 above that spending levels are due to government policy, not the state of the economy.

Spending levels are currently at historically high levels, and this increase has occurred largely by design. Therefore, it is odd that the level of spending appears to have taken politicians and commentators by surprise, and few if any politicians explicitly revealed their decisions would increase the size of government.

5. International comparisons of tax levels

5.1 Issues with international comparisons

International comparisons of tax burdens are popular with many commentators, however they have a number of problems, including:

- Australia's taxing and spending policies are unusual compared with the OECD:
    - We do not have a universal social insurance system. This means our total tax and spending levels are "not strictly comparable" (Smith, 2007)[76] to countries with these systems. This is discussed in more detail in Section 5.2 below.
    - Australia targets its welfare system much more than most of Europe[77] where there is a greater provision of welfare to the same people who are paying tax (also known as 'churn'). As Smith (2007)[78] states, this arguably artificially inflates the tax burden in those countries, making Australia look better than it actually is.
    - We have an uncommon company tax imputation system that may result in higher company tax payments and lower personal tax compared to other countries.
- The same level of revenue can be raised in an efficient way, or an inefficient way. Australia has a higher reliance on the less efficient personal and company taxes, as noted in Sections 5.3 and 5.4 below.
- Tax expenditures (or tax concessions) can have similar effects to standard government spending, but the first shows up in international comparisons as a lower tax burden while the second shows up as higher spending (and tax) levels.
- International comparisons are for a particular point in time and rankings may change over time. Nevertheless, similar conclusions have been reached in earlier reports listed at the end of Section 5.2 below.

These concerns mean that international comparisons of Australia's taxes should be treated with caution.

Many international comparisons make use of unweighted averages of the relevant countries. However, this has a major problem: it gives the same weight to tiny and large countries. An unweighted average effectively gives the economy of Iceland a weighting of more than 1,200 times the US.

Therefore, this report focusses on weighted averages more than unweighted averages. The weighting is done by GDP at purchasing power parity for 2014 (or nearest available year) using data from the World Bank.[79] The arguments for using weighted averages are discussed further in Box 2.

There are additional issues with OECD comparisons:

- The comparisons are with many stagnating economies. Most European countries with high tax rates were very severely hit by the GFC and have been struggling to recover.[80] Many are also burdened with very high levels of government debt.[81] They do not present models that Australia should follow. Of the 34 OECD countries, 23 are in Europe (or about two thirds).
- The OECD excludes Taiwan, which is richer than most of the eastern European OECD members, and includes Mexico which has a lower GDP per person than a number of non-OECD countries such as Taiwan, Argentina, Russia and Croatia.
- The developed world excludes Australia's top trading partner, China, and many other significant trading partners in Asia. In addition, an unweighted OECD average (see Box 2) neglects the substantial weight that Japan and the US have in Australia's trade.[82]

Nevertheless, this report still uses the standard definition of the developed world as being OECD members, given this is the approach taken by other reports.

Box 2: Why should weighted averages be preferred for international comparisons?

An unweighted OECD average puts the same weight on Iceland (representing 0.03% of OECD GDP) and Luxembourg (0.1% of total) as the US (35% of total) and Japan (10%). The relative size of the US should not be understated: the US economy is larger than all the continental European countries in the OECD put together. Therefore, an unweighted OECD average generates a highly Eurocentric view of the world. This is misleading. The overall level of taxation in the US is of far greater significance than tax levels in Iceland or Luxembourg.[83] An unweighted average ignores these size comparisons.

In contrast, weighting by GDP gives a much better view of tax revenue or rates for the overall world or OECD economy. It better reflects the tax rate on the average person across the relevant countries. Within the OECD, taxes are lower for more people than implied by the unweighted average.[84]

The case for using weighted averages for international comparisons was also put in an earlier CIS publication on this topic, Burn (2004),[85] as well as in Novak (2014)[86] and Smith (2007)[87].

Averages can also be weighted by trade with Australia. This form of comparison is done in Novak (2014) and in Burn (2004) and produces similar results to weighting by GDP.

5.2 Comparison of overall tax levels

Australia is a low taxing country according to many commentators, including the ACTU,[88] ACOSS,[89] the Australia Institute,[90] Per Capita,[91] and the federal government's Tax Reform White Paper.[92]

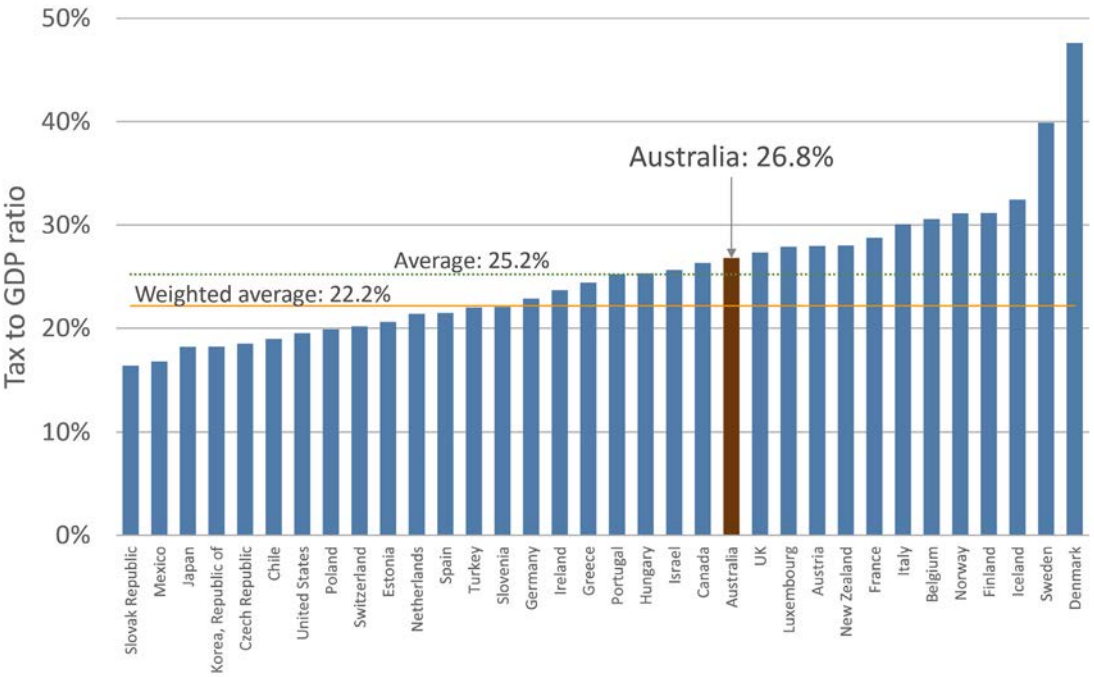
However, the international data does not support this conclusion.

In fact, Australia's tax to GDP ratio is *above* the developed world average according to both IMF and World Bank data. The IMF data is shown in Figure 7.

According to this IMF data, Australia's tax to GDP ratio is 1.6 percentage points above the unweighted average for the developed world, and a substantial 4.6 percentage points above the weighted average, which is a better measure (see Box 2). In 2015–16 dollars, Australia overtaxes by $76 billion per year, compared to the weighted average.

Global comparisons are worse. Australia's tax to GDP ratio is 5.3 percentage points above the weighted average for the 81 countries with data in the IMF database, and 4.6 points above the unweighted average. This dataset covers 79% of world GDP so this result should be treated with caution.

Figure 7: Tax to GDP ratio in developed world, from IMF data



Source: IMF Government Finance Statistics for 2013 (the most recent year with available data).[93] Data for Mexico and New Zealand are taken from the respective IMF country reports. Excluding Mexico and New Zealand, the weighted average is 22.4% and the unweighted average is 25.4%, so the comparisons are very similar.

In the World Bank dataset, Australia has a tax to GDP ratio in 2012 of 21.3%, well above the developed world weighted average of 14%, although this figure does not include subnational taxes (taxes levied by state and local governments).[94]

By contrast, OECD data states that Australia's overall tax levels are below the developed world average, see for example the government's Tax Reform White Paper, chart 2.2.[95] This result is primarily because the OECD counts social security contributions (SSCs) as taxes while the IMF and World Bank do not. Australia does not use these SSCs, but many OECD countries do.

Broadly, SSCs are mandatory payments by employers and employees to a central fund used to pay for entitlements such as retirement incomes, disability pensions and unemployment benefits. See OECD (2010)[96] and OECD (2011)[97] for more details.

While SSCs are like taxes because they are compulsory, on the other hand there is often a distinct link between SSC payments and the benefits received;[98] so they are less like taxes. Hence, there are valid reasons for the exclusion of SSCs from both the IMF and World Bank measures of the total tax burden.

The international data therefore provides mixed results: on some measures Australia has a tax burden above the developed country average, on others it is below average. But it cannot be definitively stated that we are a low taxing country.

Several other reports take a similar approach to the IMF and World Bank and exclude SSCs in international comparisons of Australia's tax burden. This includes Novak (2014),[99] Carmody (2014),[100] the Financial Services Council (2015),[101] and Smith (2007)[102] — and all these reports find that Australia's tax levels are above the OECD average.

A different approach is taken by the Productivity Commission, which suggests that both SSCs and payroll taxes be excluded from the analysis; and it similarly finds that Australia has a higher tax to GDP ratio than the OECD average.[103]

If social security contributions are instead treated like taxes, as the OECD does, then there are sound reasons for Australia's superannuation guarantee (SG) to also be added to the burden. This is argued by Geoff Carmody and Saul Eslake, as cited in Novak (2014),[104] John Freebairn,[105] and Neil Warren[106]. Greg Smith (2007)[107] in particular argues that including the SG generates a more comparable measure of Australia's tax burden. If this change is made, Australia's burden remains above average based on OECD data. Australia's tax plus SG level is 32.0% of GDP, above the OECD weighted average of 30.7% (only counting the compulsory component of the SG).[108]

Regardless, these international comparisons argues against increases in Australia's total tax burden.

5.3 Comparison of personal taxes

Australia's top marginal tax rate for personal tax is well above the global average (both weighted and unweighted averages), as shown in Figure 8 below, based on data from the KPMG tax rates online database.[109]

Of the countries surveyed (117, representing about 96% of world GDP), 90% have a lower top marginal tax rate than our current rate, and our rate is 12.1 points above the weighted average. Australia's current top marginal tax rate is 49% but is set to fall to 47% in 2017–18 with the end of the temporary budget repair levy.[110] After the temporary budget levy expires, our top marginal rate will be 10.1 points above the KPMG average.

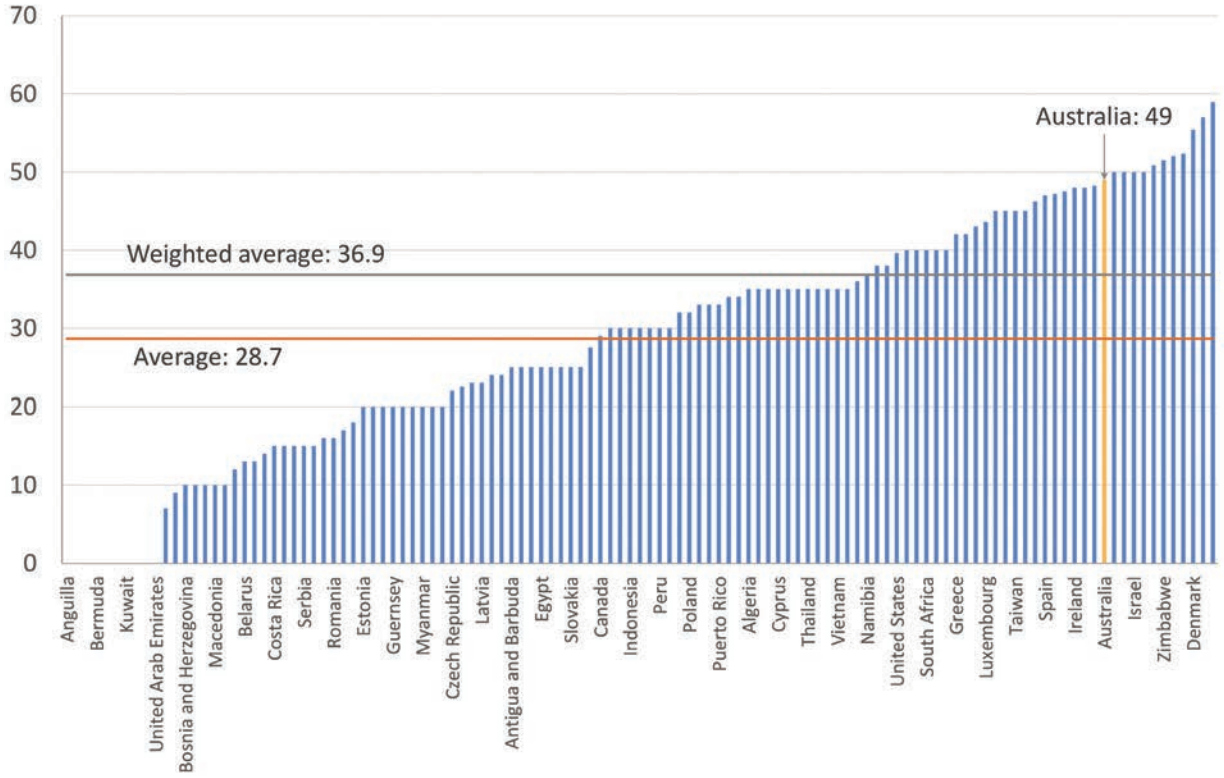
Australia's top marginal rate is well above the average for every continent in the KPMG database, including the average for Europe. Over the period covered in the KPMG database (2006 to 2015), there was also a small decline in the global average (of 0.1 percentage point).

In 2015, the weighted average rate for the OECD was 45.6%, based on data from OECD.Stat.[111] This average is below the Australian tax rate of 47% once the temporary budget repair levy expires. The unweighted average is much lower at 42.0%. The threshold where this top rate cuts in is 2.2 times the average wage, which is well below the OECD weighted average of 7.9 times the average wage.

This analysis is confined to the top tax rate. A more comprehensive analysis looks at tax revenue. In 2013, personal tax revenue in Australia was 2.4 percentage points of GDP above the OECD weighted average, or $40 billion above average, based on OECD data.[112] A move to this average would provide a personal tax cut of 23%.[113] Australia's revenue from personal tax is also greatly above the global average based on IMF data, but this data excludes a number of countries, so it should be treated with caution.

This data therefore does not support the current personal tax revenue levels, the forecast increases in this revenue, or any proposals to increase this revenue, including levies on high income earners and policies to reduce tax concessions with no offsetting personal tax cuts.

Figure 8: Top marginal tax rates from KPMG database for globe



Source: KPMG online tax database and World Bank. Australia's top marginal rate has been increased from the figure in the database to reflect the actual rate of tax, including the budget repair levy. The figures in the KPMG database generally do not include state and lower level governments which would increase the global averages. To aid readability, not all countries are named on the horizontal axis.

5.4 Comparison of company taxes

Australia's company tax rate has remained unchanged since 2000 at 30%, while other countries have decreased their company tax rates. The worldwide decline in company tax rates has been noted before, including by the Minerals Council and the government's Taxation White Paper.[114]

As a result, Australia's corporate tax rate is above the global average (29.2%) and developed world average (27.5%).[115] The proposed company tax cut to 25% will take Australia below these averages, but it is likely that other countries will reduce their rates at the same time so we might not be below the average in 10 years' time.

In addition, Australia's company tax revenue is much further away from the average: it is 2.3 percentage points of GDP above the OECD average, so we overtax our companies by $40 billion compared to this average.[116] A move to the OECD average would cut company tax revenue by half.[117] The proposed company tax cut to 25% will reduce this gap to the OECD average, but will not close it completely.[118] Similarly, average revenue is likely to decline over the next 10 years, so the gap to the average may not close by much.

The high company tax revenue compared to the OECD clearly supports the case for company cuts. Similar to personal tax, these international comparisons argue against policies that specifically increase revenue from company tax without offsetting tax cuts.

It might be argued that Australia's imputation system means our company tax revenue is overstated compared to other countries. The total value of franking credits used by individuals and not–for-profit organisations in 2012–13 was $9.4 billion,[119] which converts to $10.2 billion in 2015–16. If this is taken off Australia's company tax revenue, then Australia still overtaxes companies by about $30.3 billion per year compared to the OECD average. This adjusted gap will still remain even after a cut in the tax rate to 25%.

In addition, if we take imputation credits off the company revenue, we need to add it on to personal tax revenue,[120] making personal taxes even further above the OECD average: personal tax revenue is $50.5 billion above the OECD average if franking credits are added back in.

5.5 Comparison of taxes on goods and services

Australia has several taxes on goods and services: the GST and special taxes on fuel, cigarettes, alcohol, and luxury cars. Australia's total revenue from all these taxes is very close to the weighted OECD average, but well below the OECD unweighted average.[121] Comparisons to the weighted average are superior, as argued in Box 2. Therefore, Australia cannot be said to have inadequate tax revenue from goods and services based on international comparisons.

Regardless, it would be particularly difficult to gain public acceptance for a GST increase, as shown by the difficulties with the original introduction of the GST and the recent rejection of possible increases in the GST rate. Many of the commentators supporting international comparisons of Australia's taxes would oppose increases in the GST.[122]

It might be easier to obtain public support for tax hikes on specific goods and services — but the OECD comparison noted above argues against any such increases: Australia's total taxes on goods and services are about equal to the OECD weighted average.

5.6 Comparison of taxes on property

Australia's taxes on property (mainly land tax and stamp duty on conveyances) raise revenue that is 0.1 percentage point of GDP above the OECD weighted average.[123] Therefore, there is no support for tax increases on the basis of international comparisons.

There are strong arguments for rebalancing property taxes away from stamp duty towards land tax,[124] but this is not the focus of this paper.

5.7 Comparison of taxes on wages and employment

OECD data indicates Australia's taxes on wages and employment are significantly below the OECD average. However, this is because the OECD treats compulsory social security contributions (SSCs) as taxes, and as noted in Section 5.2 above, the IMF and World Bank do not. Excluding SSCs, Australia's tax levels are above the developed world average. As a consequence, no clear finding can be made about how Australia's tax burden on wages and employment compares to the rest of the developed world.

In any case, moving Australia towards the average based on OECD data would suggest there should be tax cuts for non-wage income, such as interest and dividends, and a net tax increase for wages, because there would be simultaneous personal tax cuts and (larger) wage tax hikes. In addition, many countries impose SSCs in a way that is regressive.[125] It is hard to see how moving towards OECD practice in this area would be acceptable to the general community.

5.8 Why not emulate the Scandinavian countries?

It is sometimes argued that Australia can afford to have higher taxes because northern European, or Scandinavian countries,[126] have succeeded with higher tax levels.[127] Nevertheless, there are a number of reasons to be particularly cautious about this comparison:

- As noted in Section 5.1 above, European countries, including Scandinavian countries, were hit hard by the GFC and have been growing only slowly since then.[128] They are hardly success stories that Australia should be copying.
- In the past, governments have acted to prevent the tax increases that would move us towards the Scandinavian tax levels, let alone equalling these tax levels (see Section 3.1 above).
- Scandinavian countries offset overall high taxes with lower taxes on capital and, on some measures, less regulation in the rest of the economy — thus compensating for the worst aspects of higher total tax levels. However, their recent poorer performance suggests this strategy may not work long term.
    - The Scandinavian countries have company tax rates that are all substantially lower than Australia's, according to the OECD tax database.[129]
    - The Scandinavian countries have less regulation than Australia according to the World Bank's Doing Business Report,[130] the World Economic Forum global competitiveness ranking[131] and the IMD World Competitiveness Yearbook.[132] However, Australia performs better on the Heritage Foundation Index of Economic Freedom,[133] so this point should not be overstated.

6. Impact of taxes on growth and the economy

Should taxes increase despite the analysis above opposing these tax hikes? This section surveys the evidence showing that tax increases (either deliberate or occurring by default through bracket creep) have substantial adverse effects on wages, employment, incomes and the economy more broadly.

The harmful effects of tax increases include:

- Discouraging employment, particularly for second income earners,[134] which causes multiple problems including jobless families, higher poverty and a reduced ability to escape poverty.[135]
- Discouraging innovation;[136]
- Encouraging tax avoidance;[137]
- Encouraging emigration/discouraging immigration of skilled workers;[138]
- Discouraging investment in skills and education;
- Discouraging hiring and investment by unincorporated businesses; and
- Distorting saving and investment decisions.

The modelling results summarised below estimate these harmful effects.

Some of this modelling relates to tax cuts while other relates to tax increases: but the impact is broadly symmetrical. So modelling of a small tax cut can be converted into estimates for tax increase by changing the sign of all results, and vice versa for modelling of tax increases.[139]

Most of these modelling results have only small changes in employment, with most of the labour market adjustment occurring through changes in wages. If wages can't change by as much, then the employment change will be larger than modelled: a tax cut will increase employment by more, and a tax increase will result in a larger decline in jobs.

6.1 Impact of taxes: Treasury modelling

The federal Treasury has conducted modelling of the impact of various tax changes on the economy once all adjustment has occurred (which may take a number of years). While there have been a number of Treasury reports making similar findings to those below, the most recent reports are discussed.

Treasury modelling released in 2016[140] estimates that the average personal tax rate will increase by 9% from 2016–17 to 2020–21, mainly driven by bracket creep. This result is comparable with the CIS estimates that the total tax burden will increase by 7.8% over a similar period, see Section 2.1 above.

This 9% tax increase is modelled to reduce GDP by 0.35%. The estimated gross reduction is 0.55%, only partly offset by an increase in GDP of 0.2% from higher government spending. However, there are reasonable grounds to be sceptical of the benefits to growth from increased government spending, as argued in the CIS Target 30 publications listed at the start of this report. As a result, the forecast increase in personal taxes is likely to cut GDP by closer to 0.55%, a figure stated as "large" by Treasury.[141]

A reduction in GDP of 0.55% of GDP is worth $9.1bn in today's figures, or $377 per person.

The size of this harmful impact on the economy compares unfavourably to other substantial policy changes. For example, an extensive range of reforms proposed by Infrastructure Australia, including large productivity improvements in gas, electricity, the NBN, telecommunications, water and transport, is modelled to increase GDP by 1.1%,[142] so the tax hike would wipe out about half of the benefits of this wide-ranging reform.

A Treasury paper released with the 2016 Budget, Kouparitsas et al (2016)[143] finds that a company tax cut increases GDP, national income, investment, exports, employment, and wages. Kouparitsas et al (2016) argue that they have made conservative assumptions to address concerns that modelling may not fully incorporate the costs of transitioning to the long-term benefits.

If the tax cut is financed by removing wasteful spending (as recommended in the CIS TARGET30 publications listed at the start of this report), then Kouparitsas et al (2016) find the benefits of a tax cut from 30% to 25% are: GDP increases by 1.1%; national income increases by 0.7%; investment increases by 2.9%; and wages increase by 1.1%. A company tax cut financed by other tax increases still produces substantial improvements in all these measures, but this approach would not reduce the total tax burden which is the concern of this report. Note that the GDP benefit of this tax cut is equal to the benefits of the major infrastructure reforms proposed by Infrastructure Australia (see above).

An increase in GDP of 1.1% is worth $18.2 billion in today's money, or about $750 per person, while an increase in national income of 0.7% is worth over $11 billion, or about $460 per person.

Kouparitsas et al (2016) importantly argue the increased GDP and incomes from the tax cut will lead to higher tax revenues, offsetting the costs of the tax cut. The report estimates the offset at 49%, so the costs of the tax cut are about half the estimates in the static modelling. Based on the cost estimates outlined in Section 3.1, the cost estimate falls from $8.2bn to $4.2bn, so the gain to income is more than 2.6 times the net revenue cost.

More details of Treasury's modelling approach are outlined in Cao et al (2015),[144] which also models changes in GST, stamp duty and land tax.

This evidence from Treasury clearly argues against the forecast tax increases, let alone any additional tax hikes.

6.2 Impact of taxes: other Australian evidence

These estimates of large impacts of tax on the economy are consistent with a number of other results including the following:

- Modelling by Independent Economics (2016)[145] finds that a company tax cut from 30% to 25% will result in a gain in wages of 1.0%, GDP of 0.7% to 0.9%, and national income of 0.5% to 0.7%. That report finds that the increased national income leads to more tax revenue being raised, so the long-term costs of the tax cut are reduced by 55%. Similar to the Treasury modelling, the costs of the tax cut are about half the estimates in the static modelling.
- In a CIS report, Robson (2006)[146] finds countries that significantly cut taxes between 1980 and 2000 had economic growth per person nearly three times the growth of countries that did not.
- Many studies have estimated there are large harmful effects of taxation on the wellbeing, or welfare, of Australians. While these harmful effects can show up as lower GDP, wellbeing is a broader concept. Studies showing these results include Cao et al (2015),[147] KPMG Econtech (2010),[148] and earlier research summarised in Robson (2006).[149]

Other modelling shows substantial benefits from tax reforms that switch the tax burden from more inefficient taxes to less inefficient taxes.[150] However, these tax mix switches are not the focus of this report. Nevertheless, these reports confirm that personal tax is a particularly inefficient tax in terms of its impact on wages, employment, and growth. Yet this is the tax that is set to increase significantly as a share of total taxation, as noted in Section 2.1 above.

Modelling by Janine Dixon of Victoria University[151] finds that company tax cuts do result in increased GDP, investment and wages, similar to the results above, but argues that the tax cuts also cause a decline in national income. However, these results are in sharp contrast to the results quoted above (particularly from Treasury). Warwick McKibbin has said that Dixon's results imply that Australia would benefit from cutting foreign investment[152], a result that is counterintuitive.

More detailed critiques have been provided by Chris Murphy from Independent Economics[153] and Peter Nash and Brendan Rynne from KPMG.[154]

The costs of tax increases are larger than these estimates

There are several reasons to expect that the costs of taxation in the modelling above are underestimates. Most models don't include all aspects of tax avoidance and evasion, which are generally greater when tax rates are higher.[155] Also, most models don't include progressivity of taxes or varied (heterogeneous) households: Cao et al (2015) argues these omissions probably mean personal tax modelling underestimates the efficiency costs of this tax.[156]

In addition, with increased globalisation, many tax bases are becoming more mobile, thus increasing the costs of tax. This problem particularly affects company tax, because it is becoming easier for companies to shift profits between countries, despite efforts to prevent this activity. More and more assets, income and transactions relate to information (particularly intellectual property) that is hard to tax and even harder to value correctly: for example, what is the 'correct' value of the intellectual property in an iPad? This all means taxes are becoming easier to avoid and their costs are increasing.

6.3 Impact of taxes: International evidence

The Australian evidence cited above is in alignment with a range of international evidence on substantial harmful effects of taxes on the level of GDP or its growth, including:

- A paper by Christina Romer and David Romer in 2010[157] finds that an increase in US tax rates by 1% of GDP leads to a reduction in GDP by over 2.5%. The authors argue "The effects are strongly significant, highly robust, and much larger than those obtained using broader measures of tax changes."
- A literature review by McBride (2012)[158] finds that of 26 empirical studies, all but three find a negative impact of taxes on growth, and all of the 15 studies since 1997 support this adverse result. Of those studies that distinguish between types of taxes, corporate income taxes are found to be most harmful, followed in order by personal income taxes, consumption taxes and property taxes. This is consistent with the ranking of taxes in Treasury research (Cao et al, 2015).[159]
- A paper by the OECD[160] includes empirical findings that a decrease in personal marginal tax rates by 5 percentage points is estimated to lead to an increase in GDP of 1% in the long run; and a 5 percentage point reduction in company tax rates would lead to investment increasing by between 1.0% and 2.6% of the value of capital.
- Lee and Gordon (2005)[161] find that a cut in the corporate tax rate by 10 percentage points would raise the growth rate by 1 to 2 percentage points.

Several other papers with similar results are reviewed in Carling (2010).[162] Numerous local and international studies showing the benefit of company tax cuts for wages are in Potter (2016).[163]

6.4 Impact of the overall size of government

Research has also examined the adverse impact of the size of government overall — or the joint effect of high taxes and high spending levels.

Bergh & Henrekson (2011)[164] state that six of the seven examined studies find an increase in the size of government reduces economic growth. Bergh & Henrekson (2015)[165] critique the one study that finds differently. Bergh and Henrekson (2011) argue that the best summary of these papers is that an increase in government size of 10 percentage points in developed countries is associated with economic growth that is 0.5% to 1% lower per year for every year into the future.

Based on this, we can estimate the impact of the projected tax increases in Australia. While federal government tax levels are projected to increase to 23.8% of GDP in 2021, the 2015 Intergenerational Report assumes this ratio will increase even further to 23.9%, which is 1.9 percentage points above the historical average (see discussion in Box 1).[166] This tax increase, compared to the average, is estimated to cut economic growth by between nearly 0.1% and nearly 0.2% every year, based on the Bergh and Henrekson estimates. While the effect in one year is small, it compounds over time to have a very large effect: GDP will be lower by between 3.9% and 7.9% after 40 years (note the significance of this size in comparisons in Section 6.1 above).

This harmful effect of large government on growth is in alignment with previous CIS publications (cited in the related publications above), including the launch report for TARGET 30[167] which presents the following evidence:

- Smaller public services tend to be more efficient.
- The growth in the size of government in developed countries from 1960 to 2005 had a large adverse effect on GDP.
- The size of government in developed countries is negatively related to the UN's Human Development Index.
- The optimal size of government is likely to be smaller than the current size of around 34% of GDP (including non-tax revenue).[168] Thus it will make things worse to move further above this optimal level.

7. Conclusion

There are many reasons to conclude that Australia should not be facing the forecast substantial tax increases, let alone further tax increases:

- The current tax burden is above historical averages, and set to go further above these averages. This applies equally to federal government taxes alone, or taxes for all Australian governments.
- The long run tax burden, which includes the budget deficit, is well above the historical average, and only set to moderate slightly — and some of this moderation depends on spending reductions that may never occur.
- Taxes have been around or below today's levels in previous periods when the budget has been near balance and in periods when economic growth and unemployment rates were around current levels. By contrast, spending has been much lower in these same periods.
- Over the past 40 years, governments have not succeeded in explicit implementation of substantial tax increases and have acted to offset tax increases above the historical average.
- Australia's tax burden is higher than the developed world average, based on IMF and World Bank data.
- Australia's personal tax and company tax revenue are well above developed world averages.
- The countries with high tax levels have been performing poorly in recent years; Australia should avoid emulating these countries. To the extent they have had economic successes in the longer term, these other countries may have offset high overall taxes by lower taxes on capital and less regulation in the rest of the economy.
- Tax increases have substantial costs in terms of lost GDP, employment, wages and investment.

If taxes are increased or kept higher because of tax avoidance, this would be perverse: taxes would be higher on businesses not avoiding tax but would remain unchanged at zero on the most successful tax avoiders. Higher taxes would also encourage the avoidance that is supposedly the problem.

There are proposals to fund tax cuts by increasing other taxes, such as through a tax mix switch, reductions in tax expenditures (superannuation or CGT) or the removal of negative gearing. However, none of these proposals address the underlying problem: tax levels are above average and set to go further above average. Funding a tax cut with a tax increase will leave the overall trajectory of tax revenue unchanged: high and increasing. Most of these proposals also allow the reliance Australia has on the most inefficient taxes (personal and company tax) to continue and get worse.

Instead of allowing the tax burden to increase, there are numerous proposals to control the growth in government spending (see the related publications section at the start of this report). These proposals should be the starting point to address any problems with the budget balance.

Appendix

Data Sources

Figures for the federal government are based on the following:

- From 1975–76 to 2019–20 are from the 2016 Pre-election Economic and Fiscal Outlook (PEFO). These figures are almost unchanged from the 2016–17 Budget.
- Figures for 2020–21 are the PEFO figures extended by a year based on projections from the Parliamentary Budget Office[169]: it is assumed that the tax to GDP ratio will grow at the same rate (in percentage point terms) as in the PBO forecast for that year. The PBO projections do not include the company tax cuts in the 2016–17 Budget, but it is expected that this will not have a large impact on 2020–21: the net tax cut from 2019–20 to the following year is expanding the lower company tax rate (27.5%) from companies with turnover of $100m to $250m. This is unlikely to affect the figures substantially.

Figures for all Australian governments (federal, state and local), also known as the general government sector, are based on the following:

- Before 1992–93 are based on Figure 1 in Reinhardt and Steel (2006).[170]
- For 1992–93 to 2014–15 are from the ABS data series Taxation Revenue, Australia, Catalogue No 5506.
- Forecasts for 2015–16 to 2018–19 are derived from the PBO's National Fiscal Outlook forecasts.[171] As above, it is assumed that the tax to GDP ratio will grow at the same rate (in percentage point terms) as the forecasts for revenue to GDP ratio.
    - The PBO report does not provide projections for the years 2019–20 and 2020–21 so they are not included in the figures.
- The combined deficits of all Australian governments for the whole time period are from the Reserve Bank of Australia's Statement of Monetary Policy of May 2016.[172]

Figures for this report relate to government tax revenue and exclude non–tax revenue such as dividends, rent, fines and sales of goods and services. Taxes are compulsory takings of money, whereas non-tax revenue is conceptually different — it generally is investment income and money paid voluntarily for goods and services provided. It is therefore excluded from most of the analysis in this paper.

In addition, non-tax revenue contains a large number of one-off effects and is subject to substantial fluctuations.[173] For the federal government, non-tax revenue has varied from 1.3% to 2.9% of GDP over the period used in this paper.[174] Furthermore, non-tax revenue previously included interest received from states because the federal government borrowed on behalf of the states. These arrangements stopped from 1986, and the decline in interest received caused much of the decline in non-tax receipts.[175] Including the non-tax revenue from temporary borrowing arrangements with the states would confuse the historical comparisons and make the historical average artificially high.

This paper uses cash not accruals data, as accrual tax data is generally only available from 1999–2000 onwards. An average for this period is unlikely to be representative for reasons discussed in Box 1. In addition, accruals data is not available for all Australian governments (the general government sector). The term tax receipts and tax revenue in this paper both refer to the cash measure. The accruals measure of tax revenue to GDP is on average 0.5 percentage points higher than the cash measure over the period 1999–2000 to 2015–16, and is forecast to be around 0.5 points higher in each of the following five years.

Population figures are from the ABS publication: Population Projections, Australia, Catalogue Number 3222. Forecasts for inflation (for calculating real growth in tax) are from the 2016 PEFO, except for 2020–21, where it is assumed that inflation will be 2.5% (in line with Budget projections).

Appendix to Section 2.2

Conducting the analysis in Section 2.2 for all Australian government produces the results in the table below (there are a number of advantages of analysing the tax burden of all levels of government, as outlined in Section 2.3). Note in particular that total tax levels were substantially lower in historical periods when the state of the economy was comparable to today.

Table 6: Tax levels of all Australian governments when state of budget and economy similar to today

State of economy/budget	Tax to GDP		
	Average	Difference from today	Difference from 2018–19
Combined balance between deficit of 0.5% and surplus of 0.5%	28.3%	+0.1pp	-0.8pp
Combined balance between deficit of 1% and surplus of 1%	28.2%	0.0pp	-0.9pp
GDP growth between 2% and 3%	27.5%	-0.7pp	-1.6pp
Unemployment rate between 5.25% and 6.25%	27.1%	-1.1pp	-2.0pp

Sources: Reinhardt and Steel (2006), ABS, author's estimates, and RBA for budget balance. See earlier in Appendix for details.

Endnotes

1 See further details in Robert Carling & Michael Potter (2015) *Exposing the Stealth Tax: the Bracket Creep rip–off*, CIS Research Report 8, 13 December.

2 Scott Morrison & Mathias Cormann (2016) *2016–17 Budget*, Paper 1, table 5 and John Fraser & Jane Halton (2016) *Pre-election economic and fiscal outlook 2016*, 20 May.

3 Parliamentary Budget Office (2016) *Impact of policy decisions and parameter variations on Australian Government revenue and spending estimates*, 24 February.

4 For example:

- Committee for Economic Development of Australia (2016) *Deficit to balance: budget repair options*, report of the CEDA Balanced Budget Commission.
- John Daley and Danielle Wood (2015) *Fiscal Challenges for Australia*, Grattan Institute Working Paper.
- Jessica Irvine (2015) "We have to raise revenue, not just cut spending", *Sydney Morning Herald*, 18 April.
- ABC 7.30 (2015) "Without action, taxes will have to go up, warns former Treasury head", 22 September.
- Nassim Khadem (2015) "'Delusions' setting Australia up for a big budget shock: Ross Garnaut", *Sydney Morning Herald*, 8 December.

5 Greg Jericho (2015) "It's the revenue, stupid (with no apologies to Scott Morrison)", *The Guardian*, 16 December.

6 The Australia Institute (2016) *50 prominent Australians to PM: Now is not the time for tax cuts*, 13 April.

7 The PEFO figures are almost identical to the figures in the 2016–17 Budget.

8 Parliamentary Budget Office (2016) *Unlegislated measures carried forward in the budget estimates—February 2016 update*, 10 March.

9 Author's calculations based on Parliamentary Budget Office (2016) Unlegislated measures.

10 Author's calculations based on Parliamentary Budget Office (2015) *2015–16 Budget: medium–term projections*, Report no. 02/2015, June.

11 Carling & Potter (2015).

12 ATO Taxation Statistics, sample file for 2013–14, available from: https://data.gov.au/dataset/taxation-statistics-2013-14/resource/38a7cded-b3d6-41ec-bf33-b320801331e5

13 Author's calculations based on Fraser & Halton (2016) PEFO and Morrison & Cormann (2016) 2016–17 Budget.

14 See Alan Barnard (1986) *Source papers in Economic History No 13: Government Financial Data, 1850 to 1982*, August. See also Figure 4 in Julie Novak (2013) *Australia's Big Government, by the Numbers* and Sam Reinhardt & Lee Steel (2006) "A brief history of Australia's tax system", *Economic Roundup*, Winter.

15 John Clark and Adam Hollis (2013) "Tax-to-GDP: Past and prospective developments" *Economic Roundup*, Issue 2.

16 Morrison & Cormann (2016) 2016–17 Budget, Overview, p9.

17 ABC 7.30 (2015) Without action, taxes will have to go up.

18 Joe Hockey (2015) *2015 Intergenerational Report: Australia in 2055*, page 113.

19 CEDA (2016) *Deficit to balance*.

20 Source: http://www.rba.gov.au/chart-pack/commodity-prices.html

21 Sinclair Davidson (2015) *Official evidence on mining taxes: 2015 update, report for Minerals Council of Australia*, May.

22 Source: http://www.rba.gov.au/chart-pack/business-sector.html#4

23 Source: http://www.rba.gov.au/chart-pack/balance-payments.html#6

24 Source: http://www.rba.gov.au/chart-pack/exchange-rates.html#1

25 ABS (2016) *Australian National Accounts: National Income, Expenditure and Product, December 2015*, Cat No 5206.

26 See: https://twitter.com/ShaneOliverAMP/status/735735606551007232.

27 ABS (2016) Australian National Accounts.

28 David Jacobs and Alexandra Rush (2015) "Why is Wage Growth So Low?", *RBA Bulletin*, June Quarter.

29 "Since the adoption of the Charter of Budget Honesty, successive governments have sought either to maintain budget balance on average over the course of the economic cycle or to achieve surpluses on average over the medium term." Source: Parliamentary Budget Office (2013) *Estimates of the structural budget balance of the Australian Government 2001–02 to 2016–17*, Report No 01/2013.

See also: Wayne Swan & Lindsay Tanner (2009) *Updated Economic and Fiscal Outlook*, February, Part 4.

30 Jared Owens (2016) "Australia's AAA credit rating will be in jeopardy warns NAB", *The Australian*, 11 April.

David Uren (2016) "AAA credit rating at risk from rising public debt", *The Australian*, 12 April.

Jacob Greber (2016) "AAA threat as bad as banana republic days: JPMorgan", *Australian Financial Review,* 14 April.

31 Fraser & Jane (2016) PEFO, p8.

32 John Fraser (2016) *The Australian Budget – some context: Speech to the Sydney Institute*, 28 January.

Clancy Yeates and Jonathan Shapiro (2016) "Banks still too big to fail, says NAB chairman Ken Henry", *Australian Financial Review*, 6 April.

33 Morrison & Cormann (2016) 2016–17 Budget, Paper 1, page 3-1.

34 This analysis was inspired by Geoff Weir (2016) "We don't tax too little, we just spend too much", *Australian Financial Review*, 30 March.

35 These years were 1980–81, 1981–82, 1990–91, 1997–98 and 2001–02.

36 These years were 1979–80, 1980–81, 1981–82, 1986–87, 1987–88, 1990–91, 1997–98, 1998–99, and 2000–01 to 2003–04.

37 That is, the budget balance was between a deficit of 0.25% of GDP and a surplus of 0.25% of GDP.

38 In return for receiving the GST, the states agreed to remove various taxes including some stamp duties, Financial Institutions Duty and Bank Accounts Debits tax. See details in Peter Costello (1998) *Tax Reform: Not a New Tax, A New Tax System*, Chapter 2.

39 Parliamentary Budget Office (2016) *National fiscal outlook as at 2015–16 mid-year fiscal update*, Report no. 01/2016.

40 Greg Smith (2007) *Australia's Aggregate Tax Burden – measurement, interpretation and prospects*, Australian Tax Research Foundation Information series no 5.

41 Smith (2007).

42 The current tax burden plus the deficit, or minus the surplus, as the case may be.

43 Parliamentary Budget Office (2016) Unlegislated measures.

44 CEDA (2016) *Deficit to balance.*

45 This is because tax revenue plus non-tax revenue plus deficit equals spending. See discussion of non-tax revenue in the Appendix.

46 Comprehensive data is not available for the whole period from 1975–76.

47 Source: ATO Taxation Statistics, see: https://data.gov.au/dataset/taxation-statistics-2013-14/resource/99af746e-072a-4ede-818f-2f0a9074381d?inner_span=True

48 Source: OECD Tax Database, see: http://www.oecd.org/tax/tax-policy/tax-database.htm#C_CorporateCaptial

49 Independent Economics (2016) Company tax scenario - report to the Treasury.

50 As noted earlier, this tax reform involved the transfer of tax revenue from states to the federal government, which is why the federal government tax burden increases in 2000, as shown in Figure 1. However the policy changes reduced the overall tax burden, as shown in Costello (1998) pp34-36.

51 John Ralph, Rick Allert and Bob Joss (1999) *A Tax System Redesigned, Final report of the Review of Business Taxation*, Terms of Reference.

52 National Archives of Australia (nd) *Tax reform*, accessed 19 May 2016.

53 For the carbon tax was forecast to raise $7.69bn in 2012–13, $8.61bn in 2013–14 and $9.20bn in 2014–15 while the associated tax cuts were $3.35bn in 2012–13, $2.37bn in 2013–14 and $2.32bn in 2014–15. Source: Wayne Swan & Penny Wong (2001) *2011–12 Mid-year Economic and Fiscal Outlook*, p150 and 159.

The mining tax is complicated by the large changes in revenue forecasts for the time it was in place, but the figures in this publication indicate that package was expected to lead to large net increases in revenue. Source: Kai Swoboda (2013), *Revised revenue projections and associated expenditure for the Minerals Resource Rent Tax (MRRT),* report for Parliamentary Library.

54 Even though this proposal to tax trusts as companies was costed as part of the broader Ralph reforms to business tax that were meant to be revenue neutral.

55 See: John Howard (1998) *Press Conference, Prime Minister's Courtyard*, Parliament House, 14 October; and http://australianpolitics.com/1998/09/27/vcepolitics-1998-week-5.html

56 Every proposal involving an increased GST had only some of the revenue being returned as tax cuts, with the remainder of the revenue being used for other purposes such as health spending, compensation or repairing the budget. By definition, this means an increase in the overall tax burden.

57 Peter Costello (2007) *2007 Intergenerational Report*, April, Part 4.

58 Simon Cowan (2016) *The myths of the generational bargain*, Research Report 10.

59 See for example Mike Seccombe (2014) "How John Howard's tax cuts undid his protégé Tony Abbott", *The Saturday Paper*, 20 December.

60 Peter Costello & Simon Crean (2004) *Debate Between Peter Costello and Simon Crean - National Press Club, Canberra*, 22 September and Craig Emerson (2012) "The truth is Labor is the party of lower taxation", *The Australian*, 19 May.

61 See Martin Parkinson (2014) "Fiscal sustainability & living standards — the decade ahead", Speech to the Sydney Institute, 2 April.

62 Carling & Potter (2015).

63 See for example Lenore Taylor (2016) "Pesky facts are spoiling Scott Morrison's economic story", *The Guardian*, 15 April; and Josh Bornstein (2016) "Reclaiming Mutual Obligation" *Canberra Times*, 27 May.

64 See for example Oliver Lang, Karl-Heinz Nöhrbaß, and Konrad Stahl (1997) "On Income Tax Avoidance: The Case of Germany", *Journal of Public Economics* 66(2), pp327–47; and Martin Feldstein (1999) "Tax Avoidance and the Deadweight Loss of the Income Tax", *Review of Economics and Statistics* 81(4), pp674–80.

65 Morrison & Cormann (2016) 2016–17 Budget, Paper number 2, page 5.

66 Morrison & Cormann (2016) 2016–17 Budget, Paper number 1.

67 The Parliamentary Budget Office discussed changes in structural revenue and spending in a report in 2013, but the report did not provide detailed figures and the figures have not been updated since 2013. See Parliamentary Budget Office (2013) *Estimates of the structural budget balance of the Australian Government 2001–02 to 2016–17*, Report No 01/2013.

68 Parliamentary Budget Office (2016) Impact of policy decisions and parameter variations.

69 See for example Deloitte Access Economics (2016) *Shock and ore? Budget Monitor*, 26 April; and Greg Jericho (2015) "It's the revenue, stupid (with no apologies to Scott Morrison)", The Guardian, 16 December.

70 This is the difference between the first estimate of revenue and the last in table 1 in Swoboda (2013) Revised revenue projections for MRRT.

71 If spending was set based on these incorrect forecasts, then this is relevant for analysis of spending levels. However, the level of spending is more relevant than whether this was set based on incorrect revenue forecasts.

72 See for example 2013–14 Budget Paper Number 1, page 3-18.

73 The tax to GDP ratio usually falls in a downturn, because the decline in tax revenues is greater than the decline in GDP. This clearly happened in recessions, see in Figures 1 and 2, as well as during the GFC. As argued in Clark and Hollis (2013), the reasons for a decline in revenue during downturns include progressivity of personal income tax, capital gains behaviour and taxes being applied to more volatile components of GDP.

74 See for example Mike Seccombe (2015) "Resources bust worse thanks to Howard-Costello", *The Saturday Paper*, 18 April in contrast to Mike Seccombe (2014) "How John Howard's tax cuts undid his protégé Tony Abbott", *The Saturday Paper*, 20 December.

75 Parliamentary Budget Office (2016) Impact of policy decisions and parameter variations.

76 Smith (2007), p11.

77 In 2005, Australia had the greatest proportion of total welfare transfers going to the bottom quintile in the whole of the OECD. Source: Australian Government Treasury (2008) *Architecture of Australia's tax and transfer system*, August, Section 5.9. See also Miranda Stewart, Andre Moore, Peter Whiteford, and R. Quentin Grafton (2015) *A Stocktake of the Tax System and Directions for Reform: five years after the Henry review*, Tax and Transfer Policy Institute, Australian National University, February, chart 3.7.

78 Smith (2007), p19.

79 Source: World Bank, see http://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD

80 International Monetary Fund (2016) *World Economic Outlook*, April, Table 1.1 and Table A2.

81 See International Monetary Fund (2016) *Fiscal Monitor, April 2016: Acting Now, Acting Together*, Table A7. European countries with gross debt to GDP ratios over 80% of GDP in 2016 are Austria, Belgium, Cyprus, France, Greece, Ireland, Italy, Portugal, Slovenia, Spain and United Kingdom.

82 See: Australian Government Department of Foreign Affairs and Trade (2015) *Composition of Trade*.

83 Mikayla Novak (2014) *The Australia 'low taxing country' myth*, Institute of Public Affairs Occasional Paper; and Peter Burn (2004) *How Highly Taxed are We? The Level and Composition of Taxation in Australia and the OECD*, CIS Perspectives on Tax Reform 7.

84 Smith (2007).

85 Burn (2004).

86 Novak (2014).

87 Smith (2007).

88 ACTU (2015) *Submission to the government's consultation on the Tax White Paper*, 1 June.

89 ABC AM (214) Low income earners brace for expected budget cuts, 29 April.

90 The Australia Institute (nd) *Is Australia a high tax country?*, accessed 17 May 2016.

91 Per Capita (2015) *Per Capita Tax Survey 2015*, June.

92 Australian Government (2015) *Re:think Tax Discussion Paper — Better tax system, better Australia*, March, pp16-17.

93 Source: IMF, see: http://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405

94 Source: World Bank, see: http://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS

Figures for Mexico were not available so the average excludes Mexico.

95 Australian Government (2015), page 17.

96 OECD (2010) *Taxing Wages 2008-2009 Special Feature: non-tax compulsory payments as an additional burden on labour income.*

97 OECD (2011) *Taxing Wages 2011, Special Feature: Trends in Personal Income Tax and Employee Social Security Contribution Schedules*.

98 This is because the SSC is related to earnings and the pension is also related to earnings in most countries, see OECD (2013) *Pensions at a Glance – OECD and G20 indicators*.

99 Novak (2014).

100 Geoff Carmody (2014) "Australia is NOT a low taxing country", OnLine Opinion, 29 May.

101 Financial Services Council (2015) *Tax white paper submission.*

102 Smith (2007), p17ff.

103 Productivity Commission (2015) *Tax and Transfer Incidence in Australia*, Commission Working Paper, pages 26-27.

104 Novak (2014), p10.

105 See: ABC Fact Check (2015) *Fact check: Comparing Australia's income tax take with other OECD countries*, 17 November.

106 Neil Warren (2004) *Tax: facts fiction and reform*, Australian Tax Research Foundation Research Studies No 41, Sydney, p54.

107 Smith (2007), p17.

108 Data on the compulsory component of the superannuation guarantee is based on data from John Daley, Brendan Coates & Danielle Wood (2015) *Super tax targeting*, Grattan Institute Report 2015-11.

109 Source: KPMG Tax Rates Online, see: https://home.kpmg.com/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online.html

Note that the threshold where the top marginal tax rate starts is also relevant, but this is not in the KPMG database.

110 Source ATO Taxation Statistics, see: https://www.ato.gov.au/General/New-legislation/In-detail/Direct-taxes/Income-tax-for-individuals/Temporary-Budget-Repair-levy/

111 Source: OECD Taxation Statistics, Table I.7, see http://stats.oecd.org/index.aspx?DataSetCode=TABLE_I7

112 Source: OECD Taxation Statistics, as above. See explanation of weighted average calculation in Section 5.1.

113 Tax revenue would decline from 10.8% of GDP to 8.3% of GDP.

114 Jack Mintz, Philip Bazel & Duanjie Chen (2016) *Growing the Australian economy with a competitive company tax*, Policy Paper for Minerals Council of Australia; and Australian Government (2015), Chart 2.10.

115 OECD Taxation Statistics, Table II.1, see https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_II1

KPMG Tax Rates Online, see: https://home.kpmg.com/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online.html

116 Source: OECD Taxation Statistics. See explanation of weighted average calculation in Section 5.1.

117 Company tax would decline from 4.9% of GDP to 2.6% of GDP. There would be an offsetting increase in personal tax revenue due to franking credits — arguing for even larger personal tax cuts if the goal is for personal tax revenue to move towards the OECD average as well.

118 Given Independent Economics (2016) estimates that the decline in company tax revenue from the tax cut will be about $11 billion, partly offset by reduced usage of franking credits.

119 Franking credits used by individuals were $8.91 billion. Source: ATO Tax Stats, see: https://www.ato.gov.au/About-ATO/Research-and-statistics/In-detail/Tax-statistics/Taxation-statistics-2013-14/?page=4#Table_3_Individuals___selected_income_items

Franking credits used by charities was $580 million. Source: ATO Tax Stats, see: https://data.gov.au/dataset/taxation-statistics-2013-14/resource/684f4f1c-ac13-4026-ab23-d888d89f8ddd?inner_span=True

120 Deducting imputation credits off company tax revenue effectively treats company tax as a prepayment of personal tax, so this prepayment needs to be added back to personal tax revenue.

121 Source: OECD Taxation Statistics. See explanation of weighted average calculation in Section 5.1. The difference between Australia and the OECD weighted average is less than 0.1 percentage point of GDP.

122 See for example ACTU (2015) *We don't need a GST hike, we need a fairer tax system*, press release 5 November and Michelle Grattan (2015) *GST hike regressive and should be a last option: ACOSS*, the Conversation, 4 November.

123 Source: OECD Taxation Statistics.

124 See for example NSW Business Chamber (2016) *Business and community sector calls on NSW Government to abolish stamp duty*, press release, 5 April.

125 Many countries implement social security contributions as a flat tax starting at the first dollar of earnings — thus imposing a tax increase on all low income earners, and the contributions cut out above a certain income in 14 OECD countries. See OECD (2012) *Taxing Wages 2011*.

126 Here referring to Finland, Norway, Denmark and Sweden.

127 The tax to GDP ratio in 2013 was 43.7% in Finland, 40.5% in Norway, 47.6% in Denmark and 42.8% in Sweden, compared to 27.5% in Australia excluding the superannuation guarantee and 32.0% including the super guarantee.

128 See endnote 80.

129 Source: OECD Taxation Statistics, see: https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_II1

130 Source: World Bank Group Doing Business, see: http://www.doingbusiness.org/rankings

131 Australia's global competitiveness ranking slipping from 16th in 2007 to 21st in 2016. In 2016, Sweden's ranking was 9; Denmark was 12; Finland was 8; Norway was 11 and Belgium was 19. Source World Economic Forum, see http://reports.weforum.org/global-competitiveness-report-2015-2016/

132 Source: the 2015 IMD World Competitiveness Scoreboard, see: http://adminpanel.ceda.com.au/FOLDERS/Service/Files/Documents/26527~OverallRankingBarChart.pdf

133 Source: The Heritage Foundation Index of Economic Freedom, see: http://www.heritage.org/index/

134 Ben Phillips (2015) "The truth about bracket creep and Hockey's tax tales", *The Conversation*, 20 January.

See also Sandra Dandie & Joseph Mercante (2007) *Australian Labour Supply Elasticities: Comparison and Critical Review*, Treasury Working Paper 2007-04.

135 See for example: Jennifer Baxter, Matthew Gray, Kelly Hand & Alan Hayes (2012) *Parental joblessness, financial disadvantage and the wellbeing of parents and children*, Department of Families, Housing, Community Services and Indigenous Affairs Occasional Paper No 48.

Lisa Fowkes (2011) *Long-term unemployment in Australia*, Australian Policy Online Topic Guide, 26 October.

Michelle Cunningham, David Orsmond & Fiona Price (2014) "Employment Outcomes of the Economically Disadvantaged", RBA Bulletin, March Quarter.

Phillips (2015).

Ken Henry et al (2010) *Australia's Future Tax System: Final Report*, Part 2, Chapter A1.

136 "high top statutory income taxes reduce the post-tax income of a successful entrepreneur relative to an unsuccessful one and can reduce entrepreneurial activity and TFP (total factor productivity) growth": OECD (2010) *Tax Policy Reform and Economic Growth*, OECD Tax Policy Studies No 20, November.

137 See Joe Hockey (2015) *Intergenerational Report: Australia in 2055*, page 80 and citations in endnote 64.

138 See Hockey (2015) p80 and Enrico Moretti & Daniel Wilson (2015) "The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientists", NBER Working Paper No 21120.

139 However, the harmful effects of tax cuts grow more quickly as tax is increased, so the relative adverse effects of tax hikes are generally greater than the benefits of tax cuts.

140 Treasury (2016) *Economic and Fiscal Effects of Rising Average Tax Rates*, Treasury Ministerial Brief, 1 February.

141 As above.

142 PwC (2016) *Modelling of potential policy reforms, Final Report to Infrastructure Australia*. PwC models GDP to increase by $39.0bn in 2040, off a base of $3,485.1bn, a 1.1% increase.

143 Michael Kouparitsas, Dinar Prihardini and Alexander Beames (2016) "Analysis of the long term effects of a company tax cut", Treasury Working Paper 2016-02.

144 Liangyue Cao, Amanda Hosking, Michael Kouparitsas, Damian Mullaly, Xavier Rimmer, Qun Shi, Wallace Stark, and Sebastian Wende (2015) *Understanding the Economy-Wide Efficiency and Incidence of Major Australian Taxes*, Treasury Working Paper 2015-01, April.

145 Independent Economics (2016) Company tax scenario.

146 Alex Robson (2006) How High Taxation Makes Us Poorer, in *Taxploitation: the Case for Income Tax Reform*, CIS Readings 11.

147 Cao et al (2015).

148 KPMG Econtech (2010) *Economic Analysis of the Impacts of Using GST to Reform Taxes*, Report to CPA Australia, September.

149 Robson (2006).

150 See for example ACIL Allen Consulting (2015) *Modernising Australia's tax system*, report for Property Council of Australia; KPMG (2016) *The Economic impact of a GST-funded Company Tax Cut*, Report for Financial Services Council; and KPMG Econtech (2011).

151 Janine Dixon & Jason Nassios (2016) *Modelling the Impacts of a Cut to Company Tax in Australia*, Centre of Policy Studies Working Paper G-260.

152 Ben Potter (2016) *Election 2016: Cost of company tax cut no reason not to go ahead, says McKibbin*, Australian Financial Review, 12 May.

153 Chris Murphy (2016) *Budget Forum 2016: The Economic Impact of the Company Tax Cut, Austaxpolicy: Tax and Transfer Policy Blog*, 9 May 2016.

154 Peter Nash and Brendan Rynne (2016) "Basic economics tell us company taxes are too high and uncompetitive," *Australian Financial Review*, 15 April 2016.

155 See endnote 64.

156 Cao et al (2015), pp 3 & 23.

157 Christina Romer and David Romer (2010) "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks" *American Economic Review*, 100(3) pp763–801. A non technical summary of an earlier version of this paper is here: http://www.nber.org/digest/mar08/w13264.html

158 William McBride (2012) *What Is the Evidence on Taxes and Growth?*, Tax Foundation Special Report 207, December. McBride's literature survey includes the Romer & Romer paper and the OECD studies discussed in this section.

159 Cao et al (2015).

160 Åsa Johansson, Christopher Heady, Jens Arnold, Bert Brys and Laura Vartia (2008) "Taxation and Economic Growth", OECD Economics Department Working Paper No 620.

161 Young Lee & Roger H. Gordon (2005) "Tax Structure and Economic Growth" *Journal of Public Economics* 89(5–6), June, pp1027–43.

162 Robert Carling (2010) *The Unfinished Business of Australian income tax reform*, CIS Policy Monograph 108.

163 Michael Potter (2016) *Company taxes do harm wages*, Ideas@TheCentre, 13 May.

164 Andreas Bergh & Magnus Henrekson (2011) "Government size and growth: survey and interpretation of the evidence" *Journal of Economic Surveys* 25(5), pp872-897.

165 Andreas Bergh & Magnus Henrekson (2015) "Government size and growth: a rejoinder" *Journal of Economic Surveys*, 30(2), pp393-396.

166 This analysis includes the projected tax burden of the federal government alone. A projection for all Australian governments is not available.

167 Peter Saunders, Robert Carling & Simon Cowan (2013) *TARGET30: Towards smaller government and future prosperity*, TARGET 30 report 1, Appendix A.

168 Parliamentary Budget Office (2016) National fiscal outlook.

169 Parliamentary Budget Office (2015) 2015–16 Budget: medium–term projections.

170 Reinhardt and Steel (2006).

171 Parliamentary Budget Office (2016) National fiscal outlook.

172 See: Reserve Bank of Australia (2016) *Statement of Monetary Policy*, May, graph 3.16.

173 Parliamentary Budget Office (2014) *Trends in Australian Government receipts*, Chapter 6.

174 As above.

175 As above.

About the Author

Michael Potter

Michael Potter is a Research Fellow at the Centre for Independent Studies. He recently co-authored the CIS paper *Exposing the Stealth Tax: the Bracket Creep rip-off*. Michael has worked for the Parliamentary Budget Office, the Federal Departments of Treasury, Environment and Prime Minister & Cabinet (where he advised then Prime Minister John Howard on the introduction of the GST). He has also worked as Policy Manager, Economics at the National Farmers' Federation, and Director, Economics and Taxation at the Australian Chamber of Commerce and Industry.

THE CENTRE FOR INDEPENDENT STUDIES

Research Report 15 (RR15) • ISSN: 2204-8979 (Printed) 2204-9215 (Online) • ISBN: 978-1-922184-66-5

Published June 2016 by The Centre for Independent Studies Limited. Views expressed are those of the authors and do not necessarily reflect the views of the Centre's staff, advisors, directors or officers.

Level 1, 131 Macquarie St, Sydney NSW 2000 • **phone:** +61 2 9438 4377 • **fax:** +61 2 9439 7310 • **email:** cis@cis.org.au