

Australia needs to prepare for an ageing population

Future path
Productivity will have to increase if fewer working people are to support more Australians blessed with longer lives.



Josh Frydenberg

With the budget back in balance for the first time in 11 years and on track to return to surplus, it's important that we focus not just on the "what" but the "why".

At \$19 billion per annum, our interest bill is more than double what we invest in childcare and nearly as much as we spend on schools.

Our debt burden represents not just a cost to the budget and therefore every taxpayer, but also an opportunity cost as it constrains the government's ability to invest in other areas.

If we don't remain fiscally disciplined today, the next generation will have to pick up the bill tomorrow.

The return to surplus will have been hard-fought.

When we came to government, we inherited a budget deficit of \$48.5 billion or 3 per cent of gross domestic product, the second highest in Australia's history even though five years had elapsed since the global financial crisis.

Since then, we have steadily improved the bottom line, with real spending growth halved to 2 per cent of GDP, the lowest level of any government in 50 years.

While we have benefited from positive terms of trade, we have been prudent in our budget forecasts. This has ensured our record spending on health, education and disability support is not contingent on high commodity prices.

The strength of the labour market, with more than 1.4 million new jobs being created since September 2013, has been a real driver of our improved budget position.

Last financial year, more than 300,000 jobs were created, which was 100,000 more than Treasury had forecast. Unemployment is at 5.3 per cent compared with 5.7 per cent when we came to government, and employment growth remains at 2 per cent compared with the OECD average of 0.9 per cent and the 0.7 per cent we inherited. This stronger budget position has



We must focus on population, participation and productivity to meet the ageing challenge.

allowed us to cut taxes for income earners and small and medium-sized businesses while keeping our tax-to-GDP ratio below our self-imposed cap of 23.9 per cent.

It has also given us the fiscal capacity to respond to significant calls on the budget, like the drought.

As a government, we have committed over \$1 billion of additional funding since the election to provide much-needed support to farmers and local communities.

We have also said we will be providing more funding for aged-care, in light of the findings in the interim report of the royal commission.

These immediate spending pressures are not the only challenges facing the budget. There is a longer-term trend we need to face.

Our population is ageing and this will place new demands on our health, aged care and pension systems.

Since the first Intergenerational Report was released in 2002, we have gone from 13 per cent, or 2.5 million people, being aged 65 and over, to 16 per cent, or 4 million people, today.

Our median age, now 37, has increased by two years since then and life expectancy has gone to 81 for males and 85 for females.

With the sixth highest life expectancy in the world, we are seeing an increase of almost one year every four years.

As more Australians live longer, the number of working-age Australians for every person aged over 65 diminishes; whereas in 1974-75 it was 7.4 to 1 and 40 years later, in 2014-15, it was 4.5 to 1, it's estimated over the next four decades to fall to just 2.7 to 1.

This new dynamic, which is already playing out, will require a range of policy responses. As a nation, we need to effectively leverage the three P's—

population, participation and productivity—to meet this challenge.

When it comes to workforce participation, we are at record highs and the participation rate for those aged 65 and over has increased from 12.3 per cent to 14.6 per cent over the past five years.

The participation rate for this cohort was less than 6 per cent 20 years ago.

However, with Australians in work currently undertaking 80 per cent of their training before the age of 21, this will have to change if we want to continue to see more Australians stay engaged in work for longer.

When it comes to population, our migration program has served us well.

With the median age of migrants being 20 to 25, or 10 years less than that of the broader population, immigration has helped to soften the economic impacts of an ageing population.

Productivity is, however, one area where we must do better. Tracking at less than half the long-term average, our focus is on deregulation, skills, industrial relations and other micro-economic reforms to improve service delivery.

Infrastructure is another key area where the Prime Minister announced yesterday a \$400 million-plus package which involves new money as well as bringing forward spending on six projects in South Australia.

As we implement our economic plan to repair the budget, grow the economy and guarantee spending on essential services, we do face some significant domestic and global economic headwinds.

This will require calm and considered decision-making instead of engaging in knee-jerk reactions to every economic event, or requests for more government spending.

Our ability to effectively manage these short-term as well as the longer-term challenges depends on it.

Josh Frydenberg is the federal Treasurer.

How 'hurt money' could fix the exec pay problem

Capital move
The early 20th century pioneers of incentive pay had better ideas than the squishy notions of modern regulators.



Richard Holden

Executive pay at Australia's largest public companies has come under even more scrutiny than it usually does at this time of year. And against the backdrop of the Hayne royal commission, the Australian Prudential Regulation Authority has proposed a series of changes to remuneration practices for the entities it regulates.

On the plus side, APRA has suggested that bonuses should be deferred for seven years, and it has recognised that explicit financial targets—so-called key performance indicators—can be gamed. On the minus side, APRA chairman Wayne Byres told The Australian Financial Review Banking and Wealth Summit in March that half of overall remuneration should be based on some squishy measure of "corporate culture".

Designing effective executive compensation schemes is not a new problem. In fact, the original management incentive schemes were developed by US companies DuPont and General Motors in the 1920s. And as I outlined in a *Journal of Economic Perspectives* article, these were long-term plans that used the stock price as a holistic, market-based performance measure, and required executives to buy into the plans, exposing them to upside and downside risks.

As I pointed out, as "two of the first firms to adopt the multi-divisional organisational form, which delegated substantial authority to a significant number of executives, DuPont and General Motors were among the first to confront the acute need to align the interests of management with shareholders".

To achieve this alignment of interests, GM and DuPont paid cash bonuses, but required that those bonuses be invested in company stock. In addition, they lent money to managers so that they could

purchase additional shares at market prices. Managers had to pay market interest rates on these loans. And in the GM plan, they were required to repay the principal, too. The plans were seven to 10 years in length. As the long-time GM president, CEO and chairman Alfred P. Sloan put it, "I believe [management] should be told frankly that here is an opportunity to go in business; they take the profit and they take the risk."

If remuneration consultants were doing their job, boards wouldn't need an intervention from the regulator.

Not only were these the original management incentive schemes, they also worked remarkably well. For instance, the GM plan, which ran from 1930 to 1937, had an annualised return of more than 40 per cent during the height of the Great Depression.

APRA's guidelines are clearly in flux, and there has been sensible pushback from extremely experienced directors such as Michael Chaney and Graham Bradley. APRA has got some things right and some things wrong in its suggestions to date.

But it's unclear why APRA needs to be setting out guidelines for executive pay at all. That's the job of the board of directors. And if remuneration consultants were doing their job, boards wouldn't need an intervention from the regulator.

There's no race to the bottom at play here. If a board puts in place a "bad" incentive scheme for its executives, it is in a worse competitive position. Its business and its stock price will suffer. And if the market for corporate control functions well, its directors will quickly be uploading new resumes on LinkedIn.

Indeed, one view of the core business of private equity is that it is involved in arbitraging executive compensation schemes. It takes companies with weak or counterproductive incentives and puts in place turbocharged incentives aligned with the interests of the new owners.

In fact, the type of incentive schemes that private equity funds typically put in place in their portfolio companies look a lot like the DuPont and GM schemes of yore. They involve executives buying stock with so-called "hurt money" to expose them to downside as well as upside risk. The incentives are long term in nature, and the payoff is based on the same measure of performance as the private equity sponsor—what they eventually sell the company for.

It's important to get executive pay right, and corporate Australia does not have a perfect track record on this front. APRA has rightly identified the danger of overly specific KPIs as being "gameable" (a topic about which I wrote recently with Florian Ederer of Yale and Margaret Meyer of Oxford).

But rather than look to a corporate regulator for tips on how to get incentives right, boards would be better served by looking to the original incentive schemes of a century ago, and the modern schemes enacted by private equity funds. Shareholders would thank them for it. **W**

Richard Holden is professor of economics at UNSW Business School.

Be wary of those tech 'milestones'

Ariel Proccaccia

In 1950, the mathematician Alan Turing proposed the eponymous Turing Test to decide whether a computer can demonstrate human-like intelligence. To pass, the computer must fool a human judge into believing it's a person after a five-minute conversation conducted via text. Turing predicted that by the year 2000, a computer would be able to convince 30 per cent of human judges; that criterion became a touchstone of artificial intelligence.

Although it took a bit longer than Turing predicted, a Russian chatbot presenting itself as a 13-year-old Ukrainian boy named Eugene Gostman was able to dupe 33 per cent of judges in a competition held in 2014. Perhaps the cleverest aspect of the machine's design was that its teenage disguise made it more likely that people would excuse its broken grammar. Nevertheless, the misdirection is transparent and superficial in conversations the chatbot had with sceptical journalists—so much so that one marvels not at the computer's intelligence, but at the gullibility of the judges. Sadly, conquering the Turing Test has brought us no closer to solving AI's big problems.

Last month, quantum computing achieved its own controversial milestone. In some ways, quantum supremacy is akin to iconic AI milestones like the Turing Test, or IBM's chess victory over Gary Kasparov in 1997. These achievements demonstrate specialised capabilities and garner widespread attention, but their impact on the overarching goals of their respective fields may ultimately be limited.

THE WASHINGTON POST

For the full version of this article visit afr.com/opinion

AFR/ART ADSS