Boom, Bust and Echo- Changing Demography and The Implication for Government Services

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(This is an edited version of a talk given by Professor Foot on behalf of IPAA.)

What I want to do is talk about demographics and policy, both private and public sector policy. I’m not going to make any distinctions between the two. This is as relevant to the private sector as it is to the public sector.

We should probably start with a definition of demography. Demographics is the study of human populations. Of course demographers like to call it the scientific study of human populations. But more importantly from my perspective as an economist or someone interested in economics and policy issues, I’m interested in how people spend their time and their money. I am also interested in how they spend their workplace time. So demographics is about people, and people can either be clients and customers -- that’s the marketing implications. Or people can be employees, and that’s the human resource planning implications. I never cease to be amazed at how many organisations I go into, particularly in the private sector, where I argue "well let’s have your marketing department here and your HR department here because they’re the people who talk about people". And I’ve actually been into big organisations where they’ve been introducing themselves for the first time! They’ve never been in the room together because the perception is that the marketers don’t have anything in common with people in HR and vice versa. For me demographics is all about people.

Boom Bust & Echo. Boom refers to the Boomers. They’re quite different in Australia from North America so those who use American dates of 1946 to 1964 to determine the Australian Boomers are wrong, but we’ll come back to that a little later on.

The Bust refers to the group that was born over the late 1960s and 1970s in North America and I’m going to start with the North American data so you understand the context. Then I’m going to show you how Australian data doesn’t completely fit that profile. The introduction of the birth control pill gave women a lot more control over the size of their families and consequently far fewer people were born in the late 1960s and 1970s. As a result now there’s a dearth of new labour entrants in North America because there are hardly any 20 Somethings out there. That's why the US economy is sucking young workers in from the rest of the world.

Then over the 1980s the Boomers started to have their children, but they were having fewer children so it’s an echo of the original boom. And that’s where the title Boom Bust & Echo comes from. So what are the trends of the future? What we’ve got is those ageing Boomers who want more peace and quiet and their Echo kids wanting more noise and action. This is a conflict. We’ve got those ageing Boomers not only wanting more peace and quiet but they also want quality and service which their Echo kids can’t afford. Now if you’re providing public policy or if you’re marketing, do you market to the Boomers or do you market to their children? Two very
different value sets and very different attitudes. Not because they have intrinsically
different attitudes -- when the Boomers were their children’s age, they had the same
attitudes as their children currently have. They’re in different parts of their life cycle.
But if you try and use the same product or the same service to hit both of these groups
you’re probably going to end up in the middle and it’s called bust. And that is the
challenge for both the public and private sectors in the new millennium.

I’m going to start with North American data so that you understand why the boom,
bust and echo profile is so applicable to North America. I’m going to talk about
human resource planning issues in the North American context and then we’re going
to drop into Australia and see how applicable they become here.

**Canadian Data**

We have here census data from 1971 and 1981. SLIDE

I make no apologies for going back into the distant past because I firmly believe that
if you want to understand where you’re going in the future you’d better understand
where you’ve come from in the past.

So let’s start with the 1971 data. First of all demographers often call these pictures
population pyramids because they look very much like a pyramid. That, of course,
reflects the fact that as you drift up in age there’s a higher probability that you’ll pass
into the promised land; therefore there’s fewer people in the upper age brackets. You
may notice that by 1971 the base of the pyramid had collapsed in Canada - far fewer 1
year olds around than 10 years olds in 1971. This reflects the fact that over the
1960s, after the introduction of the birth control pill in North America and with
women entering the labour market, fertility started down gradually in the early 1960s
and then plummeted in the mid to late 1960s. We go to primary school at age 6 so by
the late 1960s in Canada, elementary or primary school enrolments had peaked and
started to come down. We go to high school at age 13 - so by the mid 1970s high
school enrolments had peaked and were on the decline. There was a surplus of
teachers in the system and declining school enrolments right across the board.

This piece of analysis of the impact of demographics on school enrolments was based
on a key assumption. Economists can never do anything without making
assumptions. I am a Professor of Economics and have to be true to my species. And
so my research too is based on assumptions. And we’ll put key assumption no. 1 on
the table right now -- that every year you get a year older.

So let’s now go to the 1981 census data. And what do you think happens when we
compare the 1981 data with the 1971 data? Ten years later we’ve become 10 years
older. The assumption seems to work. Of course we now have the 1991 census
data in Canada and do you want to guess what we’ve found? Once again 10 years
later we’ve become 10 years older so I’ve now verified the assumption on an
independent piece of statistical information as any good analyst should! So let’s
bring you to the mid 1990s - I’m going to take you to my home state in Canada, the
province of Ontario where 12 million Canadians live. Now the dominant feature of
that population by the mid 1990s obviously is the big bulge we call the baby boom.
The first Boomers were born in 1947. They had their 50th birthdays in 1997 and
they’re all now streaming out to get their seamless bifocals. And the eye glass industry has a great public relations campaign going because they don’t call them seamless bifocals any more; they’re calling them progressive lenses so the Boomers can feel progressive when they go out to get their eye glasses. Increases in fertility over the 1950s resulted in a peak in 1960. They are aged 36 in 1996. So based on these data, I would define the baby boom in Canada as a 20 year generation, born between 1947 and 1966 with a peak in 1960. Today they’re aged 34 to 53; they are in their late 30s, 40s and early 50s. The front-end Boomers are now in their 50s and about to become grandparents. Of course the numbers of births are going down so there’s going to be exploding numbers of grandparents and hardly any grandkids.

The pre-Boomers and the front-end of the baby boom have done well because it’s always good to be in front of a big group. All you had to do was show up, you didn’t necessarily have to be any good. But the back end of this market, those now in their mid to late 30s, are the true Generation Xers. The title Generation X comes from a novel written by Douglas Copeland published in 1991. By the way a good Canadian author who couldn’t get his book published in Canada so he had to go to the US and get an American publisher to publish it for him - it became an influential best seller. The three main characters in Douglas Copeland’s book were all 29 year olds. So Generation X got defined by the media as this disadvantaged group of 20 Somethings. The only trouble is that the media don’t seem to understand our basic assumption - that a 29 year old in 1991 is a 38 year old in the year 2000. Gen X are 30 Somethings not 20 Somethings, at least in North America. The characteristic of Gen X of course is that whenever they applied for a job, it seemed like the rest of the world applied for the same job. The front-end Boomers took all the jobs, drove up house prices, drove up interest rates. If you were born in the back end of a big generation, you’re at an incredible disadvantage.

The dominant feature of the North American population pyramid is these Boomers. Following the baby boom, declining fertility over the 1960s through the 1970s created the baby bust generation - the busters. There’s hardly any 20 Something’s out there in North America today to do entry level and information technology work. They’re in short supply. Lots of people are in their 30s but hardly anyone is in their 20s. Why do you think North America is so yearning for young 25 year olds that they’re giving them signing bonuses. This is not necessarily happening in Australia. Maybe the demographics are different. Then over the 1980s the Boomers started to have their children and an increasing number of births occurred. This group is the children of the Boomers but because the Boomers were only having roughly 1-2/3 kids, they weren’t reproducing themselves as a generation. You need two children to replace yourself and your partner. So at 1-2/3 the boom in the child ages is really an echo of the original boom.

In the 1980s fertility rates were going down while birth rates were going up. The fertility rate is the average number of children born to a woman over her lifetime. It’s a proxy for the average family size. The birth rate is the total number of births divided by the total number of women of child bearing age so it depends on the total number of births. What happened over the 1980s and into the 1990s in North America? The massive baby boom generation were moving through their prime child bearing ages in their mid to late 20s and early 30s. Even though on average they were having slightly fewer children there were so many more or them having on average
fewer children that there were more children born over the 1980s, hence the rise in the birth rate. These are the children of the Boomers, the so called baby boom Echo generation. So we’re getting our North American facts established -- basically those born from 1947 to 1966 are baby boomers, from 1967 to roughly 1980 the baby bust, and the generation of the 1980s and early 1990s is the baby boom echo. These are the three dominant groups in the population.

It’s pretty hard to do strategic planning in either the private or public sector when you go from boom to bust to echo and this is the challenge of demographics and adaptability. Now the number of births are on the way back down again. The Boomers are now getting too old to have their children and this leads to more real challenges in the education system. My home province has been building more elementary schools and high schools because there’s been increasing enrolments over the last decade and a half. But the numbers of births started down in 1992 so when do you think that will be impacting the primary school system? By the late 1990s the school board in Toronto suddenly discovered that it may have to start closing schools. You may want to take particular note of this little decline in Ontario for when I get to Western Australia.

Please do not misunderstand me. If you’ve got a growing population of young people in your community because you happen to be a new community that’s growing it doesn’t mean you shouldn’t build new elementary schools. But I would strongly recommend that you put plumbing in every classroom so you can sell them off as senior citizen condos about 10 to 15 years from now when they’re not required any more. Building flexibility into our public policies, building flexibility into our bricks and mortar is absolutely crucial if you’re going to adapt to these population swings over 10, 15, 20 year periods.

**Workplace Implications**

We should be totally inclusive in our analysis, so let’s look at the other ages. Consider age 80 in 1996. When were they born? Remember our assumption that every year they got a year older! - They were born in 1916 so you can see the impact of the first world war still showing up on the population profile. It’s not because we sent the boys off to the front and they got killed because it’s on the girls side of the population profile as well. It is because we sent the boys off to the front that fertility dropped like a rock between 1915 and 1919. Then the boys came home. The Roaring 1920s obviously were good economic times - there were lots of births in the 1920s. The 1920s were followed by the Depression of the 1930s -- not many people born in the 1930s. I have thoroughly enjoyed going to senior management presentations over this last decade. Sitting in front of me in the first half of the 1990s were predominantly silver haired men in their mid 50s because these are the people who have got the knowledge and experience and the power to be in the top positions. I looked these guys in the eye and told them you know that being in your mid 50s in the early 1990s means you were born in the late 1930s. Hardly anyone was born in the late 1930s; you guys couldn’t miss out. You’re not at the top because you’re any good; you’re there because you’re in short supply. Senior executives of many of our organisations were born in the late 1930s and early 1940s. Hardly anyone was born in the late 1930s and early 1940s. They hardly had any competition when it came to getting to the top.
On the other hand those born in the early 1960s have faced a whole different reality. But more importantly, unfortunately for those Gen Xers born in the 1960s, who are their parents? Exactly the generation that could raise four children on one income. The tough time of being a Gen Xer of course was not simply trying to find a job in the workplace but it was dealing with parents who now have golden early retirement packages. They raised three or four kids on one income and simply did not understand the changing workplace reality for younger people. I love pointing out to these senior executives who are now retiring with their golden pensions that the reason that you still may have boomerang children is because you had on average 3+ kids. You flooded the labour market with Gen Xers. It’s all your fault that they’re still coming to live at home again. But this allows us to understand a little bit more about the workplace.

The first Boomer born in 1947 reached age 20 in 1967 so over the 1970s and 1980s the massive baby boom generation flooded into the workplace. Now this means that you’ve increased the supply of workers and what happens when you increase the supply of something? You depress the price. Why do you think there’s been very little real wage growth in North America and even in Australia over the 1980s and into the 1990s. We’ve flooded the labour market with workers -- workers are in abundant supply now. Why do you think there’s been very little productivity growth over the past two decades? If you’ve got an abundance of workers why invest in machines? But more importantly perhaps let’s look at this workforce. The baby boomers flooded the workplace over the 1970s and 1980s and by the 1990s they look a bit like a rectangle in the workplace.

Now corporate structures have traditionally looked like hierarchies or triangles. So over the late 1980s and into the 1990s we were trying to take a rectangular population that every year was getting a year older and we were trying to promote this up a hierarchical corporate structure. Now have you ever tried to push a rectangle up a triangle? Ever understood why we’ve suddenly discovered new concepts called plateauing and career blocking? Ever understood why the gurus of the 1990s suddenly started to say that those old hierarchical corporate structures are not working for us any more -- we need to re-engineer the corporation. You’ve got two options don’t you? You can keep the hierarchical corporate structure and then you have even more workers in their 40s all competing for very limited numbers of mid management positions. If you didn’t do any re-engineering you can’t bridge a 48 year old to early retirement like you could a 58 year old. So the early retirement policies of the 1980s weren’t going to work in the 1990s. So around the developed world, at least in Canada, the US and Australia, we had to develop new human resource planning policies for the 1990s. We did that and it’s called the severance package.

The alternative of course was to adapt the corporate structure to fit the workplace. The only way you can push a rectangle up a triangle is to flatten the triangle and all of a sudden the new workplace policies became flattening corporate structures, delayering - we called it broadbanding - getting rid of layers in the organisation.

But now the workplace has completely changed because in a world where you have a hierarchical corporate structure, you’re largely going to have what’s called a linear career path. You’re going to largely stay in one occupation for life. You may be a
nursing trainee and then become a registered nurse followed by a director of nursing, but you’ve largely stayed in the same occupation. You may start off as a trainee engineer then become an engineer followed by a managing director of an engineering firm but you’ve basically stayed in one occupation for life. So in a world of tall hierarchical corporate structures which we’ve had for the last 100 years, the linear career path became the norm and the expectation. And the linear career path is characterised by a reward system that focuses on promotion and upward mobility. But if you do some re-engineering and flatten the corporate structure you’ve got less vertical mobility and more horizontal mobility and you move to what’s called a spiral career path. And that means more lateral moves and fewer vertical moves. That means that you’re probably going to have 3, 4, or 5 different occupations in your lifetime.-- This is the new world of work for young people. Those over 35 are implying that the young people don’t have any loyalty. But the young people know exactly the new world of work. They’re going to have what’s called spiral career paths and if you want to bring them on board you’d better understand this.

Increasingly in a flat pyramid the reward system focuses on re-education and retraining because what somebody wants to do is move out of the accounting department into the legal department, out of the legal department into the HR department, out of the HR department into the marketing department. Moving around the organisation becomes as important as moving up. And because in a flat pyramid you’re going to have made those salary bands much wider, even when you move within the same level in the organisation you can get salary increases. This is what the young people of today are looking for and most managers don’t understand it. If you want to attract a young person today, what you should be doing is not bringing them into a level in a vertical structure. You should be bringing them into a corporate pool. You bring a 20 Something into a corporate pool and say okay for the next two years we guarantee four assignments in the organisation in four different departments. And then you’ve guaranteed them the lateral mobility and education and training as they gradually move around the organisation. Out of that they will select which department they enjoyed the most. And if they didn’t like any of them, then they will leave. This is not disloyalty; this is the new world of work. All the Boomers sitting above them are saying, "huh huh we’ve got power over you" and they’re saying "forget it buddy, I’m out of here". But the trouble is that in a flat structure, re-education and retraining is applicable throughout the entire employee workforce. Yet the very thing we did when we downsized in the 1990s was downsize the re-education and retraining budgets. That was a mistake because it is the only reward that you’ve had to offer your employees and you’re not even doing that. Is it any surprise that the workforce is disillusioned? This becomes a crucial part of the reward system so that people have mobility around the organisation as much as up. Remember the spiral does move up so sooner or later, there is promotion, but it’s based on different criteria.

Finally we shouldn’t ignore the world of work of many people, particularly those in their 20s and those in their 50s who have been downsized. That is the transitory career path. Here you put a temporary team together to solve a problem. This is the management consulting team - or the royal commission who have the expertise that you need to solve the problem. When the problem has been solved and the report has been submitted, the team is disbanded. The reward system focuses particularly on variety; you get to do lots of different things in this part of your
lifetime.

So there’s the world of work. In general the world of work has moved from the dominance of linear career paths to the increasing dominance of the spiral and transitory career paths as we flattened the corporate structures. You need to understand that when you move from the tall pyramid to the flat pyramid, the reward system is no longer going to be promotion; it’s going to be retraining and re-education and workplace variety. We don’t seem to have gotten this right yet.

**United States**

Comparing Canadian and American data [SLIDE] you may notice the baby boom in Canada is even bigger relative to the population than it is south of the border. Their fertility didn’t go to the same high levels as Canada over the 1950s and 1960s. The fertility rate in the US remained below that of Canada until all of a sudden it jumped above in the late 1960s - a consequence of the Vietnam War. If you wanted to avoid being drafted and sent to Vietnam you got married and started a family. Over the 1980s and into the 1990s the US fertility rate again has gone above the Canadian fertility rate. The US has considerably higher fertility than both Canadians and Australians. Canadian fertility is around 1.6, Australia around 1.7, the US around 2.1 children per family - they’re now replacing themselves. But the reason their fertility rate has gone up is because of the growing percentage of Hispanics in the US. White non-Hispanic Americans are having 1.9 children per family, slightly higher than Canada and Australia, but Hispanic Americans are having 2.9 children per family. So this tells you the boom isn’t quite as big in the US, but the echo is even bigger. This has very important implications.

If you have lots of young people coming along, you know that there’s going to be a lot more demand for recreational equipment in the local parks; you know the demand for sports arenas is going to go up; and you know the demand for movies is going to go up. This of course is the reason why movie attendance is going up in North America. Now there are some significant regional deviations within the US. In general the Northeast is much older than the Southwest; similarly eastern Canada is older than western Canada. The same is true for states in Australia. States where there is rapid in-migration like Western Australia and Queensland are going to be younger than the older states where there’s out-migration like Victoria and South Australia. What's going on in your state may not be the same as what’s going on in another state and you’d better understand that in developing strategic plans and policies. For example, in California the Echo is now as big as the boom. Therefore tweenage and teenage marketing and advertising is just exploding in the US Southwest. And since most of the movie industry is driven out of California, they think there’s a huge future for mega movie complexes. But build mega movie complexes throughout eastern Canada and I guarantee they will be bankrupt in five years in many areas because they don’t understand the difference in those regional demographics. Another example is Levis jeans. This private sector company has its head office in California. Levis have always clung to the strong marketing belief that you need to market to people basically 18 to 25 because if you get consumers when they’re young, you’ll be able to retain them for the rest of their life. So Levis jeans have always marketed to this group. Over the 1960s, 1970s, and into the 1980s they had a booming market.
Then they got to the late 1980s and 1990s and they went from boom to bust. Levis lost more than half their market share because they kept marketing to younger people and there were ever fewer numbers of people in those age groups. The problem with Levis was that they forgot to create jeans with elastic waist bands! Remember that analogy when you design public programs.

**Australia**

**SLIDE**

These trends help you understand what is happening in North America, but how relevant are they to Australia? Australians are not immune from my assumption that 10 years later they have become 10 years older. So let’s bring you up to the mid to late 1990s. While the US rushed their troops home at the end of the Second World War, in Canada and Australia our troops dribbled back home over 1945 and 1946. So the real beginning of the baby boom didn’t start until 1947. So every time you read 1946, that’s American data. In Australia the baby boom grows, peaks, and declines, but where’s the bust? There are plenty of Aussies in their mid to late 20’s. By the way this is why you did so well at the Olympics. You don’t have a shortage of 20 Something’s who win most of the medals. In fact the peak number of births occurred in 1972 and they were aged 28 in the year 2000 - in their prime gold medal winning ages. The peak of the Canadian baby boom born in 1960 was 40, over the hill and never going to win a gold medal. I am not sure of the reasons for this difference. Perhaps the pill came later. Perhaps women didn't participate in higher education in such great numbers until later. But the point is that in Australia you actually have lots of 20 Something’s today to take entry level positions and do your information technology. Moreover, since you tend to be most mobile in your 20s, is it any surprise that these people are travelling around the world? And since there’s a shortage of them in the US and Canada, is it any surprise they can go off and make nice big money over there in California? My preference is to let them go, but just make sure you stay in touch with them so when they’re ready to start a family in their early 30s, they realise that it’s a whole lot more fun to raise kids back here in Australia than it is in much of the US.

So there’s a difference between the current workplace in North America where there are help wanted signs on entry level positions particularly in restaurants and retail stores and where, in fact, they’re paying signing bonuses and worrying about retention and the current workplace here in Australia. Maybe you don’t have to worry nearly as much as North America does. On the other hand if you’ve got a surplus of 20 Somethings or at least a good supply of 20 Somethings, don’t be surprised if some leave for “greener pastures”.

Now look what’s coming in the future. In eight to ten years from now you will suddenly find yourself with a shortage of younger people. By the way this has all sorts of implications for our colleges and universities. But there is an echo, a small echo. With fertility rates now under 2 children per family, this group is going to be smaller. But look at the base of the population pyramid. If the number of births go down in 1995, when you think you might start seeing declining primary school enrolments? I trust you’re all planning for this and that the city is not allocating more space for schools because it’s been growing. And what about parks and recreation? Let’s look at some Australian states. The biggest state in Australia, New South Wales, looks just like the Australian data. I think it’s very important to understand some
regional variation so let’s go to Tasmania which is SLIDE very different. Because of the noticeable boom, bust & echo profile, there are much bigger planning challenges in Tasmania than in New South Wales. But I bet you don’t think of it that way. In Tasmania those in their 20s often go off to the mainland. You can see there are fewer 4 year olds in 1998. Look’s what coming in education planning in Tasmania.

In South Australia, every age group over 50 has a bigger percentage compared to the Australian average. South Australia is older than the Australian average and older than other states and this is why the higher need for home care. South Australia is often leading a lot of the issues associated with gerontology and aged care. They’re having to face a lot of the public policy issues associated with ageing before other states.

SLIDE
You’ll notice exactly the opposite is true in Western Australia. Western Australia has a smaller percentage than the national average in all the senior age groups and a bigger percentage of young people. So of course you’re going to be an exporter of young people, you’ve got slightly more of them. But by the mid 1990s, the numbers of births started to decline. What did I say about school enrolments?

I thought I’d finish with the Northern Territory because this brings out some very clear data. The Aboriginal communities of course tend to have more children and the Northern Territory tends to be much younger. You’re unlikely to choose to live up there when you’re getting old needing health care. Boom, bust, & echo works perfectly in the Northern Territory. You’ll notice the boom, bust & echo didn’t work very well for Western Australia. Understand the trends going on elsewhere, then understand these basic demographic facts of your own region to see how much they apply to you.

In summary, Australia has a bigger percentage of people in their 20s compared to North America. But then there’s a smaller percentage of people in their teens. There is a boom, bust & echo profile when you use aggregate 5 year data. The 5 year age groups provide a broader perspective and boom, bust and echo does really apply to Australia, but how much depends on each state’s demographics

Other Countries

It seems that Australia is currently worried about migration from New Zealand. Of course, since there’s a lot of people in their 20s in New Zealand and that’s when you’re most mobile, it is not surprising that they’re flooding across the Tasman. But we can see that in the future, migration from New Zealand will slow down dramatically because there are fewer numbers following the peak ages. The peak number of people in New Zealand are currently between 20 and 35 which are the most mobile ages. There are a smaller number under 20.

The boom in the United Kingdom is smaller reflecting the devastation and rebuilding that followed the Second World war. However, in every age group over 50 the UK has a much bigger percentage. Sixteen percent of the UK now are over 65, whereas
it’s 12% for Canada and 11% for Australia. The United Kingdom today is where Australia will be 20 odd years from now. Australia is one of the youngest countries in the developed world, so you’re the very last group to have to face a lot of the ageing issues. Europe and Japan are much older.

That current miracle in Europe called Ireland has lots of people in their early 20s that have been entering the workplace. So in fact the miracle in Ireland has very little to do with low corporate taxes. It’s got a lot more to do with lots of young people entering the workplace as both producers and consumers. Meanwhile they’ve forgotten to have kids in Italy. The fertility rate in Italy is 1.1 children per family. Italy, like many countries in Europe, is running out of young workers. Do you realise that, given current trends, Turkey will be the biggest country in Europe within 20 to 25 years? It I was sitting in the Department of Foreign Affairs and I was thinking of sending trade commissions, would I send a trade commission to Italy where the growth of the Italian population is now declining or would I send the trade commission to Turkey? Where do we tend to send our trade commissions? Canberra just sent a trade commission to Japan. The growth of the Japanese market place is now exactly zero. Japan has now peaked at 125 million people and is on the way down in the future.

**Large Countries**

The largest country in the world, China, has a boom, bust & echo profile just like North America. China is now having 1.5 children per family. The Americans are having a half a child more than the Chinese. Australians are having more children than the Chinese. With its fertility rate under control, China is going to make it in the global sweepstakes. India has not got it’s fertility rate under control. It’s just boom, boom and boom. India will have great difficulty making it in the global sweepstakes.

The fourth largest country in the world is Indonesia with well over 200 million people. If you don’t create jobs for your young people they will either leave or throw out a president. Of course Indonesians are up to their eyeballs in debt. We borrow when we’re young for our education, mortgage, automobile, furniture and so on. So countries with lots of young people have lots of debts. But because Indonesia and Brazil are so large, the world financial community is so worried about these two countries that they send in Europeans who are from old countries to tell them how to run their economies like their own. How inappropriate - the IMF and the World Bank don’t understand their demographics.

Now would you have wanted to start a family in Japan at the end of the second world war after two atomic bombs had been dropped on your country? Japanese women certainly didn’t. They were having five children per family in the 1930s and by the mid 1950s this had fallen to under 2 children per family and this was well before the introduction of the birth control pill. Now the fertility decline over the late 1940s and 1950s means that 20 years later when people are ready to enter the workplace as workers, labour force growth declines. So in the late 1960s early 1970s Japan started to run out of young workers, exactly the opposite of North America and
Australia. Now what happens if you run out of young workers? Inevitably labour becomes scarce and increasingly you produce output using machines and this is why Japan embraced technology in the 1970s. They had no choice; they were running out of young workers. What do you think happens to productivity when you put lots of new machines in place and you’ve got a slower growing workforce utilising those machines? Productivity takes off - this has little to do with the brilliance of the Japanese management style as we were told. It has to do with the fact that 55 years ago the Americans dropped two atomic bombs on their country to terminate the war in the Pacific.

Meanwhile in Australia and in North America wave after wave of Boomers entering the workplace resulted in abundant labour supply. You’re going to hire people and forget to give them new machines to work with and guess what happened to productivity in North America and Australia over the 1970s and 1980s - it went down. Then the declining fertility of the 1960s and 1970s hit the workplace 20 years later in the late 1980s and 1990s. All of a sudden in North America over the 1990s they started to run out of young workers as a result of the declining fertility 20 years before and guess what happened in the US? They discovered technology 20 years behind the Japanese and right on time. And guess what’s happened? Productivity is taking off. It’s not taking off as much in Australia because you don’t have the lack of 20 Something’s that the US has, so inevitably your productivity is going to grow at a slower pace than the US and that’s exactly how demographics says it should be so don’t get upset.

Conclusion

Demographic changes provide a valuable insight to many trends both in the past and into the future. It is relevant to both the public and private sectors. It allows us to understand trends in school enrolments and movie attendance for example. It also allows us to understand workplace trends and the differences between states and countries. It can form a solid foundation for proactive future looking strategic planning and policy analysis. You ignore it at your peril if you plan to remain in your job for more than three years! I hope that this presentation has provided a glimpse of the sorts of ideas that can be provided through the important lens of demographic analysis. Thank you for your attention.