ANZ RESEARCH

NEW ZEALAND ECONOMICS
KEY THEMES FOR 2015

2 February 2015

INSIDE

NZ ECONOMICS TEAM

Cameron Bagrie
Chief Economist
Telephone: +64 4 802 2212
E-mail: Cameron.Bagrie@anz.com
Twitter @ANZ_cambagrie

David Croy
Senior Rates Strategist
Telephone: +64 4 576 1022
E-mail: David.Croy@anz.com

Sharon Zöllner
Senior Economist
Telephone: +64 9 357 4094
E-mail: Sharon.Zollner@anz.com

Mark Smith
Senior Economist
Telephone: +64 9 357 4096
E-mail: Mark.Smith2@anz.com

Con Williams
Rural Economist
Telephone: +64 4 802 2361
E-mail: Con.Williams@anz.com

Sam Tuck
Senior FX Strategist
Telephone: +64 9 357 4086
E-mail: Sam.Tuck@anz.com

Peter Gardiner
Economist
Telephone: +64 4 802 2357
E-mail: Peter.Gardiner2@anz.com

The economic upswing is one thing, but the New Zealand economy is also going through a material transition. We're moving from legacy to opportunity, amidst the demands of rebuilding our second-largest city, housing shortages in our largest city, demographic shifts, global wobbles and an overvalued currency. **We present six themes intertwined with this journey. A common sub-theme is the heightened importance of the microeconomic story.** We're optimistic about New Zealand's medium-term prognosis, amidst a very elevated risk profile across the global economy.

THEME 1: CHANGE IS THE NEW NORMAL

There is greater performance variability across and within industries when structural forces collide with cyclical ones. A nimble and fast-adapting education sector will be critical. Leadership needs to trump populism. The microeconomic agenda – both at the firm and policymaker level – will be key. Microeconomics always matters; it matters more when the economy is navigating fast-moving structural tensions.

THEME 2: LOCALISED FOCAL POINTS

We are eyeing seven "local focal points" (beyond dairying) over the coming year. Structural metrics – what are the "binge indicators" telling us? The NZD – will it fall? The Christchurch rebuild – is a post-rebuild hole looming? Inflation – where is it? Thinking beyond China – many eggs in many baskets? Auckland housing – how worried should we be? Net immigration – how long will this continue?

THEME 3: THE TREND IS YOUR FRIEND

Growth may have peaked, but the trend for NZ.Inc still looks favourable. Key reasons to be optimistic of solid trend growth include improving productivity, rising capital intensity, unlocking growth from areas of advantage (including an abundance of natural resources), growing signs of a more tech-savvy economy, a well-functioning political system, greater signs of execution on opportunities across the tradable sector, a complacency virus at bay, and a sound microeconomic agenda.

THEME 4: DAIRY OUTLOOK

Low dairy prices dominate as a key downside risk for New Zealand. We project milk powder prices to recover to around US$2,800-$3,000 per tonne by mid-year and then US$3,300-US$3,500 per tonne by early 2016. This means a farm-gate milk price of $4.35/kg MS in 2014/15 and a soft opening price in May of around $5.75/kg MS. Cash-flow will tighten dramatically in H2 2015. It will necessitate a cut to capital, core and discretionary expenditure to break even and avoid a debt blowout. That will create some issues across the economy, but it looks manageable.

THEME 5: LIQUIDITY VERSUS FUNDAMENTALS

Offshore risks abound but one will dominate: the prospective start to the Fed normalising US monetary policy, and the impact that process could have on both liquidity-driven asset values and regions that leveraged heavily during the era of incredibly low rates. While the BoJ and ECB are still expanding their balance sheets, it is the Fed that is ultimately key. Asset valuations and investment thematics must morph away from liquidity and towards the economic fundamentals as policy returns to semblances of a more normal setting. We expect the path for policy normalisation to be haphazard with significant volatility and a strong potential for dislocation.

THEME 6: ADDRESSING INCOME INEQUALITY

A degree of inequality can be expected (and is necessary) in any market economy. However, rising income inequality dampens economic mobility, reduces education standards, and makes an economy less flexible. Rising social tensions can also lead to political instability. There are good economic reasons for addressing inequality. New Zealand looks to be pushing a number of the correct buttons but has a way to go. Job creation, raising educational achievement, and encouraging flexibility across the education sector need to be at the epicentre of a multi-pronged strategy.

KEY THEMES FOR 2015

SUMMARY

This paper outlines some key themes we believe will influence New Zealand's economic prospects over the coming years. While economists and commentators often focus on macroeconomic variables – interest rates, the currency, commodity prices, employment, house prices and the like – there are often deeper thematics that reside in the background.

Key thematics we are eyeing include:

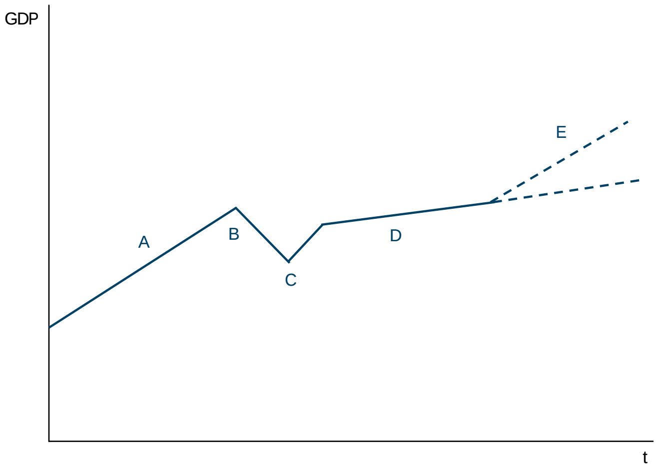
- **Change – the new normal;**
- **Localised focal points** – a host of considerations to eye;
- **The trend is your friend** – trend growth is higher courtesy of both the appreciated and the under-appreciated;
- **Dairy** – the key localised downside risk;
- **Liquidity versus fundamentals;** and
- **Addressing income inequality** – elongating the expansion further.

New Zealand is firmly into an economic expansion. Good times are here. However, **the good times mask frictions and tensions.** Growth may have peaked, but the economy is moving from a high growth rate off a low base to moderate growth off a higher level. An expansion needs to be managed just as upswings need to be fostered. There are challenges; Auckland housing being one of many. In such an environment, a common sub-theme across all thematics is the heightened importance of the microeconomic story. Leadership needs to trump populism, the policy agenda must be constructive, and firms need to maintain that harder edge. Complacency – a typical precursor to a downturn – needs to be kept at bay.

Our aim in writing this paper is to alert our readers to some of the wider forces influencing the economic outlook. We want to highlight the tensions that exist across the economy. New Zealand might be in a sweet spot at present, but the repercussions of the global financial crisis (GFC) and interplay of complex structural forces will continue to be felt for years.

The New Zealand economy is still going through a material transition. We're moving from legacy to opportunity, amidst the demands of rebuilding our second-largest city, housing shortages in our largest city, and an overvalued currency. Part of our legacy is a weak national balance sheet. We have champagne tastes, but for a long time have generated beer income. Opportunity centres around connections to the fast-growing Asian region and other emerging markets, inroads in the free-trade arena, utilising New Zealand's abundant natural resources, businesses being fighting fit with plans in place to grow, and pulling it together with that "number 8 wire" mentality (innovation). While the changes are economic, including massive amounts of resource shifts, they also involve altering human behaviour.

FIGURE 1. A STYLISED RECENT ECONOMIC HISTORY



We can stylise what New Zealand has gone (and is still going) through into five stages.

- **Borrowed growth (from the future) – stage A.** An under-leveraged balance sheet in 1990 was replaced by a heavily leveraged one by 2008. The economy was on steroids.
- **The inevitable purging and correction process – stage B.** Welcome to the GFC.
- **Upturn – stage C.** Recessions are followed by recoil. This has happened locally, but not across the board globally (i.e. witness Europe). Deleveraging curtails the ability of normal pro-cyclical forces to propel the economy.
- **Transition and execution – stage D.** We settle into an economic expansion. The slope of D is less than A. We can grow during the expansion phase – but not as fast. The piper must be paid.
- **Promised land (we hope) – stage E.** Imbalances are finally purged. Choices in the transition stage bear fruit. We either see stronger and better economic performance, or not. And let's not forget it will be harder for New Zealand to grow as fast in the future because the population is ageing and this means slower growth for the labour force (15 to 64 year olds are expected to shrink as a proportion of the resident population over the next 25 years). To offset this, **you need to be doing things not just smarter, but *a lot* smarter.**

KEY THEMES FOR 2015

You can see divergent paths around the globe. New Zealand is now well into the transition and execution phase. By contrast, Europe is yet to experience a material upturn.

It's a potent combination when you try to move from legacy to opportunity, while addressing certain necessities (i.e. a city rebuild) and realities (high NZD, global challenges) along the way. And we're facing a time limit; demographic challenges are pending. One key lesson from the past few years is that central banks can only take you so far. The ultimate drivers of growth come from microeconomic facets and what people, businesses and policymakers do themselves. **Buckle up, because it promises to be an interesting ride.**

THEME 1: CHANGE IS THE NEW NORMAL

The upshot: There's a wide array of cyclical and structural forces shaping the outlook for New Zealand, including the interplay of monetary policy and fiscal policy, altered consumer attitudes to spending, shifting demographics, altering trade patterns and heightened volatility and technological advancement. Secular forces are growing in relevance and speed of advance (i.e. technology). This creates frictions and tensions which need greater active management by both policymakers and businesses. There is higher performance variability across and within industries. A nimble and fast-adapting education sector will be critical. Leadership needs to trump populism. The microeconomic agenda – both at the firm and policymaker level – will be key. Microeconomics always matters; it matters more when the economy is navigating structural tensions.

The New Zealand economy looks okay on numerous levels. The last technical recession was in the second half of 2010; the level of real GDP has risen 11% since then. The unemployment rate has dropped from over 7% to 5.4% in just two years. The economy is entering its fifth year of expansion. Productivity levels are up and inflation is low.

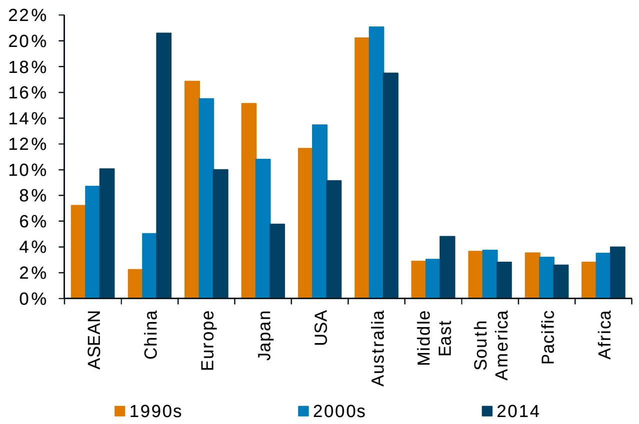
The economy still has its share of issues. Real GDP per capita is only 6% above 2010 levels; wage growth is still subdued, and unemployment is high in some segments. It's taking time for the "trickle down" to take hold. The household savings rate is now positive but is still low, and net external debt is still high – though both are better than they were five years ago. House prices are overvalued – and strongly so in Auckland. The potential for the market to scream away further had been nipped in the bud via the higher OCR and high-LVR lending restrictions, but borrowing rates are now nudging lower again on global nervousness, pouring petrol on to the fire. New Zealand may be hugely reliant on offshore savings, but regulatory changes like the core funding ratio regime and required lengthening of the term of bank funding have been brought in to mitigate vulnerability to changes in global credit markets. Credit growth is tracking below the rate of nominal GDP; that's deleveraging, albeit slowly. It's akin to managing some unruly children, as opposed to reining in someone who is completely off the rails.

We can point to both conventional elixirs of growth and challenges going forward: the elevated terms of trade, the boost from migration, the construction boom, and supportive financial conditions. These are going head-to-head with restrictive fiscal policy, a high NZD, a national balance sheet that won't allow a good old-fashioned spending free-for-all, and falls in dairy prices. Solid growth remains in prospect.

That picture is clouded by changes that are manifesting on a number of levels.

- **Demographic issues are coming more and more to the fore.** People are living longer. Male life expectancy at birth has risen from 74 in 1980 to 79.3 today. The current ratio of 5 workers per retiree is expected to decrease to just over 2.5 by 2061. This will increase the tax burden and lead to skill shortages. The medical sector will find both opportunity and challenge in this dynamic. We as a nation need to have a serious chat about that retirement age! But there are wider issues including succession for many businesses (and particularly regions) too.

FIGURE 2. DESTINATION OF NZ'S EXPORTS, PERCENT OF TOTAL



Source: ANZ, Statistics NZ

- **Trade patterns are evolving.** New Zealand was the first OECD country to sign a Free Trade Agreement with China (in 2008). Partly as a result, New Zealand's China-bound exports have catapulted from between 2-5% of total merchandise exports over the previous two

KEY THEMES FOR 2015

decades, to 20% of exports in the past 12 months. Growth in market share to the ASEAN group of nations and the Middle East has also lifted, while our traditional markets (the UK, Japan and the US) have tailed off. The next hotspot to watch, South America, is waiting in the wings. These are fundamentally different markets with different consumer preferences and tastes. China is now New Zealand's largest inbound tourism market; their tastes differ from traditional markets.

- **Economies' speed limits have shifted, with material implications for the composition of global growth, incomes, wage growth and expected investment returns; all will be lower.** A leveraging tailwind has been replaced by a deleveraging headwind. That's payback for prior largesse. Some economies are failing to embrace reform (i.e. parts of Europe) which only exacerbates challenges. New Zealand has fared better; our potential growth rate dipped post-GFC but has now recovered lost ground (refer Theme 3); that's a positive signal for living standards going forward.
- **Technology is advancing rapidly.** Consider a few examples. Uber removes the need for staff in central booking offices. Self-driving trucks and cars are a challenge to the transport workforce. Alibaba allows small businesses to connect with manufacturers the world over (even for smaller order runs), cutting out the "middle-man". The rise of 3D printers looks to revolutionise local and customised manufacturing – an example being custom prosthetics. Internet shopping and the technological revolution have challenged the CD store, is threatening bookstores, and is now moving further into the retail chain. It's not just blue collar jobs under threat. IBM's Watson (the artificial intelligence "computer" of Jeopardy fame) is on its way to becoming the best medical diagnostician in the US. The big data revolution is putting an army of consultants out of business, as it is possible to analyse the entire data set (not just a sample), making targeted productivity improvements and real-time feedback possible. Generally, technology is increasing the productivity of the most skilled in their respective professions, while reducing the need for the "bottom 50%". Other jobs will no doubt arise that are currently unthinkable at present. Who would have thought ten years ago that mobile game development was a not only a viable career, but a lucrative one; that all big companies would need social media teams; or that bloggers would often control the news? Parents need to be thinking long and hard about how technology, artificial intelligence and robotics will impact the employment opportunities for their children.
- **Global inflation trends are subdued.** Deflation risks abound.
- **People are more cautious.** Borrow-and-spend style growth is being replaced by living within one's means. You can see subtle shifts across the economy; formal measures of saving have lifted, but also partial indicators of the same. KiwiSaver appears more embedded than ever. The economy can now have a more rational debate about lifting the retirement age (it's not about to happen soon but there is at least more debate and call for it). We're seeing similar nuances globally and the ramifications are immense. Globally, a lot relies on the US consumer. The US consumer's ability to drag the global economy along is diluted if they are experiencing structural change too, as we suspect.
- **House prices are surging, but retailing is not.** Retailing remains a tough gig across the country despite falls in the unemployment rate, rising incomes, elevated consumer confidence and rising asset prices. A restrained consumer is essential if New Zealand's building boom is to be accommodated without blowing out the external accounts or lifting inflation.
- **Some regions and nations get it, and some don't.** Micro is the new macro. Central bank intervention can only take you so far. Witness Europe, which is in desperate need of an accident to drive an appetite for change and reform. We suspect they'll get one.
- **2015 will bring a lot more volatility to contend with.** The VIX index (which measures S&P equity volatility and is a proxy for global risk) has risen sharply in the last two months; that's telling us something about the conviction (or lack of it) around the global scene. Pick your economic challenge. Ukraine, Russia, Middle East, Europe, emerging markets including China, US, leverage in the oil sector, and so on. It's typical for the global scene to be buffeted by an array of forces but this array is now a swarm. We seem to be jumping from hot spot to hot spot, all amidst the belief that central bank policymakers offer indefinite salvation in the form of interest rates being lower for longer. What happens when that steroid loses its efficacy, which is what we are seeing semblances of now.
- **Despite recent falls, the NZD is still trading above conventional estimates of fair value and we expect it to continue to do so.** The yield differential is wide, QE is suppressing the euro and

KEY THEMES FOR 2015

yen, and New Zealand's rock-solid credentials look "rock star-like" compared to others.

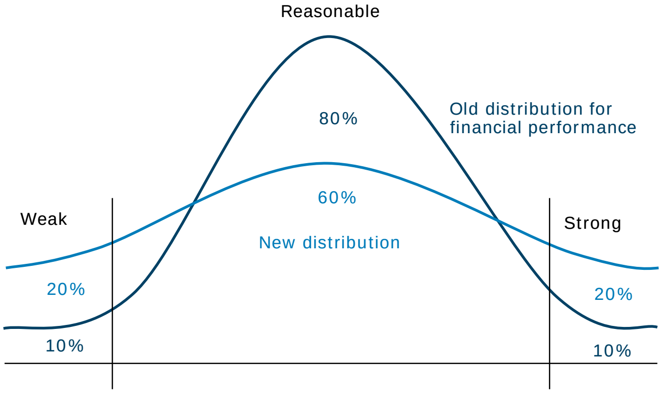
- **Interest rates are lower than usual and are set to remain so.** Pre the 1970s there was little inflation and interest rates were low. The inflationary burst and battle to tame the beast is looking at present like the historical exception, as opposed to the rule. That has huge implications not just for borrowers but for savers too.
- **Asset bubbles are more relevant.** Prudential policy is the new realm for central banks. Market forces alone can fail.
- **Soft commodity prices have gone up, down, and sideways but are still generally very elevated.** The same applies for New Zealand's goods terms of trade. However, there is more volatility to contend with and that has major implications for stabilisers such as currencies and monetary policy, which typically act as offsets. And some other commodity bellwethers are showing clear signs of mean reversion. Where are the peak oil theorists?
- **Locally, there are some extraordinary one-offs to contend with, in the form of a city rebuild and Auckland's housing shortages.** Neither have quick fixes, and they offer both cyclical boosts to the economy (and strains) and longer-term secular challenges. That's putting huge pressure on resource allocation.
- **Climate change and biosecurity issues have not disappeared.** Indeed, if anything, the sensitivities and their significance are rising. We can't afford a larger repeat of the Psa crisis in our agriculture sector, when market sentiment is nervous and capital flows are mobile.
- **The Government is being more proactive and surgical with its interventions**; it's neither the ambulance at the bottom of the cliff nor willy-nilly throwing money at issues. Money is being targeted and spent, but with accountability parameters around it.

That's a non-exhaustive list, but it's still long and is testament to the vast array of influences.

This interplay of cyclical and secular forces has major implications for the years ahead.

- **The performance curve within sectors is still shifting; performance is becoming more dispersed.** Retailing is tough, but some manage to flourish while others do not. A string of construction companies folded last year in Christchurch; you can still go bust in a booming industry. Structural changes at the economy-wide level necessitate change at the core business level if firms are going to survive, let alone thrive, no matter what the industry. Microeconomic foundations need to be strengthened, with continued emphasis on doing the basics well, but also greater willingness to adapt to suit the changing environment. Firms need to get more strategic with their future direction. "She'll be right" no longer applies in an increasingly connected and competitive global marketplace. **An average business can look very good in a strong performing economy,** but they are exposed in an environment where secular and cyclical forces collide. A larger gap between strong and weak businesses within sectors portends a lot more consolidation to come across and within industries.

FIGURE 3. THE CHANGING DISTRIBUTION OF FINANCIAL PERFORMANCE



Source: ANZ

- **The same applies within regions.** Witness Queenstown and Wanaka versus Taupo and Rotorua a decade ago and compare them now. The combined guest nights for Taupo and Rotorua for the latest 12 months have dropped 6% from a decade earlier, while the figure for the Queenstown Lakes district has lifted 30%. The wider macroeconomic picture can only take a region (or business so far); ultimately it is the ability to execute around unique points of difference and comparative advantages that determines performance. That requires looking within as opposed to out. Regional development needs to be driven from within regions and not from central government. Central government can be the supporting actor but not the lead one.
- **Leadership needs to trump populism**. That's a tough call when game theory tells us that self-interest dominates group interest. As an investment thematic we favour nations that show more leadership than populism. It's a short list.

KEY THEMES FOR 2015

Leadership drives microeconomic reform, better growth and improving investment returns.

- **Central government needs to be proactive in utilising some of its comparative advantages, including scale and balance sheet.** We aren't talking about swinging right or left, letting the free market prevail or the Government becoming a bigger piece of the economic pie. We're talking about the Government acting more and more in a facilitation role, working proactively with the business sector and community groups. The flow (and accessibility) of information and research will be critical in an environment of change. Governments have more scale than businesses (especially SMEs) here.
- **Heavyweights across New Zealand industry will be important as leaders and some consideration should be given to actively incentivising such businesses to assist "trickle down" dynamics.** Auckland International Airport's investment in tourism, promoting New Zealand and driving international connectivity, supports the airport but also the downstream tourism industry. Any industry needs the heavy-weights to be investing strongly on their behalf; they open gates and doors. But particularly small open economies.
- **The policy agenda needs to be proactive as opposed to reactive.** Proactivity will bring the potential for mistakes but that's better than being behind the curve and playing catch-up.
- **Firms need to do the same.** For firms it's the same old story discussed above; the divergence between the winners and losers will continue to widen, with the winners being those that embrace the constant change that technology brings us, amid heightened tensions across the business cycle. Where once you could cash the "rent check" from your intellectual capital, there is now a clear trend of disruptive innovation that creates new wealth at the expense of rent-seeking behaviour. Ergo, examine how bloggers and social media have disrupted the once powerful news media, and ask the question of how an Uber could disrupt your guild. As Kodak, Nokia and Dell have learned, it's better to be the one doing the disrupting.
- **Tension points need to be managed to prevent steering the economy off course.** Addressing Auckland's housing woes and Christchurch's rebuild stresses top the list. This is occurring, and the growth story is broader than them alone.
- **A nimble education sector is critical.** If the demand picture is evolving quickly so too must the supply-side building blocks of an economy.
- **Have a culture of continued tweaking rather than try to slug the home run.** As the Oakland Athletics proved, it's the team of unlikely athletes that always gets on base that wins the game, rather than a few superstars.

THEME 2: LOCALISED FOCAL POINTS

We are eyeing seven "local focal points" (beyond dairying) over the coming year.

- Structural metrics – what are the "binge indicators" telling us?
- The NZD – will it fall?
- The Christchurch rebuild – is a post-rebuild hole looming?
- Inflation – where is it?
- Thinking beyond China – putting many eggs in many baskets.
- Auckland housing – how worried should we be?
- Net immigration – how long will this continue?

Our answers in brief…

- There is no evidence a hangover is looming though some areas such as housing need watching.
- If it does, it won't be for reasons we like much.
- No, though there will be regional aspects to manage.
- A mix of structural and temporary factors help to explain it; low inflation will be around a while.
- There is no shortage of opportunity for New Zealand, particularly in Asia; we face execution challenges not opportunity ones.
- Auckland house prices are a threat to economic expansion and financial stability.
- Rising departures are expected to return net PLT migration flows closer to historical norms, although risks and uncertainties remain. So long as the economic story holds up – and we think it will – so too will migration trends.

THE BINGE INDICATORS

The New Zealand economy has typically been "rolled" by one of two dynamics:

- A global event; or
- A build-up of internal imbalances and weaknesses that necessitate a purging process.

ANZ

KEY THEMES FOR 2015

Mother Nature can play a role too but doesn't usually dominate the overall economic cycle.

The first risk is very real, and is covered in Theme 5.

The second represents a group of indicators that don't typically make mainstream media commentary, but which are critical in assessing the potential durability of an expansion and the probability of a pending correction. Recall that the New Zealand economy entered recession *prior* to the GFC and the Asian Crisis. Drought and the RBNZ played a role during the latter but the seeds were sown by deteriorating structural metrics; the economy was "primed" for a crunch.

A quick glance through a few key indicators reveals:

- **Household debt is still high but off historical peaks.** It stands at 156% of disposable income compared to 161% in 2007. Household debt servicing, at just over 9% of disposable income, is higher than it was a year ago, but still well below the circa 14% level evident during the GFC.
- **Net external debt has fallen to 60% of GDP from 85% of GDP** at the time of the GFC.
- **The current account deficit has fallen to under 3% of GDP from close to 8% of GDP in 2006.** The annual goods balance has moved from deficit into surplus, with lower credit growth and borrowing costs contributing to a narrowing in income deficits to GDP.
- **Credit growth has generally tracked below the growth in nominal GDP.** Deleveraging has dominated and the household sector in aggregate is no longer using the rising value of housing collateral as an ATM.
- **The household savings rate has been in positive territory since the March 2009 year.**
- **The fiscal accounts are back on track for surplus** after letting the automatic stabilisers work during the downturn and absorbing the up-front costs of rebuilding Christchurch. Net public debt – at less than 30% of GDP – is world class.
- **Inflation is low and productivity is rising.** No need for the RBNZ to be heavy-handed.
- **Banks have successfully lengthened the terms of a large proportion of their funding**, making the New Zealand economy less sensitive to capital outflows and variation in global funding costs. Around 86% of loans and advances to the domestic financial system are being funded domestically or for terms longer than one year.

Some metrics remain at disconcerting levels – house prices and household debt levels are high in relation to incomes and nationwide household saving is low.

There are still some concerns on other levels. The global scene is highly uncertain, and our dependence on trade and overseas capital leaves New Zealand vulnerable to adverse external events. Domestic twin risks dominate, namely house prices – particularly in Auckland and the concentration of debt in the dairy sector. House and land prices are high in relation to incomes, with the economy and financial system vulnerable to abrupt falls in asset values. Potential catalysts include a deteriorating outlook for incomes courtesy of an aggressive turn in the global scene (we are watching Asia and Australia), or a sharp move higher in (currently low) residential and rural interest rates for borrowing.

On the whole, though, one must conclude that the New Zealand economy is in better shape, structurally speaking, suggesting that the party can rock on a little longer. But equally there are aspects that require continued attention, and possibly active intervention if pre-2008 style behaviours resurface.

THE NZD – HARD TO GET TOO BEARISH ABSENT A GLOBAL EVENT

One "fundamental" matters in regard to the NZD; it is the general outlook for the economy, and it still looks okay. While commentators can point to lower commodity prices as justification for the NZD moving down, that is only a **necessary condition and not a sufficient one.**

Strong economies don't tend to have weak currencies. Strong net migration, high domestic confidence, an improving housing market, and increasing labour market utilisation are supporting the NZD. Growth is slowing, but from an above-trend rate towards trend; 3% growth is not something to be sniffed at.

Courtesy of best-in-class yields and a solid growth outlook, the NZD will remain supported during times where global drivers are on the back foot. However, yield and economic growth are a well-trodden path and a well-known story. As recent falls in the AUD and NZD illustrate, yield and growth are not always enough to stem currency declines when volatility and uncertainty is high.

Potential downside risks to the economy – and thus the NZD – continue to dominate global market thinking. The candidates are pretty clear; dairy prices have halved, the terms of trade are in

KEY THEMES FOR 2015

retreat, and the RBNZ is repeatedly saying the NZD is unjustifiably and unsustainably high. And they have now stated that rates could move up or down.

But until the domestic economy rolls over, a default bid will remain for the NZD.

- **There is a glaring 300 basis point yield differential** with countries accounting for 70% of global GDP.
- **Given the bond ladder** (JGBs 0.25%, German Bunds 0.4%, US 10-year Treasuries 1.8% and NZGBs double that) and a world awash with liquidity, **NZD dips will be bought.**
- **Rock-solid economic credentials are the modern day rock-star.** New Zealand looks stellar compared to peers.
- **New Zealand is showing signs of no longer being a hi-beta play on the global scene.** Suddenly NZGBs have become defensive plays and the New Zealand equity market is holding up well vis-à-vis global peers and ructions.
- **Dairy prices are down but the terms of trade are still elevated.** And when we eye the relative paths over the medium-term for the price of butter versus TVs, steak versus cars, and seafood versus clothing, we remain bullish on the trend for the terms of trade.
- **There is a secular story to be mindful of.** As growth in China rotates from investment to consumption so too do capital flows. That's NZD/AUD supportive.
- **Success comes with a catch.** The NZD is overvalued but the economy has coped. New Zealand is starting to stand out as a poster child in the post-GFC era. The microeconomic platform is being put on a pedestal internationally. Amidst cyclical volatility in the NZD, capital will still be biased towards New Zealand.

And so we have a central scenario of elevation for the NZD. It'll move down against the USD courtesy of the USD heading up, but it's difficult to get bearish against other currency pairs.

TABLE 1: THE CURRENCY BEAUTY CONTEST

Category	NZD	AUD	USD	EUR	GBP
Economic Growth	3.2%	2.7%	2.7%	0.8%	2.7%
Annual Inflation	0.8%	1.7%	0.8%	-0.2%	0.5%
Policy Rate	3.50%	2.50%	0.25%	0.05%	0.50%
10yr Bond Yield	3.2%	2.5%	1.7%	0.3% (GE)	1.4%
Unemployment	5.4%	6.1%	5.6%	11.5%	5.8%
C/A Balance % GDP*	-5.3%	-4.1%	-1.7%	3.1%	-4.6%
Budget Balance % GDP*	0.7%	-2.0%	-4.3%	-2.3%	-4.4%
Govt Net Debt % GDP*	5.3%	5.4%	85.9%	68.5%	65.9%
Overall Rank	1st	2nd		Last	
Deviation from Fair Value	5%	-4%	N/A	-11%	-8%

1st place in each category shaded **dark blue**, 2nd place shaded **light blue**, and last place shaded **red**.

Source: ANZ, OECD, Bloomberg

All this is subject to the huge caveat that the global scene remains stable. That may seem like a heroic assumption but we're not into picking black swan events. **Previous shakeouts in the NZD have been linked to global events.** Any big move over the coming years will be driven by the same. **All eyes are on China.**

NO POST-CHRISTCHURCH REBUILD HOLE

The economy – and particularly the Canterbury region – is being supported by earthquake rebuild-related activity.

There is a growing perception that the economy is then set to fall into a hole as the rebuild stimulus fades. The argument is logical enough. While rebuild activity will last another decade, the peak in the profile is rapidly approaching, and as this fades, the incremental boost to growth becomes a drag.

While the latter fact is a mathematical truth, **we disagree regarding the impact on the aggregate economy for a number of reasons.**

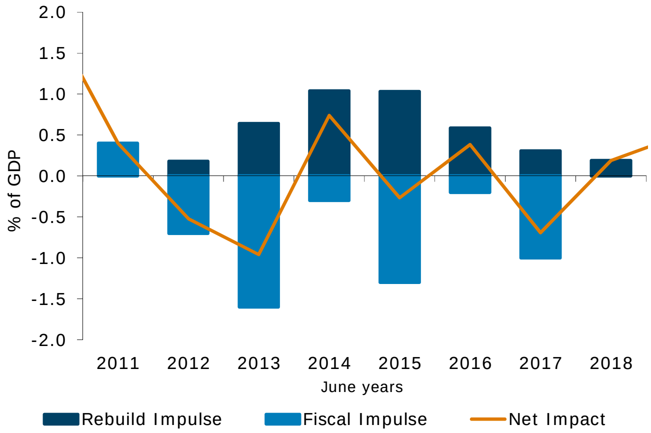
- The stimulus peak from the rebuild is just under 2% of GDP, but this has been steadily building over four years, and the stimulus will similarly fade gradually from its forecast peak in 2017. We suspect the rebuild will take longer than forecast, but irrespective, people know it will peak in the coming years and this gives them time to adjust and plan accordingly.
- The Christchurch rebuild stimulus has been offset by contractionary fiscal policy. There are regional and sector facets to this. But fiscal policy will not remain contractionary indefinitely; politicians won't keep their hands off the loot.

KEY THEMES FOR 2015

- The scaling up in irrigation-related development across the Canterbury Plains will also provide a boost for the region.
- A host of the Canterbury rebuild-related work is necessary for replacement demand impetus to occur: tourism, education and CBD activity being examples. As the city "recovers" (is rebuilt), activity in these areas should recover too.
- The rebuild is placing pressure on aggregate demand; the unemployment rate in Canterbury is a shade over 3%. Some fading in momentum is to be expected given supply-side constraints. Fading momentum is not a downturn.
- Christchurch is chewing up resources that could otherwise be devoted to other activities. These resources can be redeployed ex-post, boosting growth elsewhere.
- Various automatic stabilisers will adjust as appropriate. As activity from the rebuild fades, so too will (some) pressure on the OCR (and indirectly on the NZD).

Within this aggregate story, there will be regional-specific aspects to manage. Waning rebuild activity is Christchurch-specific; less contractionary fiscal policy is a national phenomenon. Resources will therefore need to adjust. The onus is on local policy-makers and businesses to get alternate drivers of growth into place in a timely fashion.

FIGURE 4. REBUILD VERSUS FISCAL CONSOLIDATION
First round impacts



Source: ANZ, RBNZ, Statistics NZ, Treasury

For Christchurch to flourish post-rebuild, key microeconomic facets and sectors need to be firing. The likes of the education sector, manufacturing, agriculture, tourism and the port (we note growing competition from Timaru) need to be performing well. **Identifying and unlocking alternate drivers of growth need to be at front and centre, and we can see that on some levels.** It'll be a failure to drive broader regional activity that will determine the post-rebuild bog for Christchurch (or not), not waning rebuild activity itself.

INFLATION – A FOOT IN EITHER CAMP

There is a strong likelihood annual headline CPI inflation will fall into negative territory over early 2015, and it will certainly be below the bottom of the RBNZ's 1-3% band over the year.

Having such a low rate of inflation is not entirely surprising, as it is a global phenomenon. Declines in oil prices feature heavily; falls in petrol prices alone are enough to knock around 1% off headline inflation. However, forecasters (including ourselves) have a track record of over-estimating inflation in recent years. Back in the December 2012 *MPS*, for example, the RBNZ has projected that CPI inflation would end 2014 at 1.8%, with the forecast consensus generally higher than that. **Annual CPI inflation has been below the midpoint of the inflation target for the past three years, with sub-2% core inflation for the last four.** With the New Zealand economy posting reasonable rates of growth in this period, **the question remains whether the current spate of low inflation reflects transitory or more enduring features.**

Of the deflationary factors we can identify, falling oil prices, the high NZD, euro and yen weakness (which should reduce capital goods and car prices), and net migration boosts to labour supply fall into the category of "temporary but sticky". **There are some more enduring influences too**, with higher productivity containing unit labour costs (at least in New Zealand), excess manufacturing capacity globally driving disinflationary forces, household restraint, low rates of credit growth relative to incomes, better-anchored inflation expectations, and rapid technological change. The latter is growing in significance. Witness Uber (competition in the taxi market), booking hotels over the internet, the prevalence of online shopping – price comparison has become significantly easier, and margins are shrinking as a result. See Theme 1: Change is the New Normal.

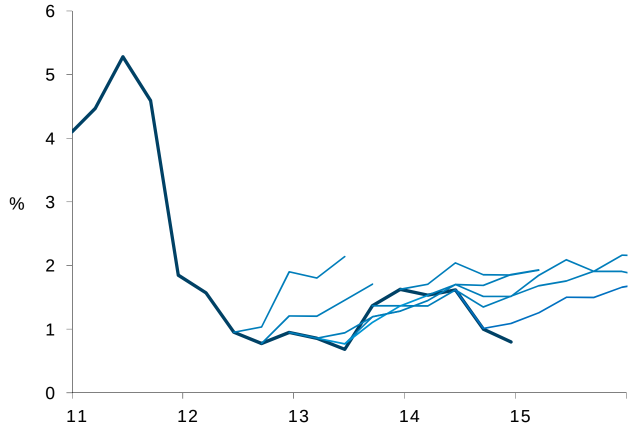
Surveyed measures of inflation expectations have eased and remain clustered around the midpoint of the inflation target; that's helpful. **Pockets of pricing pressure remain**, most notably in the construction sector, but to date they have not filtered through into more generalised price lifts – a welcome dynamic.

Our projections assume both transitory and enduring influences continue to go head-to-head; we're taking the classic two-handed economist approach on this. The proof, however, is in the

KEY THEMES FOR 2015

pudding, and the longer inflation remains low, the more pressure will build for a rethink over the relationships between the real economy and inflation.

FIGURE 5. CPI INFLATION FORECASTS
***MPS* Projections**

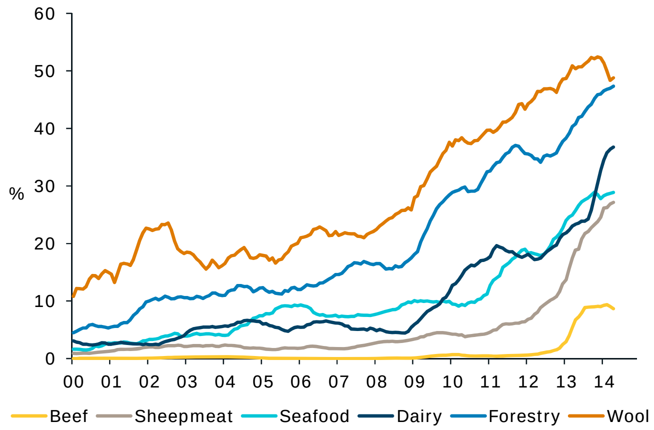


Source: ANZ, RBNZ, Statistics NZ

THINKING BEYOND CHINA

The speed of the increase in New Zealand's trade connectivity with China has been staggering. Merchandise exports have been compounding at 23% per year since the New Zealand-China free trade agreement was signed in 2008. China now takes half of our wool and forestry exports, and its share of our seafood, dairy, sheep-meat and beef exports have risen sharply. China is now our second-largest source of inbound tourists.

FIGURE 6. SHARE OF NZ'S TOTAL MERCHANDISE EXPORTS SENT TO CHINA



Source: ANZ, Statistics NZ

With opportunity and connectivity comes vulnerability – either through adverse internal market developments (eg. regulatory risk, such as recent changes in the infant formula arena) or wider macroeconomic forces (i.e. a material turn in the Chinese economy). The latter represents a significant source of risk over the coming years as nations that built up considerable leverage during the era of low interest rates adapt to higher US rates as the US Federal Reserve starts to normalise interest rates settings (refer Theme 5).

While China is now New Zealand's largest merchandise export market – at around 20% of total exports – the concentration risk argument can be overplayed.

- **China is a huge market**; it represents 19% of the global population and 12% of global GDP. They should always be material as a trading partner.
- **New Zealand is pursuing an aggressive free trade agreement (FTA) agenda, which is opening up new trade opportunities.** In fact New Zealand already has FTAs in place with 28% of the global population and 18% of global GDP. Additional FTAs currently under negotiation cover a further 43% of global GDP and 30% of the globe's population. That's a big playground. Alternative opportunities abound.
- **New Zealand has hardly been standing still in other markets.** In fact, over the last five years double-digit growth in merchandise exports has occurred for 46 of the countries New Zealand trades with (22% of total). We export more than $100 million worth of goods and products to 43 countries each year. Exports into many of these countries, such as Bangladesh, Brazil, Turkey, UAE, Peru and Chile, have been growing in excess of 20% per annum.
- **We believe many businesses have created, or are in the midst of creating, propositions that can be easily transferred to alternative markets if things go awry in China**. While China is currently the largest market for many of these propositions, it doesn't mean other markets won't rise to match – or even out-compete – China in the future.

However, New Zealand can ill afford to be complacent. One of the dangers of embracing huge opportunities in one market is that you become blinkered to wider developments and other opportunities that are fast developing in other parts of the Asian region (and further afield, such as in South America).

With this in mind, we took a deeper look at the wider Asian region. Data availability is a constraint; nonetheless we've attempted to identify the key characteristics that might make countries attractive export markets for New Zealand-orientated products, and the key obstacles currently holding them back.

KEY THEMES FOR 2015

We selected six broad categories to assess the potential of different Asian export markets using a range of indicators for each. The key was the breadth of indicators we looked at; 29 in total. We didn't focus on population or GDP alone. The key categories were:

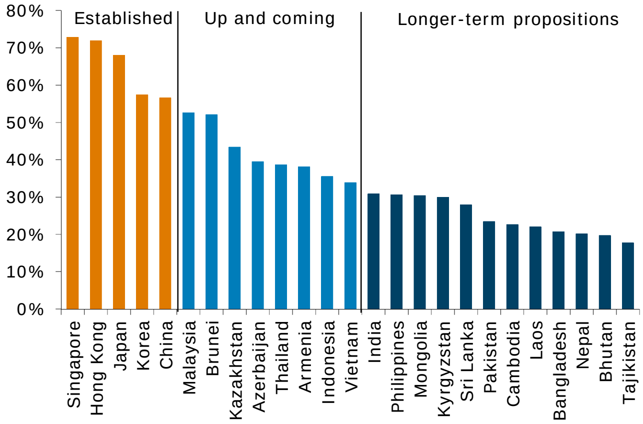
- Food market size and development[1];
- Consumer purchasing power and affluence;
- Alignment with New Zealand-orientated trade;
- Market access;
- Regulatory and political risk; and
- Supply and cool chain development/ infrastructure.

We collected data for 30 countries in the Asian region, reaching the following broad conclusions:

- For food market development and size, Japan was most attractive, followed by China, Korea, Hong Kong and Singapore. Beyond the top five, some of the more interesting up-and-comer rankings were for Malaysia, Kazakhstan, and Azerbaijan.
- The top five for consumer purchasing power and affluence were Singapore, China, Hong Kong, Japan, and – surprisingly – Mongolia.
- Looking at alignment with NZ-orientated trade (i.e. countries that consume large quantities of what we produce, and produce large quantities of what we import) revealed some surprises – the top five being Armenia, Mongolia, Japan, Korea, and Brunei Darussalam.
- Less surprisingly, Hong Kong, Brunei Darussalam and Singapore took out the top three spots in regard to market access, as no tariffs are applied to primary products. They were followed by Indonesia, the Philippines, Malaysia and China.
- In terms of supply and cool chain development Singapore and Hong Kong took the top spots, with Japan, Malaysia and Korea rounding out the top five.

Overall, **the top 5 (of 28) ranked countries were Singapore, Hong Kong, Japan, Korea and China.** Not surprisingly, these are already well-established export markets for many sectors. The **up-and-comers** threw up a mix of a few less well-known nations and some more familiar names. They **include Malaysia, Brunei Darussalam, Kazakhstan, Azerbaijan, Thailand, Armenia, Indonesia and Vietnam.**

FIGURE 7. RANKED ATTRACTIVENESS OF ASIAN COUNTRIES FOR NZ PRIMARY PRODUCTS



Source: ANZ

All up, while much of the focus has been on the Chinese market, New Zealand seems to have opportunities aplenty in the broader Asian theatre too. But it doesn't stop there with other areas, such as South America, likely to become more of a focal point over coming years. This will accentuate New Zealand's time-old problem as espoused by the Chinese President Xi Jinping on his trip down-under late last year: *"New Zealand will have to worry about the fact that there is more Chinese demand than you can possibly supply."*

Taking into account the long-term maths of emerging market demand, modernisation of the food chain in new markets, westernisation of emerging consumer taste preferences, opening up of new cultural segments, preferential access to a wide range of markets (including traditional ones), strong business relationships with key multinational foodservice and retailers – it all looks pretty impressive to us.

With the demand side taken care of (in trend terms at least – these countries do have business cycles), what will matter is the execution of chosen strategies by businesses to extract the maximum value from the opportunities available. There will also need to be strong support from government and the regulatory environment. There have been lots of encouraging signs from many sectors, with a number of success stories, but what is required is a continuous loop of strategy development, execution and refinement in a world that changes rapidly. We cover some encouraging developments in the tradable sector on page 19.

[1] Examples of indicators used for food market size and development included per capita expenditure on food, catering consumer expenditure per capita as an indicator of the development of the foodservice channel, and the urbanisation ratio, which is usually linked to consumer affluence, more westernised consumer preferences, the prevalence of food retail and foodservice providers, and concentration of potential customers.

KEY THEMES FOR 2015

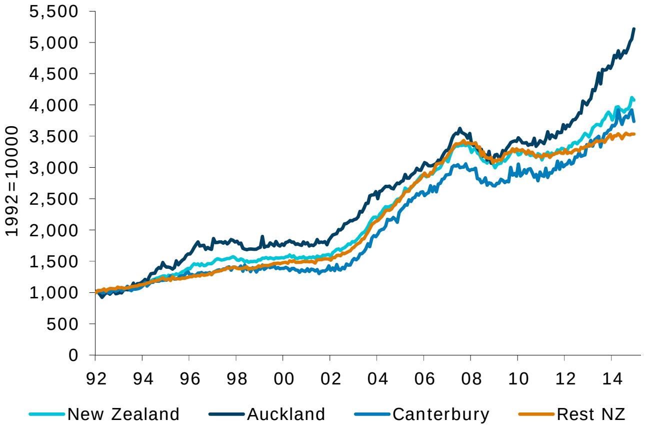
AUCKLAND'S HOUSING WOES

Auckland house prices have risen by more than 40% over the last three years – compared to around 25% in Canterbury and less than 10% elsewhere. Auckland median house prices are around eight times median household incomes as compared to under six for other New Zealand centres.

A combination of factors look to be behind Auckland house price growth:

- **Large cities globally have seen surging price growth;** witness London, New York, Sydney, etc.
- **Urbanisation and higher population growth** – Auckland's urban population has increased by roughly 50% since 1991, as opposed to 17.5% for the rest of the country. Subnational population projections suggest Auckland's population growth will continue to outstrip other regions, approaching 2 million people by 2031. Auckland is likely to account for around half of the 20,000 additional households in New Zealand per annum over the next 20 years. This cumulates to big numbers – remember the close to 400,000 additional housing units required over the next 30 years cited in the Unitary Plan for Auckland.
- **A concerted period of underbuilding.** Building consents per head of population decreased markedly in Auckland following the building boom years of the mid-2000s. The number of building consents issued for new dwellings in Auckland has more than doubled since its early 2009 trough, but is still only a shade higher than historical averages. Our regional housing demand and supply estimates are approximate, but they continue to pinpoint a housing shortfall in the Auckland and Canterbury regions. Within the existing dwelling market, inventory levels are very low in relation to sales (around 2 months on average compared to historical norms of closer to 7) – a key factor underpinning prices.
- **Poor planning and execution.** You don't get sustained periods of underbuilding for no reason. If there is not much land available, the price goes up. And high-priced land means it can become uneconomic to build affordable houses. It isn't just about zoning. It's also about putting time limits on development to stymie land banking by investors.
- **Regulation.** Bring on the reform of the Resource Management Act (RMA).
- **Tastes.** You can't just blame the market for not addressing shortages. Many people now want and expect bigger houses, rather than starting with a smaller one in a cheaper suburb. It's not exactly reasonable to complain it is harder to buy a first house if that first house is twice the size our parents' was.
- **Attitudes.** Auckland needs to go both up (high-rise and more intensive housing) and out (i.e. more land). This brings us to the NIMBYs, where self-interest interferes with group interest.
- **The investor market.** The fact that the rents in Auckland have not yet moved up sharply (though admittedly anecdotes are turning) tells us to be wary of the supply-shortage theory as dominating too far.
- **The Asian and global factor.** Forget the xenophobic hysteria. Auckland has a diverse ethnic mix and it's impossible to disentangle offshore from residents' purchases. But anecdotally, the demand is strong from offshore. And why shouldn't it be? Property here looks cheap by global comparison, and New Zealand looks a nice place to be amidst global challenges and woes.
- **Costs.** Costs for consenting, land, or construction; all have moved up rapidly. Poor productivity growth across the construction sector hasn't helped either.

FIGURE 8. HOUSE PRICE INDEXES BY REGION



Source: ANZ, REINZ

The situation is now problematic on a number of levels.

- **The more you binge, the greater the odds of a correction** – a risk the RBNZ is alert to, as are we. Housing cycles have been historically closely linked with economic ones, given more than two thirds of measured household wealth is in housing. Recent council valuations placed the value of the Auckland residential housing stock at approximately $475bn, more than twice our nationwide annual GDP.
- **It's driving tensions between Auckland and regional New Zealand**; regions see the

KEY THEMES FOR 2015

Government pouring billions into Auckland (and Christchurch) and ask, what about me? That sort of resentment is not good for stability.

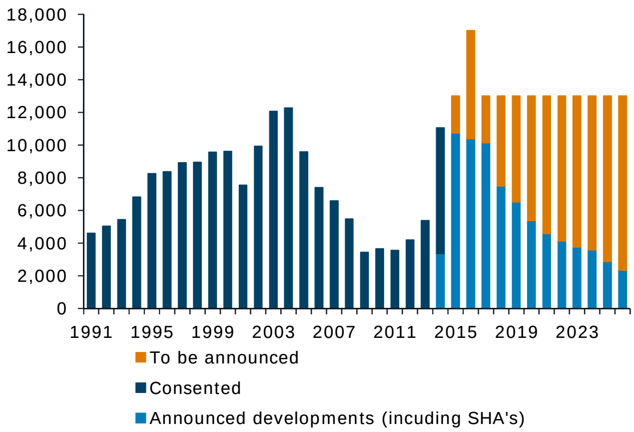
- **The more internalised Auckland becomes with its housing challenges, the greater the risk that the connections between Auckland and the rest of the nation play second fiddle**. The broader economy needs a strong Auckland just as Auckland needs the rest of New Zealand; it's the dominant gateway into the New Zealand story. But that's a catch-22, because for Auckland to flourish and act as the gateway, housing woes need to be addressed.
- **Rising house prices have lifted housing costs in the Auckland region relative to elsewhere.** According to the 2013 Census, Auckland homeowners spent more than 15% of their income on housing, higher than other regions. Close to 60% of Auckland owner-occupied dwellings still had an outstanding mortgage, as opposed to around 50% elsewhere. In 2013 almost half of crowded households in New Zealand were in Auckland. The number of persons per dwelling in Auckland (around 3) is above those of other centres (closer to 2.5).
- **Deteriorating housing affordability in Auckland has coincided with falling home ownership.** In 1986 home ownership rates in Auckland were similar to the rest of New Zealand at (73.9% versus 73.6%). Since then home ownership rates in Auckland have fallen relative to the rest of New Zealand (61.5% vs 66.5% of households owned their home or held it in a family trust by 2013).
- **It's one factor exacerbating income inequality** given the proportion of income now being spent on housing.

The array of challenges and reasons for Auckland's woes mean you can forget about a quick fix, but we are seeing movement.

In response to the 2011 Productivity Commission enquiry into housing affordability, a number of work-streams examining land supply restrictions, paying for infrastructure development, productivity in the construction sector, and costs and delays in the regulatory process have been undertaken. Under the Special Housing Areas Act (2013), development can be fast-tracked (3 months for brownfield and 6 months for greenfield applications), with the council taking a more flexible approach to granting the resource consents necessary for subdivision and development. Recent proposed changes to the RMA are designed to further improve the supply and address the rising cost of building.

Until the Auckland Unitary Plan becomes operative in 2016, the Auckland Housing Accord targeted the creation of 39,000 new residential sections and dwelling consents to the end of September 2016, with targets of 9,000, 13,000 and 17,000 each year respectively. Progress is being made, with close to 8,000 consents lodged and 11,060 new dwellings and sections created in the September 2014 year. More than 80 Special Housing Areas (SHAs) have been created during the first year of the Accord, which are expected to accommodate 43,000 new dwellings, with about the same number of other dwellings already in the pipeline according to MBIE estimates.

FIGURE 9. PENDING DWELLING SUPPLY IN AUCKLAND



Source: ANZ, MBIE

This is a good start, but the lags are long. We are at the early stages of what is likely to be a long road ahead. Dwellings still need to be built, and work on infrastructure (including roads, sewage and schooling) completed. The challenge will be doing this while avoiding the economy blowing an inflationary gasket, and simultaneously ensuring that crucial investment flows toward the productive sectors of the economy are not impeded. Already annual residential construction cost inflation in Auckland is running at 7%, higher than in Canterbury, and the rest of the country.

Putting in place more affordable housing will entail a different construction sector response than has been seen in the past, where new dwelling supply has tended to come in the form of large, expensive dwellings. The demand side will also have to reflect new realities, given that the ageing of the population structure is likely to lead to smaller household sizes. Auckland's housing stock is changing as the city reacts to its growing population and high costs for residential land, with more multi-storey homes and apartments, greater density, and fewer unoccupied homes making the dwelling stock different to the rest of the country. These trends need to continue. New ways could also be found to utilise current shelter in Auckland more effectively. According to 2013 Census figures over half of four-bedroom dwellings in Auckland had 2+ bedrooms spare.

Beyond the obvious policymaker desire to lift the supply of houses, we're mindful of other facets that will need to come together.

- **Market mechanisms are also influential in matching the demand and supply for dwellings, and shouldn't be overlooked.** Census estimates point to a small internal migration outflow from Auckland to other centres (NB: this is distinct from external migration, which does benefit Auckland). Auckland is not a big sucking vortex pulling in the rest of New Zealand at all. Waikato and the Bay of Plenty have benefitted; this tells us that market forces still have a role to play.
- **The proposed reform of the RMA has to have real teeth.** We've seen encouraging broad principles so far but no substance.
- **The construction sector needs to lift its game in regard to productivity growth.** The finger can't solely be pointed at regulations and costs. Incremental improvements such as reusable concrete boxing and more use of pre-fabricated units all help. Perhaps in the future we'll be pouring our houses out of a tube. The technology already exists. In the meantime it would certainly help with construction costs if the average kiwi didn't feel the need to play architect and make their house design unique. But it seems to be in our DNA.
- **Political capital is going to need to be burned** taking on the likes of the NIMBYs.
- **Auckland's challenges are also opportunities for some regions.** There is an opportunity for regions to proactively target Auckland businesses that are aligned to strengths in their regions. **We're for more co-ordination in terms of regional development**, though the key elixirs of regional growth and opportunities need to come from within regions themselves.
- **It's looking increasingly likely we'll see another prudential response targeting the property investor market this year.**
- **Political rhetoric will be strong in regard to offshore buyers too**, though it is very unlikely that this Government will take any measures that would substantially impede the flow of foreign capital.

Solving Auckland's housing challenges is far from simple. You can't point the finger at one catalyst (i.e. shortages) and building more as a response. The challenges are immense. **We're just pointing out that a multi-pronged approach is going to be necessary to at least keep the magnitude of the issues in the orange zone as opposed to the red hot one.**

NET IMMIGRATION

Migration has been a key supporting factor for the economy. Net permanent and long-term (PLT) immigration inflows are expected to peak below 55,000 persons by mid-2015. This is equivalent to around 1.2% of the resident population, the highest inflow since at least the early 1960s.

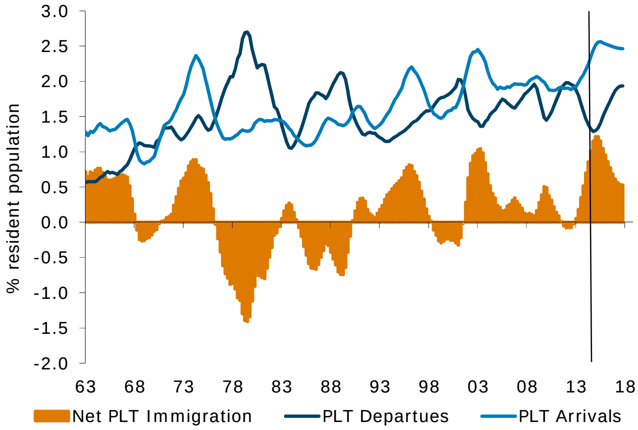
In contrast to flows in Australia, net immigration inflows are highly cyclical in the New Zealand context, and are generally viewed to be a major driver of New Zealand business cycles – although we note that the current strong net migration episode in New Zealand is both a cause and a reflection of relative domestic strength. Migration flows depend on a range of economic, social and legal considerations, both here and abroad.

Net immigration is the difference between two large and volatile numbers. **At present, PLT arrivals currently outnumber departures by roughly two to one.** The high quality of life on offer in New Zealand remains a magnet, with PLT arrivals approaching 2003 and early 1970s peaks as a share of population. However, the major swing variable behind the recent pick-up in PLT immigration has been low PLT departures, with the strong domestic outlook in relation to our trading partners keeping would-be emigrants off the plane. Traditionally New Zealand has tended to act as a spring board for migration inflows into Australia, but net departures across the Tasman have slowed from a flood to a trickle.

The traditional view is that net immigration inflows tend to add more to demand than supply, mostly via their impact on the demand for dwellings. In the **current episode, however, close to two-thirds of the increase in net immigration has come via reduced PLT departures**, which **are generally more geographically widespread and represent people who are closely integrated into the supply of labour**. More than one-quarter of PLT arrivals are also returning New Zealand citizens. Along with high numbers of arrivals from elsewhere, this will help address capacity bottlenecks. **This suggests less of an impact on capacity pressure than would otherwise be the case.** High rates of labour force participation, low rates of wage inflation and a reasonably modest response from the nationwide housing market to strong net immigration support this view, although pressures on the housing stock in some parts of the country (eg. Auckland) remain acute.

While the global scene is fickle, our expectation is that improving prospects for our trading partner economies, most notably Australia, will trigger a lift in PLT departures by the end of the year. Despite this, New Zealand is expected to remain a highly attractive destination for incoming migrants and we expect this to prevent a return to negative rates of net immigration that typically follow large net inflows. **We expect annual net PLT inflows will slow to around 25,000 persons by the end of 2017, the fabled soft landing, although risks and uncertainties remain.**

FIGURE 10. NET PLT ARRIVALS AND DEPARTURES



Source: ANZ, Statistics NZ

THEME 3: THE TREND IS YOUR FRIEND

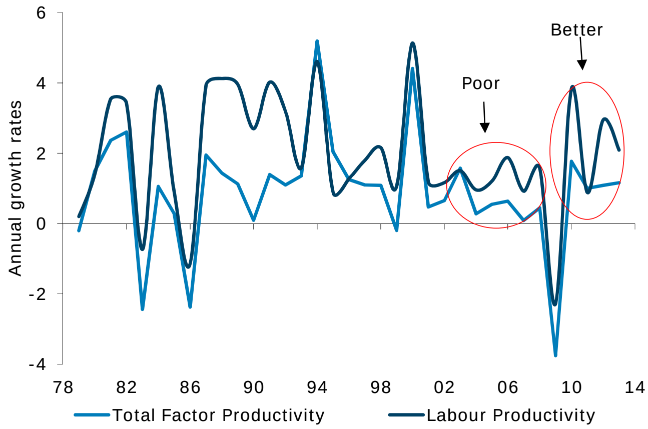
The upshot: Growth may have peaked but the trend still looks favourable. Key reasons for optimism that solid growth lies ahead include better productivity performance, rising capital intensity, unlocking growth from areas of advantage (including an abundance of natural resources), growing signs of a more tech-savvy economy, a well-functioning political system where leadership is dominating populism, greater signs of execution on opportunities across the tradable sector, a complacency virus at bay, and a sound microeconomic reform agenda. Challenges in the form of an easing impulse from migration and demographics are undeniable, and falling dairy prices will cause challenges, but New Zealand's terms of trade are still elevated.

While there are the usual cyclical risks to manage across the economy, it is prospects for the *trend* rate of growth that is key to raising living standards and investment decisions. Sustained lifts in performance over time quickly accumulate. **We're constructive over where we see trend growth.**

We can point to the conventional breakdown of drivers.

- **Productivity growth has improved,** consistent with the feedback we have been getting on the ground. You don't have to wander too far around any manufacturing firm or farm to get a real-time handle on this.

FIGURE 11. PRODUCTIVITY MEASURES

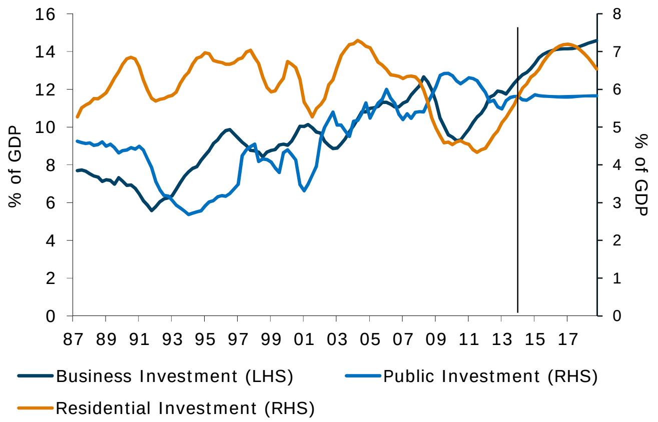


Source: ANZ, Statistics NZ

- **The pick-up in labour productivity of late is likely to be linked to increasing capital intensity,** with growth in the measured capital stock averaging 2.8% pa since 1990 and nearly 3.5% pa since the mid-1990s, consistent with the upward trend evident in investment as a share of GDP. While investment is a cyclical component and a major swing variable, there has been an upward trend evident in business investment as a share of GDP since the early 1990s, which has boosted the productive capital stock. **The capital stock is also evolving.** Close to three quarters of the capital stock is privately owned, up from two thirds in the late 1980s. While the bulk of the capital stock is in the form of buildings, the increasing importance of other investment is emerging. Strong investment has contributed to a trebling of the stock of plant and machinery since the 1980s, with the increasing emergence of other components (eg. computer software). Given technological change, this trend is not unique to New Zealand, with surveyed business intentions suggesting further upside potential, although investment spending is still vulnerable to an adverse shock, both here and abroad.

KEY THEMES FOR 2015

FIGURE 12. INVESTMENT SHARES OF GDP



Source: ANZ, Statistics NZ

- **Prospects are for the terms of trade to remain elevated.** It is certainly true that we are seeing a cyclical correction in the terms of trade, but they are still nearly 30% above long-run averages. Trends still look favourable. We could get technical and go through the positive broad protein demand story globally. Or we can take a shortcut and characterise future terms of trade movements by simply comparing baskets of goods against one another. The question is simple; which good is likely to get relatively cheaper over the coming decade? A pound of butter versus any piece of IT equipment? A kilogram of steak versus a new car? A few fillets of fish versus articles of clothing? New Zealand exports one group and imports the other. We'll bet on the former products over the latter any time, which implicitly leaves us optimistic on medium-term trends in New Zealand's terms of trade and purchasing power.

- **The production possibility frontier is being pushed out by utilisation of the natural resource base.** Recall that back in 2010, the World Bank ranked New Zealand 8th in the world in terms of our natural resource stakes per capita (and Australia a few notches below). We also had the highest holdings of renewable natural capital per person. There are numerous examples of increasing utilisation of our resource endowment – oil exploration (though this may go on hold given the present level of global oil prices!), new irrigation schemes, mining ventures, and the like. In the irrigation space there are plans in place to double the total irrigable land in New Zealand to 1.38 million hectares, which would equate to 12% of total agricultural land. This would be a tremendous boost to productivity, as irrigated farmland generates three times the production of non-irrigated land. New avenues will undoubtedly appear, although there is a balance to be struck between utilising our resource base and safeguarding the environment for future generations.

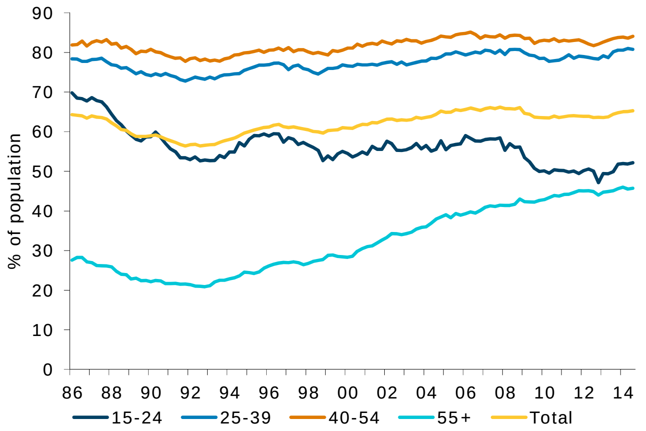
FIGURE 13. IRRIGATION DEVELOPMENTS

- **We're picking the migration inflow to remain strong and above "average".** Our reasoning is simple. Migration doesn't drive the economic cycle, it moves in response to it, giving it greater "swing" and variability. Or put another way, when things are good (bad), migration adds (detracts) further from the growth picture. But it all starts with the growth foundations, and while we can see some economic challenges over the year ahead in terms of the cycle, they look far more manageable than offshore peers.

- **While demographic challenges are real there are also reasons for optimism regarding the supply of labour**, despite the unemployment rate being in the low 5's. Courtesy of strengthening net PLT immigration (much of which is due to New Zealanders returning overseas), annual growth in the working age population is approaching 2% per annum, the highest in a decade. Despite more baby-boomers hitting retirement age, labour force participation is the third-highest on record, boosted by reforms to get more people in the workplace, balance sheet considerations, a healthier older-age workforce and technological change. Labour force participation for the over 55s has doubled over the last 20 years, while falls In unemployment rates for younger workers bode well for future productivity levels.

KEY THEMES FOR 2015

FIGURE 14. EMPLOYMENT RATE BY AGE GROUPS
(Numbers employed relative to working age population)

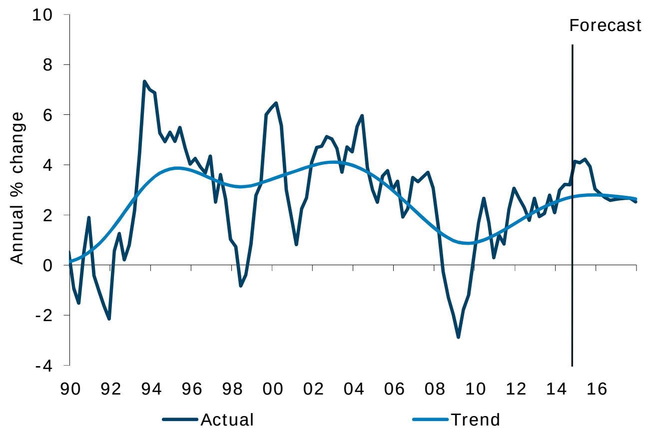


Source: ANZ, Statistics NZ

- **There are emerging signs of a more tech-savvy and innovative economy**. As we discussed in Theme 1, the world is going through a period of profound technological and social change. New Zealand is no different. We have one of the highest rates of internet usage in the world, with the Government funding a program to increase the use of ultra-fast broadband. It holds out the prospect of boosting export earnings and increasing employment; just look at the number of IT start-up firms in New Zealand, the number of business hubs forming (which brings together ideas, business acumen and capita funding) and the considerable potential of New Zealand software firms (eg. Xero). Smartphones, iPads and other wireless devices are a part of everyday life for ordinary New Zealanders and have helped lower search costs and increased the amount of information available to New Zealand households, businesses and Government. The productivity-enhancing impact of this new technology is hard to measure, but the anecdotes we are hearing are positive. The adoption of best-process techniques from overseas is generating tangible benefits here, but we are still at the cutting edge of development locally. Think how successful Weta Workshop has been, look at America's Cup technology (although it did not deliver the ultimate result we all hoped for), and see the agricultural innovation commonly displayed at Fieldays.

We've kept our analysis of the conventional factors brief because we believe there is also a huge array of unappreciated dynamics at work. They reflect a more subjective reading of the tea leaves and anecdotal evidence. The latter may appear a bit woolly, but frankly the New Zealand economy is the accumulation of the decisions of 4.5 million people. By the time their collective actions appear in the hard data-flow the horse has bolted. Economists need to keep up to play on subtle shifts in behaviour. They add to the macro-vibe.

FIGURE 15. ACTUAL AND TREND GROWTH



Source: ANZ, Statistics NZ

THE MICRO AGENDA IS ROBUST

Microeconomic issues are often overlooked when assessing the macro-economy, but the economy is the summation of its parts. Economists can point to heaps of factors that influence growth, though the problem with some, such as investment and labour supply, is that they are growth! It's all pretty basic and starts with getting the right incentives in place; this drives the right behaviours. It's not just policymaker 101, but management 101; a poor set of KPI's (key performance indicators) for a staff member will drive sub-optimal behaviours. New Zealand has already done a lot of the heavy lifting in terms of getting a system that is world class at the macro level. We rank at the upper end of the OECD in terms of literacy, attainment of secondary and tertiary education (though there are real issues over gaps between the top and bottom students), transparency of our institutions, and law and order. Access to childcare has vastly improved, more than half of the population has now enrolled in KiwiSaver, and reforms to the RMA will help address infrastructure bottlenecks. In the 2014 and 2015 World Bank Group surveys, New Zealand ranked second in terms of the ease in doing business out of 189 economies[2]. However, we've got some clear challenges in key socio-economic groupings too.

The past few years, and the outlook for the next few, are notable for the vast array of initiatives being pursued. Here are just a few examples.

- **Tax rates.** Continue to move these lower where possible.

[2] www.doingbusiness.org/data/exploreeconomies/new-zealand

KEY THEMES FOR 2015

- **KiwiSaver.** It is now ingrained in the national psyche. Capital markets are deeper courtesy of SOE sell-downs. The regulatory framework has been tightened.
- **The Super or "Cullen" Fund. Stellar returns.** Some clever investment in New Zealand assets. Resumed contributions can't come soon enough.
- **The labour market.** The 90-day trial period and the introduction of probation period will enhance labour market flexibility and boost prospective employment as they offer employers the option to "try before they buy".
- **ACC.** Levies have gone down – a lot (it's equivalent to a sizeable tax cut), and there are more falls to come. That's telling us something about the management of the "tail" and liability.
- **Education.** Investment in early childhood education has been ramping up for a decade. A year ago the Government announced it would invest an extra $359m in funding over the following four years to help raise student achievement. An investment approach is being taken to improving teaching practices by enabling the most effective teachers to share their expertise across multiple schools. More funding is going to the sciences over the arts.
- **Transport.** The previous Government inherited a decade of under-investment in key infrastructure and moved to address it. In recent years the current Government has moved to an outcome-focused investment approach based on a "one network" framework to apportion transport investment according to where it will do the most economic good to the nation, rather than what might be considered "fair" for each region – or where it will buy the most votes. The roads of national significance programme (a key part of the larger National Infrastructure Plan) is one of New Zealand's biggest ever infrastructure investments.
- **Social welfare.** Extensive reform such as requiring solo mothers to seek part or full-time work has had the side effect of raising labour force participation. There is more targeted intervention to make sure at-risk kids don't fall through the cracks (i.e. the 2000 at-risk kids mentioned in the 2014 Budget). The CEO of the Ministry of Social Development has a KPI to reduce welfare as opposed to manage it. That's small but signals an intent to drive different behaviours.
- **Housing.** Multi-faceted solutions that encompass both demand and supply side aspects are being pursued to tackle a complex housing shortage and affordability problem.
- **Water.** The national bottom lines and revised policy for freshwater are busy being debated and implemented by regional councils up and down the country. The collective aim of policy changes is to safeguard freshwater as a key natural resource. The dairy sector has implemented the Sustainable Water Accord which is more comprehensive than its predecessor, encompasses all the major dairy processors, and commits the sector to helping address its impact on freshwater. These initiatives suggest there is more commonality and progression between industry and regulators on this tough issue than most realise.
- **Biosecurity.** The Ministry for Primary Industries is introducing Government Industry Agreements to create structures under which the Government and a sector can work together to identify high-priority biosecurity risks; make consensus decisions on how to respond to threats; and share the cost of responses. This ensures there is a robust system in place, which is necessary given the increase in trade and several costly incursions.
- **R&D.** There is more streamlining of the Research and Development pipeline between government and the business sector. This has included a revamp of Crown Research Institute funding and objectives to better deliver national priorities and respond to the needs of research users, particularly business. The creation of a one-stop government department (Ministry of Science and Innovation) to better integrate policy, strategy and funding, ensuring stakeholders deal with a simpler system that provides more consistency and certainty. We'd still like to see the tax system used more directly though.
- **The financial system.** It has been strengthened post-GFC. Liquidity policy changes have required banks to lengthen the term of their liabilities, obtain funds from more stable sources (such as term deposits rather than international money markets), and increase the value of liquid assets held on their balance sheets. The Government has also dramatically lengthened the duration of its debt portfolio, and sourced funds from new markets such as the inflation-linked bond market. More recently, macroprudential policy has sought to reduce the systemic risk of a fall in housing collateral values by restricting the volume of high-LVR loans banks have been able to write. The RBNZ has also implemented a review of capital adequacy, which will likely include benchmarking

and closer scrutiny of banks' internal capital models and more in-depth stress testing.

That's just a sample of what has been going on. **It's impossible to quantify their impact but we're talking about collective mass and grunt across a wide spectrum.** Not only are initiatives aimed at smoothing tension points or speed bumps (i.e. housing in Auckland); they are about building collective economic muscle and the resilience of the economy. It's far from pristine (there are gaps in the local authority level; Auckland's housing woes are immense; you can't duck from climate change and retirement age challenges forever; we'd make KiwiSaver fully compulsory; we'd like to see more in some areas such as R&D etc) but it all adds to the vibe. New Zealand is an economy that is far from standing still. **Better micro settings are the precursor to better macro performance and New Zealand looks to have made some considerable deposits (and continues to do so) in that growth jar.** Little things can become big; think about the pending boom to Queenstown from changes to the curfew on night flights.

THE TRADABLE SECTOR APPEARS TO BE WALKING THE WALK IN REGARD TO OPPORTUNITIES ACROSS ASIA

There have been some own goals (such as food safety scares) but examples of genuine point-scoring are numerous.

- **Further progress in the free trade (FTA) arena, with the announcement of the Korean FTA late last year.** Bilateral agreements seem all the rage at the moment. With everyone jumping on the bandwagon this potentially dilutes their future potency, but equally you can't afford to be left out, or competitors can get a big leg up. New Zealand's bilateral agreements now cover nearly 21% of the globe's population and 42% of GDP. Under negotiation is access to a further 29% of the global population and 30% of GDP. **The Trans Pacific Partnership (TPP) remains a must-watch in 2015, with an opportunity to gain better access to the wealthy US and Japanese marketplaces.**
- **The dairy sector has stepped up its investment and the building of partnerships to process more of the milk it collects into branded consumer products.** If well executed over coming years this will deliver higher and more stable returns to shareholders. Over the last 12-18 months Fonterra has restructured a number of its businesses, re-focused its joint ventures, announced new joint ventures targeted at growing its consumer branded and foodservice products, created more product manufacturing flexibility, and undertaken other new investment to speed up the implementation of its "value-add" strategy. Just about all the other independent dairy companies have undertaken similar investment, mostly into infant formula and nutritional dairy product manufacturing capability.
- **The dairy sector and farm leaders are showing more corporate responsibility** on issues from the affordability of dairy products for New Zealand consumers, through to environmental issues. This is helping to improve the public's perception of the industry and keeps heavy-handed regulation at bay. It also helps in-market positioning and marketing for branded consumer dairy products. Often there might not be too much of a premium directly associated with some of the initiatives, but what it does do is open the door and give New Zealand product preferred supplier status.
- **The Red Meat sector is on the improve** with solid bottom-lines expected in 2014/15 and meat processors have returned to profitability again after the 2012 disaster – albeit margins remain very slender. **Structural issues still exist, but there are signs the sector is now moving to address these.** The Red Meat Profit Partnership is the first material step-up in investment in a long time, aimed at addressing the performance gap between farmers within the sector. It's a collaborative program worth $64.3 million over seven years and brings together nine industry partners and the Government, who are coordinating their efforts to increase profitability and productivity in the red meat sector. Initiatives from this investment are just starting to flow. Beyond the farm-gate, meat processors are continuing to invest and reconfigure their businesses. There are ongoing discussions on different approaches to address processing overcapacity (i.e. moratorium on new processing capacity) and some merger and acquisition activity taking place.
- **Primary growth partnership now boasts 18 projects with $680 million of government and industry funding committed for the lifetime of the projects.** Two of the programs have been completed so far and two commercial developments have taken place as a result. In reality most of the economic benefits are long-term, but the successes so far are encouraging. Two commercial developments have been released so far. The first is the FarmIQ System, an online IT farm information hub system that connects farmers

more directly with their processor and consumers, as well as helping them to drive farm performance. The second is N-Guru™, which was developed through the Clearview Innovations program, a software tool developed with AgResearch that enables farmers to tailor nitrogen application rates to areas that are likely to produce the highest pasture response. There are many other new innovations that are likely to emerge in the medium-term.

- **There have been 17 partnerships launched between Chinese and New Zealand companies following the Chinese Premier visit towards the end of last year.** For New Zealand it isn't just about establishing trade and business relationships. In order to make the most of the opportunities on offer in China and throughout Asia there is another leg – deepening of economic and financial ties – that needs to take place. This involves the exchange of skills (migration), services, technology and capital (foreign direct investment). Trade with China represents 20% of our bilateral merchandise trade flow, but only 2% of our overall foreign investment flow. At the current juncture there is no doubt significant progress has been made on bolstering migration and trade links with many countries, but deepening financial and other ties seems to be in the early adoption stage. The memorandum that was signed in late year may help to get the ball rolling.
- **The kiwifruit sector is recovering strongly from the 2010 Psa outbreak. It's a remarkable story for a sector that looked out for the count just a few years ago.** The new Gold3 cultivar grafted extensively in the winter of 2012 has proved more tolerant to Psa than researchers anticipated when it was first selected to replace the ravaged Hort16a variety. Growers have also adapted management practices, as well as learning to manage the new variety and control the disease. There are some areas where Psa continues to affect the new cultivar significantly, particularly in low-lying, damp areas and higher-altitude, elevated sites, but at this stage the sector looks on track for a full recovery of volumes in 2016/17.
- **Innovative marketing programmes through non-traditional channels.** One example is Zespri's foray into China's social media network, which has exceeded all expectations. The company staged a massive water fight in Shanghai to mark the launch of its Sungold kiwifruit, with more than 1,000 people taking part and a video of the event received more than 25 million hits on Chinese social networking sites. With China having one third of the world's social network users, being able to tap into this channel is phenomenal.
- **More innovation, investment and structural change across a range of smaller primary sectors that all have big growth aspirations over the next 10 years.** There are many examples from the last 12 or so months centred around apiculture, aquaculture, goat milking, sheep milking, a range of small horticulture sectors and the wool industry. Manuka honey is one example, with growth aspirations to become a $1.2 billion earner by 2028 (presently $75 million). There are discussions and investment underway to try and unify certification standards, form a single apicultural industry body, and build industry capability. Active manuka honey has scientifically-proven, health-giving properties, which is driving global demand across a range of channels from food, beverages, nutraceuticals and health & beauty care. The activity in manuka honey is unique to New Zealand, which creates a highly defensible barrier to competition. Along with its economic potential it can also be used to achieve environmental rejuvenation on erosion-prone land and riparian planting. There are still plenty of challenges, such as counterfeiting, but some of initiatives being undertaken look to be steering the sector in the right direction.
- **Despite the elevated NZD, prospects for the tourism sector is bright**, with the September 2014 MBIE tourism sector outlook pointing to a 30% increase in visitor numbers through to 2020, with overseas visitor spending up by a quarter. More active promotion and increasing connectivity is seeing New Zealand gain market share in the international tourism market, with the forthcoming Cricket World Cup and FIFA Under 20 Football World Cup expected to provide a 2015 boost to visitor numbers.

WE'RE SEEING MORE LEADERSHIP THAN POPULISM

It has been said that democracy is the absolute worst form of governance apart from all the others. It is a fact that when times get tough, voters are tempted to vote for politicians promising populist short-cuts that are seldom good for growth. In New Zealand, while we'd certainly like to lead some sacred cows to the slaughter-yard (universal super, never lifting the retirement age, ruling out a capital gains tax, interest-free student loans), on the whole **the Government has the confidence to pursue policies that are**

economically sensible if not vote-winning (free trade, asset sales).

But more importantly, we are seeing a lot of unity in the political spectrum in some major areas. Witness the pre-2014 election pitching from all the major parties about running surpluses and keeping debt low. That sort of unity is unusual but telling us something about how the politicians (who poll extensively) are reading the mood of the nation. Moreover, opposition political parties are prepared to put some politically difficult policies on the table and we'll give any party credit for that. This sort of dynamic is even more important when we eye growing political fragmentation globally.

SOCIETY APPEARS RECEPTIVE TO CHANGE

An economy is a super-tanker: it takes time to turn. Leadership can only take you so far – habits have to change on the ground. Some habits – such as New Zealand's fixation with housing – need modification. Housing is not a productive asset, and the proportion of wealth that New Zealanders devote to it (around 85% here, versus 82% in Australia and 72% in the United States) sucks up capital that could otherwise be used to start and grow companies.

Our economic performance after all, reflects the collective decisions of 4½ million individuals, whether that's their borrowing, spending, or voting decisions. Japan's lost decade epitomises a refusal to bite the bullet. Europe is witnessing the same. Despite signs of pre-2008 style behaviour emerging in some areas (Auckland housing), it appears that the critical mass in New Zealand remains tilted towards necessary structural change. Witness the continued uptake of KiwiSaver despite the smaller carrot now on offer; the focus on fiscal responsibility in the 2011 and 2014 elections; a refreshingly non-hysterical – if ultimately stalled – discussion of the possibility of raising the retirement age beyond the age of 65; and the saving debate turning more towards compulsion. The fact that life is tough for retailers is encouraging sign for the broader economy; despite being well into an economic expansion people are being responsible with their cash and the household saving rate is firmly in positive territory.

Such signals don't guarantee that society is willing to do the hard yards, but it's reassuring that things are moving in the right direction. However, **we're also seeing evidence of old-style behaviour** in the apparent belief that Auckland house prices only ever go up, though signs of this flowing through into the broader economy are muted.

THE COMPLACENCY VIRUS APPEARS AT BAY FOR NOW

Economies tend to go through a four-stage process, we characterize as the CROC. It starts with a **C**risis necessitating a **R**esponse (aggressive monetary policy stimulus, currency realignment, fiscal stimulus and firms getting back to basics to drive productivity etc). You then gravitate into **O**pportunity as a recovery broadens into an expansion. We are currently well into this stage. The final stage, the one that kills the expansion, is **C**omplacency. Real wages outstretch productivity, cost structures become bloated and competitiveness wanes, structural imbalances form (eg. excessive debt), and populism starts to trump leadership on the political front. The seeds are sown for the next **C**risis, and the spiral is in motion.

The complacency virus so far seems at bay. Outside some giddiness in housing, we're not seeing early warning indications of a deterioration in structural metrics – which is something that can't be said of much of the rest of the developed world since the Global Financial Crisis. The collective economy appears focused. Indeed, it was notable that policymakers and the incumbent Government hosed down talk of the "rock-star economy" in 2014; they are well attuned to the risk of complacency setting in. The theme seems to be more "rock solid".

CONCLUSION

At this stage of the economic cycle New Zealand would typically be facing problems of rampant inflation and a blow-out in the external accounts. It is very encouraging for our future growth prospects that that is not the case. In addition, growth in the quantity and quality of labour and capital, and improvements in how we use them, bode well. That is not to say that the economy is bullet-proof – as a small open economy we will always be buffeted by global forces, and some worrying signs remain in the Auckland housing market. However, there is mounting evidence that the potential trend growth rate in the economy has lifted, and that's what really matters for standards of living over the long haul.

While there are obvious risks and challenges to be mindful of, and the business cycle has not gone away, New Zealand remains well placed and **we suspect is in the amidst of a super-cycle where success breeds even more success.** Get the right ingredients for growth in place and an economy can quickly be engulfed in a positive spiral where solid growth and good credentials encourages greater investment and belief in the medium-term story.

THEME 4: DAIRY OUTLOOK

The upshot: Dairy prices dominate as a key downside risk for the New Zealand economy. Dairy prices need to bounce for profitability to be restored across the industry and the heavy build-up in leverage to not become problematic. We project milk powder prices to recover to around US$2,800-$3,000 per tonne mark by the middle of the year and then US$3,300-US$3,500 per tonne by early 2016. This means a farm-gate milk price of $4.35/kg MS beckons in 2014/15. That's challenging cash-flow wise, but manageable. We're expecting a soft opening price in May around the $5.75/kg MS mark. This means cash-flow will tighten dramatically in H2 2015. It will necessitate a cut in not just capital and discretionary expenditure, but also core operating expenditure to break even and avoid a debt blowout. That will create some issues across the economy, but looks manageable given pep in other areas.

INTRODUCTION

Dairy incomes boomed in 2013/14 and the terms of trade soared, providing considerable impetus across the economy. A halving in dairy prices this season raises questions about the prospects for the sector itself and wider economy. **A rebound in prices is expected. But will the bounce be strong enough** to ward-off further cuts to the 2014/15 outlook and provide more than a break-even result in 2015/16? Dairy farm profitability is underwater in 2014/15; a lot of leverage has been accumulated; farm prices are elevated and asset valuation metrics stretched; and spot prices need to lift a long way for current industry forecasts to materialise. **One year of challenge is manageable; two years would be problematic.**

THE ROUT

The rout in dairy prices can be put down to three key factors:

- **A bow wave of global milk supply from key export regions. The uptick in supply from the major global exporters has been the largest in 8 years.** Over the last 18 months, monthly milk supply from the major exporters has averaged annualised growth of 3.5%, which is well above medium-term growth (8-year period) of closer to 1.9%.
- **China over-bought during the first half of 2014**, leading to an overhang of inventory.
- **Russian bans on dairy imports from 28 countries.** Russia is the second-largest global importer accounting for 12-15% of globally traded product. It was also Europe's largest export destination, accounting for 22% of trade prior to the ban. The ban effectively reduces Russian dairy consumption and means European milk has had to find a home elsewhere.

Collapsing dairy prices have necessitated successive downward revisions to the 2014/15 milk price. Fonterra currently stands at $4.70/kg MS and the other independent milk companies are either side of this depending on their product mix and currency hedging. Including financing costs, that is below the cost structure of a typical owner-operator farm, meaning expenditure and cost structures are going to have to be closely looked at. It's an income loss to the economy of $6.3 billion, or 2.9% of GDP, though we need to be careful making such comparisons from an extraordinary peak to an 8-year low. **Cash-flow for the sector this season is not as bad as the headline numbers suggest, due to the high deferred payments from the year before, but things are set to tighten quickly**.

OUTLOOK

The greatest concern for the industry and broader economy remains the outlook for the sector's cash-flow over the coming 18 months. Both the final milk price for 2014/15 and opening advance in May for 2015/16 will be particularly influential. At present:

- **Spot prices are a long way from break-even.**
- **Prices need to lift to US$3,500 per tonne by the middle of the year just to deliver Fonterra's current forecast of $4.70/kg MS for 2014/15.** This looks a stretch. And they need to lift even more to deliver something above break-even in the 2015/16 season.
- **The NZD is down but it's still high and we suspect will remain elevated** given New Zealand's yield differential to other markets.
- **There has been a considerable build-up in leverage across the sector** from the early 2000's. This hasn't stopped since the global financial crisis (GFC) either, with total sector debt having grown by 43% since 2008.
- **Dairy-aligned land prices have surged again** with the REINZ all-farm index, which adjusts for compositional differences, up 50% over the last two years and dairy farm prices up 35%.
- **The processing industry is in the midst of the biggest investment cycle ever**. In 2014/15 about $1.7 billion worth of new processing and associated facilities will be completed and a further $1.2 billion has been earmarked for coming years.

KEY THEMES FOR 2015

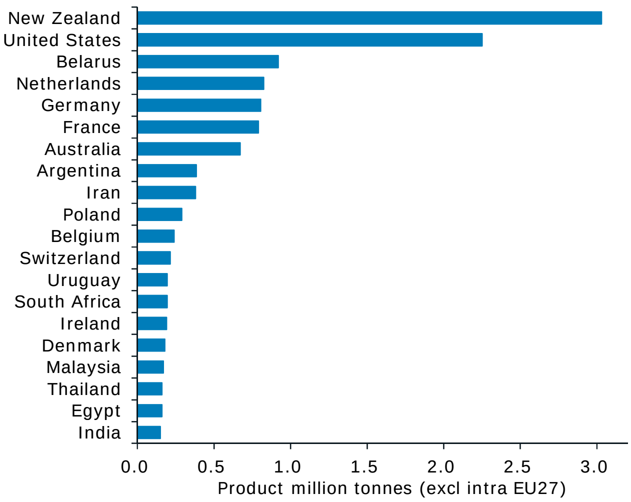
However, there are some key mitigating factors:

- **Cost structures have been far better controlled** than during prior periods when the dairy payout surged.
- **Leverage is heavily concentrated** with around half the debt held by 20% of farmers. Many of these are larger/corporate operations that tend to have more balance sheet flexibility and often better financial performance from investment in key areas. Lower interest rates have reduced interest costs despite an increase in debt levels. On the typical farm this has seen interest servicing costs decline by nearly $0.50/kg MS since the GFC.
- **Productivity growth has been impressive** and has run 3.5% above trend (as measured by MS/cow) over the last three years.
- **There has been a huge amount of investment back into dairy operations over the last five years.** According to Dairy NZ the average farm undertook $850,000 of capital expenditure, with $720,000 of this funded from retained earnings. **This creates more "flex" for cost structures during leaner times, has created greater efficiencies and adds to productive capacity.**
- **We expect there to be more pep from other income and the dividend for Fonterra shareholders.**

Nonetheless, **prospects for the headline milk price and international prices remain key,** both for those within the industry and the broader economy.

THE CYCLE – SUPPLY DRIVEN

FIGURE 16: TOP GLOBAL EXPORTERS

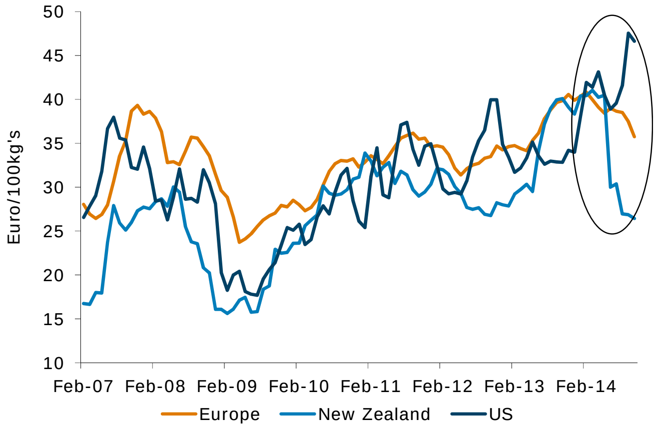


Source: ANZ, Fonterra

The cycle in dairy prices over the last 8 years has been heavily influenced by supply. The present oversupply situation can be traced back to the end of 2013 through to the middle of 2014 when record farm-gate prices across all the major exporting regions combined with lower feed costs and good seasonal conditions led to strong gains in dairy production (predominantly via higher yields, rather than many more cows). **The bow wave has been so great it has created the largest supply upswing in 8 years.**

The timing and magnitude of the impact on prices of all the additional milk has been uneven across the different product categories and major producers. This has caused pricing mis-matches and lagged farm-gate supply adjustment across several major exporters. These anomalies are now beginning to correct, but only slowly so far.

FIGURE 17. STANDARDISED MONTHLY FARM-GATE PRICES



Source: ANZ, Datum

New Zealand farm-gate prices have so far borne the brunt of the downturn, but the effects of lower dairy product prices are now starting to be felt more widely. The spread in farm-gate prices between New Zealand and Europe/US was at its widest in the last 8 years over the final quarter of 2014. **Reduced farm-gate prices across the US and Europe combined with low prices in New Zealand will eventually slow supply growth and help to re-balance the market.** This looks to have already started to occur with a turning point being reached (refer Figure 18).

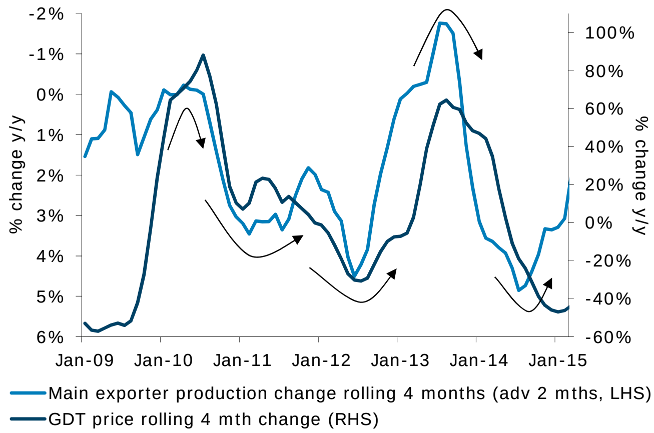
KEY THEMES FOR 2015

TABLE 2. EXPORTS OF MAIN DAIRY PRODUCTS FROM LARGEST PRODUCERS (LAST 12 MONTHS TO NOVEMBER)

	New Zealand	Annual Chg.	Europe	Annual Chg.	US	Annual Chg.	Australia	Annual Chg.
WMP	1,407,678	141,828	389,854	25,864	53,719	18,728	91,044	-2,181
SMP	364,293	-42,447	598,069	203,041	566,513	39,570	152,022	24,141
AMF	208,750	3,479	21,516	2,018	12,373	4,314	7,081	-4,606
Butter	308,055	58,560	114,296	18,758	72,250	784	36,589	-421
Cheese	273,918	-12,553	740,226	-62,578	378,004	79,685	153,474	-13,037
Whey	80,136	-1,086	574,789	11,554	526,400	11,713	34,594	-1,749
Total	**2,642,830**	**147,781**	**2,438,750**	**198,657**	**1,609,259**	**154,794**	**474,804**	**2,147**

Source: ANZ, AgriHQ

FIGURE 18. MILK PRODUCTION GROWTH VS GDT PRICE CHANGES



Source: ANZ, Dairy Australia, DCANZ, CLAL, Datum, USDA

We are anticipating milk supply growth of 1.3% in 2015 across the three major export regions (NZ, Europe and US), who account for nearly 70-75% of total cross-border trade. **If milk supply growth slows to this level across the main exporters it would typically imply a 30-40% lift in GDT auction prices by the second half of 2015.** The recovery is likely to be toward the bottom end of this range though. The current bow wave of milk and inventory will take the market some time to clear; Europe is likely to have high exportable supplies in 2015 despite softer milk supply growth; and demand from the major importers looks weak until at least the second half of 2015, if not longer.

Europe's exportable supply is expected to remain high due to the ban on exports to the Russian market and weak demand even if it re-opens in August. Russia was Europe's largest export market, accounting for 22% of trade – and 12-15% of global import demand – prior to the ban. Even before the ban there were moves afoot to restrict imported dairy products and boost domestic support for farmers. This and the current political situation imply the ban will last much longer than August this year. And even if the ban were to be lifted, import demand will likely be weak due to the collapse in Russia's economic fortunes with the fall in oil prices and the dramatic 50% decline in the ruble. Combined with trade restrictions, these dynamics point to a dramatic decline in dairy consumption. This will mean Europe will focus more on milk powder production, where additional capacity has been added for post quota removal in efficient producing countries and in many key New Zealand markets. Weak domestic economic conditions and a lower euro are also expected to increase the attractiveness of exporting over the domestic market. **So while supply growth might be moderate, export competition is expected to remain high.**

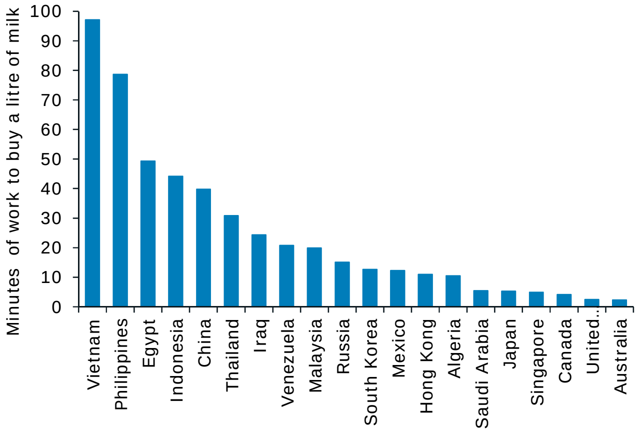
THE TREND – DRIVEN BY COST OF PRODUCTION AND DEMAND

Demand growth during the second half of 2013 and over much of 2014 was choked off in many emerging markets as high wholesale prices fed through to retail. This highlights **the importance of affordability** for demand growth in many emerging markets. While demand elasticity varies greatly across the major emerging importers and strong lifts in real incomes are occurring, households in many markets spend a large proportion of their disposable income on food (25%+).

Affordability is best highlighted by the wide divergence in the amount of work required to purchase a litre of fresh milk. In many cases New Zealand's main markets sit at the higher end on this measure. For China it takes 6.5 times more hours of work for the average Chinese consumer to purchase a litre of milk than it does the average New Zealander. Compared with the US it takes 16 times longer!

KEY THEMES FOR 2015

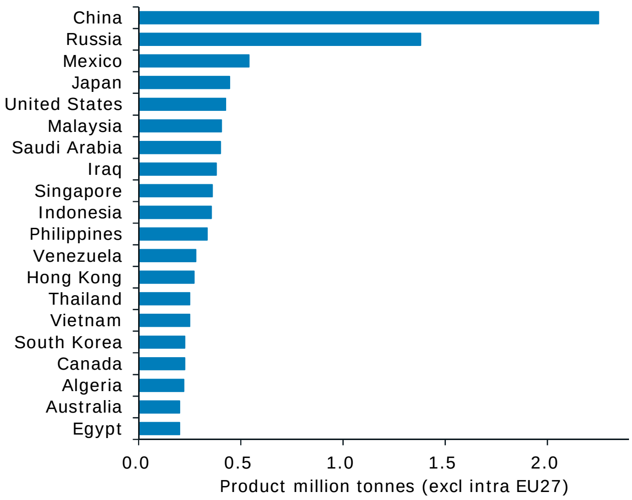
FIGURE 19. AFFORDABILITY OF FRESH MILK ACROSS MAJOR IMPORTERS



Source: ANZ, Numbeo, World Bank

Near-term, the reverse of what occurred through 2013/14 should apply as 2015 progresses. Lower wholesale product prices should start to feed through to retail prices, improving affordability and stimulating demand once again. **But with Russia out of the market (12-15% of global import demand) more of the heavy lifting will have to be done by other countries. Prospects for many of these major importers are still looking shaky, so we are cautious about how quickly this dynamic will flow through.**

FIGURE 20. TOP GLOBAL IMPORTERS



Source: ANZ, Fonterra

CHINA

Much has been written about the drop in China's import demand and overhang of inventory from early 2014. Domestic production appears to have picked up, driven by high farm-gate prices, a mild summer and ongoing investment in large-scale farms. Some of the increase will have been made into WMP, which, combined with high imports from the first half of 2014, seems to be supressing import demand.

Overall, we expect China's import demand to pick up in the second half of 2015 as inventories are cleared, the seasonal peak in domestic supply (Q2) passes, and lower wholesale product prices feed through to retail stimulating demand growth. Medium-term import demand is expected to be supported by counter-seasonal supply needs, food safety concerns locally, and the high local cost of production.

OUTSIDE OF CHINA AND RUSSIA

Other emerging Asian countries are very important secondary markets. Import demand looks to be under pressure as their currencies depreciate against the USD. European exporters also appear to be targeting these markets.

Oil-dependent nations have been a key source of demand in recent years. We are anticipating (and are already seeing) some pull-back due to the collapse in oil prices. Countries that are heavily dependent on oil revenue accounted for 24% of dairy export earnings over the last four years. By number, oil-dependent countries account for 15 out of the top 40 export destinations and have been some of the fastest growing in recent years. In aggregate they have been just as important as China.

All up, with Russia out of the market, growth has to be driven by other regions. Looking across many of New Zealand's major markets, things look decidedly shaky at present. Nevertheless, affordability plays a big part and lower retail prices should support a modest recovery in import demand.

THE COST OF PRODUCTION

Current milk powder prices are below the cost of production for all the major exporters, meaning they can't stay this low for ever. The recently published annual report from the International Dairy Federation updated the average cost of production for the main producing and exporting countries. The analysis includes a capital charge on land and other capital. It also includes an opportunity cost for an owner/operator labour.

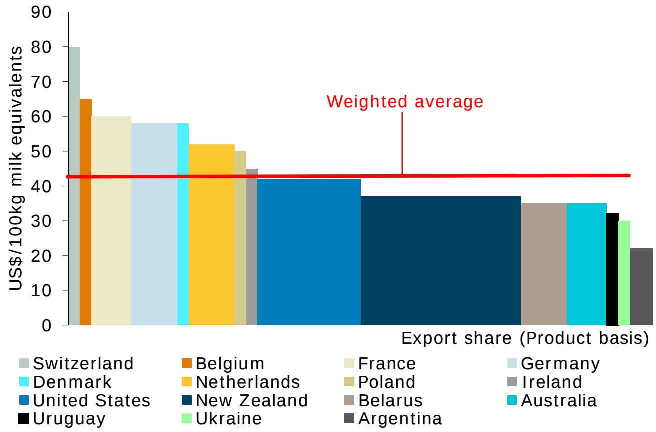
Key take outs are:

- **The weighted average cost of production for the 15 top export countries in 2012 was US$43/100kg milk equivalents.** This translates into costs around US$0.44 per litre. This figure has risen by around 85% over the last decade.

KEY THEMES FOR 2015

- **New Zealand milk was benchmarked at US$34/100kg milk equivalents**. This translates into approximately US$0.35 per litre, or NZD6.20/kg MS.
- **The cost of milk production varies considerably amongst countries** and different farm systems within a country.
- **Southern Hemisphere producers still have a cost advantage over Northern Hemisphere rivals, but the gap has closed** significantly in recent years. The drop in feed and energy prices in recent months will have further closed the gap.
- **China's average cost of production is assessed to be between US$50-60/100kg milk equivalents.** This is very high by international standards. However, for a farm of 340 cows (which represents a larger farm) and where investment is being directed, the average cost of production is assessed at just US$29/100kg milk equivalents, cheaper than New Zealand. This sized farm equated to 30/40% of the milk produced in China.

FIGURE 21. AVERAGE COST OF PRODUCTION FOR 15 TOP EXPORT COUNTRIES IN 2012



Source: ANZ, IFCN, Fonterra

Analysing the cost of milk production for the key exporters suggests a milk price of at least US$35/100kg milk equivalents is required for the lower-cost producers to be incentivised to grow production. In Europe, something around the US$45-55/100kg milk equivalent mark will be required to stimulate investment following quota abolition. Europe's cost of production seems to generally be at the higher end of the spectrum. The US sits around the top 15 export country average at US$42/100kg milk equivalents, but as our previous analysis has shown there is a wide differential between small and large operations.

Based on the average cost of production at USD$43/100 kg milk equivalent this translates into a milk price of around the US$0.44 per litre mark. Converted to a milk solids basis this is US$5.90, or NZ$7.85 at an NZDUSD of 0.75. **Analysing the more efficient European producers down to the bottom quartile suggests long-term milk powder prices need to be between US$3,300 to early US$4,000 per tonne to encourage longer-term investment in supply capacity. For New Zealand dairy farmers this translates into a medium-term range of $6-to-$7/kg MS depending on market conditions and the NZD. This delivers a mid-point of $6.50/kg MS, which happens to be very close to the 7-year average milk price of $6.63/kg MS.**

While we expect there is a fair amount of downward pressure emerging on the cost curve at present from lower energy and feed prices, current GDT prices (US$2,600-$2,700/tonne) are well below break-even for the most efficient producing countries. They are unsustainable in our view. **Given the weaker demand environment and bow wave of milk only gradually subsiding, we expect only a gradual recovery toward the bottom of the US$3,300 to low-$4,000/tonne band.**

CONCLUSION

Any recovery in dairy prices looks fairly tepid for the first six months of 2015. More momentum is likely to take hold in the second half of 2015 as supply growth slows, helping rebalance the market. We expect milk powder prices will only recover to around the US$2,800-$3,000 per tonne mark by the middle of the year and then US$3,300-US$3,500 per tonne by early 2016.

This is a more prolonged and slower rate of recovery than Fonterra recently assumed in their latest milk price update. Thus we have revised our 2014/15 forecast farm-gate milk price to $4.35/kg MS.

We anticipate a softer opening price in May probably around the $5.75/kg MS mark, although we expect a further uplift toward the low $6/kg MS mark as the season progresses. There has also been a large fall in the NZD/USD. However, most dairy companies are now well hedged for 2014/15. If the NZD stays in the low 0.70s over coming months, then this would lift our opening 2015/16 milk price forecast toward the low-mid $6/kg MS.

This will make the next 18 months very difficult for farmers' cash-flow and ability to balance the books. It will necessitate a cut in not just capital and discretionary expenditure, but also core operating expenditure to breakeven and avoid a debt blowout.

KEY THEMES FOR 2015

THEME 5: LIQUIDITY VERSUS FUNDAMENTALS

The upshot: Offshore risks abound but one will dominate: the prospective start to the Fed normalising US monetary policy, and the impact that process could have on both liquidity-driven asset values and regions that leveraged heavily during the era of incredibly low interest rates. While the Bank of Japan (BoJ) and European Central Bank (ECB) are still expanding their balance sheets, the Fed and US interest rate settings are ultimately the key. Asset valuations and investment thematics must morph away from liquidity and towards the economic fundamentals as policy returns to semblances of a more normal setting. We expect the path for policy normalisation to be just as haphazard with significant volatility and a strong potential for dislocation. Policymakers will hardly be seeking such an outcome, but it'll be hard to avoid.

There's no shortage of risks and hot spots around the globe. Slow growth and deflation in Europe, the Russia/Ukraine conflict and sanction-related tension with the West, Syria, sharply lower oil prices, Greece threatening to (or should we say needing to!) exit the euro, continued leverage excesses (now amongst emerging markets), and ongoing concerns about the impact of gradually-slowing growth in China and East Asia. Time and time again changes in New Zealand's economic fortunes have been tied to international events. Rather than take a scattergun approach, we're going to focus on two particular issues. However, before doing that, we need to understand the nature of the GFC, the responses and the outcomes.

A POTTED HISTORY OF THE GFC

The broad causes of the GFC are generally agreed upon: global – and particularly US – interest rates were kept too low for too long; the fabled Greenspan "put" in the face of financial market asset price gyrations kept getting rolled out. This led to excessive growth in leverage, consumer largesse, the formation of asset bubbles, and general irrational exuberance. Impacts were exacerbated by global financial liberalisation, light-handed regulation, financial engineering and borrowers fully prepared to leverage up and discount the risks.

After the fallout, the policy prescription was also fairly clear-cut; fix the financial plumbing and get asset prices back up. Interest rates were reduced to record-low levels and quantitative easing (QE) was undertaken. It doesn't matter which asset class you look at, the response has been phenomenal. Between 2009 and 2014, the S&P 500 rose by 84%, yet US nominal GDP rose by just 16% over the same period. The market cap of the Dow Jones US Total Stock Market Index rose from 90% of GDP in 2009 to 137% of GDP by the end of 2014. Bond yields fell to multi-decade lows, credit spreads contracted sharply, and carry currencies like the NZD – a classic bellwether for "risk" – appreciated to a record high and remain reasonably elevated. It makes perfect sense too; when the risk-free rate (think US 10-year Treasury yields) goes down in yield and up in price, so too should all asset classes.

The policy response delivered both benefits and collateral damage to NZ.Inc. These include:

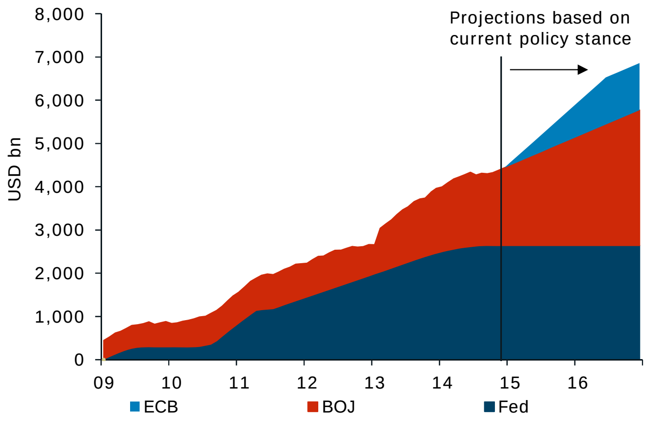
- **Restoring stability to the global financial system,** which allowed the credit wheels to resume turning as offshore credit markets unfroze.
- **Lower long-term interest rates.** Falls in longer-term US interest rates flowed through locally, boosting local assets.
- **An elevated NZD**.
- **A New Zealand yield curve close to inverting**, encouraging longer-term fixed-rate borrowing over shorter terms and diluting RBNZ policy traction.
- **Financial flows became far more "internationalised"** as investors chased yields lower as US bond yields collapsed. According to the IMF, advanced economy allocations to emerging market bonds more than doubled from around 4% of total allocations in 2008 to around 9% at the end of 2012. New Zealand is not an emerging market, but offshore ownership of NZD-denominated bonds tripled between October 2008 and October 2014. Some of that was driven by rising bond supply but our yields look compelling versus those offshore.
- **Monetary policy stimulus in the US quickly engulfed emerging market economies such as China.** Capital flows raced into the region. Growth boomed. Fancy terms such as the BRICs (Brazil, Russia, India and China) were coined to describe the new market darlings. Emerging markets were celebrated as the place to be. Property values, leverage, and activity all climbed. Commodity prices soared in association and became an asset class. New Zealand received a GFC "get out of jail free" card in the form of the soaring goods terms of trade.
- **Asset prices and regional prospects became increasingly driven by liquidity as opposed to fundamentals.** The question "but where do I put my money?" became a regular one.
- **Western policy (think US QE) created conditions for Japan to begin "Abenomics"**

which has kick-started a "race to the bottom" in currency markets across Asia, giving the new NZD TWI a boost (which has now partially unwound).

WHERE DO WE STAND (6 YEARS AND 4 MONTHS SINCE THE "PEAK" OF THE GFC)?

- **The Fed has concluded its QE programme,** as has the Bank of England (BoE).
- **The BoJ and the ECB are still in expansion mode**, with the BoJ announcing an escalation in its QE programme within days of the Fed ending theirs, and the ECB announcing plans for sovereign bond buying in January. Given how globalised markets are, it doesn't matter too much where the liquidity is coming from, only that it keeps coming.
- **We appear on the cusp of a full-blown currency war.** Currency misalignment and offshore capital flows chasing long-end yields are making life increasingly difficult for the likes of the RBNZ.
- **Markets continue to turn a blind eye to fundamentals.** They can afford to focus on yield and momentum rather than quality and valuations if liquidity keeps coming. But when the music stops, we need to more seriously consider the real value of the assets that have been procured by the central banks and the private sector.

FIGURE 22. G3 SOVEREIGN BOND PURCHASES (TO DATE PLUS PROJECTIONS)



Source: ANZ estimates, Bloomberg

- **Leverage, and thus global exposure to interest rates, has never been higher.** BIS data show that the total value of bonds outstanding reached $100 trillion in May 2014, up a staggering $30 trillion since mid-2007. Private sector leverage problems have become public sector ones.
- **Growth remains anaemic in Europe, and global inflation is trending lower as oil prices continue to tank.** Central bank actions to suppress yields merely bought policymakers time; policymakers unfortunately didn't use it well.
- **There's been a failure to drive microeconomic reform, which is a precondition to growth and solvency.** Arguably, central banks have done too much and have been so successful driving asset prices higher that they have removed many sources of market tension, which are actually needed to drive the right behaviours. Indeed, it was only September last year when the yield spread between Greek and New Zealand 10 year government bonds was around 1%. That spread is now closer to 7% (having risen by close to 1% in a single day in the week following the Greek election).
- **Growth is slowing in China** (a good thing given the need to rebalance) **but this is creating clear tensions** between the economic objective (more balanced growth, albeit slower) and the social/political objective of maintaining people in jobs. All amidst a sizable build-up in leverage.
- **The US economy is looking far stronger,** having made dramatic improvements on the jobs front. The US Federal Reserve appears on target to hit its dual mandate (despite a pending near-term fall in inflation due to lower oil prices).
- **We've seen a rout in some commodity markets.** Rising supply and waning demand are partly to blame but some can be put down to the financialisation of commodities as an asset class in a QE world. While QE is still being driven by the ECB and BoJ, the Fed has been key for commodities as an asset class. The so-called commodity super-cycle is defunct and leverage is being exposed.
- **Markets are oscillating from taking a benign attitude towards risk one day to trading wildly the next;** recall the 20% movement in the value of a US 10-year bond in a day last October. This year has started with the bears having the upper paw after the bulls closed 2014 with the upper hoof.

So all up, a host of problems remain. Some central banks have to "do more" to combat challenges, but the Fed – the world's largest and most important central bank – is set to continue to take the foot off the accelerator.

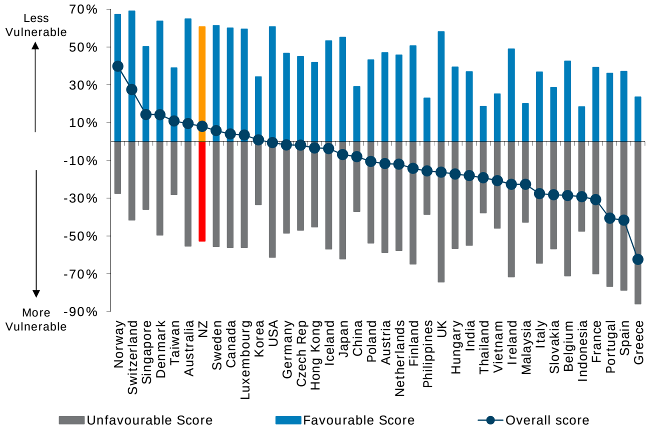
WHERE TO FROM HERE?

Two issues are particularly relevant going forward. The **first is Europe, and the second is the impact**

of the upcoming normalisation of Fed policy, particularly on asset prices and Asian economies.

Our sovereign risk framework flags continued problems in Europe. To recap, we analysed 38 key countries using both "worry" variables (things like government debt, the fiscal balance, the current account, net external debt) and "flexibility" variables (GDP per capita, population, the existence of a floating exchange rate, political stability, competitiveness, etc). The data points to ongoing stresses in Europe, particularly on the periphery. Whereas countries like Italy and Ireland are slowly improving in our rankings (which are relative, rather than outright comparisons), France, Portugal, Spain and Greece remain at the bottom of the table. France is Europe's second-largest economy, yet its net debt is expected to continue to grow (from 74% of GDP this year, up from 32% in 2007). Real yields in Europe are above real GDP; solvency parameters are worsening.

FIGURE 23: SOVEREIGN DEBT VULNERABILITY SCORES



Source: ANZ

The German "bund" yield curve is starting to look a lot like Japan's JGB curve, which was once regarded to be a special case. We now also have every point on the US Treasury bond curve out to 10 years below 2%, yet the Fed is supposed to be tightening this year! Such low yields have created an unsustainable "bond ladder", with yields in each market trading at multiples of other markets. Look for example at 10 year bonds. Japan is at 0.25%, Germany is currently at 0.3%, the US is roughly five times that at 1.7%, and New Zealand is almost twice that at 3.2%. This is what we call the "bond ladder", and you can't have such divergence in interest rate markets when currencies are deviating materially from fundamentals, in a world that is coupled as opposed to decoupled.

The bigger issue – for both New Zealand and the broader global economy – is how the global financial system and various economies respond to a prospective tightening in US monetary policy, given US rates are the implicit bellwether for the global cost of capital. That's a classic game of chicken; interest rates will hardly be moving up if the economy cannot sustain it, and there is the bond ladder to consider. Can US rates really move up if BoJ and ECB policy rates are at zero bounds and QE is being undertaken? It makes little sense in a coupled world. However, the Fed will ultimately do what is necessary and the US economy is looking sound under the bonnet. Few would have predicted that the Fed would have needed to embark on QE1, QE2, Operation Twist and then QE3 to get us to where we are now, or would have predicted the "taper tantrum". In that context, it seems nonsense to think that monetary policy will simply slot back into its normal cyclical place. The level of asset prices and leverage makes the process of normalisation a highly delicate operation.

Still, the Fed has made it clear that it is keen to embark on "normalisation" as soon as it can, even if inflation remains low. Most commentators read this as signalling that the first fed funds rise will occur mid-year, and in turn, they expect US bond yields to rise slowly in 2015 (although the plunge in oil prices is a potential spanner in the works). Cyclically and structurally, there are compelling reasons to expect US bond yields to rise. But if the QE-inspired **fall in yields (higher bond prices) buoyed other asset prices, then what happens to those asset prices when yields rise (i.e. bond prices fall)?** Any asset you can borrow money to buy is potentially riding for a fall. Quite aside from the likelihood that the **short-term price action will be nothing short of chaotic, we doubt if anyone, including policymakers, really knows how things will unfold.** We've already seen numerous examples over the past two years where the path to lower interest rates was via higher interest rates first. Yields eventually hit a certain level that undermined asset values, necessitating a rally back into bonds. The threshold for "wobbles" appears to be getting lower.

Looking through the uncertainty, we can make some simple observations.

- **Fundamentals cannot be ignored indefinitely;** in fact the longer they are ignored, the greater the odds of a pending dislocation.
- **Policymakers' ability to ring-fence a "black swan" event is low**; interest rates are already at the zero bound (though some nations have negative policy rates) and sovereign debt is high (the average level across the Euro area is now 94% versus 65% in 2007, pre-GFC). Policy makers have been effective at containing volatility, but they too face challenges and cannot lean against

the market for ever, as the Swiss National Bank found out.

- **The lower-for-longer interest rate steroid appears to be losing its efficacy.** Recall when bad economic news became good news, because it meant interest rates would be lower for longer? That steroid appears to be diluting. Asset prices may be at elevated levels, but we're seeing larger swings in volatility. More policymakers are becoming attuned to the negative (and unintended) consequences of interest rates remaining low, and other issues such as income equality (Theme 6) have arisen. Many feel that Wall Street has benefitted at the expense of Main Street.
- **There are compelling reasons to believe any lifts in interest rates will be modest.** Inflation is tame and the trend growth rate lower; that supports low yields. There are still risks to manage. Lifting a policy rate from 0.25% to 1% represents a large proportionate shift (i.e. a quadrupling in the rate). As the RBNZ has witnessed; rates do not need to go up far to get some bang for your buck.
- **Policymakers will need to be consistent if the removal of policy stimulus is to be successful.** Historic swings in everyday cash rate cycles have been volatile, but this time you have the complication of transitioning from quantitative policy too, and at a time when others are still undertaking QE, and more and more secular forces are in play. Recall market volatility from October, after which we saw mixed messages from policymakers. Suddenly dollar strength became ex-post relevant for the Fed. We even had one Fed member postulating about an end to QE3 being delayed – the month it was due to end! UK policymakers' comments were confusing: "Volatility shouldn't influence policy normalisation" (BoE Governor), but interest rates could remain lower for longer (BoE Chief Economist), though rate increases in mid-2015 were still "not a bad bet". Meanwhile France, Germany and Italy argued over austerity and China eased policy after saying an economic slowdown is healthy!
- **What is not clear is whether the phenomenal rise in asset prices was the result of "trickle down"** (i.e. money that would have been invested in bonds being invested in equities), **investors being enticed to "borrow and invest" as part of a rational response to the dramatic fall in bond yields, other factors, or a combination of the two**. If it was more "borrow and invest", then expect there to be fewer rate rises and more asset price dislocation.
- **Many investors appear to have based their investment decisions on the flawed assumption that low interest rates will persist indefinitely**, and further, that somehow super-easy policy would stimulate a supernormal recovery. Neither statement is correct. Policy will normalise – though what is "normal" is open to some conjecture given the rapid pace of change, and the post-GFC recovery has been modest by historic comparison. Basic equity valuations tend to look extremely favourable if one assumes a low discount rate and a high growth rate. The gap between G10 GDP growth and yields (i.e. nominal growth exceeds nominal yields) is back at historic highs, suggesting yields have more upside. That's not good for equities, and suggests we will see less of a policy adjustment.
- **Rising US interest rates are not just a problem for borrowers** (who are often considered to be the losers). In the short term, it is also a problem for investors exposed to the capital losses that come with rising interest rates. There is some offset provided as the value of future liabilities fall (for pension funds and the like), and as reinvestment rates rise, but the knee-jerk reaction to rising interest rates is typically very nasty for borrowers and investors alike.
- **The "financialisation" of housing across the developed economies of the world has dramatically increased household exposure to interest rates**. Just look at New Zealand, where million dollar mortgages are no longer uncommon. When the cost of basic needs like housing fluctuate with the interest rate cycle, so too does consumer confidence and consumption.

The more relevant indirect concern for New Zealand is the impact on the wider Asian region, which is now strategically entrenched as critical for our economy. Diversification of money flows (from the core into the periphery) when US liquidity was being exported are at risk of being replaced by "reversification" – flows from the periphery to the core. The massive carry trade – which New Zealand has been heavily impacted by – must unwind, and if the ructions seen during the so-called "taper tantrum" are anything to go by, brace for more volatility.

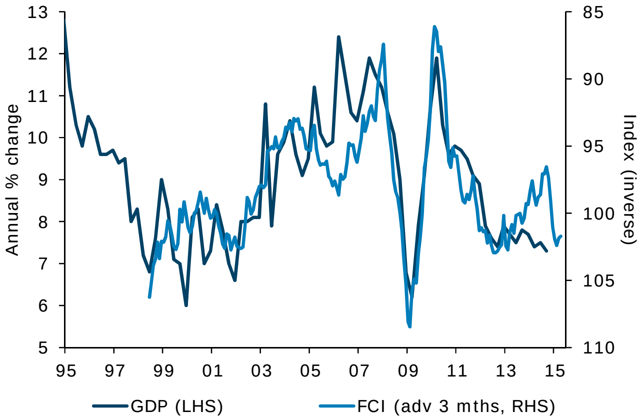
Asia has been at the forefront of leverage since the GFC. According to the FT, total public and private sector debt in China rose from 176% of GDP to 258% by mid-2014. Money supply (as measured by M2) has also expanded rapidly since the GFC – not just in China (+106%) but across the ASEAN economies too, led by Indonesia (+101%), Philippines (+93%), Thailand (+63%) and Malaysia (+56%). Nominal GDP has been

KEY THEMES FOR 2015

stronger across the region but the build-up in leverage has been substantial and centred in countries with the least-developed financial markets. Much of this debt is secured over property, and prices are no longer rising (more on that later). Two of the fabled BRIC's (Brazil and Russia) are now in free-fall.

House prices in China are falling, with prices in Tier-1 cities down 2.7% in the year to November. Sales volumes have fallen sharply, creating an unintended build-up in inventory across the 35 largest cities that our China economics team estimates will take at least 15 months to clear. If prices and sales fall further, it may take even longer. Some of this reflects steps taken by policymakers to cool the market, but it's a fine balancing act amidst a large build-up in leverage, the reining in of corruption (a good thing) and shadow banking, and central government curbs on Local Government Financing Vehicles (LGFVs). Unable to borrow from banks, or issue debt in their own name without central government permission, many local authorities in China have raised debt through LGFVs, often using land as collateral. But the central government has recently said that debt raised through LGFVs is not guaranteed by the state, rattling investors. Some regions have banned the use of LGFVs, creating a liquidity squeeze. Property default rates are also on the rise, and although uncertainty surrounds the true extent of non-performing loans, estimates are vast.

FIGURE 24: CHINA GDP VS FINANCIAL CONDITIONS INDEX



Source: ANZ, Bloomberg

Chinese financial conditions have tightened. We take a lot of guidance from our financial conditions measures and have noticed a tightening of late. More worrying is that our FCI for China has a material weight on asset prices, far beyond what is typical for an FCI, but we let the data speak for itself matching closely to GDP. Such a high weight makes us suspicious of non-linear dynamics coming into play; the fallout from lower asset prices could quickly manifest into tighter financial conditions, weaker asset prices and the spiral is then in motion. Partial indicators such as electricity consumption are also inconsistent with official GDP estimates.

Commodities have also been "financialised". Emerging market demand for commodities – a huge driver of the terms of trade for New Zealand and Australia – has grown substantially over the past two decades. But some of this demand has been the result of USD liquidity, USD weakness, and the "financialisation" of commodities as an investment asset. The channel is simple: abundant USD liquidity and a weaker USD boosted demand for commodities as a financial asset. That's game-changing. Turbo-charged theories of commodity super-cycles abounded (and went against two hundred years of experience) and few acknowledged the financialisation or liquidity angle. That's significant because this channel has a finite timeframe; the USD is firming and USD liquidity is increasingly restricted. A financialisation model is more difficult to apply to soft commodities (limited shelf life etc) though still appeared indirectly (an overcooked supply-side response; think of the huge investment in the likes of dairying globally to capture the new wave of demand for infant formula as well as leverage into others including oil and associated build-up in leverage). Oil exporters have been large buyers of milk powders, so there is some cross-over between the so-called "hard" and "soft" commodities. There have been fun and games in iron ore and oil as dominant suppliers attempt to undermine marginal and high-cost producers. However, these moves have not occurred in isolation: the broad CRB index is also down.

Asian central banks are under enormous pressure to ease policy or allow their exchange rates to depreciate. While the Fed is expected to tighten this year, many Asian central banks will be acting in the opposite direction, which has ramifications for their currencies, which is an issue for New Zealand exporters.

Markets are calling for the RBA to ease, as are we. The impact of this is being felt strongly via the NZD/AUD exchange rate. This is partly an Australia story, partly a New Zealand story, and partly an Asia/commodities story. Australia is New Zealand's largest trading partner (in bilateral trade in goods and services), China is number 2 and ASEAN is number 3. All roads thus lead to Asia. All else equal, weaker Asian currencies mean less demand for NZ exports. So while we may welcome the Fed shifting policy driving the USD up and NZD/USD down, we need to be coy about the broader indirect consequences.

KEY THEMES FOR 2015

THEME 6: ADDRESSING INCOME INEQUALITY

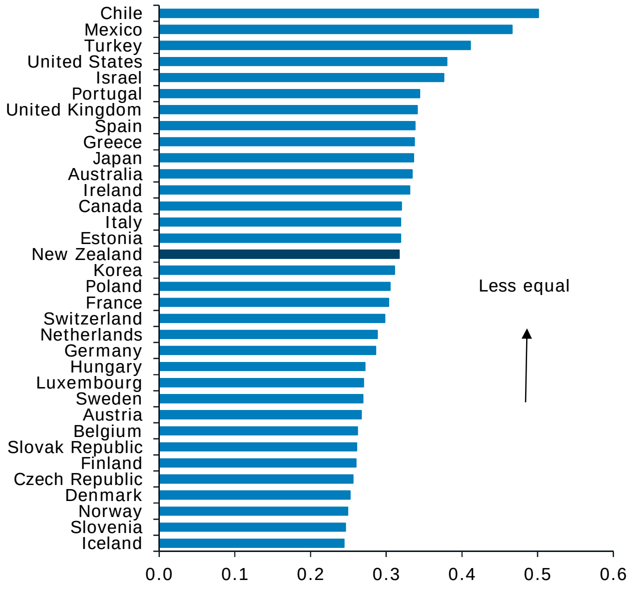
The upshot: A degree of inequality can be expected (and is necessary) in any market economy. However, this does not mean that any amount of inequality is okay from an economic growth point of view. Rising income inequality dampens economic mobility, reduces education standards, and makes an economy less flexible. Rising social tensions can also lead to political instability where populism trumps leadership, discouraging sound (but not necessarily popular) policies. There are good economic reasons for addressing inequality. New Zealand looks to be pushing a number of the correct buttons but has a way to go. Job creation and raising educational achievement and encouraging flexibility across the education sector need to be at the epicentre of a multi-pronged strategy.

Income inequality matters. Quite apart from moral questions of fairness, income inequality has real economic implications. Recent OECD research (*Focus on Inequality and Growth* – December 2014) shows that rising inequality hurts growth, and the reasoning is simple; poorer members of society invest less in education. So let's start by looking at a few key statistics, bearing in mind that **there is a wide array of measures for inequality and they can tell different stories**: that old adage of lies, dammed lies and statistics still applies.

KEY STATISTICS ON INCOME INEQUALITY IN NEW ZEALAND

New Zealand income inequality is middle of the pack, according to the OECD. At 0.32, New Zealand's Gini coefficient is similar to Australia's (0.33). Chile is the most unequal country in the OECD, while Scandinavia dominates the other end.

FIGURE 25: INCOME INEQUALITY BY COUNTRY

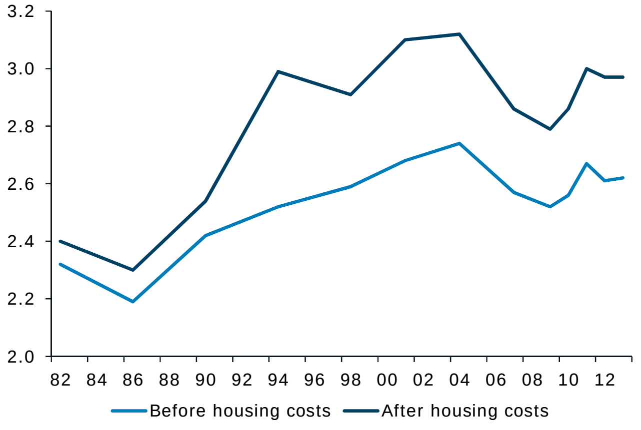


Note: The Gini coefficient compares cumulative proportions of the population against cumulative proportions of income they receive. It ranges between 0 in the case of perfect equality and 1 in the case of perfect inequality.

Source: ANZ, OECD

But while New Zealand's income inequality may be middle of the pack, it is considerably higher than it was before the mid-1990s according to the Ministry of Social Development (MSD).

FIGURE 26: THE P80/P20 RATIO



The P80/P20 ratio summarises the relative distance in the income distribution between those in the 80th percentile and those in the 20th. The higher the ratio, the greater the level of inequality.

Source: ANZ, Statistics NZ

Some other key statistics from MSD[3]:

- The top decile received eight times the income of the bottom (after tax and transfers) in 2011.
- The top 1% of households received around 8% of all taxable income in 2010 and 2011. This is more than in Scandinavia (5 to 7%), similar to Australia, but much lower than the UK (14%) and the US (17%).
- Wealth inequality is usually around double the level of income inequality (using the Gini measure). The wealthiest 10% hold around 50% of all household wealth, whereas the top 10% of income earners receive a 25% share of all income. New Zealand's wealth inequality is about average for the OECD.

UNICEF has calculated that roughly one in five New Zealand children (18%) live in poverty. This figure is derived from the proportion of households earning less than 60% of the median income. New Zealand's level is ahead of the US (33% living in poverty) and the UK (25%), but behind Germany (15%), Australia (13%) and the Scandinavian nations (<12%).

WHY DOES INCOME INEQUALITY MATTER?

A degree of income inequality is to be expected – and is indeed desirable – in any market-driven economy. Rewarding and encouraging entrepreneurial fortitude, investment and risk-taking boosts economic growth. People need to be incentivised to work harder and innovate. But **it is pretty intuitive that high degrees of income inequality aren't good for growth either** despite the empirical evidence regarding the impact of income inequality on growth being mixed.

Addressing excessive income inequality can enhance economic growth in several ways.

- **It can help extend expansions**. Those with lower incomes consume a larger proportion of their incomes. If too much income growth goes to the top earners, consumption can be hollowed out.
- **It helps grease the wheels of an economy via a little bit of inflation.** We fear high inflation but deflation is just as bad. Just look at the last generation in Japan. With labour's share of income sitting at lows in the likes of the US it's of little wonder inflation is dormant. Lifting that share requires material lifts in incomes, and it's not just at the lower end, with a lot of pressure on middle income groups too. That doesn't mean ramping up wages is the policy solution; wage increases not backed up by improved productivity can be inflationary and there are competitive issues to consider. Rather it highlights that getting more discretionary spending power into people's pockets is required.
- **Those at the bottom of the ladder tend to be more vulnerable during cyclical downturns**, suffering more when growth falters and unemployment rises. **This exaggerates boom / bust cycles.**
- **An income distribution that is perceived as broadly fair can reduce political pressures and thereby encourage the pursuit of sound microeconomic policies which promotes the "long game" and stability.** If a large proportion of the population is "missing out" on the good times, they will look for scapegoats. These are likely to take the form of more hostility to free trade agreements, inward migration, or inward or outward foreign investment; factors which can enhance overall growth. An aggrieved populace also supports populist policies that can ultimately undermine economic performance.
- **Excessive, entrenched inequality tends to lead to a wide divergence in education quality and quantity across society.** An education system should ideally provide a level playing field: fostering talent regardless of who one's parents are, or their income.

There is another important factor to consider on the education front: the world is changing rapidly, and economies need to be mobile and well educated in response. Globalisation and technology – particularly robotics and automation – threaten jobs and incomes in fields further up the skill spectrum than ever before. It's no longer just about robots assembling cars. It's software replacing accountants and computers making medical diagnoses. A 2013 University of Oxford study[4] concluded that computerisation threatens just under half of US jobs. They also find a strong negative correlation between wages and an occupation's probability of computerisation. **Increasing technology will inevitably be a force acting to increase income inequality:** the occupations likely to be computerised are already (or soon will be) at the lower end of the income spectrum.

---

[3] *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2013.* Ministry of Social Development.

[4] *The future of employment: how susceptible are jobs to computerisation?* Frey, C B and M Osborne, 17 September 2013. University of Oxford.

Of course, **innovation and technological advancement isn't (generally) a bad thing: it improves productivity and growth**, and has allowed an increase in human leisure time. Who would want to feed the world without tractors and combine harvesters? Write this article with a typewriter? Or return to the days when the household laundry took a full day each week? **However, change brings disruptions to deal with, and in the shorter term particularly, there are losers as well as winners.** These disruptions could be unruly if people in aggregate across the economy do not have the skills and flexibility to adapt to change.

WHAT CAN BE DONE?

First up, while it matters how the pie is cut up, you need a decent pie to start with. **Measured inequality in New Zealand might have been lower in 1984, but the economic ship was sinking back then.** Tackling hard issues can cause hardship and widening inequality, but a failure to do so can result in a bigger bomb down the track.

Any attempts to ameliorate income inequality must be very carefully designed with marginal work and risk-taking incentives at the micro level firmly front and centre. There is a reason why communism failed. Reducing the relative rewards that come from risk-taking and hard work will reduce risk-taking and hard work. **A degree of income inequality is a necessary if unpalatable by-product of providing the sort of incentives that lead to higher living standards.**

To some extent the degree of income inequality is a political choice that depends (among other things) on the value society places on the size of the pie, versus how evenly it is sliced up. Of course some nations are fortunate enough to simply be presented with a more appealing range of choices. Norway, for example, with its strong national balance sheet and high real wage levels, can sustain significantly higher income tax rates while remaining competitive in the global skilled labour market. New Zealand does not have that luxury. In this section we are not aiming to recommend one societal choice over another, but rather look at **ideas of how** – short of a massive oil find – **the system might be able to be tweaked at the margin for the greatest aggregate benefit – to improve the choices society faces.**

Whether for economic or political reasons, the prevailing political breeze in New Zealand is running strong on the topic. Income inequality and derivatives of it (housing affordability, child poverty) will be high on the agenda in the 2015 and subsequent Budgets and central to the 2017 election. And that makes good economic sense if an elongated expansion is to be achieved.

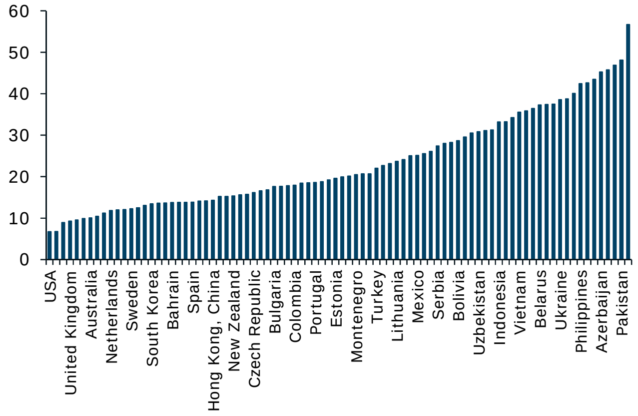
The debate in New Zealand seems more proactive than in most countries. We're not saying a full-blown strategy is being implemented and the problems are being addressed; far from it. However, answers to some tough questions are being sought. Here are some broad concepts.

- **First, we need acceptance that it's a group-wide and national problem.** A piecemeal solution won't work.
- **Don't just let the free market sort it out**; that's about as sensible as letting rugby players referee themselves. But equally, a whistle-happy referee ruins a game. Strike a balance.
- **You need growth to drive job creation, which drives income growth.** However, jobs are a means to an end – not an end in themselves. Returning to the 1980s days of negative value-add assembly industries or thinking the Government can do things cheaper than the private sector is not the answer.
- **Raise take-home pay**; you go about that by cutting taxes, not raising them. That's achievable in a fiscal sense only with prudent management of the Crown's accounts and keeping a lid on spending demands. Means testing national superannuation, or raising the retirement age would provide scope to lower income tax rates.
- **There needs to be a ruthless obsession with lifting productivity growth**, the precursor to sustained lifts in real wages. Considerations such as raising the minimum wage are only sustainable if there is the productivity growth to support them. The business sector is pivotal but you don't create a seamless, well-oiled, efficient machine with poor infrastructure and regulation.
- **Shift attention from the top earners to lifting the bottom.** Rather than chopping down tall poppies, it is far more useful to focus on improving the fortunes of those missing out.
- **Housing needs to be affordable.** Housing costs now chew up 16.3% of household income, compared to 15.4% in 2007. The costs are highest in Auckland, despite higher incomes. The long-run picture is starker: in 1984, only 3.3% of New Zealand households were paying more than 40% of their income in housing costs; today it is nearly 13%. That's a massive shift.
- **The same applies to food.** For developed countries, New Zealand sits at the higher end of

KEY THEMES FOR 2015

the spectrum for the proportion of income spent on food consumed at home (15.4%). For those with lower incomes it is a bigger burden. Part of this is due to the fact that New Zealand exports a large proportion (in many cases more than 80%) of most of its agricultural produce. This means New Zealanders have to pay the "world" price, and in many cases New Zealand has preferential access to higher-value markets and receives a premium. Net-on-net this is an economic benefit to the nation. However, anyone that travels or migrates to New Zealand immediately realises how expensive it is to eat. Forget about tweaking GST; that's a populist gimmick. The issues are broader. If the Productivity Commission can be unleashed to look at housing affordability, then they can look at food too.

FIGURE 27: BY COUNTRY % OF CONSUMER EXPENDITURE ON FOOD CONSUMED AT HOME



Source: ANZ, USDA

- **There should be a capital gains tax on housing – including the family home.** An across-the-board capital gains tax might be politically unpalatable, but a rising share of income is now coming from housing-related capital gains (and inherited wealth). Labour income accrues more evenly than capital income.
- **Financial literacy needs to lift.** Financial intermediaries can (and are) playing a role here.
- **Any strategy needs bipartisan support.** Income inequality is a long-term issue, and flip-flopping policy won't change long-term behaviours. A second or third-best policy solution – though not economically "pure" – may well be the better option if it brings less risk of a U-turn over the long haul. But this requires the political fraternity to think about group and national interest and not self (political posturing) interest. Alas, economic theory (game theory) shows the latter tends to dominate.
- **There needs to be strong regional involvement and engagement.** Central government can provide the broad settings at the aggregate level, but regional performance needs to be led locally. Doubters of this should compare Taupo and Rotorua today versus Queenstown and Wanaka 15 years ago. What applies for growth applies equally for social issues; hence the requirement for regional engagement.
- **Education is absolutely critical**, particularly in light of ongoing innovation and rapid technological change. It's an investment. It is also a factor that is naturally amenable to government intervention: a market failure exists due to the fact that the benefits from education accrue to more than just the individual – the market will under-deliver if left to its own devices. Research shows that inequality hinders education – human capital accumulation, in the jargon. Low income can become a trap, as the unaffordability of additional education makes it nigh-on impossible to break out. It can also reduce opportunities for the next generation. That nexus needs to be broken. More than ever, the system needs to be about learning to learn, to make individuals responsive to a rapidly-changing environment. The education system itself also needs to be agile in responding to the changing needs in key sectors (such as information technology) and areas of competitive advantage. Strong integration with eventual prospective employers is key.

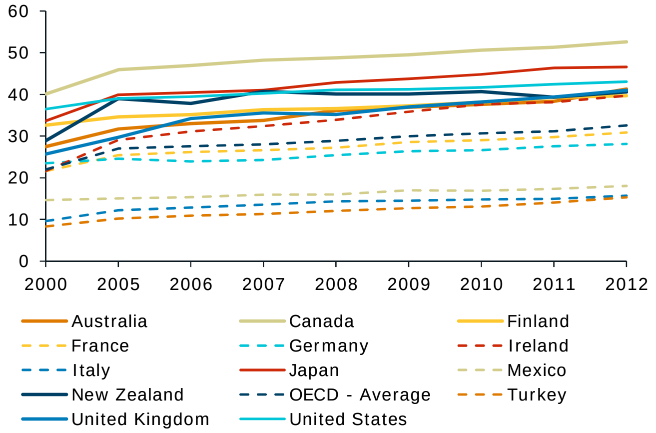
Education is such a critical element that it is worthy of further discussion.

Not only is there a need to increase the number of people undertaking professional development and higher education, but equally there is a need to constantly adapt the curriculum of different disciplines. New Zealand is producing more tertiary graduates. However, the mix isn't great. Creative arts bachelor degrees have outnumbered information technology degrees by nearly three and half times since 2008. In the primary sector space, a recent study showed 20% more qualified workers will be required over and above business as usual to deliver industry strategies by 2025.

Outside of the formal education sector, professional development also needs to keep pace with rapid changes. While there are many professions that have fallen by the wayside over the last 100+ years, there are many others that still exist but operate vastly differently to 50 years ago or even more recently. With the opening up of markets, the reach of multinational companies, the internet age, better supply chains and general globalisation, change in business practices and product offerings occurs more quickly. Such rapid change means different professions and the tools and skills they utilise need to be more agile.

According to OECD data, of New Zealand's population aged 25-64, just over 40% had a tertiary education in 2012, up from 29% in 2000, and well above the OECD average of 33%. However, New Zealand has gone largely sideways in the past ten years.

FIGURE 28: TERTIARY EDUCATION: % OF 25-64 YEAR OLDS: SELECTED NATIONS



Source: OECD, ANZ

WHAT IS ALREADY BEING DONE?

Action to tackle income inequality is being taken on a number of fronts (and this often precedes the incumbent Government). Here is quick overview of some key initiatives.

- **Housing affordability**: the Government has fast-tracked areas in Auckland for housing development, is reforming the Resource Management Act to free up land, striking numerous housing accords and has also launched an enquiry into why construction costs are so high in this country compared to Australia. But it's not a magic bullet.
- **Child poverty** has been lifted up the Government's priority list in response to clear societal discomfort about the current situation. OECD research says New Zealand poverty rates generally aren't too bad, and are quite good amongst the elderly, but the nation scores less well for child poverty. See the Children's Commissioner's Expert Advisory Group's report "Solutions to Child Poverty in New Zealand: Evidence for Action" for data and recommendations on the issue.
- **Health**: Although there has been some criticism, the Whanau Ora programme has been introduced to provide more targeted health initiatives to Māori who are often at the bottom end of the income spectrum. Free GP visits and prescriptions are to be extended for children under the age of 6 to 13 in July.
- **Financial literacy** is making its way into more parts of the school curriculum. KiwiSaver and saving is becoming progressively ingrained in the national psyche.
- **Productivity**: we seem to be pushing all the right buttons here with driving a more productive public service, a wide-ranging microeconomic reform programme (the Business Growth Agenda), asset sales (deepening capital markets and freeing up money for reinvestment), using the Productivity Commission more, and reducing red tape. A more generous tax treatment of R&D spending would be another helpful move.
- **Education**: Examples here include a stronger focus on raising student achievement, particularly in the early childhood arena, new teacher and principal roles (performance pay by disguise), more tuition subsidies for science in the tertiary sector, and the establishment of more Centres of Research Excellence). But stepping back – New Zealand still produces too many arts graduates and not enough in technology, engineering and science. Arts degrees are cheap to supply, but the price signals will not provide an optimal outcome in this instance. The relative price lever (i.e. student fees) doesn't just need to be tweaked, it needs to be given a damn good rip.
- **The Government's "investment" style approach to its spending** and balance sheet management.

That's non exhaustive, but it is clear steps are being taken, and it'll be at the forefront across the political arena over the coming years.

THE BOTTOM LINE

New Zealand finds itself in an enviable position where improving economic fortunes (amidst volatility and extensive change) offers optionality to address challenges and circumvent economic issues.

If the economic cycle is to be durable and elongated – the long game – then inequality issues will need to be addressed. There is a rubber band; there will always be divergence in incomes. It's now looking taut.

IMPORTANT NOTICE

The distribution of this document or streaming of this video broadcast (as applicable, "publication") may be restricted by law in certain jurisdictions. Persons who receive this publication must inform themselves about and observe all relevant restrictions.

1. Disclaimer for all jurisdictions, where content is authored by ANZ Research:

Except if otherwise specified in section 2 below, this publication is issued and distributed in your country/region by Australia and New Zealand Banking Group Limited (ABN 11 005 357 522) ("ANZ"), on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (collectively, "recipient"). This publication may not be reproduced, distributed or published by any recipient for any purpose. It is general information and has been prepared without taking into account the objectives, financial situation or needs of any person. Nothing in this publication is intended to be an offer to sell, or a solicitation of an offer to buy, any product, instrument or investment, to effect any transaction or to conclude any legal act of any kind. If, despite the foregoing, any services or products referred to in this publication are deemed to be offered in the jurisdiction in which this publication is received or accessed, no such service or product is intended for nor available to persons resident in that jurisdiction if it would be contradictory to local law or regulation. Such local laws, regulations and other limitations always apply with non-exclusive jurisdiction of local courts. Certain financial products may be subject to mandatory clearing, regulatory reporting and/or other related obligations. These obligations may vary by jurisdiction and be subject to frequent amendment. Before making an investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular circumstances.

The views and recommendations expressed in this publication are the author's. They are based on information known by the author and on sources which the author believes to be reliable, but may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this publication and are subject to change without notice; and, all price information is indicative only. Any of the views and recommendations which comprise estimates, forecasts or other projections, are subject to significant uncertainties and contingencies that cannot reasonably be anticipated. On this basis, such views and recommendations may not always be achieved or prove to be correct. Indications of past performance in this publication will not necessarily be repeated in the future. No representation is being made that any investment will or is likely to achieve profits or losses similar to those achieved in the past, or that significant losses will be avoided. Additionally, this publication may contain 'forward looking statements'. Actual events or results or actual performance may differ materially from those reflected or contemplated in such forward looking statements. All investments entail a risk and may result in both profits and losses. Foreign currency rates of exchange may adversely affect the value, price or income of any products or services described in this publication. The products and services described in this publication are not suitable for all investors, and transacting in these products or services may be considered risky. ANZ and its related bodies corporate and affiliates, and the officers, employees, contractors and agents of each of them (including the author) ("Affiliates"), do not make any representation as to the accuracy, completeness or currency of the views or recommendations expressed in this publication. Neither ANZ nor its Affiliates accept any responsibility to inform you of any matter that subsequently comes to their notice, which may affect the accuracy, completeness or currency of the information in this publication.

Except as required by law, and only to the extent so required: neither ANZ nor its Affiliates warrant or guarantee the performance of any of the products or services described in this publication or any return on any associated investment; and, ANZ and its Affiliates expressly disclaim any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense ("Liability") arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this publication.

If this publication has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. ANZ and its Affiliates do not accept any Liability as a result of electronic transmission of this publication.

ANZ and its Affiliates may have an interest in the subject matter of this publication as follows:

- They may receive fees from customers for dealing in the products or services described in this publication, and their staff and introducers of business may share in such fees or receive a bonus that may be influenced by total sales.
- They or their customers may have or have had interests or long or short positions in the products or services described in this publication, and may at any time make purchases and/or sales in them as principal or agent.
- They may act or have acted as market-maker in products described in this publication.

ANZ and its Affiliates may rely on information barriers and other arrangements to control the flow of information contained in one or more business areas within ANZ or within its Affiliates into other business areas of ANZ or of its Affiliates.

Please contact your ANZ point of contact with any questions about this publication including for further information on these disclosures of interest.

2. Country/region specific information:

Australia. This publication is distributed in Australia by ANZ. ANZ holds an Australian Financial Services licence no. 234527. A copy of ANZ's Financial Services Guide is available at http://www.anz.com/documents/AU/aboutANZ/FinancialServicesGuide.pdf and is available upon request from your ANZ point of contact. If trading strategies or recommendations are included in this publication, they are solely for the information of 'wholesale clients' (as defined in section 761G of the Corporations Act 2001 Cth). Persons who receive this publication must inform themselves about and observe all relevant restrictions.

Brazil. This publication is distributed in Brazil by ANZ on a cross border basis and only following request by the recipient. No securities are being offered or sold in Brazil under this publication, and no securities have been and will not be registered with the Securities Commission – CVM.

Brunei. Japan. Kuwait. Malaysia. Switzerland. Taiwan. This publication is distributed in each of Brunei, Japan, Kuwait, Malaysia, Switzerland and Taiwan by ANZ on a cross-border basis.

European Economic Area ("EEA"): United Kingdom. ANZ in the United Kingdom is authorised by the Prudential Regulation Authority ("PRA"). Subject to regulation by the Financial Conduct Authority ("FCA") and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request. This publication is distributed in the United Kingdom by ANZ solely for the information of persons who would come within the FCA definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the PRA and the FCA. Germany. This publication is distributed in Germany by the Frankfurt Branch of ANZ solely for the information of its clients. Other EEA countries. This publication is distributed in the EEA by ANZ Bank (Europe) Limited ("ANZBEL") which is authorised by the PRA and regulated by the FCA and the PRA in the United Kingdom, to persons who would come within the FCA definition of "eligible counterparty" or "professional client" in other countries in the EEA. This publication is distributed in those countries solely for the information of such persons upon their request. It is not intended for, and must not be distributed to, any person in those countries who would come within the FCA definition of "retail client".

Fiji. For Fiji regulatory purposes, this publication and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this publication.

Hong Kong. This publication is distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated

IMPORTANT NOTICE

activities. The contents of this publication have not been reviewed by any regulatory authority in Hong Kong. If in doubt about the contents of this publication, you should obtain independent professional advice.

India. This publication is distributed in India by ANZ on a cross-border basis. If this publication is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing. Further copying or duplication of this publication is strictly prohibited.

New Zealand. This publication is intended to be of a general nature, does not take into account your financial situation or goals, and is not a personalised adviser service under the Financial Advisers Act 2008.

Oman. This publication has been prepared by ANZ. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this publication is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and by receiving this publication, the person or entity to whom it has been dispatched by ANZ understands, acknowledges and agrees that this publication has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this publication is intended to constitute Omani investment, legal, tax, accounting or other professional advice.

People's Republic of China. If and when the material accompanying this publication does not only relate to the products and/or services of Australia and New Zealand Bank (China) Company Limited ("ANZ China"), it is noted that: This publication is distributed by ANZ or an affiliate. No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this publication in the People's Republic of China ("PRC"). Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this publication or any other method. This publication may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this publication relates to the products and/or services of ANZ China only, it is noted that: This publication is distributed by ANZ China in the Mainland of the PRC.

Qatar. This publication has not been, and will not be lodged or registered with, or reviewed or approved by, the Qatar Central Bank ("QCB"), the Qatar Financial Centre ("QFC") Authority, QFC Regulatory Authority or any other authority in the State of Qatar ("Qatar"); or authorised or licensed for distribution in Qatar; and the information contained in this publication does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC. The financial products or services described in this publication have not been, and will not be registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar. Accordingly, the financial products or services described in this publication are not being, and will not be, offered, issued or sold in Qatar, and this publication is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this publication and distribution of this publication is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this publication must abide by this restriction and not distribute this publication in breach of this restriction. This publication is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.

Singapore. This publication is distributed in Singapore by the Singapore branch of ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act Cap. 100 of Singapore. In respect of any matters arising from, or in connection with the distribution of this publication in Singapore, contact your ANZ point of contact.

United Arab Emirates. This publication is distributed in the United Arab Emirates ("UAE") or the Dubai International Financial Centre (as applicable) by ANZ. This publication: does not, and is not intended to constitute an offer of securities anywhere in the UAE; does not constitute, and is not intended to constitute the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the United Arab Emirates, the Emirates Securities and Commodities Authority or the United Arab Emirates Ministry of Economy; does not, and is not intended to constitute an offer of securities within the meaning of the Dubai International Financial Centre Markets Law No. 12 of 2004; and, does not constitute, and is not intended to constitute, a financial promotion, as defined under the Dubai International Financial Centre Regulatory Law No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority ("DFSA"). The financial products or services described in this publication are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules. In addition, ANZ has a representative office ("ANZ Representative Office") in Abu Dhabi regulated by the Central Bank of the United Arab Emirates. ANZ Representative Office is not permitted by the Central Bank of the United Arab Emirates to provide any banking services to clients in the UAE.

United States. If and when this publication is received by any person in the United States or a "U.S. person" (as defined in Regulation S under the US Securities Act of 1933, as amended) ("US Person") or any person acting for the account or benefit of a US Person, it is noted that ANZ Securities, Inc. ("ANZ S") is a member of FINRA (www.finra.org) and registered with the SEC. ANZ S' address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). Except where this is a FX- related or commodity-related publication, this publication is distributed in the United States by ANZ S (a wholly owned subsidiary of ANZ), which accepts responsibility for its content. Information on any securities referred to in this publication may be obtained from ANZ S upon request. Any US Person receiving this publication and wishing to effect transactions in any securities referred to in this publication must contact ANZ S, not its affiliates. Where this is an FX- related or commodity-related publication, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). Commodity-related products are not insured by any U.S. governmental agency, and are not guaranteed by ANZ or any of its affiliates. Transacting in these products may involve substantial risks and could result in a significant loss. You should carefully consider whether transacting in commodity-related products is suitable for you in light of your financial condition and investment objectives. ANZ S is authorised as a broker-dealer only for US Persons who are institutions, not for US Persons who are individuals. If you have registered to use this website or have otherwise received this publication and are a US Person who is an individual: to avoid loss, you should cease to use this website by unsubscribing or should notify the sender and you should not act on the contents of this publication in any way.

This document has been prepared by ANZ Bank New Zealand Limited, Level 7, 1 Victoria Street, Wellington 6011, New Zealand,
Ph 64-4-802 2212, e-mail nzeconomics@anz.com, http://www.anz.co.nz