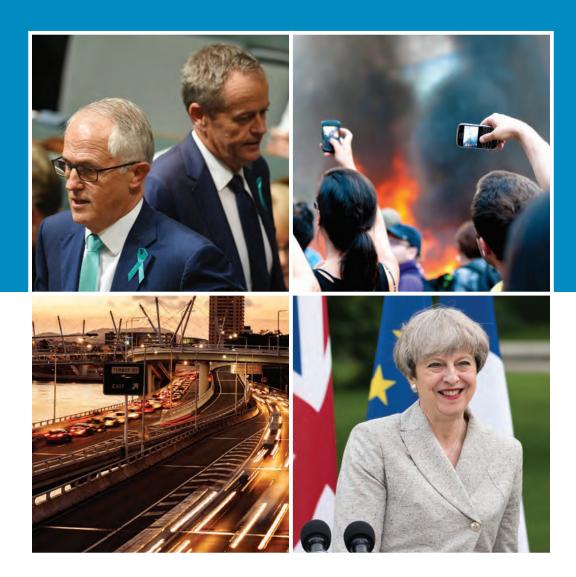
economic and political overview



2018





Economic and political overview 2018



About this publication

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About CEDA

CEDA — the Committee for Economic Development of Australia — is a national, independent, member-based organisation providing thought leadership and policy perspectives on the economic and social issues affecting Australia.

We achieve this through a rigorous and evidence-based research agenda, and forums and events that deliver lively debate and critical perspectives.

CEDA's membership includes 750 of Australia's leading businesses and organisations, and leaders from a wide cross-section of industries and academia. It allows us to reach major decision makers across the private and public sectors.

CEDA is an independent not-for-profit organisation, founded in 1960 by leading Australian economist Sir Douglas Copland. Our funding comes from membership fees, events and sponsorship.

CEDA – the Committee for Economic Development of Australia

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The content in the 2018 Economic and Political Overview was up-to-date at the time of printing. Due to the dynamic current economic and political environment, it may not address the most recent developments.

CEDA's Economic and Political Overview event series takes place around Australia to coincide with the publication's release, and provides the latest analysis from the report authors as well as business and political leaders.

Foreword



Each year CEDA's Economic and Political Overview aims to provide an overview of the previous year and outlook on the year ahead, to provide

our members with insight on the policy and economic front.

Traditionally the 18 months following an election is the period of enacting policy priorities or at the very least laying the ground work for reform and policy implementation.

However, international events, from Brexit to the election of Donald Trump, coupled with the citizenship saga for Federal members of parliament – which is likely to roll into 2018 – have contributed to a more tumultuous post-election environment.

That is not to say there haven't been significant achievements in the last 12 months. The same-sex marriage bill passed through parliament; and reflecting persistent efforts through 2017, a revised Trans-Pacific Partnership (TPP) trade deal, now the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) was signed with 11 important trading partners.

Given the volatility of recent years, it is difficult to predict what's ahead in 2018 for Australian politics, but in her political outlook chapter, Narelle Miragliotta, argues that major new policies are unlikely.

On the economic front, risks remain but the outlook is relatively positive with significant momentum in global economic growth. Domestically, investment is expected to support growth while weak wages growth and constrained consumer spending are likely to be key issues throughout 2018.

As highlighted by Michael Blythe in his economic chapter, potential global flashpoints exist - negotiations around Brexit, still high debt levels, and an Italian election that could trigger debate about another EU exit - but growth is looking up in many countries.

In addition to the economic and political chapters, this year's publication looks at how we find and access accurate information in an increasingly digital world.

The report also includes a chapter on how the change in distribution and access to information impacts political campaigns and policy making and whether longer and fixed Federal parliamentary terms might support better policy and information provision to the public.

From a business perspective, the report examines how evolving digital techniques and platforms are offering new ways for businesses to utilise big data, how data and analytics are likely to transform the global economy and the workforce, ethical and security implications of this change. All important issues for Australia's future.

This year's contributing authors are:

- Michael Blythe, Chief Economist and Managing Director, Economics, Commonwealth Bank of Australia;
- Dr Narelle Miragliotta, Senior Lecturer, Politics, Monash University;
- Dr Tim Fountaine, Partner, McKinsey & Company; and Dr Michaela Freeland, Associate Partner, McKinsey & Company;

- Dr David Glance, Director, Centre for Software Practice, University of Western Australia;
- Dr Andrew Banfield, Head of School, School of Politics and International Relations, Australian National University; and Harrison Miller, doctoral candidate, Australian National University.

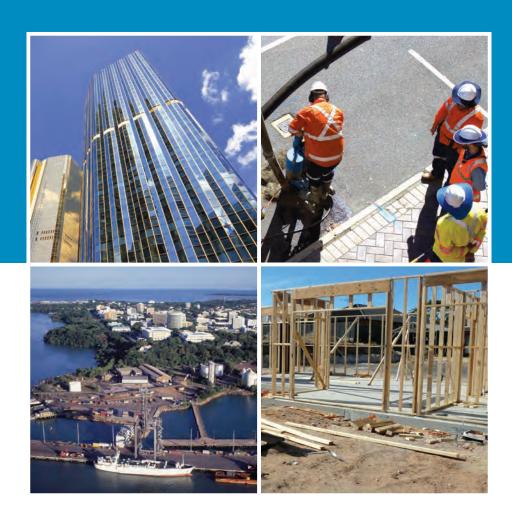
Each year CEDA's *Economic and Political Overview* kicks off CEDA's program of events and research

To coincide with the release of this publication, CEDA will again be holding events across Australia during February and March, to provide further business intelligence and analysis on the year ahead. I hope to see you at one of these events.

Melinda Cilento Chief Executive

CEDA

Economic Overview



Michael Blythe



Michael Blythe is the Chief Economist and Managing Director of Economics at the Commonwealth Bank. His extensive experience as an economist reflects more than 30 years working in economic policy and financial-market-related areas.

Michael's role encompasses monitoring, analysing and forecasting trends in the Australian economy and financial markets. In addition, he prepares a wide range of research material on matters of current interest. In his capacity as the CBA's Chief Economist, he is a regular conference presenter and media commentator on major economic developments and themes. Michael and his team have consistently ranked in the top three for macroeconomic analysis advice in various industry polls.

Michael works in the Institutional Banking & Markets division of the Commonwealth Bank. This division is responsible for managing the Group's relationships with major corporate, institutional and government clients and providing a full range of capital raising, transactional and risk management products and services.

After graduating in economics from the University of Sydney in 1982, he spent a total of 13 years in various roles within the Economic Group of the Reserve Bank of Australia. This included a stint at the International Monetary Fund in 1988. He was the RBA's Senior Economist from 1991-95. Key features of these roles involved the provision of economic analysis and policy advice.

Michael joined the Commonwealth Bank in late 1995.

Rearview

The common theme in end-year reviews over the past five years was "unrealised expectations". Whatever forecasts were on the table for the global economy and for the Australian economy at the start of the year were typically revised lower as the year progressed. But 2017 was different.

The major forecasting institutions such as the IMF and the OECD revised global growth forecasts *higher* during the year.

Global growth was strong enough to drive further reductions in unemployment. But global growth and tightening labour markets did not lead to any real lift in wage and price inflation. Inflation rates remain below target in most advanced economies.

The lift in global growth gave some support to financial markets, eased fiscal pressures in some countries and encouraged (modest) steps towards monetary policy normalisation.

Australia completed its 26th year of continuous economic growth in 2017 and now holds the record for the economy with the longest expansion of the modern era (see figure 1).

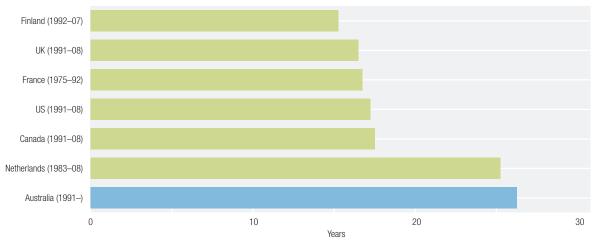
The labour market defied expectations as strong jobs growth pushed unemployment lower (see figure 2). But, as elsewhere, there were few upward pressures on wages and prices.

The housing market cooled, as hoped, and the RBA spent the year on the sidelines, as expected.

"Australia ... now holds the record for the economy with the longest expansion of the modern era."

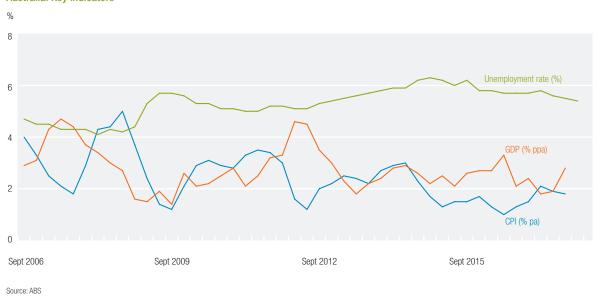


FIGURE 1 Years of continuous growth



Source: CBA

FIGURE 2 Australia: Key indicators





"A lift in economic momentum and some favourable economic parameters leave the Australian economy well placed at the start of 2018."



The starting point for 2018

A lift in economic momentum and some favourable economic parameters leave the Australian economy well placed at the start of 2018.

The CBA Purchasing Managers Index (PMI) illustrates the momentum point (see figure 3).

The PMI covers the bellwether manufacturing sector and the dominant services sector (or nearly three-quarters of the economy). A reading above 50 indicates expansion. The further above 50 the stronger the expansion.

Both the manufacturing and services PMIs were lifting during the final months of 2017. PMI readings ended the year well above the neutral 50 point and comfortably in expansion territory.

Other economic and policy parameters are adding support to growth. Interest rates remain low, the Australian dollar is well below 2013 peaks and flat unit labour costs are supporting jobs and boosting export competitiveness. Australian policy makers also have a degree of residual firepower available should something go wrong.

FIGURE 3
CBA Purchasing managers indexes



Source: HIS Markit/CBA

Growth themes for 2018

The underlying themes driving the economy in 2018 include:

- The cessation of commodity-related headwinds is making it easier for the economy to grow (see figure 4).
- A significant proportion of the growth story is essentially "locked in" by the nature of the growth drivers
- Residential construction will peak but an elongated top is likely.
- The much-anticipated turn in non-mining capex has arrived.
- The combination of weak income growth and high levels of household debt will restrain consumer spending.
- Price and wage restraint will persist but the lows were in 2016–17.
- Overall policy settings will remain accommodative.

CBA forecasts (see Table 1) have the economy growing by 2.75 per cent in 2018. This outcome would be a significant improvement on the 2.25 per cent increase in 2017. And it would leave the economy running at potential for the first time since 2011–2012.

Favourable labour market trends should continue against this backdrop. The unemployment rate at year end could be close to our full-employment estimate of five per cent.

These trends also mean that *underemployment* should be moving lower. Less labour market slack brings closer the long-desired turn in wages and income growth. That said, any return to "normal"

TABLE 1
Australia: CBA key forecasts

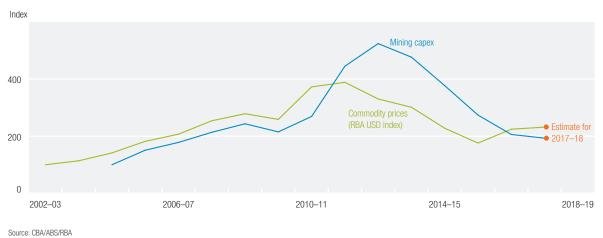
	2016 (actual)	2017 (forecast)	2018 (forecast)
Real GDP (%ch)	2.6	2.3	2.9
Real GDI (%ch)	2.7	4.6	1.3
Employment (%ch)	1.7	2.2	2.4
Unemployment rate (%)	5.7	5.6	5.3
Headline CPI (%ch)	1.3	2.0	2.3
Underlying CPI (%ch)	1.5	1.9	2.1
Wage Price Index (%ch)	2.0	2.0	2.4
Terms-of-trade (%ch)	0.1	11.2	-5.7
Nominal GDP (%ch)	3.8	5.7	3.3
Current A/c deficit (\$bn)	48.1	32.8	39.1

Source: CBA data

wages growth of 3-3.5 per cent per annum still seems some way off.

What looks closer is the return of inflation rates back into the RBA's 2-3 per cent target band. Albeit the bottom end of that band.

FIGURE 4 Commodity boom-bust





"Global expansions tend to last longer if global trade is lifting, businesses and governments are investing and labour markets are improving. These supports are in place."



A favourable global backdrop

Risks remain. But the global economy is evolving in a way that will assist the Australian economic story in 2018.

A synchronised upturn

A synchronised global upturn is underway. Based on IMF forecasts, well over half of all countries have an accelerating growth profile over 2017-19. This trajectory is the best result for the global economy since 2004-06, or before the global financial crisis (see figure 5).

A sustainable upturn

Global expansions tend to last longer if global trade is lifting, businesses and governments are investing and labour markets are improving. These supports are in place.

Leading indicators of global trade, such as growth in container traffic, are running at high levels. The global capex cycle has also turned up. Encouragingly, part of this lift reflects rising infrastructure spending. The improvement in labour markets around the world is quite exceptional. Strong labour markets are a support for consumer spending.

FIGURE 5 Global growth momentum (number of countries)

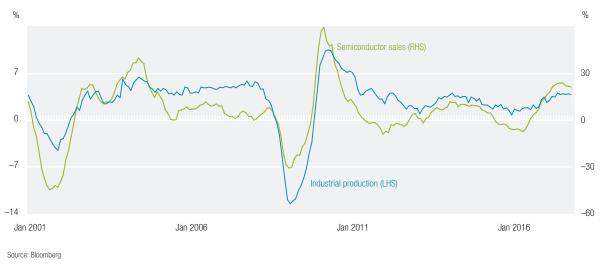
% of total Accelerating Forecasts 75 50 25 Contracting 0 2010 2013 2016 2019 2004 2007 Source: IMF/CBA

FIGURE 6
Inflation indicators (annual percentage change)



Source: CBP World Trade Monitor/CEIC

FIGURE 7
Global leading indicators (annual percentage change)



Global reflation?

Tightening labour markets have not produced much, if any, lift in wages growth. Nevertheless, some important fundamentals are shifting. The deflation in the Chinese Producer Price Index since 2012, for example, is over. China is now "exporting" inflation to the rest of the world (see figure 6).

Policy normalisation?

A synchronised, sustained upturn with some shift to upside inflation risks is one where extreme monetary policy settings are no longer required. Nevertheless, policy makers are likely to move only slowly and cautiously.

A favourable growth skew for Australia

The mix in global growth drivers looks quite positive from an Australian perspective. Growth is accelerating in nearly 75 per cent of our major trading partners. And the type of growth is skewed towards industrial production. Global IP is growing strongly, a favourable development for global commodity demand and major suppliers like Australia (see figure 7).

From the global economy to commodities

Commodity prices were quite volatile during 2017 but defied expectations that much of the gains during 2016 would be handed back. Prospects for 2018 depend on the shifting patterns of demand and supply.

China is the key to *demand*. They account for 45-60 per cent of global consumption of the major commodities.

The downside risks to the China story include the desire to shift from investment-driven growth to a consumer-services model, the expansion of the anti-corruption campaign, the need to cut excess capacity and improve productivity and rising environmental concerns.

But other factors are pushing the demand side of the equation in a positive direction. A stronger global economy provides an offset to any China weakness, Chinese policy makers can shift back to stimulus if necessary and commodity-friendly infrastructure spending on urbanisation and the central and western provinces continues.

CBA's China Tracker (see figure 8), our preferred guide to the Chinese growth momentum, was pointing higher at the end of 2017. The Chinese economy, and commodity demand, may surprise again on the high side.

The *supply* side of the commodity equation could also play out in a price-friendly fashion.

Gross margins have widened for global miners. But margins remain relatively low by historical standards. The capex lift needed to boost supply may "A stronger global economy provides an offset to any China weakness."



be muted as a result. Especially in an environment where miners have preferred to focus on cutting debt, boosting dividends and reducing costs.

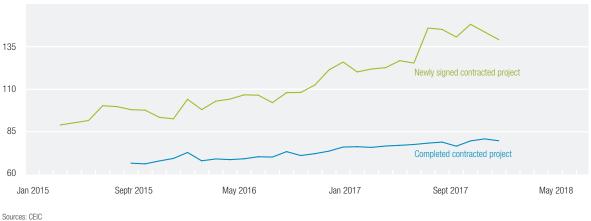
FIGURE 8
CBA China tracker (momentum – change in annual growth rate)



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FIGURE 9
One belt one road (rolling annual contract value)





Medium-term issues — will the rivers of gold return?

India has long been touted as a possible candidate to take the lead from China. It has the same population and urbanisation trends and infrastructure needs as China. Unlike China, its population will continue to grow. And some new developments offer upside to commodities. The "Make in India" campaign, for example, aims to lift the manufacturing share of GDP from 16 per cent to 25 per cent by 2022. The focus is on commodity-intensive sectors such as capital goods, shipping and infrastructure.

"The unwind of the commodity boom was a significant drag on the Australian economy over the 2011–17 periods."



China's One Belt and One Road plan aims to improve connectivity across Eurasia via a Silk Road Economic Belt and a Maritime Silk Road. The plan covers 65 countries which, in aggregate, could be the "new China". These countries account for 65 per cent of global population and about 40 per cent of global GDP (see figure 9).

The plan will require a significant investment in commodity-intensive infrastructure. The ultimate infrastructure spend is put at US\$4-8 trillion, albeit spread over an extended timeframe.

A final potential upside to the commodity story would come if President Trump delivered on his proposed US\$1 trillion infrastructure program.

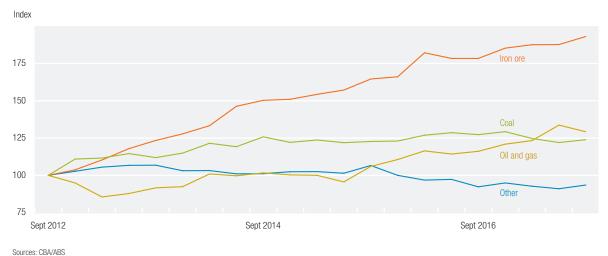
From commodities to the Australian economy – getting easier to grow

The unwind of the commodity boom was a significant drag on the Australian economy over the 2011–17 period. Falling commodity prices resulted in what was effectively an "income recession". Falling mining capex weighed on spending and jobs.

But the commodity downturn is largely complete. And by taking out a significant negative, it is getting easier for the Australian economy to grow (see figure 10).

There are other positive spill-overs as well. Higher commodity prices boosted company profits and government revenues. The improved fiscal backdrop helps shore up Australia's AAA rating. And it means tax cuts are suddenly on the table for discussion.

FIGURE 10 Minging output by sector (Q3 2012=100)



Jources, ODA/ADO

Is growth guaranteed?

Many of the key economic drivers for 2018, and beyond, are locked in. In a sense, a fair proportion of the growth story is "guaranteed".

The resources payoff

The much-enlarged mining capital stock boosted iron ore exports and is now doing the same to lique-fied natural gas (LNG).

Resource exports will continue to rise quickly as Australia becomes the biggest global exporter of LNG. The ramp-up will contribute approximately 0.5 per cent to GDP growth for the next couple of years. This GDP contribution is "guaranteed" by the nature of the LNG contract arrangements. The gas has already been sold.

The infrastructure boom

After a long period of disappointing outcomes, infrastructure spending is now growing strongly.

Infrastructure spending adds to growth and employment in the short term. And it boosts productivity and income over the medium term. These are desirable outcomes.

The rise in infrastructure spending will contribute around 0.5 per cent to GDP growth each year for the next couple of years. This GDP contribution is "guaranteed" because it comes from multi-year projects that have started. And once started, infrastructure projects roll through to completion.

There is certainly plenty of investor appetite for long-life assets, especially transport. A survey by

"Infrastructure spending adds to growth and employment in the short term. And it boosts productivity and income over the medium term."



Infrastructure Partnerships Australia showed 70 per cent of respondents were "highly likely" to invest in Australian infrastructure. The survey also reported a perceived increase in sovereign and political risk that had dented Australia's attractiveness relative to the rest of the world.

These outcomes emphasise the importance of getting the overall policy backdrop right. Equally, they underscore the need to look beyond asset recycling when funding infrastructure spending. We have long argued that debt financing should be part of the mix. It's relatively cheap and debt financing is an effective way to share the costs of long-life assets with the users over time.

The Asian income expansion

Our thoughts about growth drivers have focused since 2012 on the opportunities offered by Asian demographics and incomes.

Solid population growth and rising incomes is producing a spending wave that is reshaping the region and the global economy. The population in Emerging and Developing Asia now stands at 3.5 billion. And per capita incomes now exceed the global average (see figure 11).

There is a well-worn path that income and spending trends typically follow:

- Initially, there is more spending on food. People want more of it. And better quality.
- Manufacturing and urbanisation start to take hold and the need for infrastructure lifts as incomes rise.
- Incomes then reach a trigger point where the spending focus shifts towards services.

Australia has certainly benefited from the early stages of this income progression via the commodity intensive nature of spending. And this benefit still has some way to run.

Energy becomes a larger part of the commodity mix as incomes rise. So, Asian income growth will assist the LNG part of the Australian growth story.

The main benefits and opportunities reside in the services part of the story. Rising Asian incomes are driving a strong demand for education and tourism services. Both now sit in Australia's top-five exports.

The rise in tourism and education spending will contribute 0.5–0.75 per cent to GDP growth each year for the next couple of years. This GDP contribution is "guaranteed" because it comes from a combination of demographics and economic momentum (see figure 12).

FIGURE 11 Emerging and developing Asia

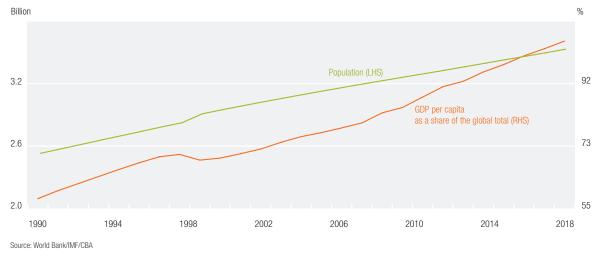
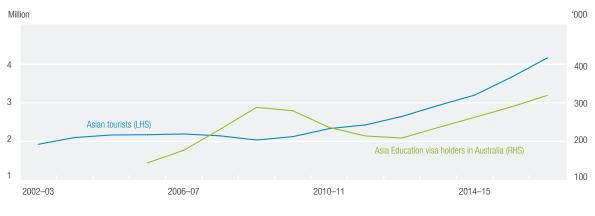


FIGURE 12
Education and tourism



Source: ABS/Dept of Home Affairs

FIGURE 13

Dwelling supply (new construction as percentage of population growth)

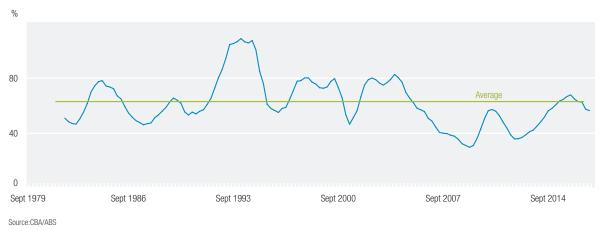
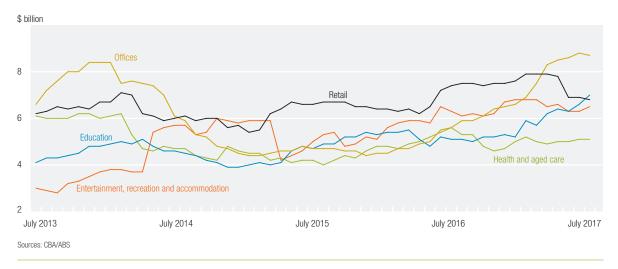


FIGURE 14
Non-residential building approvals (rolling annual total)



A continuation up the income curve suggests that the health and financial services sectors will also be beneficiaries of rising Asian incomes.

Our proxy for growth in those parts of the Australian economy exposed to Asian income growth ran at 3.5 per cent per annum over the past two years. Overall GDP growth, in contrast, averaged out at 2.3 per cent per annum over the same period.

Is the residential construction boom over?

Falling residential construction could detract from growth in 2018. The "typical" downturn cuts GDP growth by around one percentage point.

But there are reasons to think that the top for this cycle will be more extended. And that the downturn may be milder than expected.

The residential construction pipeline is sitting at record highs. And this pipeline is heavily skewed towards higher density dwellings. This size and skew argues for an elongated top. Apartments take longer to complete.

There is also a shift in demographics in play. Trends in the construction:population ratio are telling. Despite the biggest construction boom on record, that ratio is running *below* average levels at present. We need to keep building at faster-than-normal rates.

Risks to residential construction lie to the upside. Consistent with this risk, leading indicators like building approvals and new construction lending have started trending up again. (See figures 13 and 14).

"There were signs during 2017 that the long-awaited lift in non-mining capex had finally arrived. If the turn is here, then it is long overdue."







Will business capex lift?

There were signs during 2017 that the long-awaited lift in non-mining capex had finally arrived. If the turn is here, then it is long overdue.

It may well be that the lengthy list of positive fundamentals that has characterised the capex backdrop for a while now is finally bearing fruit. These fundamentals include rising capacity utilisation, an elevated profit share, strong business confidence, borrowing rates that are low and balance sheets that are in good shape.

Coercion or compulsion?

Equally, there are some concerns that capex is being dragged forth from reluctant businesses.

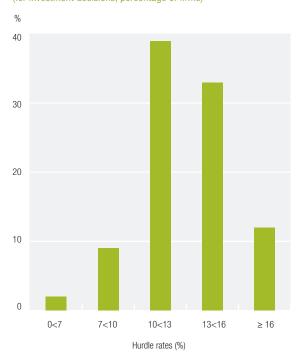
So, the education boom is dragging out more education-related construction. The tourism boom is forcing tourism-related construction, such as hotels, higher as well. The skew in jobs growth towards services requires more offices. On the other side of the equation, the weakness in retail spending means retail construction activity is rolling over.

These forces will continue into 2018. And to the list we could add the pressure from the infrastructure boom. The private sector firms doing the construction for the public sector need to tool up.

Stumbling blocks remain

The high hurdle rates used to evaluate investment projects remain a major impediment to a decent lift in business capex (see figure 15).

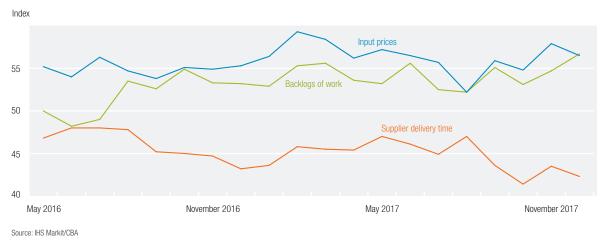
FIGURE 15
Business hurdle rates
(for investment decisions, percentage of firms)



Source: Deloitte CFO survey/RBA

Surveys show that most businesses have hurdle rates of 10–16 per cent. Such rates look unrealistically high in a low inflation, low yield, low return environment. Not surprisingly, many projects fail to meet the hurdle and capex suffers. Instead, companies have preferred to hand back "excess" capital to shareholders via buybacks and dividends.

FIGURE 16
CBA manufacturing PMI (price pressure indicators)



The rise in perceived political and sovereign risk discussed earlier is also an investment deterrent. As is the rancorous debate about company taxes.

And to the list we can add the recent spike in energy costs. The results from the World Economic Forum's *Executive Opinion Survey* for 2018 show that an "energy price shock" is the major concern identified by Australian business.

The risks if capex fails to lift

There are some significant risks to the broader outlook if the lift in business capex proves a false dawn.



"The financial stability risk comes from the high levels of household debt and the housing market that lies behind that debt." Some respondents to CBA Purchasing Manager surveys, for example, are reporting that capacity constraints are holding back output. The backlog of work is running at elevated levels and delivery times are lengthening (see figure 16).

Any reluctance by business to lift capex would limit our ability to fully benefit from an improving global economy and solid underlying domestic backdrop. It would also mean upward pressure on labour costs and input/output prices. These developments will need careful watching in 2018.

Households: from financial stability risk to macroeconomic risk?

Households are major sources of risk to financial stability and the macroeconomy. The financial stability risk comes from the high levels of household debt and the housing market that lies behind that debt. The macroeconomic risk comes from the pressures on consumer spending from stretched balance sheets and weak income growth.

Contained financial stability risks?

The interrelated concerns about the housing market and household debt date back to 2003. Any number of "stress tests" have been applied to the Australian housing market since then, including a global financial crisis. And the market has successfully dealt with those tests.

And that is the fundamental point. The trigger needed to turn financial stability *risk* into reality is not there.

FIGURE 17 Housing cycle triggers

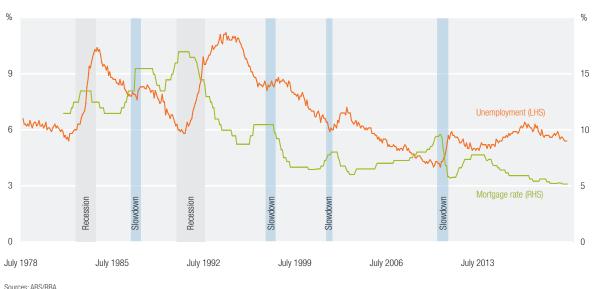
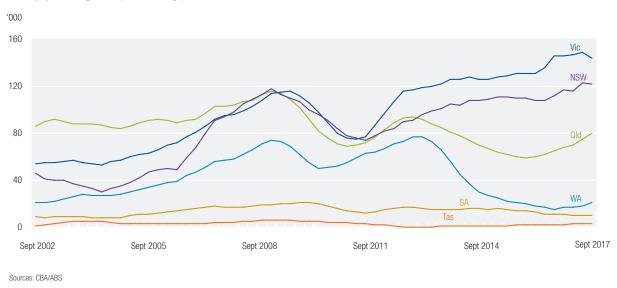


FIGURE 18
State population growth (annual change)



The usual triggers are rising unemployment and rising interest rates. But unemployment is trending lower. And mortgage rates remain low. (See figure 17).

The other potential trigger is the housing market itself. An extended period of rising dwelling prices has pushed a range of valuation metrics to what look like extreme levels.

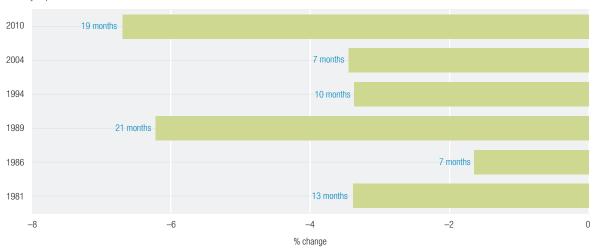
RBA estimates put the price:income ratio in Australia at about five, a record high. But a breakdown of this ratio by state reveals all of the increase in the past few years was in Sydney and Melbourne.

These are the capitals with particularly strong demographics, so rising valuation ratios have a solid underpinning.

A more specific concern relates to the large number of inner city apartments under construction. The fear is that the addition to supply will create an imbalance, forcing prices lower. But most of the new supply is coming on in Sydney and Melbourne. And, again, these capitals have the strongest demand as well, courtesy of rapid population growth. Brisbane, in contrast, is wedged between rising supply and weak population growth (see figure 18).

FIGURE 19
Australia: Dwelling price drops (percentage decline from peak)

Price cycle peak in...



Source: CoreLogic/CBA

Nevertheless, the housing market is cooling. And price growth will continue to slow:

- Low affordability is crimping owner-occupier demand.
- Regulatory action, higher mortgage rates and weakening price expectations are slowing investor demand.
- Changes such as tighter lending standards and higher stamp duty for foreign buyers, together with capital outflow restrictions in China, are dampening foreign investor interest.

There are six episodes of *falling* dwelling prices since 1980 (see figure 19). The longer and larger downturns are those associated with recessions or recession-type events like the Global Financial Crisis. Excluding the genuine recession episodes, downturns have been small and short-lived (averaging a four per cent decline over 11 months).

Some protective steps have been taken. Borrowers have lifted repayment rates and built up sizeable balances in mortgage offset accounts. And banks have tightened lending standards, cut high Loan to Value Ratio (LVR) lending and reduced interest-only lending.

Rising macroeconomic risks?

Financial stability risks may remain in the background in 2018. But macroeconomic risks, in the consumer space, loom large.

In particular, average household debt is higher, more households have debt and carry that debt later into life. Household concerns about their balance "Some protective steps have been taken. Borrowers have lifted repayment rates and built up sizeable balances in mortgage offset accounts."

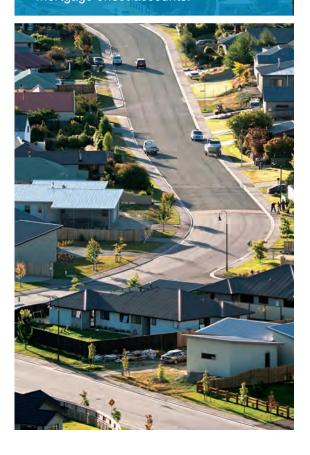
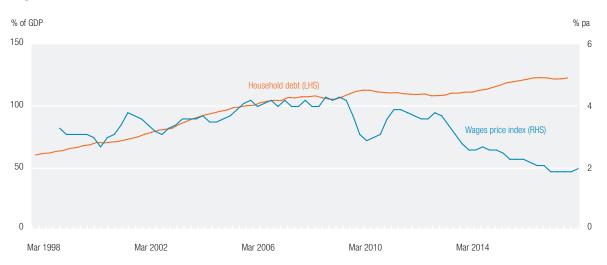


FIGURE 20 Wages and debt



Sources: IIF/ABS

FIGURE 21
Housing and the consumer (annual percentage change))



sheets have increased as a result. The pressures have been intensified by weak income growth, rising living costs and elevated job security concern. (See figures 20 and 21).

These concerns are changing the way house-holds behave.

The risk is that the consumer is now less responsive to "good" economic news and more responsive to "bad" news. Consumers could scale back spending by more than normal in response to a "shock", accentuating any downturn.

The other structural impact is the increased sensitivity of the households to interest rate changes. Higher debt levels mean that any given change in rates will have a bigger impact on household cashflows than previously.

There is some cyclical relief at hand. An improving labour market, for example, is lowering job security fears. But the biggest cyclical boost would come from a pickup in income growth.



"Looking ahead, rate rises are more likely than cuts. And the focus on budget repair limits scope for tax cuts or increased welfare spending."





The need to find more income

The main market-driven components of income growth are labour incomes (wages) and other income (largely SME profits).

The main direct income influence that policy makers have is via interest rates, taxes and social welfare payments.

Looking ahead, rate rises are more likely than cuts. And the focus on budget repair limits scope for tax cuts or increased welfare spending.

So, any increase in household spending power is dependent on a lift in wages growth.

Weak wages growth: changing drivers or market failure?

Wages growth has slowed sharply (see figure 22). Current outcomes around the two per cent per annum mark are the lowest on record and are barely keeping up with inflation.

Australia is not alone in experiencing unusual weakness in wages growth. It is a common global theme. And one common global driver is the increased competition in product and labour markets. This competition leaves employers reluctant to grant wage rises and employees reluctant to pursue them.

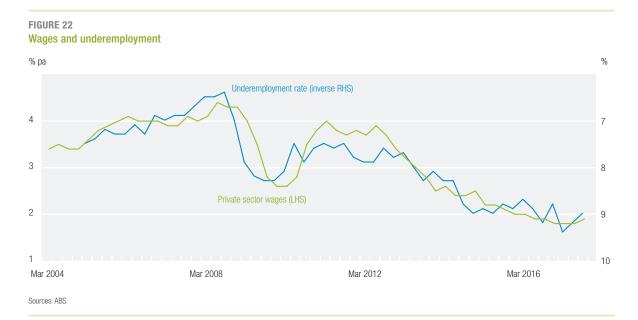


FIGURE 23
Consumer prices (annual percentage change))



A specific *domestic* theme is the high level of underemployment. Unemployment may be falling but many workers want longer hours. The resultant labour market slack is dampening wages.

"Philip Lowe has argued that 'some pickup in wages growth would be welcome' and it would be 'a good thing' if workers asked for a pay rise."



These observations underlie the critical importance of getting the economic and policy backdrop right. The correct environment will see jobs growth continue, labour market slack diminish and wages eventually respond.

But there is a degree of urgency building given the level of risks. And policy makers are showing an increased level of concern. RBA Governor Dr Philip Lowe has argued that "some pickup in wages growth would be welcome" and it would be "a good thing" if workers asked for a pay rise.

At the very least, it seems we should be thinking about wages policy as well as the more traditional monetary and fiscal policies.

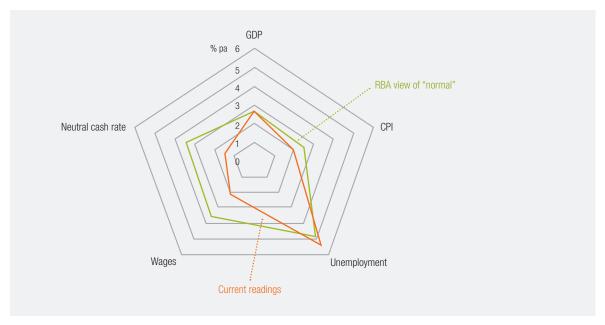
Policy makers used to exert a fair amount of influence on labour incomes through the centralised wage fixing system. A return to a fully centralised system is not desirable. But a national wage increase would deliver additional spending power to the group most likely to use that benefit. Households in the lower half of the income distribution spend a larger share of their income.

Will inflation matter in 2018?

Inflation rates picked up a little in 2017 (see figure 23). CBA forecasts have inflation moving a little higher again in 2018. But this trajectory would only return inflation to the bottom half of the RBA's 2-3 per cent target band at year end.

All inflation models have a high weight on labour costs. So, it is difficult to get much of a lift in inflation without faster wages growth.

FIGURE 24
Current outcomes versus 'normal'



Source: CBA/RBA/ABS

That said, inflation risks do seem tilted to the upside. A consistent theme from CBA's PMI surveys is that both demand and supply issues are impacting on input and output costs. In particular, higher energy prices are boosting business input costs. There are risks that higher energy prices filter through the pricing chain.

The RBA in 2018?

The RBA spent a fair amount of time in 2017 defining what "normal" meant for a selection of key indicators. Benchmarking the current economy against these normal parameters shows activity-type indicators closing in on normal. But inflation indicators are still some way off (see figure 24).

We expect the gap to close further during 2018 and as the economy normalises the case for normalising policy settings strengthens as well. We have the start of a modest tightening cycle pencilled in for November 2018 (table 2).

The increased sensitivity of households to changing interest rates will also influence the policy process. It should mean a drawn-out rate rise cycle that peaks short of the 3.5 per cent neutral rate nominated by the RBA.

We put the cash rate peak for this cycle at 2.5 per cent and don't expect to get there until early 2020.

TABLE 2 CBA interest rate forecasts

	March 2018	June 2018	September 2018	December 2018			
Cash rate	1½	1½	1½	1¾			
3-year bonds	2.05	2.10	2.20	2.30			
10-year bonds	2.65	2.70	2.80	2.85			
Fed funds	1¾	2	2	2			
US 10-year bonds	2.65	2.70	2.75	2.80			
vs USD:							
AUD	0.80	0.81	0.82	0.83			
EUR	1.18	1.20	1.22	1.23			
JPY	110	107	106	105			
CNY	6.55	6.45	6.40	6.35			

Source: CBA data







"There are plenty of geopolitical events to watch out for in 2018. ... Tensions with North Korea and Iran will no doubt continue... Brexit negotiations will continue."

Global risks and issues

There are plenty of geopolitical events to watch out for in 2018.

US mid-term elections are due in November. Opinion polls suggest a significant number of Congressional seats could change hands. And this no doubt contributed to the relative ease with which tax cuts passed through the Congress. So, the chances of other parts of President Trump's agenda being enacted are probably higher. Some, such as a lift in infrastructure spending, will help. Others, such as possible trade restrictions, will not. Tensions with North Korea and Iran will no doubt continue.

US fiscal policy is moving in an expansionary direction. We think this stimulus is only worth about 0.3 percentage points to US GDP growth in 2018 and 2019. And any associated repatriation of funds by US companies may be used for balance sheet repair rather than boosting capex and jobs. But there are some upside growth and inflation risks that could see the Fed move faster.

As fiscal stimulus fades during 2019 and the interest rate structure lifts, some *downside* risks to the US economic story may emerge in 2020.

There are plenty of other potential flashpoints to watch in 2018. The Italian election is one example. The risk is that debate on Italian EU/

EUR membership becomes part of the campaign. Surveys show that 46 per cent of the Italian population think they would be better off outside the EU.

Aside from elections, Brexit negotiations will continue during 2018. The timeline for negotiations has a deal in place by October 2018 with votes on the proposals due by year end.

Rising global debt levels have kept alive fears of a replay of 2008. But growth in debt remains well below that in the lead up to the Global Financial Crisis. And a stronger global economy is easing some pressures. The global debt:GDP ratio is actually *falling* at present (see figure 25).

The risks are more to do with the *composition* of that debt. Governments in the mature economies and non-financial corporates in emerging market economies account for most of the increase in global debt since 2008 (see figure 26).

The risks from government debt relate to rising debt servicing costs as interest rates rise and the reduced capacity to apply fiscal stimulus should it be required in the future.

The main risk parameters from the rise in corporate debt relate to the large amount of USD debt due to be rolled over up from 2018–2020. This refinancing will be taking place at a time of higher US interest rates, a potentially stronger USD and soft credit metrics.

FIGURE 25
Global debt (percentage of GDP)

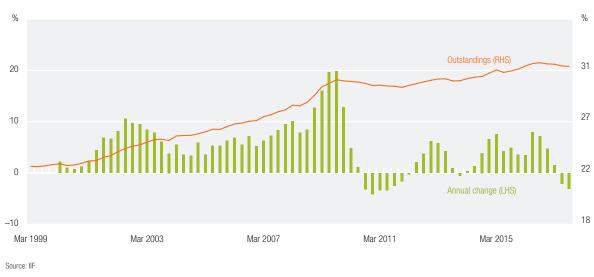
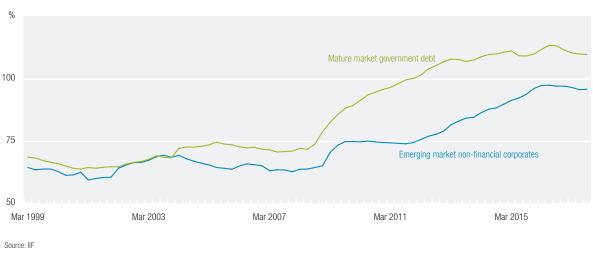


FIGURE 26 Global debt (percentage of GDP)



Financial markets in 2018

The global backdrop favours rising interest rates, especially in the US. But still-low inflation rates mean that the increase will be quite modest.

Australian longer-term interest rates will follow the US higher. But again, the rise should be quite limited. The RBA will continue to lag the Fed rate rise cycle so spreads to US bonds will remain close to zero.

A shift to a more stimulatory fiscal policy may assist the US dollar in the near term. However, the

longer-term drivers favour the US dollar moving lower. The Fed, for example, is well advanced in its normalisation cycle. But other central banks are likely to start lifting rates and have more work to do than the Fed. We expect most major currencies to strengthen against the US dollar in 2018.

The views in this article are those of the author and should not be attributed otherwise.

Political overview



Dr Narelle Miragliotta

Dr Narelle Miragliotta has been a senior lecturer in Politics at Monash University since 2007. Before that she taught at the University of Western Australia. She has research interests in Australian political institutions more broadly, and particular interests in political parties, electoral systems and elections and parliaments. At Monash University she has taught units on Australian politics, the media, and environmental politics.

Introduction

The Australian national political scene mirrored the anxieties and uncertainties confronted by other liberal democracies in Asia, Europe and North America in 2017. The year was dominated by the ongoing fracturing of the political right, with all of its attendant implications for the efficacy of Malcolm Turnbull's leadership, the internal stability of the Liberal Party and the Coalition relationship more generally. The year was also marked by several constitutional skirmishes, a record-breaking number of parliamentarians forced to exit parliament, and the continuation of the energy and climate wars. The more things changed in 2017, the more they stayed the same.

The intractable problem of asylum seekers

The year got off to a less than auspicious start for the Turnbull Government when it was forced to explain the specifics of the asylum seeker exchange deal to the newly inaugurated US President Donald Trump. In January, the Prime Minister had an unpleasant, and widely reported upon, conversation with Trump over the transfer agreement the Australian Government had brokered with the Obama administration to re-settle asylum seekers. For Trump, the deal represented political risk because of his administration's proposed ban on refugee resettlement in the US. For the Turnbull Government, the deal offered a partial remedy to those asylum seekers whose refugee claims were being considered at Australian offshore detention centres on Manus Island in Papua New Guinea (PNG) and Nauru.

While the exchange between Trump and Turnbull suggested that US-Australian relations might not be quite as predictable under the new President as it had been under previous US administrations, the incident drew renewed attention to the status of asylum seekers on Manus. Following the 2016

decision by the PNG Supreme Court that the detention of asylum seekers on Manus breached the country's constitution, it was announced that the detention centre would be decommissioned in 2017. However, the closure of the centre in October made headlines when the PNG police forcefully removed those refugees and asylum seekers who had refused to vacate the facility.

The circumstances of the camp's closure, and the Australian Government's refusal to re-settle its remaining occupants, drew global condemnation. In November, just as the Turnbull Government was claiming a seat on the United Nations Human Rights Council, the UN Human Rights Committee (Committee) called for an end to offshore processing and for the Government to bring those on Manus and Nauru to Australia or another safe country. The Committee stressed that detention should be used to assess individual risk and not as a general deterrent, and found that Australia has "effective control" over the offshore detention centres, in spite of their claims to the contrary.

The situation of the asylum seekers on Manus also cast a momentary pall over Australia's relationship with New Zealand. In November, New Zealand's newly elected Prime Minister, Jacinda Arden, reaffirmed her predecessor's offer to accept 150 refugees from Australia's offshore detention centres, but not before describing the Australian Government's handling of the situation as "unacceptable". While the Prime Minister indicated that

he might consider the option once the US transfer arrangement was finalised, the Immigration Minister, Peter Dutton, was categorical in his rejection of the offer, arguing that it would likely "reopen" the movement of people seeking asylum in Australia. When Arden's offer was reiterated in December, it was met with a not so subtle warning from Deputy Prime Minister, Barnaby Joyce, to "stay away from another country's business."

In December, there was some respite for the Turnbull Government with confirmation that nearly 200 refugees from Nauru and Manus would be re-settled in the United States in the New Year, following a group of 50 others who had been accepted in September. However, the fate of the remaining asylum seekers, and the costs of offshore processing will remain something of a thorn in the side of the Turnbull Government in 2018.

Coalition politics

The offshore processing of asylum seekers was one of the few policy areas over which the Coalition was in strong agreement in 2017. The year, not unlike that which preceded it, saw an already fractious Coalition grow increasingly unwieldy. While Turnbull was spared a formal challenge to his leadership, his authority was regularly undercut by defiant Coalition backbenchers.

"The circumstances of the camp's closure, and the Australian Government's refusal to re-settle its remaining occupants, drew global condemnation."

















"The consequences of an emboldened Nationals party room was apparent by year's end when several backbenchers forced the Government's capitulation on a Royal Commission on banking."

The breakdown in discipline was a function of growing tensions between conservatives and moderates within the Liberals. While the rupturing of the political right is a global phenomenon, the Prime Minister lacked the authority and political acumen to contain disaffection within his own ranks. One of the first significant outbreaks occurred in February following the defection of Senator Corey Bernardi from the Liberals to establish the Australian Conservative Party. Throughout the year, these strains were intensified by frequent media and policy interventions by Tony Abbott - the man Turnbull had deposed from office in 2015. Commentators widely interpreted Abbott's actions as an attempt to establish himself as the voice of Liberal conservatism in direct competition to the Prime Minister.

Volatility within the Liberals spilled out into the Coalition relationship, with Nationals MPs proving highly restive. Under growing electoral pressure from a resurgent Pauline Hanson's One Nation Party, and seemingly cast adrift by Turnbull's inability to impose discipline within his own party, gave license to disgruntled forces within the Nationals party room to openly challenge the Government's decisions, and Turnbull's prime ministership. Moreover, the chorus of critical voices were not limited to federal Nationals politicians. NSW Deputy Premier and Nationals leader John Barilaro called on Turnbull to give people

a "Christmas gift" by quitting immediately, while former National leader, John Anderson, laid the blame for voters "deserting us" at Turnbull's feet for not showing sufficient "respect" towards conservative voters.

The consequences of an emboldened Nationals party room was apparent by year's end when several backbenchers forced the Government's capitulation on a Royal Commission on banking. Previously, the Government had argued against an inquiry into the banking sector, claiming that it would undermine international investor confidence in Australia's banks and cause delays to the Government's financial and economic reform agenda. However, the poor result for the Liberal National Party at the Queensland state election in November (it suffered a -7.63 per cent swing in its primary vote), and before that in Western Australia in March, strengthened the determination of some Nationals MPs. Buoyed by strong public backing for an inquiry, as well as support from the four big banks, Nationals Senator Barry O'Sullivan announced his intention to proceed with a private member's bill to set up a commission of inquiry. But before any of this eventuated, Turnbull announced a royal commission, a decision which he described as "regrettable but necessary" and which reinforced the perception that he lacked effective control of the Coalition.

What fuels dysfunction within the Turnbull Government is not merely the consequence of competing leadership ambitions, ill-disciplined parliamentarians, or poor leadership. These problems are symptoms of deeper ideological malaise within the centre-right. Turnbull survived the year because there is no obvious replacement, and because there is no clear formula or strategy for charting an acceptable middle ground between those forces presently polarising the political right. However, should an appropriate replacement appear, or political realignment occur in 2018, Turnbull may not survive politically.

Labor

Labor's political strategy throughout 2017 was to sit back and watch the Coalition self-implode. For the most part, this tactic was successful, as Labor consistently led the Coalition on the two party preferred vote in polls throughout the year.

But the year was not without it challenges for the Bill Shorten Labor Opposition. While polling had Labor on track to win the next election, Shorten's personal ratings failed to lift throughout the year, and continued to trail behind those of Turnbull. Towards the end of the year, Senator Sam Dastyari brought unwelcome attention to the party because of his relationship with Huang Xiangmo, a businessman with known links with the Chinese Communist Party. Dastyari's previous protestation that he did not have close ties to Huang were challenged by a report that the senator had warned the businessman that his phone was likely being tapped by Australian security services, and then again with the release of a 2016 audio recording in which the senator could be heard openly contradicting Labor's official position on the dispute in the South China Sea. While Dastyari eventually capitulated to pressure to resign from the senate, the incident raised renewed questions about Shorten's political judgement.

While Labor is seemingly disciplined around Shorten's leadership, and the means to depose him are difficult following the change in the rules to elect the federal parliamentary leader, challenges await, from possible factional infighting in Victoria and NSW, and the prospects of at least two lower house by-elections in 2018 due to the cloud over the constitutional eligibility of some of their MPs to sit in parliament.

Section 44 and revolving door of parliamentarians

This was the year in which an unprecedented number of parliamentarians resigned or had their election vacated because they were found ineligible under the Constitution to either nominate for election or sit in the parliament. The first casualty for the year was former One Nation Senator, by then Independent, Rod Culleton, when the High Court declared his election invalid on the grounds that he had been convicted of theft prior to nominating for the 2016 election (section 44(2)). Within a few days of this ruling, the federal court declared Culleton to be an "undischarged bankrupt," which then rendered him ineligible to serve under section 44(3) of the Constitution.

Culleton's disqualification was followed with the Court rendering its decision on the status of Family First Senator, Bob Day. Day had resigned in the previous year when his construction company went into liquidation, a circumstance that meant he





"While Dastyari eventually capitulated to pressure to resign from the senate, the incident raised renewed questions about Shorten's political judgement."







"The political and constitutional quagmire that section 44 has given rise to will continue into 2018, with additional referrals to the High Court lodged, and likely by-elections to follow, when this involves lower house MPs."

was ineligible to remain in parliament under 44(3). However, it became necessary to decide whether Day was even entitled to stand for election when questions were raised over whether he had a financial interest in a contract with the Commonwealth in violation of Section 44(5). The High Court found that Day did have such an interest, albeit an "indirect pecuniary interest" with the Commonwealth, with the result that he was not eligible to be elected in the first place.

The judgments in both cases, and Day's more particularly, affirmed the Court's previously strict interpretation of those sections pertaining to an individual's eligibility to serve in parliament. Beginning in July, the full import of the wording and interpretation of section 44 exploded in a spectacular manner over the citizenship requirements when Scott Ludlam and Larissa Waters, both from the Greens, resigned from parliament on discovering they held dual citizenship.

No sooner had the Prime Minister accused the Greens senators of "extraordinary negligence," five other parliamentarians declared their reservation about their own citizenship status. Parliament consequently referred all seven cases to the High Court and in October it found five MPs ineligible, three of whom were members of the Coalition team, and two of whom – Deputy Prime Minister Barnaby Joyce and Senator Fiona Nash – were members of the Government's ministry.

However, the matter did not end here. In October, the President of the Senate, Stephen Parry, resigned and, in December, Liberal MP John Alexander announced that he also held dual citizenship. This was followed with resignations from two crossbench Senators – Jacqui Lambie (JLN); and Skye Kakoscke-Moore (NXT).

The political and constitutional quagmire that section 44 has given rise to will continue into 2018, with additional referrals to the High Court lodged, and likely by-elections to follow, when this involves lower house MPs. It has been acknowledged that in many of these cases that parliamentarians unknowingly had become or remained nationals of another country because of the vagaries of foreign citizenship law. Yet in spite of this, and possibly even because of it, the Government has ruled out a referendum to change the provisions, arguing that Australian voters would not countenance politicians with dual citizenship sitting in the national parliament. The Government did, however, refer matters relating to Section 44 for inquiry and report by the Joint Standing Committee on Electoral Matters, which is required to report to parliament by March 2018. Given the high bar that the Court has imposed particularly in relation to the citizenship requirement (such as the "reasonable steps" to renounce foreign citizenship), the issue of the eligibility of MPs will remain on the agenda in 2018.

Indigenous recognition stalls

While parties, parliament and the courts were grappling with the requirements set down under the "disqualification" provisions within the Constitution, progress towards constitutional recognition of Indigenous people floundered once again.

The Referendum Council, a bi-partisan body, was established in 2015 to advise on progress towards a referendum to recognise Aboriginal and Torres Strait Islander peoples in the Constitution. The Council was required to consult specifically with Aboriginal and Torres Strait Islander people on their views of meaningful recognition. The 18 month consultation process, which included 12 First Nations Regional Dialogues, culminated in the National Constitutional Convention at Uluru in May, 2017. At the convention, around 300 delegates deliberated over three days and formulated a statement of first principles for constitutional recognition, released as the *Uluru Statement of the Heart*.

The Uluru statement called for a non-constitutional treaties commission (the Makarrata commission) and for the "establishment of a First Nations Voice." It was the latter of these proposals that elicited most attention, and ultimately controversy. It sought the creation of an advisory council that would provide advice and guidance to parliament on bills and proposals that affected Indigenous peoples. The body, while constitutionally enshrined, would not possess the right to insist or make legislation.

Labor expressed support for the proposal, calling for a joint parliamentary select committee to finalise a question to put to voters. Similarly, some constitutional conservatives within the Liberals were also open to the proposal. However, cabinet rejected

the idea of an advisory council, arguing that it was neither desirable, on the grounds that it was incompatible with the principle of equal civil rights nor viable, because it would be rejected if put to a referendum. The Government's unilateral dismissal of the proposed advisory council was variously characterised by Indigenous leaders, scholars and community activists as "sending a confusing signal to the Aboriginal Affairs portfolio," "a despicable act of mean-spirited bastardry," and having "broken the First Nations hearts of this country."

The Turnbull Government has indicated that constitutional recognition of Indigenous people remains on its agenda. The Government has also expressed a willingness to consider the proposal for a truth and reconciliation commission that would facilitate treaty making with Indigenous people. However, given that the Government has squandered whatever semblance of good will that they still had with stakeholder groups, it would seem highly unlikely that there will be any progress in this portfolio in the coming year.

Same sex marriage

While the opportunity to achieve substantive progress on Indigenous recognition stalled in 2017, Australia became the 26th country to legalise same-sex marriage. With an almost 80 per cent participation rate at a postal survey, Australians voted overwhelming in favour of legalising same-sex marriage – 61.6 per cent to 38.4 per cent.

The process to affect legislative change was, however, convoluted and contentious. When Turnbull assumed the prime ministership in 2015,



"The Uluru statement called for a non-constitutional treaties commission (the Makarrata commission) and for the 'establishment of a First Nations Voice.'"





"While same-sex marriage is now legal in Australia, the matter is not entirely resolved, with the debate now shifting to the question of religious protections."



he retained his predecessor's commitment to hold a national plebiscite on same-sex marriage before changing the law. Labor and the Greens rejected this decision, and the bill to authorise it, on the grounds that the plebiscite was discriminatory and needlessly costly (\$122 million) because such a decision could and should be taken by parliament. This forced the Turnbull Government to adopt an alternative strategy, which was to have a postal plebiscite conducted by the Australian Bureau of Statistics (ABS), the nation's official statistician, as against the Australian Electoral Commission (AEC) following usual electoral procedures.

The decision to have the poll managed by the ABS was the subject of several concerns. Fears were expressed about the integrity of a process that would exclude ordinarily eligible voters, such as Australian citizens overseas or silent voters whose addresses cannot be shared by the AEC. There were concerns that the non-binding nature of the plebiscite did not oblige the Government to proceed with presenting a bill to the parliament should Australians support a change to the law. Security concerns were also raised, from vote-buying to safeguarding the privacy and anonymity of electors.

Importantly, the decision to proceed with a postal survey became the subject of two constitutional challenges. The basis of one of the challenges concerned the question over whether the Government had a valid "appropriation" to withdraw the \$A122 million needed to conduct it. The second legal question concerned whether the ABS had the power to run the plebiscite. While the ABS is duly authorised to collect "statistical information" on a range of prescribed matters, there were questions about whether information about Australians' opinions on same-sex

marriage qualifies as "statistical information."

The High Court dismissed both challenges in a unanimous 7–0, allowing the plebiscite to proceed. Within days of the "Yes" outcome being declared, Liberal Senator, Dean Smith, introduced a same-sex marriage bill into the Senate. It passed both houses of parliament comfortably, but not before an attempt to add an amendment to incorporate an absolute right to religious freedom was tabled, but rejected.

While same-sex marriage is now legal in Australia, the matter is not entirely resolved, with the debate now shifting to the question of religious protections. To meet the concerns of (what are mostly but not exclusively) religiously minded MPs, the Government announced an expert panel led by former Howard Government Minister, Philip Ruddock. Its objective is to evaluate whether Australian law "adequately protects the human right of freedom of religion". While the report is not due until 31 March 2018, it marks what is likely to be the start of a contentious debate over how to balance marriage equality and religious freedom.

Energy and climate wars continued

Energy policy remained at the fore of national policy attention in 2017. Going into the year, there was reason to hope that something resembling a lasting energy framework would be agreed upon. The basis for this optimism was the appointment of Alan Finkel to conduct an independent assessment into the security and reliability of the national electricity market in the previous year. Momentum was strengthened by the sector, which – in a remarkable



"Securing agreement over the precise details of NEG will not be without significant challenges, even if there is a consensus that reform is both essential and long overdue."



display of unity – released a joint statement in which they implored Australian governments to end the "policy uncertainty, lack of coordination and unreformed markets".

In June, the Finkel review released its *Blueprint* for the Future, a comprehensive plan for fixing the national electricity market. The key recommendation of the report was a Clean Energy Target (CET) that would be calibrated to the Paris Climate Change agreement, with the target to be agreed to by Australian governments.

The Blueprint, however, met with criticisms from both coal advocates and the green sector. Many within the green sector complained that the Blueprint was a "short-term political fix" to assuage those "who have an ideological attachment to dirty fuel". Yet those with an ostensible attachment to coal found little to like. Conservatives within the

Coalition particularly complained that the CET would lead to a more unreliable service and that the target of 42 per cent of renewable energy by 2030 was misguided. In the end, the federal Energy and Environment Minister, Josh Frydenberg, was unable to convince the joint party room of its merits and the Government, unwilling to risk back benchers crossing the floor, announced that it would not proceed with the CET.

While the Government was unable to persuade the joint party room to adopt a CET, it was able to achieve support for a new proposal in the form of a national energy guarantee (NEG), formulated by the Energy Security Board. The NEG is composed of two core elements: a reliability guarantee; and an emissions guarantee. The first part, the reliability guarantee, requires suppliers to provide a proportion of their electricity from dispatchable sources such as batteries, hydro or gas, with precise levels varying from state to state. The second component, the emissions guarantee, requires retailers to reduce greenhouse gas emissions by 26 per cent of 2005 levels by 2030.

The NEG, however, is not without its detractors. Possibly the most contentious aspect of the NEG is that subsidies and incentives for renewables would be abolished with retailers expected to ensure the power that they purchase is efficient enough to enable Australia to meet its international obligations. Second, the proposal has been criticised for lacking detail, specifically its failure to set down clear penalties for non-compliance by companies.

In spite of the concerns held by the various stakeholders, the Turnbull Government did manage to secure the agreement of Australian governments to proceed with the NEG. Taking direction from the Energy Ministers' Council within the Council of Australian Governments, the Energy Security Board (the body established in August to coordinate the Blueprint reforms) will commence work on drafting the detail of the scheme to be considered in April 2018.

It remains to be seen what kind of reform package is eventually achieved by Australian governments. Securing agreement over the precise details of NEG will not be without significant challenges, even if there is a consensus that reform is both essential and long overdue. If the reaction of some of the member states is anything to go by, there remains a very real divide between the coal-dependent states, and those states keen to move ahead on renewables. Moreover, in order that any reform proves a stable long-term fix, it will require federal Labor's backing. While Labor's support is probable it is by no means certain.



"While there is much to occupy the Government in the coming year, it has a difficult road ahead."



Looking ahead

Given how gruelling 2017 was for the Turnbull Government, it is no doubt approaching 2018 with a healthy amount of trepidation. The Government is unlikely to propose any significant reforms that were not already announced or foreshadowed publicly in the previous year. In part, this is because the Government has enough to deal with in simply managing those issues that ensnared it in the previous year, from finding an acceptable compromise on religious freedoms, securing a workable agreement on a new energy framework with Australian governments, and bracing for any uncomfortable revelations that the banking royal commission might reveal. In addition to these matters, the Government will be negotiating sweeping changes to foreign donation rules for parties, activist groups and charities, and seeking to reform espionage and intelligence laws. It has also set the ambitious goal of reducing both corporate and personal income tax in the coming year. While these are matters which the Coalition is likely to march in lock-step over, opposition forces within the Senate will prove far less amenable.

While there is much to occupy the Government in the coming year, it has a difficult road ahead. For a combination of personal and ideological reasons, Turnbull will struggle to inspire much needed unity within the Coalition. Based on his performance in 2017, there is little reason to believe that the Prime Minister can transform the Liberals' internal dynamics, contain Tony Abbott's

ambitions, stop disgruntled backbenchers from leaking, or reign in disaffected Nationals members. With the Government's numbers in the House of Representatives on a razor's edge, and an election likely in or before November 2019, a growing number of Coalition backbenchers may calculate that their electoral survival is best secured by strategic acts of defiance, in full knowledge that such displays of ill-discipline will expedite the Government's collapse at the polls.

Not that all the political risk falls on Turnbull's shoulders alone. Shorten will be hoping that Labor is able to defend its seats in by-elections should the High Court find that one or more of the four MPs referred to the High Court are ineligible to serve in parliament. Should this eventuate, and should one or more of these seats not be retained, Shorten's political credibility will be further diminished. With the prospects of a stronger global economy anticipated by many economists, Labor can ill-afford to become complacent. This will be the year that Labor will have to begin to mount the "policy" case to form the next government. But this could prove risky because it could expose latent policy tensions within Labor, underline the unpopularity of its leaders but also - importantly - give the Turnbull Government something to take aim at beyond its own dysfunction. For those wishing and hoping for calmer days ahead, I would advise them not to hold their breath.

The views in this article are those of the author and should not be attributed otherwise.

Enter the age of analytics disruption



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Introduction

It's time to stop talking about the power of data, analytics and artificial intelligence (AI) as things of the future. That future has arrived.

Twice as many articles mentioned AI in 2016 as 2015; four times as many as in 2014.¹ Similarly, the share of US jobs that requires AI skills has grown four-fold since 2013.² Data and analytics have already started to disrupt the Australian economy, more than we may realise, and the impact on our daily lives is becoming more apparent.

Data, storage, and processing power capabilities are increasing as their costs are falling, fulfilling the preconditions for data and analytics to transform the global economy.

The good news is Australia is making some sound early moves to benefit from this transformation, with up to \$220 billion of GDP value at stake. However, analytics will not just lift output, but can completely disrupt industries, shifting the basis of competition. As the influence of data and analytics continues

to grow, public and private sector leaders need to take stock of the workforce, ethical, and security implications of an increasing ubiquity of analytics in day-to-day life and business processes.

Data and analytics are transforming the global economy

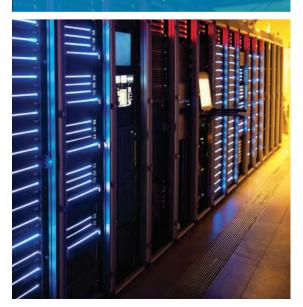
The world is doubling its accessible data every three years.³ By 2015, Rio Tinto's Australian operations were generating 30 terabytes of data. That's three times the data in print in the world's largest library, the US Library of Congress, per month.⁴ Much of the data is being captured by the "Internet of Things" (IoT) – connected sensors increasingly used in everything from heavy industrial processes to consumer products, and the Internet Corporation for Assigned Names and Numbers (ICANN), the independent non-profit organisation that governs domain names and Internet Protocol (IP) numbers, is now racing to prepare for a world in which every device (or "thing"),

big or small, has its own IP address. IoT will enable data to be captured continuously from all industrial, commercial and domestic activities – data that is then available to analysts and innovators seeking to make that activity more automated, easier or predictable.

Fortunately, computer processing is becoming more than powerful enough to deal with this explosion of data. The most advanced supercomputer in 2016 was 40 times faster than its 2010 predecessor.⁵ Not only are computers faster, they are also cheaper. The processing power available per dollar has doubled every year for the past quarter century.⁶ Finally, all this data, processing power and processing results can be stored on cloud-based platforms, allowing unprecedented scalability and lower storage costs

The algorithms and tools available to data scientists have also improved. Greater computational power is enabling neural networks and reinforcement learning, techniques that have existed for decades but lacked the power to perform effectively – essential for ground-breaking applications in image recognition and optimisation problems. Algorithms can now compete with people on a range of tasks including diagnosing skin cancers, interpreting the human voice and recognising images. Machine versus human games of Chess, Go and Poker are no longer fair challenges.

"Economic power is shifting to those who own scarce data or, more commonly, to those who can aggregate or analyse the data in exceptional ways."



Data, as a result of these rapid advances, is becoming an increasingly valuable asset. Economic power is shifting to those who own scarce data or, more commonly, to those who can aggregate or analyse the data in exceptional ways. With these abilities, sophisticated players can enter markets with surprising speed, and establish dominant positions without the cost of traditional fixed assets.⁸ Partly for this reason Apple, Google, Amazon, Facebook, Microsoft, GE, Baidu, Alibaba Group and Tencent are now among the world's most valuable companies.

These companies keep pushing boundaries because they are themselves being pushed by the next wave of disruptors. Of the approximately 200 so-called global "unicorns" – private companies worth US\$1 billion or more – our analysis indicates that just over 70 per cent have business models predicated on data and analytics. The recognisable leaders include Uber, Lyft, Didi Chuxing, Palantir, Flipkart, Airbnb, DJI, BlaBlaCar, Ola, Snapdeal, and Spotify. Further, the next generation of digital leaders is emerging from beyond the western world, particularly India and China.

Australia is making its own early moves

To build a picture of our national progress on data and analytics, we have considered the potential economic benefits to Australia and the extent to which sectors can improve. We estimate Australia could lift its annual GDP by \$220 billion by 2025. This value is based on our previous work9 to scale the economic opportunities represented by analytics, calculated by the McKinsey Global Institute, to the Australian context. It is comprised of economic benefits across industries driven by: real-time monitoring and control, and predictive optimisation based on data from IoT sensors; combining internal and external data and analytics for improved forecasting, process optimisation, and labour allocation; and improved machine learning algorithms driving better and more prevalent automation (of manual, but also knowledge-based and back-office, processes). Flow on benefits to the consumer - in the form of higher convenience, quality, and lower prices - are equally significant (though not measurable in economic metrics).

We have also created a "data and analytics index" (Figure 1) to measure the relative maturity of Australian sectors, based on metrics like spending on cloud services, employment levels of data scientists and engineers, reported use of analytics within

FIGURE 1 Australian data and analytics index

raou	alian data and analytics ind	20X	Assets			Usage			Labour				
Relativ II analyti matur	ow high cal analytical	Overall index	Analytics financing	Analytics spending	Digital assets stock	Digital supply chain	Process	Strategy and innovation	Data and analytics work	Data and analytics talent	Percentage share of GDP (FY2016)	Percentage share of employment (FY2016)	
stries	IMT										2.8	1.7	
ısive Indu	Professional, Scientific and Technical Services										6.2	8.5	
Knowledge Intensive Industries	Financial and insurance services										8.8	3.6	
Knowle	Administrative and support services										2.7	3.6	
	Retail trade										4.3	10.5	
	Health care and social assistance										5.4	12.8	
dustries	Wholesale trade										3.9	3.1	
Service Industries	Rental, hiring and real estate services										3.0	1.8	
	Accommodation and food services										2.4	7.1	
	Arts and recreation services										4.7	1.9	
	Electricity, gas, water and waste services										2.6	1.1	
les	Manufacturing										6.0	7.5	
Asset Intensive Industries	Transport, postal and warehousing										4.7	5.2	
	Construction										8.1	8.9	
	Mining										6.9	1.9	
	Agriculture, forestry and fishing										2.2	2.7	

Based on a set of metrics to assess Analytics & big data investment and activity for assets (7 metrics), usage (16 metrics), and labor (2 metrics); see technical appendix for full list of metrics and explanation

Source: (ABS FY15-16 Data were available – FY13-14 where unavailable); DIBP; selection of 100 ASX300 annual reports (FY2017); Facebook; Twitter; Appstore/iTunes; Google Play Store (2016 data); Linkedln (Nov 2017); McKinsey analysis

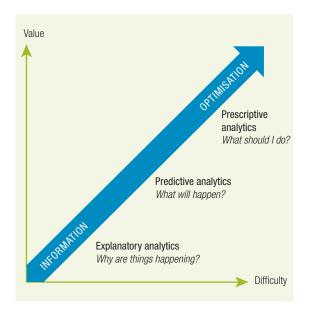
business processes, and instances of terms like "machine learning" and "analytics" in annual reports and market-facing communications. This index aims to capture the current (relative) levels of ambition and progress across sectors of the economy, and hence their current ability to start capturing some of the value at stake.

To date, the information technology, media and communications (IMT), finance and insurance, and professional services sectors have integrated analytics into their business models to the greatest extent. The remainder of the economy lags behind with less than half the level of maturity of these three leading sectors. Capital-intensive industries, such as transport and logistics, construction and agriculture, have among the lowest levels of maturity.

Attracting and retaining data and analytics talent stands out as the worst performing area for most sectors. The bottom 13 sectors have less than 10 per cent of the maturity of IMT in this indicator. This is troubling because producing and retaining employees with these skills will be critical for the entire economy as technical sophistication and competition for resources continues to intensify.

Albeit with these differing levels of maturity, Australian companies are using data and analytics in a variety of ways. It helps to consider these in three groups, which are progressively more sophisticated in terms of analytical techniques, and more valuable to both company and consumer (Figure 2). They are called explanatory, predictive and prescriptive analytics.

FIGURE 2
Three levels of analytics



Explanatory analytics

Explanatory analytics looks at past data and offers insights into why things are happening. It brings a fact base to making assertions about cause and effect. For example, it can be used to explain differences in mortality rates between hospitals, or performance of different stores in a retail network. One engineering company we worked with used explanatory analytics to understand the different drivers of productivity in project teams. Among the many findings, they noticed that efficiency decreased for every extra time zone the team was working in, and that output was higher when team members had worked together before. Each effect was only small, but together they provided opportunity for improvement of more than 20 per cent.

Predictive analytics

Predictive analytics forecasts what will happen in the future. Australian mining companies have built maintenance models, using data from sensors embedded in machinery, to predict in real-time how likely a failure is, which maintenance to perform to avoid it, and which previously-routine maintenance can be avoided, increasingly uptime and reducing costs. Predictive analytics can also break down blunt averages into personalised performance and risk, particularly valuable in insurance. QBE Insurance's "Insurance Box" is an example. The in-car device records driving behaviours. The data is used to offer lower-risk drivers savings of up to 30 per cent, while others are offered safe driving tips, and then higher premiums. Overall, premiums have fallen six per cent by better matching premium and risk.¹⁰

Prescriptive analytics

Prescriptive analytics moves from forecasting to determining the best course of action. It is the most sophisticated, and potentially most influential, of the levels of analytics. Building prescriptive analytics into the workflow of processes across an organisation is the key "unlock" for capturing the full value of data in the future.

Healthcare has been an early adopter, and early beneficiary, of these capabilities. For example, St Stephen's Hospital in Hervey Bay, Queensland is Australia's first fully-integrated digitised hospital.

Its patient monitoring is the catalyst for a single integrated system for ordering medications and procedures and to check errors. The hospital has reduced medication omissions by 89 per cent and reduced errors by 22 per cent, even as scripts are processed four-times faster.¹¹

The finance sector is using spending patterns to make dynamic changes in their customer terms and relationships. Patterns consistent with at-risk behaviour – such as a sudden lift in night-time cash withdrawals – can automatically reduce credit limits. Data can also be used to ascertain which customers are likely to self-manage their debt, which are under stress and likely to respond to guidance, and which should be subject to bank action. The algorithms automatically recommend an action to agents.

Six ways data and analytics can be truly disruptive

From these examples, it is easy to see why Australian companies are investing heavily in data capabilities. As Telsyte stated in a 2017 report, "Big data and associated analytics is now in the same league as CRM and marketing automation for share of software budget." Almost all of this expenditure is designed for efficiencies in core operations that would not have been thought possible a decade ago."

However, instigating or responding to future analytics-enabled disruptions will require business model innovation and investment well beyond what most Australian companies currently have underway. The critical point is the true integration of analytics into core business processes – operationalising analytical models and translating them into action. Uber's model, and its effect on the taxi industry, is a telling example: data, devices and artificial intelligence combine to increase benefits to driver and passenger, to the cost of taxi owners and operators. More disruption on this scale is imminent. To understand the waves of disruption that are being experienced internationally, consider the six overlapping possibilities in Figure 3.

The well-known examples of Uber, eBay and Airtasker are all instances of the power of hyperscale, real-time matching, and there are many more applications close on their heels. Peer-to-peer models such as SoFi and SocietyOne are matching borrower risk scores with lender appetites for risk to connect the two sides of a loan directly; and start-ups like Square enable business customers to receive credit card payments immediately.¹³

"The well-known examples of Uber, eBay and Airtasker are all instances of the power of hyperscale, real-time matching...."



FIGURE 3
Six waves of disruption



Source: McKinsey & Company

Business models enabled by orthogonal data can draw data from one source (such as, data on driving behaviour from a connected car) to re-design an existing service (for example, personalised insurance offered online with no further assessment analysis or costs). Likewise, for new office constructions, property designers and managers are using data from sensor lights to design according to how people actually move about their offices, cutting down the time and expense for in-person ethnographic design work.¹⁴

Radical personalisation is also being widely tested. Imagine working with market segments of one, using individual identifiers to drive transactions in education, travel and leisure, media, retail, advertising and health care. In the latter, the declining costs of genome sequencing, proteomics, and real-time monitoring make it possible to generate this ultra-granular data on an individual level. With these data, healthcare providers may shift their focus from disease treatment to wellness and prevention. At the very least, treatments, dosages, and care settings can be personalised, leading to more effective outcomes with fewer side effects and reduced costs.

Data integration capabilities - of numerical, qualitative, visual, and aural data from different sources - are now available to companies on a hitherto impossible scale, breaking down the technical and organisational silos that have often kept relevant data hidden from those who need it. Only now is retail banking, for instance, able to start pulling together data on customers' transactions, financial status and demographics. Added to radical personalisation and to orthogonal data, banks and other retailers may pursue personalised products, dynamic pricing, better risk assessment, and more effective marketing - all with more competitive cost structures than many incumbent institutions. Dutch insurance giant Achnea, for example, launched its wholly-online business InShared in 2014, offering full transparency over premium calculations and returning any undrawn funds from its overall policy pool to policyholders - all enabled by superior risk analytics - and with superior marketing ROI and one-third the operating costs of its traditional products.

Discovery and innovation are also being transformed by analytics. Pharmaceutical companies are among those leading the way. For example, AstraZeneca and Human Longevity have partnered to build a database of more than one million genomic profiles linked with medical records and 500,000 DNA samples from clinical trials to mine for patterns that may lead to further understanding of drug efficacy against myriad diseases. ¹⁵ The applications also go beyond the research itself, to unlocking productivity in how it is conducted.

Data and analytics are helping organisations determine how to structure their teams, resources, and workflows to innovate, collaborate and perform. They're asking what combinations of personalities, skills, team sizes, in-person and remote working, experience and training may mesh best. Vast amounts of email, calendar, locational and other data are available to help find an answer.

Finally, human decision-making itself is ripe for disruption. Human decisions are often limited

by our finite ability to process information, and to do so without bias. Analytics can incorporate all data deemed relevant, break down asymmetries, automate algorithms, and make the process more transparent. Hiring decisions are among those most clouded by bias and asymmetric information, and data and analytics are increasingly being adopted to present clear recommendations on the skills needed, the wages payable, and the attributes of applicants, including their education.

On a wider scale, "smart cities" can draw on visual and sensor data to improve traffic flows, reduce waste and optimise infrastructure efficiency. Singapore applies real-time congestion data to set tollway and parking fees, while Copenhagen draws data from road sensors to turn signals green for approaching cyclists.¹⁶

Questions for Australia

As with many new technologies, the issue for Australia is not whether disruption driven by data and advanced analytics is happening, but what we should do about it. The implications for Australian businesses, workers and policy makers are significant. The topic bears far more discussion than we cover here, but we would start with the need to review whether our current approaches to the labour market, ethics and cybersecurity are what they need to be.



"On a wider scale, 'smart cities' can draw on visual and sensor data to improve traffic flows, reduce waste and optimise infrastructure efficiency."



"...it is important to note that very few jobs are automatable in their entirety. More likely, roles will evolve to interpreting data and using more complex reasoning – and as such become more valuable, with workers freed-up from more basic tasks."



Implications for the workforce

The workforce implications of the rise of analytics are double-edged. There is rapid demand growth for data-literate workers, while, at the same time, automation can perform many existing tasks.

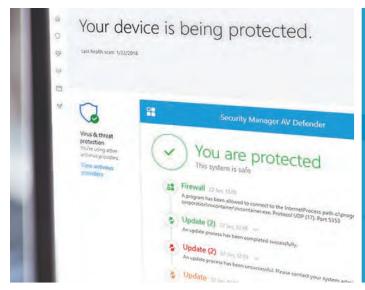
The McKinsey Global Institute estimates that demand for deep analytical talent in the US could be 50 to 60 per cent greater than its projected supply by 2018. Shortages in Australia are expected to be at least as acute. As early as 2014, McKinsey found that 28 per cent of global executives surveyed rated finding talent (functional and technical) as their greatest challenge in digital transformation.¹⁷ Not surprisingly, firms are pushing beyond their own people to bring across entire teams or businesses to fill the gap. Woolworths, for example, invested in Quantium Group in 2013 to access its data and analytical services, 18 while the Australian Securities and Investments Commission (ASIC) partners with Australian cybersecurity company Nuix for analytics and digital investigation.19

Three skills in particular will be in demand led, of course, by data scientists. In Australia, entry-level analytics salaries rose 11 per cent in 2015,²⁰ compared to an average of less than two per cent rises across all occupations.

The other two critical skills are the ability to translate data insights to a broader business audience and bringing data and insights to life with data visualisation. "Business translators" play a dual role. They are business leaders with the deep organisational knowledge or functional expertise to ask the data

science team the right questions. They also understand enough analytics to derive the right insights from data scientists' work and convey them back to process owners within the business to be acted upon. As Dr Michael Brand from Monash University in Melbourne puts it, "While many are now teaching how to run correlations and regressions, very few around the world ... are teaching what to do with the results and how to make analytics an integral part of one's business."²¹ These are skills that organisations may want to keep in house – and roles into which it may be possible to up-skill the existing workforce – even if their technical talent is provided by third parties.

On the flipside, analytics and the automation it enables, does represent a disruption to current employment. Our research with Jobs for NSW confirmed that 45 per cent of all work tasks are automatable, and the impacts will be felt everywhere, from transport to the operating theatre.²² The financial sector has already foretold large future workforce reductions as more tasks are automated.23 Yet it is important to note that very few jobs are automatable in their entirety. More likely, roles will evolve to interpreting data and using more complex reasoning - and as such become more valuable, with workers freed-up from more basic tasks. This in itself informs the skills Australia must develop in its workforce. As the Department of Employment put it in 2016, jobs calling for "Creativity, complex judgement, advanced reasoning, social interaction and emotional intelligence are likely to grow in the decades ahead, and are less likely to be affected by advances in automation and artificial intelligence".24



"The Australian Cyber Security
Centre's 2016 survey of 118
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the confidentiality, integrity or
availability of network data or
systems. By international measures,
Australia is doing well to minimise
the cost of these breaches."



Ethics

There are serious ethical questions around the use of analytics in business, quite apart from the broader ethical/societal concerns around artificial intelligence and automation. Artificial intelligence experts have been posing these questions through the likes of OpenAl and the Foundation for Responsible Robotics.²⁵ Now is the time for more business leaders, policy makers and thought leaders to shape the discourse and any resulting changes in regulation or convention.

The most apparent issue for many is the ubiquitous use of personal data, for example, to present personalised ads on websites and social media feeds. There is a paradox here – many consumers are concerned about data privacy issues but, at the same time, knowingly hand over huge volumes of personal data. Governments need to ensure consumers have transparency and control over what data companies hold about them, and how they use this.

A related concern is with machine-learning algorithms trained on real-world data. Since the real world can be racist, sexist, and biased in other ways, real-world data fed into the algorithms may also have these features, so that the algorithms internalise the biases as they learn. A 2016 study at Princeton University, for example, found that machine learning algorithms similar to those increasingly used

in automated CV screening associated typically African-American names more strongly with unpleasantness than European-American names, all else being equal.²⁶ When the algorithms determine what news and ads appear, they may also tend to exacerbate entrenched beliefs that may be outdated in more progressive societies.

Deeper and familiar questions quickly follow. If the media we see is tailored just for us, with less and less exposure to alternative views and incompatible facts, how likely are we to join a nation-wide consensus on important policies? If algorithms are determining some business decisions, whose ethical guidelines are being encoded, and who may be held responsible for their conclusions? If marketing is more personal, direct and powerful, is it tending towards manipulation, not only for benign purposes such as to eat better or to stop smoking, but on journeys towards potential private and public harm?

Cyber security

Finally, there are issues that concern the security of data and its availability to those who might misuse it – or demand a fee not to. IT system breaches are more common than we might think. The Australian Cyber Security Centre's 2016 survey of 118 organisations found that 90 per cent of them had experienced a breach that compromised the

confidentiality, integrity or availability of network data or systems.²⁷ By international measures, Australia is doing well to minimise the cost of these breaches. IBM calculates the average cost of a breach in Australia to be approximately US\$1.9 million, about half the global average.²⁸ But there is no room for complacency, and the risks are increasing with the number of connected devices.

Conclusion

The readiness of Australian industry to take advantage of data and analytics is patchy. The value at stake is high, but it is an open question who will claim the lion's share: incumbents, new competitors from Australasia or overseas, or indeed the consumer. We seem to have crossed an invisible threshold, powered by data and analytics – services and processes that could once only be imagined, are now becoming the norm. This is certainly an exciting world, but not one without risks for companies that do not meet those expectations, or communities that do not consider and manage the security and ethical issues.

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Information accuracy in the digital news age



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Introduction

Fake News was named as Collins Dictionary's Word of the Year¹ in 2017, even though it designates a phenomenon that has been around as long as people have been sharing stories. Columbia University Law Professor Tim Wu has detailed the origins of sensationalist and fabricated stories in the newspapers of New York in the early 19th-Century², a phenomenon driven by the advent of a business model founded on advertising. But even before then, the express fabrication of information for a wide range of purposes was commonplace.

In many ways, this is not surprising. The motivations for telling a story with a particular bias are varied and many. Conversely, the rewards for telling a story in a neutral and factual way are few. There is even the question of whether it is actually possible to recount an event as fact. Psychologists have determined that testimony from eye witnesses is often unreliable³ and can be influenced by a range

of factors. Even video and audio of an event can be misleading or even altered and so it is always an interpretation of events seen from a specific perspective. A different camera angle filmed under different conditions could potentially tell a different story.

There are also a range of factors from the news consumer's perspective that will influence what they actually take from a story. There are psychological biases, their level of education and political affiliations and increasingly, the platform from which they are receiving the news.

Pew Research has reported⁴ that Americans are now almost as likely to get their news online as they are from the television. For Americans under the age of 50, they are already more likely to do so. This comes at a time when social media has been acknowledged as one of the main drivers in the generation and dissemination of fake news, especially during the run up to the 2016 US Presidential election.⁵

The irony of this is that only five years ago, social media was being proposed as the enabler of the radical transformation of how news was produced. Professional journalism would give way to a future of the news being generated by the public armed with smart phones and social media accounts. The virtues of user-generated content was based on the principles of the notion of the "wisdom of the crowd." John Paton, CEO of the Journal Register Company, declared traditional journalism dead and said that "The crowd knows more than we do and the crowd can do what we do."

Unfortunately, contrary to this hope, it turned out that the crowd were just as happy to invent and distort what they generated as they were telling what could have been loosely termed "the truth". It also transpired that news dissemination consisted of a very long tail of participants. One or two people involved in actually reporting and thousands simply retweeting blindly.

Another phenomenon that was supposed to bring about a greater trust and depth to technology enabled news telling was data journalism.⁸ According to the Data Journalism Handbook, the use of data analysis and visualisation in a story was supposed to have made the task of journalism more about "facts and insights" and involve "less guessing, less looking for quotes." But again, it ignored what others have warned about for decades, the ability to easily manipulate data and graphics to bias a particular perspective. Edward Tufte in his seminal

book The Visual Display of Quantitative Information made this fact abundantly clear pointing to numerous examples of how visualisations often distorted a story. A change of a vertical axis could make a relatively straight line appear like a steep decline or rise. It could make a comparison between two options highlight a deeper difference than actually existed. These potential pitfalls are well known when publishing or reading academic scientific papers but not so among either news organisations or their customers.

Of course, journalism, like the emergent field of data science, has a code of practice that attempts to address the inherent weaknesses in the system. The Society of Professional Journalism's Code of Ethics starts with the admonition to "Seek Truth and Report It" and its first tenet being that journalists should: "Take responsibility for the accuracy of their works. Verify information before releasing it. Use original sources whenever possible."

Up against this, however, was the commercial realities and change in the fundamental business model of news brought about by the inexorable move from print and TV to digital and social platforms. More than anything this has transformed how journalists work, how they collect and report on stories and how they engage their audiences. One could superficially describe this process as a massive increase in technology enabled productivity in this industry, but the consequences of less money in the industry has so far translated into lower quality manifested by less reliable news reporting.



"It also transpired that news dissemination consisted of a very long tail of participants. One or two people involved in actually reporting and thousands simply retweeting blindly."





The root cause; a failing business model

The chart of employment in the US information industries from the US Bureau of Labor Statistics¹⁰ tells the stark story of the decline of the newspaper industry and its partial replacement by Internet publishing and broadcasting. In 1990, 455,000 people were employed by the newspapers in the US and that fell by 60 per cent to 183,200 in 2016.

This drop in employment has been mainly due to the rapidly declining revenues of news organisations as people shift from print to screen. Advertising revenues have fallen dramatically as a result along with the disappearance of revenue from classified sections that were once the almost exclusive preserve of the print media.

The Pew Research Center's newspaper fact sheet¹¹ paints a stark picture of how far revenues of newspapers in the US have declined, a trend that has been mirrored in Australia and most of the rest of the world.¹² At the heart of this decline has been a shift from the lucrative advertising of print to the

much cheaper digital platform. At the same time, newspapers have lost readers and those readers that are willing to pay for news online are paying far less. In one survey¹³ on global news readership, only nine per cent of English speaking readers were willing to pay for news online.

Advertising revenue from digital platforms, already a poor source of revenue for the news sites themselves, has been further diminished by the advent of widespread use of ad blocking software¹⁴ by the general public. It has been estimated that 615 million devices now use ad blocking software¹⁵ and 74 per cent of American ad blocking users report that they will leave a site that tries to prevent the use of the software rather than enabling ads on that site.

As news organisations have transitioned to digital, they have tried to do more with less. Journalists have to file stories with less time to prepare across a broader range of subjects. This has led to shifts in a range of journalistic practices. The first and most significant of these practices is "churnalism." ¹⁶ Churnalism involves taking news wire service copy and public relations press releases and publishing them in part, or whole, as "news."

400.000

300.000

200.000

Internet publishing and broadcasting Newspapers
Newspapers
Newspapers
Television broadcasting
Television broadcasting
Cable and other subscription programming
Books
Other publishing

FIGURE 1 Employment in selected information industries, seasonally adjusted, 1990–2016

Source: US Bureau of Labor Statistics

1992

1996

1998

2000

2002

2004

2006

2008

2010

2012

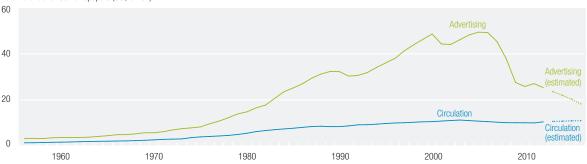
2014

2016

1990

FIGURE 2
Newspaper industry estimated advertising and circulation revenue

Total revenue for US newspapers (US\$ billion)



Source: News Media Alliance, formerly Newspaper Association of America, (through 2012); Pew Research Center analysis of year-end SEC filings of publicly traded newspaper companies (2013–2016).

Digital media has popularised a new form of churnalism where news sites simply republish stories from each other. This practice has dramatically increased as journalists search for content to post. The republications vary only in the degree of paraphrasing of the original and will often only contain a token acknowledgement of the original.

The constant striving for increased traffic to a site and mouse clicks on articles has influenced the editorial process of story content selection and the choice of headlines associated with those articles. News sites now regularly feature headings, so-called "click bait," that are designed to attract viewers but are either partially or wholly unrepresentative of the actual theme or content of the story. Accompanying this is the move to feature stories that are not actually news but are in fact opinion, "advertorial" or thinly disguised "native advertising" pieces. Native advertising is the practice of disquising the advertising of a product in the form of a standard article for the site. Native advertising may not be explicitly declared and has the advantage of being something that is not blocked by ad blocking software.

Mainstream news sites have increasingly featured the types of stories that are more popular with their readers and more likely to be shared on social media. This has led to an increase in the proportion of stories that are given to subjects like lifestyle, fashion and gossip that were once the preserve of the "tabloid" media and lifestyle magazines. The detailed tracking of social media analytics has driven this phenomenon as success of a story is judged by metrics such as social media "reach" and "engagement".

Sixty-seven per cent of US adults get their news from social media¹⁷ and so the number of readers that have allegedly read an article and reacted by liking it or better still, sharing it is now a key metric

for deciding future editorial decisions. This trend is set to increase given that the use of social media to get news is even higher amongst 18–49-year-olds, with 78 per cent of them getting their news in this way. Because the competition for attention in a social media feed is getting tougher, making articles stand out and be clicked on has often become the principle concern of news organisations.

Digital media has enabled the rapid and inexpensive reproduction of information allowing more low-cost sites to utilise a financial model that is driven by social media-fuelled advertising. Because the journalistic endeavour here is to reproduce rather than create, very little original sourcing of information is actually being done. This has in turn contributed to a large amount of content that is absent of actual news and worse, is in some cases helping to promote inaccuracies and falsehoods when they occur.

Digital churnalism

Author and journalist Nick Davies has claimed¹⁸ that only 11 per cent of stories that featured in the UK's quality press was original at the time of his writing in 2008. Everything else was churnalism. This figure was based on the analysis by researchers in 2008 of 2207 articles in the UK news which showed that 70 per cent of articles published relied on pre-packaged information. What was worse, however, was the fact that the large majority of these stories were either not fact checked or only "partially" checked.

To a certain extent this is not new, in an analysis of studies conducted over the past 100 years, Macnamara¹⁹ found that between 50–75 per cent of mass media content is provided or significantly influenced by PR.

What is different today however is the fact that social media and news aggregation sites like Google, Apple and Facebook and smaller platforms like Flipboard don't necessarily highlight the original source of a story but will provide one of the many subsequent copies or rewrites. In one case, a search in Google News for a Reuters exclusive on a Microsoft story brought up 290 versions of the story with Reuters listed 15th.²⁰ Almost any search of stories in Google News will do the same, even a recent Reuters story whose title included the word "exclusive" highlighted the site *Business Insider* as the top hit in a search for this article and not Reuters itself.

Because this process of news story selection is driven by opaque algorithms and not human editors, it would be difficult to discern an original source of the story. One could cynically argue that the order of search results for a news article is largely inconsequential from Google's perspective, as long as the sites featured carry their ads.

When social media drives the news

Since the advent of Twitter and Facebook, there has been the advent of another type of story and journalistic practice that has become pervasive. This is a story that is based entirely around either a tweet or other social media post and stories that feature these posts in lieu of interviews or statements from actual people. These stories have become a hallmark of coverage of the current US President Donald Trump, famous for his communication with the outside world via Twitter.

However, leaving Trump aside for the moment, searching for "social media reacts" on the web results in stories such as one from Aljazeera "Zimbabwe: Social media reacts to Robert Mugabe's speech."²¹ This is a typical type of article where an event is introduced followed by tweets from five or so random unknown individuals that is used as evidence that "Many Zimbabweans have expressed shock on social media."

This practice is clearly deceptive. Of course, the tweets are not chosen at random. They are not even from people who could be said to have witnessed the actual event they are discussing and, as we will see, they could even have originated from fake accounts or "bots", accounts whose content is provided automatically by software.

This practice came to the fore in the wake of social media's alleged involvement in the popular uprisings like the "Arab Spring" starting in 2011.

"Even by 2011, researchers analysing tweets quoted in articles showed that tweets were increasingly used by journalists in a variety of ways."





Journalists not only wrote about the role of social media in facilitating and coordinating demonstrations but also featuring tweets as a means of reporting on events and capturing opinions of what was actually transpiring. Even by 2011, researchers analysing tweets quoted in articles showed²² that tweets were increasingly used by journalists in a variety of ways. The first was the use of tweets from well-known or newsworthy people. The second was to add tweets to feature a range of opinions or experiences of a range of sources. Thirdly, the tweets were the story themselves because they were considered newsworthy. These practices were found in the "quality media" as well as the "popular media."

Since then, these practices of journalists using tweets as some or all of the content of a story has grown significantly, in spite of a growing wariness of social media on the part of the general public themselves.

Fake news and the US election

Even before the 2016 US presidential election Twitter and social media generally had become powerful platforms of influence used by politicians in increasingly sophisticated ways. Backed by the enormous amount of personal data collected by Facebook and Twitter, targeted ads and social media posts could surface and reach audiences more effectively than any previous means of communication had ever managed to do.

The dark side of social media platforms had also become a norm by 2016. A hate campaign known as #Gamergate in 2014²³ had already seen the systematic abuse and harassment of women by large numbers of predominantly male Twitter users. Gamergate involved the systematic harassment of three women involved in the video games industry.

The floodgates opened however in 2016 with Donald Trump's presidential campaign and his willingness to incite hatred among his supporters on Twitter, often directed at specific individuals that had incurred Trump's wrath. In doing this, the truth of allegations made on Twitter by Trump and his supporters became an unnecessary attribute of their campaigns.²⁴ Twitter as a company discovered that its platform was being systematically used for abuse by hate groups of all kinds but has found it almost impossible to rid itself of or even manage the problem.²⁵

It is one thing for domestic political supporters involved in an election to create and disseminate misleading or false opinion, it is a new level of deception when fake stories are being made up by third parties, often foreign, willing to exploit populations of users on social media for financial or geopolitical gain.

Initial investigations of the fake news phenomenon, as it was dubbed in 2016, traced the origins of many of the stories appearing on social media to the Macedonian town of Veles. An enterprising industry had developed there with young entrepreneurs manufacturing stories about US politicians, especially Trump and Hilary Clinton. Sites like DonaldTrumpNews.co and USADailyPolitics.com fed Trump supporters made-up stories with titles like "ALERT: \$600 Million Terrorist Money Trail Leads STRAIGHT to Barack H. Obama." What the creators of these sites also understood was how to take advantage of how Facebook and Google's algorithms worked to make the stories gain prominence in social news feeds.

While these sites were almost certainly set up to make money from advertising driven by social media, a more sinister motivation for fake news became public in 2017. Facebook, Twitter and Google, testifying before a US Senate hearing all detailed how Russian-based companies had created thousands of fake accounts and purchased advertising on their platforms to disseminate a wide range of fake news.²⁷ Many of the postings and ads of the





"Twitter as a company discovered that its platform was being systematically used for abuse by hate groups of all kinds but has found it almost impossible to rid itself of or even manage the problem."

accounts were targeted at Democrat Hilary Clinton's campaign but others seemed to simply be concerned with fomenting social unrest.

Facebook revealed that around 80,000 pieces of content may have been circulated to be seen by 126 million people either through sharing of posts or through users being presented paid ads.

It is worth noting that these posts were linked to a Russian company called the Internet Research Agency which has been alleged to have ties with the Russian Government. It is always dubious when claims of government ties are made, especially in a country like Russia. There is no direct evidence for this. It is clearly possible that anyone, including US political parties, could have paid the agency to create and post content and buy advertising on their behalf.²⁸

Since the allegations of foreign interference in the US elections came to light, evidence of similar fake accounts from the Internet Research Agency targeting the UK's Brexit vote has been found.²⁹

In both the UK and the US, the number of posts were tiny compared to the overall volume of content that is posted on these social media platforms every day. Even with the most targeted advertising, it is hard to believe that this strategy would have made any difference to the opinion of the public one way or another.

What it did do however was to undermine the trust in the platforms themselves and perhaps this was more the objective of the exercise. Already, politicians worldwide are increasingly pushing for regulation of social media platforms and the content that is distributed by them. For years, Facebook and Google have resisted any attempt to be held editorially responsible for the content they distribute arguing that it is simply too hard to police their platforms effectively.

This begs the question as to whether Facebook, Google and Twitter are simply content distribution networks or media companies. Before turning to this question, it is worth noting that as a result of the effectiveness of posting fake news on social media, the public's ability to discern what is true and what is not true has been significantly diminished.

Overall trust in the news media by US adults surveyed by Pew Research Center³⁰ was already very low. Only 11 per cent of Republicans trust information from national news organisations compared to 34 per cent of Democrats and 15 per cent of independents. For social networking sites that drops to three per cent of republicans trusting the information, six per cent of Democrats and five per cent of independents.





"For years, Facebook and Google have resisted any attempt to be held editorially responsible for the content they distribute arguing that it is simply too hard to police their platforms effectively."

The good news from this however is that these numbers were not greatly influenced by US President Donald Trump's election, the publicity surrounding fake news, nor Trump's constant claims that the entire news industry is the "enemy of the American people."

Social media companies as media platforms

Facebook, Google and Twitter are, in essence, extremely effective advertising companies. Their platforms provide enormous amounts of personalised data about their users that is used to target advertising. Between them, Google and Facebook this year will take 84 per cent of worldwide digital advertising spending³¹ driving almost all of the two companies' revenue.

Social media platforms are driven by software that has no human editorial oversight, and in many ways the nature of the content to the companies that own these platforms is immaterial. Whatever keeps a user on their sites engaged and sharing as widely as possible is rated highly and promoted further. No quality judgement is part of the software algorithm other than the level of engagement and so sensational, inaccurate or fake news is more likely to be promoted than news that is accurate and from a credible source.

The companies deal with inappropriate content by allowing users to flag or report postings that are abusive or fake and then human reviewers judge the content according to their "community standards". While these rules are supposed to cover threats of violence and abusive behaviour generally, standards such as these do not concern themselves with content from the perspective of trust or accuracy.

Facebook has attempted to address the explicit problem of fake news by testing a third-party factchecking scheme that displays a warning message under particular articles or posts that the article was disputed by reputable fact-checking organisations. The feature has not been universally rolled out and is fraught with problems. The first is that even if one link and story is disputed, the content can be recycled and reposted on a different site and escape detection. Searching for a commonly disputed story "The Irish Slave Trade: The Forgotten White Slaves" will highlight dozens of variants of the story posted on numerous sites. Again, it would be very difficult for Facebook to be able to automatically pick up all of these variants without making mistakes and flagging perfectly legitimate posts – such as posts debunking the claims for example.

Another approach, championed by The Trust Project is labelling stories as coming from "trusted sources". Facebook and Google are supposedly beginning to do this on their platforms. A trusted source adheres to Trust Indicators which includes disclosure about funding of the news organisation, disclaimers about the journalists involved and the use of citations and other practices. This approach is untested and it is likely that the badge will become largely ignored by the public. Its meaningfulness in the face of all of the problems with digital news media outlined above is also questionable.

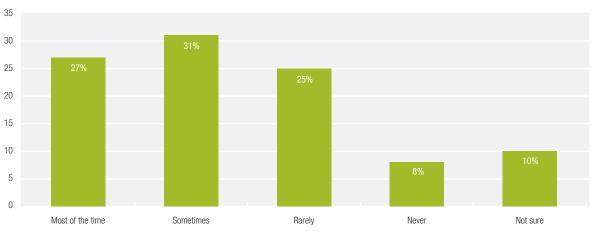
Facebook and Google have been forced to deal with some of the content issues on their platforms by hiring thousands of workers to check content when referred.³³ In the end, they had little choice as advertisers started pulling ads from the platforms after they found them being displayed alongside abusive or offensive content. Again, whether they can hire enough human oversight to really tackle the problem is yet to be seen.

"Social media platforms are driven by software that has no human editorial oversight, and in many ways the nature of the content to the companies that own these platforms is immaterial."



FIGURE 3
US adults' responses to "how often do you think mainstream media outlets report that something could be described as 'fake news'".





Source: The Economist/YouGov Poll February 18-22, 2017 - 1500 US Adults

The pervasiveness of fake news

There is no doubt that the constant use of the term fake news as a classifier for politically-motivated news has increased society's awareness of the problem and also its overall scepticism to news generally. Google Trends³⁴ shows that fake news became a topic of interest only with the election of US President Donald Trump and in fact is related as a topic to searches for his name.

Certainly, from the public's perspective, a survey of US adults³⁵ showed that 58 per cent of them believed that mainstream media reported fake news at least some, or most of the time. Supporters of Donald Trump have followed their leader's constant labelling of critical media as fake news. On Twitter alone, Trump tweeted claims of mainstream media and fake news 150 times during 2017,³⁶ usually targeting specific outlets CNN, *The New York Times*, *The Washington Post* and MSNBC.

It wasn't just Trump's efforts that helped with the rise of awareness of fake news. In an analysis of seven million tweets posted in the first 11 days of November 2016, researchers from the Oxford Internet Institute³⁷ showed that around 20 per cent of those linking content were from sites known to be associated with "polarising and conspiracy content." (As a side note, in reporting this study, Quartz³⁸ selectively reported only part of the sets of tweets analysed and turned "polarising and conspiracy content" into "fake or 'junk news' sources").

A credible analysis of the extent of the overall accuracy of news would require a metric enabling its identification and quantification. News varies by the degree, significance, and intent of inaccuracies in its content. There is also a temporal aspect to the accuracy of the news. What is believed to be true at one point in time can later be shown to be incorrect with further revelations. Content accuracy is also often caveated within a particular context. News reported as opinion and analysis is given more latitude as far as accuracy is concerned than "straight" reporting.

In the absence of credible analyses of the incidence of fake news of all forms, the impact on the public's relationship to news has been clear. They largely no longer believe the news to be accurate and free of bias. Attempts to redress this balance, by educating the public about journalistic practice for example, are unlikely to make any significant difference to these attitudes. Margaret Sullivan of The Washington Post has written about the way anonymous sources are used by that outlet39 believing that this will sway its readers to finding stories that constantly quote anonymous sources more credible. She admits at the same time however that it is a practice that is often abused by editors and journalists. Even if she succeeded in changing the opinion of Washington Post readers about articles in The Washington Post, it would have no impact on other, less strict organisations.

"It has in fact made it harder in many cases to determine what actually has happened in these situations because of the continuous real-time and social media enhanced frenzy that starts the moment the story breaks."





The wisdom of the crowds

Social media and technology like smartphones that could broadcast events as they happened were supposed to have brought about a revolution in the way news was produced. The public could collect information and their own version of the news and distribute it directly to others through social media or in more structured form as blogs on sites like the Huffington Post, Daily Kos and Medium. News sites even accommodated this trend with blogs of their own. Some of these were written by journalists, others were contributions from the public.

Contributions from the crowds should have made the news more current and more accurate. Instead of a single journalist's perspective, there would be many voices adding their view of events, providing corroborating evidence or even data, analysis and opinion. But largely this didn't happen. An unfolding event like a terrorist attack would simply see initial tweets re-tweeted, amplifying rumours and falsehoods around the globe. It still took time to establish the story and usually after statements from officials but the noise generated by the public both at the scene or simply following on social media is enough to drown out whatever the truth of the matter there might have been. It has in fact made it harder in many cases to determine what actually has happened in these situations because of the continuous real-time and social media enhanced frenzy that starts the moment the story breaks.

Final thoughts

Even as more people consume news on social media, they continue not to trust the news they see there. In part this is influenced, as discussed earlier, by political and other biases but it is also because of an inability to be able to discern when news is fake or not. In a Stanford University study⁴⁰ of 7804 students from middle school to university were unable to distinguish between an ad labelled "sponsored content" article and a real news story. General scepticism about all news viewed on the internet could generally be the safest approach to consuming news there.

There is obviously still news being produced by talented journalists with a high degree of integrity reporting news as truthfully and free of bias and outside influence as they can. Digital platforms however, have on balance, had a negative impact on overall news quality largely driven by the economics of news production in the digital economy. Even projects that have found alternate business models like private funding, or funding from governments, eventually succumb to the same pressures of a quest for attention and it is all downhill from there.

The views in this article are those of the author and should not be attributed otherwise.

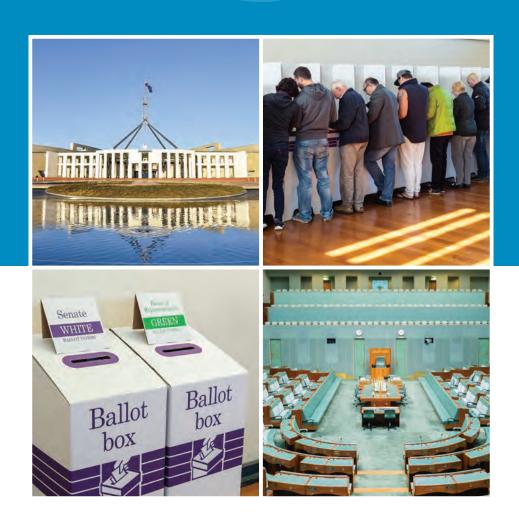
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Four-year parliamentary terms?



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Introduction

There is a long-standing political and constitutional question about whether Australia should adopt a federal four-year parliamentary term. Civic, political and business leaders have long advocated for a prolonged parliamentary term in view of the presumed benefits it would produce.¹ At times public opinion polls have also suggested majority public support.² Yet, when the question was formally put to the people in a 1988 referendum, the Australian public rejected it by a two-thirds majority.³ Nevertheless, the issue remains a topical one, again receiving bipartisan support from leaders of both major parties in 2017.⁴ Given the enduring political interest in this issue, the proposal warrants renewed scrutiny.

Three-year terms in context

Australia's three-year parliamentary term is codified in the constitution, which arose from the constitutional conventions of the late 1890s.⁵ At the time of the conventions, five of Australia's colonies had three-year terms. Provision for a federal three-year term appears in constitutional drafts as early as 1891.⁶ Only colonial Western Australia had four-year terms and made a formal submission for the federal parliament to have the same. Explanations for this 19th-century preference for shorter parliamentary terms have variously turned on the considerable political tumult of the period and the lingering influence of the Chartist Movement.⁷

Over recent decades, however, parliamentary terms have been revisited by Australia's sub-national governments. Beginning with Tasmania in 1972, each of Australia's state and territory parliaments

TABLE 1
Parliamentary terms

Parliament	Term	Date of change to four years	Fixed-term component	Early dissolution?
Commonwealth	3 years	-	Nil	Yes
New South Wales	4 years	1981	4 years	Yes
Victoria	4 years	1984	3 years	Yes – with conditions
Queensland	4 years	2016	Nil	Yes
Western Australia	4 years	1987	Nil	Yes
South Australia	4 years	1985	3 years	Yes – with conditions
Tasmania	4 years	1972	Nil	Yes
ACT	4 years	2004	3 years	Yes – with conditions
Northern Territory	4 years	1974 creation	Nil	Yes

Source: Amended from Bennett, S, 2000, "Four-year Terms for the House of Representatives?" Research Paper, Parliamentary Library, 2000: 2.

TABLE 2
National lower house terms

Length of term	Number	Comments
2 years	1	USA
3 years	13	Including Australia, New Zealand, Sweden
4 years	55	Including Austria, Belgium, Denmark, Germany, Japan
5 years	76	Including Canada, France, Ireland, Italy, United Kingdom
6 years	3	Including Morocco, Nicaragua, Sri Lanka

Source: Inter-Parliamentary Union, Parliaments of the World: A Comparative Reference Compendium, 2nd edn. Vol. 1. (Aldershot: Gower 1986)

has now made the transition to prolonged fouryear parliamentary terms. Table 1 records this Australian development toward longer parliamentary terms, made complete at the sub-national level by Queensland's adoption of four-year terms in 2016. In this new landscape, the federal parliament is now the sole exception to Australia's new norm of fouryear parliamentary terms.

Isolated at home, Australia's federal lower house is also an international outlier. An analysis of international liberal democracies (Table 2) reveals that the most common lower house term is five years (76),

followed by four years (55). Just 13 nations persist with three-year terms, putting Australia in the bottom 10 per cent of nations for parliamentary duration – bested only by the United States with its remarkably brief two-year term.

This comparative analysis reveals Australia's lower house as a clear international outlier. Yet the now universal adoption of four-year parliamentary terms in all of Australia's sub-national legislatures belies any presumed aversion to four-year terms among the Australian people. Why then does the Australian federal parliament persist with three-year terms?









History of the debate in Australia

The persistence of Australia's three-year terms for the House of Representatives is not a result of indifference or apathy. A Royal Commission into the Constitution formally investigated the issue as early as 1929, ultimately recommending that "the life of the Parliament" be increased to "at least four years." In 1982 the Reid Committee of the Review into Commonwealth Administration recommended the same. Lamenting the "poor arrangements of parliamentary business", the committee suggested that parliament "might see fit to adopt improved arrangements for conducting its business – even to the point of proposing constitutional reform to allow for four-year parliaments."

Acting on these recommendations, and further recommendations of the Constitutional Commission of 1988, the Hawke Labor Government put the proposal for a four-year term to the Australian people in a 1988 referendum. Yet Australians have long demonstrated considerable constitutional conservatism. Of the 44 constitutional amendments presented to the public by Australia's political leaders, the Australian public have seen fit to ratify just eight of them – a mere 18 per cent. In this conservative context, the literature has long recognised three necessary

pre-conditions for successful constitutional alteration: bipartisanship, popular understanding, and state acquiescence. Arguably all three of these variables were lacking in 1988, leading to the proposal receiving just 33 per cent support. At the time this overwhelming verdict represented the "lowest popular support of any proposal put to the Australian people since federation".¹⁰

Despite this resounding verdict, however, the proposal for four-year parliamentary terms remains a live one. In 1998 Liberal Prime Minister John Howard called it a "good idea" with "a lot of support in the Australian community", 11 while in 2008 Labor Prime Minister Kevin Rudd made an unfulfilled promise for another referendum on the issue. 12 As recently as 2017, the issue again received bipartisan support from leaders of both major parties. 13

The three-year term of the Australian House of Representatives is therefore something of a paradox. A domestic and international outlier, the proposal to move to a four-year term has long received bipartisan support and at times in-principle popular support.¹⁴ Yet when put to the people the proposal was overwhelmingly rejected. Clearly any proposal for change must make a clear and forceful case for the reform's presumed benefits. Some in-principle benefits are considered below.



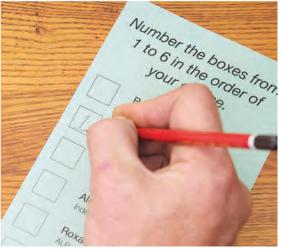
"If the cost of the election were amortised over a four-year period, there is potential savings to tens of millions of tax payer dollars."

Economic considerations

One of the most basic arguments in favour of a longer parliamentary term is financial. Analysis of the 2016 federal election reveals a total cost of \$286,605,622 or \$14.28 per elector. That's up from \$9.48 per elector in 2013. While much of the cost is simply "the cost of democracy", proponents of a longer parliamentary term note the considerable savings to be made by having less frequent elections. If the cost of the election were amortised over a four-year period, there is potential savings to tens of millions of tax payer dollars.

Voter fatigue

Proponents for reform have also pointed to the possibility of alleviating other non-financial costs. For all the democratic virtue of elections, it has long been recognised that elections also impose various burdens upon the voting public. Within the literature the frustration of frequent elections has given rise to the concept of "voter fatigue" – an issue only exacerbated by Australia's tradition of compulsory voting. ¹⁶ Transition to a federal four-year term, it is argued, would reduce these non-monetary costs upon voters.



Policy implications

While lessening the monetary and non-material costs of elections are rather uncontentious claims, proponents of change also regularly claim less immediately tangible benefits. Principal among these less tangible benefits are claims that a prolonged parliamentary term would benefit policy development and more generally improve the conduct of national debate. These latter benefits have been regularly invoked, yet never empirically demonstrated. Their centrality to the question at hand demands they be subjected to closer scrutiny. The following section scrutinises these claims through a comparative analysis of Australia and Canada. These two nations differ on the variable of interest - parliamentary terms - with Australia retaining three-year terms while Canada has long had five-year terms. Are these claimed non-material benefits apparent in the Canadian comparison?

TABLE 3
Legislative output of Australia and Canada, 2001–2016

	Average sitting days per year	Average bills passed per year	Legislative output
Australia	63	159	2.5 bills per sitting day
Canada	143	38	0.26 bills per sitting day

Source: Australia's House of Representatives Practice and the LEGISinfo legislative database of the Canadian Parliament. Original analysis conducted by the authors.

Comparative analysis: Australia and Canada

Legislative output

The central claim of most advocates of a prolonged parliamentary term is that it will improve the parliament's legislative output. Specifically, it is claimed that freed from immediate electoral imperative, legislators will be more free to embark on ambitious legislative reform. This claim may be assessed by comparing the legislative output of Australia (with its three-year terms) and Canada (with its four-year terms). If longer terms improve a nation's legislative output it would be expected that Canada would pass more legislation within a given timeframe.

A comparison of Australia and Canada reveals that in the period 2001-2016 Australia averaged just 63 sitting days per year, while in the same period Canada averaged 143 sitting days per year. This intuitively reflects the interruption to parliamentary sittings a shorter parliamentary term produces. When legislative output is compared for the same period, however, it is found that Australia passed on average 159 bills per year, while Canada passed just 38. When cast in term of bills per sitting day, this analysis reveals that Australia was nearly 10 times more efficient than Canada in passing legislation over the period in question. If a longer parliamentary term is claimed to improve the legislative process, this benefit is not immediately apparent in the current analysis.

Satisfaction with democracy

A second immaterial claim routinely made by proponents of a four-year parliamentary term is that it will raise the standard of the national debate and generally improve the nation's governance. While concepts such as the "standard of debate" and

TABLE 4
Satisfaction with democracy

		Year	Percentage satisfaction
1	Norway	1997	90.30
2	Denmark	1998	89.20
3	Netherlands	1998	88.40
4	Spain	2000	86.00
5	United States	1996	80.50
6	Iceland	1999	79.40
7	Australia	1996	78.00
8	Thailand	2001	76.90
9	Great Britain	1997	74.90
10	Chile	1999	74.70
11	Canada	1997	72.90

Source: Comparative Study of Electoral Systems, 1996–2005

"quality of governance" are amorphous notions defying simple operationalisation, a nation's satisfaction with democracy serves as a reasonable proxy. The assumption here is that an improved national discourse and quality of governance will be reflected in heightened satisfaction with democracy. Thus, in a comparison of nations it may be expected that those with longer parliamentary terms ought to demonstrate greater democratic satisfaction.

"It is imperative, therefore, that those who would advocate for the adoption of a four-year parliamentary term for the House of Representatives refine their arguments, and explain them to the Australian people."





Data on satisfaction with democracy is available from the Comparative Study of Electoral Systems (Table 4). In the most recently available data for 1996–2005 Australia ranks seventh in the world with democratic satisfaction of 78 per cent, while Canada comes in at 11th with 72.9 per cent satisfaction – a full five percentage points below Australia. Thus, it must again be concluded that the claim that a four-year term will raise the standard of debate, is not supported by the Canadian example in the current comparative analysis.

Concluding thoughts

The preceding analysis is admittedly brief and cannot definitively refute the claims at hand. Yet the Australian public have demonstrated by their repeated constitutional conservatism that they will demand an immensely high burden of proof before lending their support to any proposed constitutional alteration. It is imperative, therefore, that those who would advocate for the adoption of a four-year parliamentary term for the House of Representatives refine their arguments, and explain them to the Australian people. Absent that understanding and the other preconditions of bipartisan support and state acquiescence, the prolonging of Australia's federal parliamentary term may remain elusive.

The views in this article are those of the author and should not be attributed otherwise.

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