Industry insights

Westpac

Institutional Bank

15 June 2016



Commercial Property

Contents

Summary	02
The commercial property environment today	03
The macroeconomic outlook	07
Commercial property: mid-2016 to mid-2018	09
Commercial property: Beyond mid-2018	13

Summary

More than many other sectors we cover in our Industry Insights series, commercial property is both directly dependent on, and a timely barometer of, the macroeconomic environment. It covers the office, retail and industrial spaces in which the bulk of New Zealand's workers are employed. As a result, this report takes a more holistic view of the sector, considering the impacts on the sector from macroeconomic conditions such as occupier demand and investor demand. We also consider supply constraints in terms of skills shortages and the resultant impacts on construction costs.

Recent performance of the sector

The commercial property sector is enjoying a purple patch characterised by good yields on the back of low vacancy rates as the strong economy has led to employment growth and the demand for more space.

At the same time, investors, facing low interest rates, have both been looking for yields better than a bank deposit rate, and have been encouraged to debt-fund investments. Commercial property yields are typically 1.5 percentage points above commercial property lending rates, which is attractive to investors. The result has been capital gains as commercial property prices rise.

Strong occupier demand has also spurred a flurry of consenting activity in Auckland, while estimates suggest that much commercial rebuild work remains to be done in Canterbury. But this has brought its own problems. Capacity constraints have pushed up the cost to build, to the point that in Canterbury, many developers have chosen not to invest as the rental rates they would need to charge to make a return would be unaffordable to many potential tenants. In Auckland, similar trends are emerging, with several apartment projects already being canned after rising costs made them uneconomic.

The macroeconomic outlook and what this means for commercial property

Overall growth in the New Zealand economy is expected to remain firm through 2016 and 2017. Strong employment growth will drive demand for more commercial space, especially in Auckland, where nearly 47,000 more workers will likely need to be accommodated in the 18 months to the end of 2017. Over this period, yields are expected to flatten or modestly decline as capital values continue to rise. Industrial space in particular has been cited by many industry sources as one area where Auckland has a chronic shortage and this is likely to persist over the next few years.

Tauranga and Hamilton will also see strong commercial building activity, while the outlook for Wellington and Christchurch is less

buoyant. In Wellington, the Government's move to consolidate and reduce its footprint will create vacant space that will need to be filled by new private sector workers. While there is considerable commercial rebuild work to be done in Christchurch, much of this will be done by local developers with insurance payouts, whose demand for yields won't be as high as for third party developers.

To deliver the non-residential building work required by mid-2018, we estimate the non-residential construction sector will need to grow by 7,000 workers, or 15%. Partly as a result of this skills shortage, the national average cost to build will likely continue to rise more sharply than overall inflation over this period.

Outlook for building	Auckland	Christchurch	Wellington	
values	Next two years			
Office space	Strong	Average	Average	
Retail space	Strong	Average	Average	
Industrial space	Strong	Average	Weak	
	Mid-2018 and beyond			
Office space	Average	Weak	Weak	
Retail space	Average	Weak	Weak	
Industrial space	Strong	Weak	Weak	

Beyond the first half of 2018, the New Zealand economy is expected to slow, as Canterbury's rebuild winds down and net immigration falls away. With these changes, employment growth will weaken. This change will coincide with the wave of new office space in Auckland peaking, which may mean higher vacancy rates, especially in lower grade buildings. Higher grade buildings tend to be more attractive and a shortage of A grade and premium space has persisted for years. These higher overall vacancy rates will likely discourage large capital gains.

In Canterbury, as the rebuild winds down and commercial builders look for more work, the cost to build may fall. There will be a fine balance between the expiry of long-term leases in city-fringe offices, local developers bringing their insurance-funded newbuilds to market, and re-entry of third party developers if building and land costs make this viable. Overall, however, rental growth and therefore capital gains are expected to be weak as vacancy rates will be higher.

In Wellington, modest employment growth and the reduced Government footprint – it intends to cut this by up to one-third in a market in which Government accounts for 50% of all office space – will mean little demand for an increase in overall office space.

David Norman

Industry Economist



The commercial property environment today

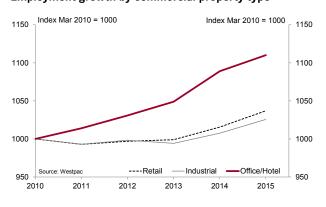
- Two factors have driven strength in commercial property over the last two years: occupier demand and investor demand.
- Strong domestic GDP and employment growth have driven demand for more commercial property space, reducing vacancy rates and buoying rents.
- At the same time, interest rates at historically low levels the world over are driving demand for commercial property investment, raising capital values.
- As commercial property prices have risen faster than rents, yields have decreased.
- The rise in occupancy rates and property prices in recent years has spurred consents of commercial property, which is translating into substantial building activity and new floorspace being added.

Economic drivers: occupier demand

Over the last few years, employment and GDP have grown reasonably strongly in New Zealand, increasing demand for commercial property from which to operate businesses.

GDP grew an estimated 16% in the six years to March 2016. On a nationwide basis, employment across all three sub-sectors of the commercial property market grew over the five years to March 2015. An estimated 50,300 more employees have been added to industries that traditionally occupy office space (an 11% increase), along with 16,700 in retail-property businesses (2.6%), and 10,400 in businesses that typically occupy industrial space (3.7%). This accounts for total growth in workers that need to be housed across commercial property of about 77,400 employees.

Employment growth by commercial property type



This change reflects something we have highlighted in several recent reports; the mix of goods and services that people consume is changing. The focus in most economies is increasingly upon services (many facilitated by new technologies) rather than on consuming more physical products. In New Zealand, this has meant that office workers are now a larger share of overall employment.

In fact, only employment in traditionally office-based businesses has grown at a rate that has kept up with national population growth of 11% between 2010 and 2015. And employment in office-based industries has grown faster than the overall labour force, which by March 2015 was only 9.5% bigger than in 2010.

Much of this total growth in employment has been in Auckland, which accounted for 71% of growth in office-based employment, 64% of growth in retail employment, and 36% of growth in industrial employment.

In four years between June 2011 and June 2015, an estimated 144,500 m^2 of office space, and 50,100 m^2 of retail space has been absorbed in Auckland (either new space or vacancy rates reduced). Over this same period, around 29,000 workers in jobs that are typically office-based have been added in Auckland, and 10,200 in retail. This equates to just 5 m^2 per worker for both retail and office space (compared to a typical average of 10 to 20 m^2 per office worker).

This does not mean that new workers are being crammed into $5\ m^2$ cubicles. Instead, it is clear that demand for commercial space in these two property types was met by a combination of additional (new) space, decreased vacancy rates, and higher numbers of workers per m^2 of space. This latter change has been facilitated by more efficient use of space as well as an increase in flexible working practices, a topic we return to later.

Auckland office vacancy rates have fallen sharply as employment in the city has grown. As of late 2015, CBD office vacancy rates had to plummeted below 7%, from nearly 14% in 2011.

As a result, businesses are struggling to find quality new premises because insufficient new capacity has been added in recent years. This discourages businesses from moving, instead adding workers to existing floorspace. Ironically, in a period of supply shortages, many landlords are limiting rent increases to avoid tenant churn and to keep reliable tenants.

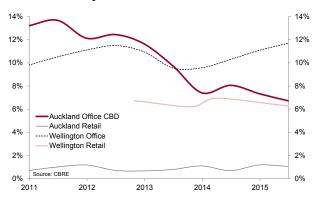
Meanwhile in Wellington, office vacancy rates are rising as the Government pursues its policy of consolidating office space and using it more efficiently. The Government is committed to reducing the average floor area per worker from around 19 m² today to between 12 and 16 m².

² CBRE.



¹ See here: http://www.westpac.co.nz/assets/Business/Economic-Updates/2016/Bulletins-2016/Westpac-QEO-May-2016_EMAIL.pdf and http://www.westpac.co.nz/assets/Business/Economic-Updates/2016/Bulletins-2016/Industry-Insights-Media-and-ICT-May-2016.pdf

Selected vacancy rates

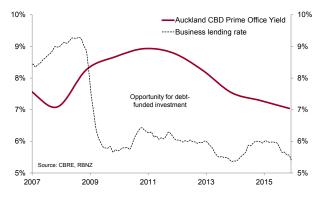


Search for yield: investor demand

These super-low vacancy rates amidst steady employment (demand) growth have supported yields even as investment funding floods the commercial property market. Some industry sources commented that they have never seen so much money "floating around" in the commercial property sector, not even during the last property boom from 2004 to 2007.

Availability of debt has further supported investor interest in commercial property investment that has been driven by a search for yield amidst exceptionally low interest rates both in New Zealand and abroad. With low vacancy rates and a relatively strong economy, investors have been confident of solid total returns on investment through capital gains and modest rental growth. The wider spread between yields and borrowing rates since the Global Financial Crisis (GFC) has made it more attractive to borrow to invest. This is a shift in an investment type where purchases are typically made off the balance sheet rather than through debt.

Indicative yield and business lending rates



Rental yields on commercial properties compare favourably to those for residential properties. For instance, in the Auckland market, residential yields are down at about 3%. In the residential market, investors must assume continued strong capital gains for the investment to be justifiable. But in commercial property, capital gains can be far more modest while still returning a profit even if the investment is debt-funded. While yields remain above interest rates, many investments will remain attractive even from a debtfunded perspective. The concern is what happens if the economy turns down or interest rates rise, a topic we return to later.

It is also important to note that commercial property lending rates can often be substantially lower than the overall business lending rate shown in the graph above. In other words, the spread between yields and borrowing rates will be even wider in many cases than the graph suggests.

As investors have begun to anticipate that interest rates will remain low for some time, willingness to debt-fund has grown. The risk of a sudden surge in interest rates is seen by many as small. Symptomatic of the attractiveness of commercial property in recent times is the boom in syndication and investment in property funds. Property funds have grown strongly in value, as investors have looked to managed funds to express their appetite for commercial property.

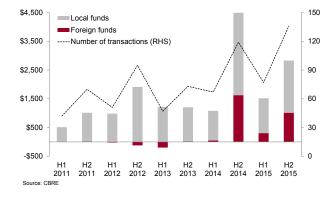
Other investors prefer to invest in specific properties, rather than a managed portfolio. They are increasing demand for syndication opportunities, which allow investors to buy shares in a specific building. Typically, expressions of interest are requested for a specific commercial property, and a deal with the vendor of the building is signed subject to completion of the syndication arrangements. Several industry sources commented that investors are signing up in record time for syndication opportunities, typically stumping up \$50,000 or more to invest in a specific building. Such is the demand for syndication opportunities that some syndicators are considering lower buy-in prices, perhaps as low as \$10,000.

Investment interest is particularly strong for higher grade buildings - Premium and A grade. Because these buildings are more expensive than lower grade properties, fewer investors can purchase them outright, but many are happy to join a syndicate or fund focusing on higher-end properties.

Where does the investment money come from?

Despite tens of billions of dollars searching for higher yields globally, around 80% of dollars invested in larger (over \$5 million) commercial property purchases in New Zealand over the last five years were from New Zealand-based investors, according to CBRE estimates. The other 20% is sold to overseas investors, often large fund managers.

Commercial property transactions over \$5 million



That said, data from the last several analysis periods shows that foreign funds have played an increasing role over the last 18 months (around 33% of purchase value compared to net divestment in the previous three and a half years). Some industry sources argued that the overseas parties have a bigger role in determining prices than their 20% of sales value suggests, since



New Zealand investors must outbid foreign investors to secure the property. As one industry source put it, "overseas investors are the cream" that in many cases sets the prices.

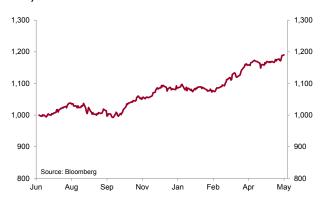
Impact on commercial property

The seemingly insatiable demand for investment properties has bid up capital values of buildings. The result has been declining yields despite modest rent rises and falls in vacancy rates.

Low vacancy rates, solid rents, and rising capital values have resulted in more property owners holding on to their properties, and has made it harder for property fund managers to grow their portfolios with quality property purchases. Some have commented that during the GFC, finding quality investment properties was easy, but finding investors was hard. Now the opposite is true.

Nevertheless, the volume of transactions over \$5 million being recorded has clearly risen over the last four years, from around 50 every six months, to between 90 and 110 every six months today. Admittedly, part of this is the result of capital gains meaning more properties are captured in the \$5 million and over category, but the rise is nevertheless impressive. And property funds are enjoying an impressive run as indicated by their share prices. The S&P/NZX All Real Estate Index has risen 19% in under a year since the Index was established.

S&P/NZX All Real Estate Index



Property funds and other investors who can find quality buildings worth buying are making every effort to buy them off-market. This is one way that property purchasers can find properties without creating a frenzy of interest from other potential buyers.

But it is important to property portfolio managers to constantly cycle out of lower-grade properties and into the more desirable Premium and A grade buildings with fewer maintenance issues, and with blue-chip tenants. As a result, fund managers looking to grow or modernise their portfolios are increasingly considering building rather than purchasing existing buildings. A good example is the new Commercial Bay development by Precinct properties (a property fund), with construction underway on a new 39-storey office and retail project.

In cities like Auckland, these large-scale construction projects are mostly the preserve of large-scale institutional and balance-sheet funded private investors, rather than smaller scale independent

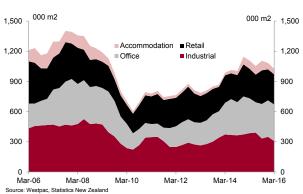
builders or developers. In contrast, as part of the Canterbury rebuild, many reasonably large commercial property projects are by locally-based developers funded by insurance payouts. Debt-funded building projects typically require 50% or more precommitment from prospective tenants before proceeding, and are therefore less common nationwide.

Construction response to occupier demand

The construction sector has been relatively slow to respond to demand for more space for occupiers. This problem is exacerbated by the time delay between demand emerging and construction being completed, which is a function of the scale of investment required, the consenting process, and supply constraints in construction.

Building consent data shows how developers have responded to the economic upswing and gives a useful insight into the stream of new building likely to be delivered in the next few years.

New floor area consented by intended use, 12-month rolling average



It worth noting at the outset that by floor area measures, the level of consented activity today is still well below the peak of 2007. Consents peaked in the year to September 2007 at more than 1.4 million m². The GFC precipitated a dramatic decline to less than half that level by 2010. Since then, there has been a steady rise in consent volumes, partly driven by the Canterbury rebuild, as we discuss below. By March 2016, consent volumes across commercial property were still almost 30% down on the peak of 2007, but up nearly 70% since the trough of June 2010.

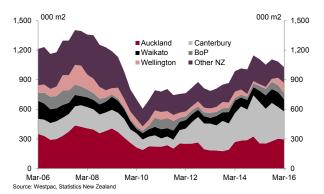
The national data also shows that the bulk of new development is in industrial and office space. Very little hotel development has been consented, as we pointed out in our recent report on the Tourism, Hospitality and Recreation sector.3 This implies a massive shortfall in hotel accommodation in New Zealand's major tourist destinations given the current tourism boom, resulting in higher revenues per room. It also suggests there may be significant development of hotel capacity over the next few years.

What is certain from our discussions with industry is that the growth in consented activity in the last two to three years will mean slower delivery of projects and higher costs per square metre, due to constraints in the ability to deliver the volumes required. We return to this topic later.

 $^{^3}$ See http://www.westpac.co.nz/assets/Business/Economic-Updates/2016/Bulletins-2016/Industry-Insights-Tourism-March-2016.pdf



New floor area - commercial property, 12-month rolling average

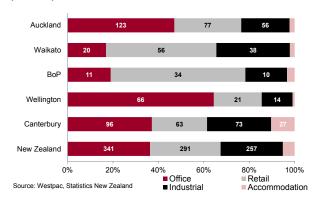


On a regional basis, the biggest growth in recent years in consent activity has unsurprisingly been in Canterbury, where the earthquake rebuild has led to a surge in demand for new construction. Consented activity in Auckland was largely unchanged over several years, but has clearly picked up since late 2013. The Waikato has also seen an upswing in activity in recent months, as has Wellington, which endured a prolonged period of weakness.

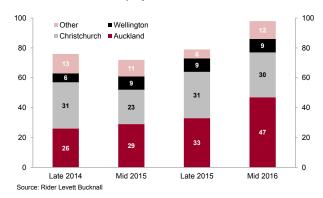
The mix in consented activity by property type is particularly interesting given the variation across regions. In Wellington, around two-thirds of consented activity in the latest year is for office space, despite a relatively modest outlook for commercial property there, given the Government initiative to cut its footprint (discussed later in this report). In Auckland, office space plays almost as important a role as a share of activity. But in the Bay of Plenty and the Waikato, retail space is growing fastest, accounting for the lion's share of building. In Canterbury, hotel stock was decimated in the earthquakes, and so a larger proportion of new building consent volumes is in accommodation, while industrial, office and retail comprise fairly even shares of the remaining work.

The recent changes in non-residential building activity are captured well in Rider Levett Bucknall's Crane Index, which counts the number of cranes dominating the skyline of major cities in New Zealand.

Commercial Property consents, year to April 2016 (000 m²)



Number of cranes employed



In the last 18 months, the number of cranes in Auckland has all but doubled. The Canterbury crane count is almost unchanged, while the spike in Wellington consents is reflected in its 50% increase in cranes, albeit off a small base.



The macroeconomic outlook

- Economic growth is expected to remain relatively strong in 2016 and 2017 despite weakness in dairy, driven by low interest rates, population growth and a booming services sector.
- The pipeline of consented buildings is strong and implies a lot of demand for construction work over the next couple of years.
- Beyond the middle of 2018, we expect economic growth to slow markedly, which will mean slower employment growth.
- One of the causes of the slowdown will be the winddown of the Canterbury rebuild, which will mean a dip in non-residential building activity there even as commercial construction remains strong in Auckland.

Despite the role of overseas investment, what happens to commercial construction, occupancy rates and yields over the next several years will be determined by economic conditions in New Zealand. We discuss these conditions in terms of the near-term and the long-term outlook.

Mid-2016 to mid-2018

Westpac is forecasting GDP growth in 2016 of 2.7%, and 2.6% in 2017. These reasonably strong estimates are despite a third weak season for dairy getting underway. They are being driven in large part by the strongest population growth since the 1970s, a booming services (primarily tourism) sector, and an emerging borrow-and-spend dynamic among households.

The Canterbury rebuild as a whole has now plateaued, with residential building work falling away even as non-residential work picks up. The rebuild is still supporting the level of economic activity, but it is no longer boosting GDP growth as it did before.

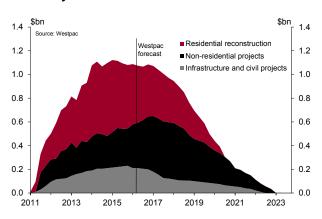
Yet at the same time, construction activity in Auckland and some other centres including Tauranga, Hamilton and Queenstown, is increasing. We expect that the ongoing work in Canterbury and the growing workload elsewhere will mean strong demand for construction workers, and that significant volumes of residential and commercial property will be added over the next two years.

Tourism is also expected to enjoy ongoing growth, while the more widespread switch to services seen in New Zealand and globally will support job growth in that sector, a prime candidate for office space occupancy.

Population growth remains strong, although net inward migration is already falling from its record highs, and by mid-2018 the net inflows are expected to be more in line with longer-term averages.

But probably the most important change is the lift in credit growth, which has raised consumer spending on the back of rising house prices.

Canterbury rebuild forecasts



Over the period to June 2018, we expect the unemployment rate to fall slightly to 5.2%, and nearly 90,000 jobs to be added to the economy. If patterns over the last five years hold, around 32,000 of these will be in typical office-based work, 10,500 in retail, and 6,500 in industrial. Many more will be in construction, education or other businesses where most workers do not work from a commercial property base as covered in this study.

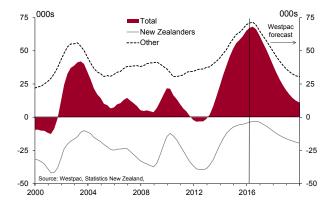
Mid-2018 to mid-2021

GDP is expected to be slow through the latter part of the decade.

The Canterbury rebuild is expected to begin falling away more sharply from 2018, eventually becoming a noticeable drag on national GDP growth.

At the same time, a stronger Australian economy is expected to weaken population growth here as a more typical volume of New Zealand residents hop across the Tasman for work.

Annual net migration





Dairy is expected to have recovered somewhat, with payouts over \$5 per kilogram of milksolids, but the industry is unlikely to return to the heady days of \$7 payouts.

Tourism is expected to perform steadily, barring an unforeseeable event that reduces global travel or the attractiveness of New Zealand. Nevertheless, its growth rate will almost certainly be weaker, meaning it will contribute less to economic *growth* than it currently does.

As a result, we expect overall economic growth to slow in the latter part of the decade. This will mean slower job growth and a rising unemployment rate, expected to breach 6% by the end of 2019. Annual GDP growth is expected to fall to 1.9% in 2018, and to 1.4% in 2019, before returning to around 1.9% by the end of 2020.

At this point we will also likely see the brakes applied to the borrow-and-spend dynamic as people become more cautious about the economic outlook, and over their own job security. This is expected to compound the economic slowdown.

A weaker economy will also mean the Reserve Bank will be unlikely to raise interest rates. If anything, the Reserve Bank may need to cut interest rates again.

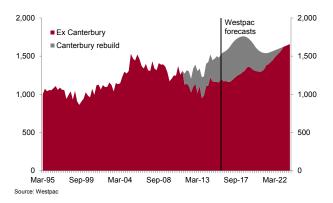
What this means for building work

The rise in consents in recent years has begun to show up in rising non-residential building work put in place. These figures include more than just commercial property – farm buildings, schools and hospitals are also included, for example – so the scale of change should not be interpreted on a one-to-one basis.

It is important also to note that this work includes alterations that add to the capital value of buildings, and will also include work such as earthquake strengthening, which is another massive task to be completed over the next 12 to 15 years.

Excluding Canterbury, non-residential capital formation is still well off historical highs. However, the overall figures imply a quality change in building as well, as the real value of work put in place

Non-residential gross fixed capital formation, \$m



did not fall nearly as much as floor area declined during the 2010 downturn (i.e. real value per m² rose). Similarly, we expect the value of non-residential work put in place in real terms to continue to exceed the peak of the mid-2000s even though the floor areas currently being consented are much lower.

Our forecast is for strong growth in building work over the next two years until mid-2018, by which time the non-residential Canterbury rebuild is expected to have peaked and will begin to wind down.

The historical data and forecasts also show significant crowding out of construction activity between Canterbury and the rest of the country. Canterbury sucked in resources, subduing activity elsewhere. As the Canterbury rebuild winds down, we expect to see an acceleration of non-residential building activity in other parts of the country, especially Auckland.

Our forecast is that there will be a dip in non-Canterbury activity in 2018 as the economy overall slows, before construction picks up again within an environment of low interest rates in New Zealand, and as capacity is freed up from the waning Canterbury rebuild.





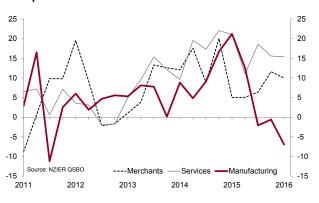
Commercial property: mid-2016 to mid-2018

- As a result of continued low interest rates and strong occupier demand over the next 12 to 24 months, we expect capital values to rise further.
- Yields will flatten or decrease more modestly with these rising prices as opportunities to grow rents in Premium and A grade space will be limited by landlords looking to retain reliable blue-chip tenants.
- The commercial construction sector's wall of work will be challenged by ongoing skills shortages, especially in Auckland, and cost escalation.
- Tauranga and Hamilton will also see strong commercial building activity.
- Significant amounts of building work are expected in both Wellington and Christchurch, but we expect vacancy rates will rise and capital value growth will be subdued.
- Canterbury theoretically has a lot of commercial building left to be done but there are concerns over the financial viability of new developments and over how soon the convention centre and other anchor projects will be in place to stimulate further demand for commercial space.

Occupier demand

The NZIER Quarterly Survey of Business Opinion (QSBO) suggests that occupier demand will be led by services and retail at a national level. Service businesses have the strongest positive outlook on hiring intentions; a net 15% of these businesses expect to employ more people over the next three months. Merchants (retail) also expect to expand employment, but the outlook for the manufacturing sector has plummeted from the highs of March 2015, to levels not seen since September 2011.

Intention to increase employment in the next 3 months, net optimists



The picture for businesses' expectations of workload is weaker. While all three sectors expect activity to increase, the outlook has weakened for all sectors over the last two years. A net 8.1% of service businesses expect the volume of services produced to rise in the next three months. Just 1.4% of merchants thought forward orders would rise.

The more positive employment outlook relative to activity supports our view of job-rich growth, with a lower exchange rate favouring labour over imported capital. As we highlighted in the section on the *macroeconomic outlook*, overall employment is set to grow quite strongly over the next two years. Taken with the QSBO, this implies that much of the growth will be in office and retail space. Regardless, demand for space is expected to remain strong, meaning vacancy rates will stay low over the next two years.

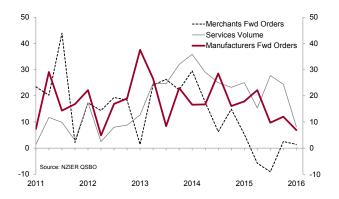
Investor demand

Low interest rates the world over are expected to remain a feature of the economic landscape, although some rises in overseas interest rates (most notably the US) are expected. In New Zealand, we expect the OCR to remain low over the next several years, but it is possible that funding and regulatory costs may mean slightly higher commercial property lending rates. Nevertheless, we expect the debt-funded demand for commercial property to remain relatively strong given the gap between yields and interest rates.

Despite a fairly optimistic outlook over the next two years, industry sources commented that some high value investors are cashing up. This suggests that these investors believe the run of capital gains is coming to an end. As the gap between yields and interest rates narrows, further capital gains will become less likely.

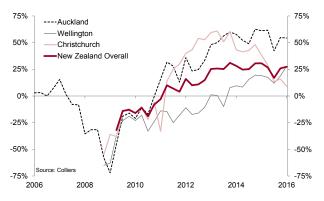
Despite some investors cashing up, the overall investor confidence is strong, although it does vary significantly by region, according to the Colliers Investor Confidence survey. The survey suggests a divergence in investor confidence in Canterbury in particular in recent months.

Activity outlook, net optimists





Regional and overall investor confidence



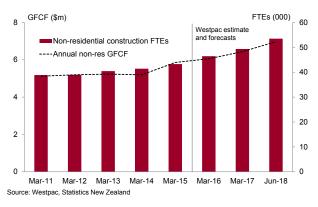
On average, a net 27% of New Zealand commercial property investors are positive about the outlook. But in Auckland, this figure is 54%. The view of Wellington investors is much in line with the national average, having climbed sharply since 2013. But confidence among Canterbury investors, while still positive overall, has slumped from a net 60% positive in December 2013 to 9% in March 2016.

As a result, overall investor confidence has remained relatively stable since late 2013, but this masks the level of exuberance or nervousness at the regional level.

Help needed: the skills shortage

Over the five years to March 2015, value added per full-time equivalent worker (FTE) in non-residential building construction averaged around \$131,000. Given our macroeconomic forecasts of work likely to be completed by mid-2018, this implies around 7,000 more FTEs will need to be added to commercial construction nationwide. This means ramping up the non-residential workforce by a further 15% from current levels, and to around 53,500 FTEs in total.

Annual GFCF and workers required



It is important to remember that this is a net addition to the commercial construction workforce. Some of these workers may come out of Canterbury's slowing residential construction sector. But industry sources expressed concern over the challenge of relocating workers to Auckland, where much of the new work is expected to be done. The salary premium in Auckland for construction workers is not large relative to smaller centres such as Tauranga, Hamilton, or Canterbury. Yet housing costs in

particular are much higher. This makes Auckland less attractive for construction workers, meaning many of the construction jobs will need to be filled by people already living locally.

Some industry sources suggested that finding low-skilled *labour* was not as hard as finding workers at the Project Manager and Supervisor level. This implies that while a huge training initiative will be required, it may not be enough to deliver projects without long delays between consent and sign-off, and without far higher dollars per square metre rates than would be the case if demand were more subdued.

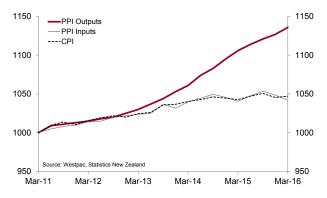
One solution to the capacity constraint is an increasing role for overseas-based construction firms. Industry sources have observed growth in the number of Australian firms bidding for projects in New Zealand, for instance. Many of these companies may be able to bring some of the senior project staff with them, but may face the same challenges in finding suitable non-supervisory staff.

Price it up: cost escalation

Ever since the rebuild in Canterbury began in earnest, the increase in the cost of building has been noticeable. In recent months, as overall inflation in the economy has been at historic lows, the marked difference in build price inflation has been even more evident.

The chart below compares changes in the consumers price index, and the producers price indices for non-residential construction. It shows changes in the price of inputs into non-residential construction and changes in the price of outputs from the sector.

Price inflation



Over the past five years, the price of outputs for non-residential building construction, rose nearly 14%. Over the same time overall inflation, as measured by the Consumers Price Index (CPI), increased just 4.7%. The cost of inputs for the non-residential building construction sector was almost a perfect match for changes in the CPI. In other words, the gap between overall inflation and the price paid for building work has been almost entirely the result of a widening gap between input costs and prices charged by the construction sector.

This gap between input and output price increases may in part due to regulatory and other inputs that are captured in the "quality" of inputs rather than as prices, but are captured as price increases on the outputs side. Nevertheless, the bulk of this expanding gap is likely to be increased margins.



There are several implications of these price rises:

- Cost estimates at the pre-sale stage may prove inaccurate.
 Auckland has seen several examples already of apartment complexes being marketed, deposits being paid, and the developers then realising the complex cannot be built at that price-point given the current environment of cost escalation.
 Some industry sources estimate that 20% of apartment projects are canned as the cost to build exceeds the estimates on which marketing was based.
- In Christchurch, the prohibitively high prices of rebuilding commercial buildings means fewer are going ahead than would otherwise be the case. Developers cannot develop buildings for a price that would imply a rental rate that most Christchurch businesses could afford.
- Similarly, the cost of building hotels in Auckland and Queenstown has made it hard to build a business case for would-be investors. This is one major contributor to the current shortage of beds in these two cities.

The regional outlook

A number of trends are expected to play a role in the outlook for key urban commercial property markets. Many of these trends have been highlighted repeatedly in discussions with industry sources.

Auckland

- Industrial land is expected to continue to remain in short supply over the next two years, driven by growth in large-scale logistics and freight forwarding businesses, as the economy in Auckland and nationally remains relatively strong.
- Vacancy rates overall in industrial and office space are expected to remain low. This shortage of space will encourage location-agnostic businesses – some industrially-based businesses and call centres for example – to relocate out of Auckland, to the likes of Hamilton and Tauranga.
- Despite the current building boom in Auckland, we expect much of the new building to be carefully pre-committed in the case of office space, and primarily purpose-built for industrial and retail businesses. Some balance sheet-funded specbuilding will nevertheless occur.
- The popularity of city-fringe campus-style office space will continue as businesses are priced out of the CBD, or seek larger premises that cannot be accommodated in the core CBD area until the shortage of quality space is addressed.
- This rise in activity on the fringes may lead to further development of a multi-centre-oriented city. Increasing numbers of businesses may locate in other town centres within the greater Auckland region as technology allows this. These town centres offer lower rents, cheaper parking, and will allow businesses to avoid some of the congestion the Auckland CBD is experiencing as a result of growth and as the City Rail Link and other CBD infrastructure projects get underway.
- Skills shortages will remain an immediate and ongoing challenge for residential and commercial work. Many businesses are looking to relocate workers out of Canterbury to work in Auckland, with success expected to be mixed.

Christchurch

 Commerical construction has provided a significant boost to Canterbury's economy, and will continue to do so for some time.

- However, the extent of building looks likely to be at the more modest end of the estimates that were made soon after the major earthquakes.
- Several industry sources suggested that the high price of building in Canterbury versus the rents that most businesses could afford in the CBD will continue to limit investment in new building by the major property developers and fund managers.
 Instead, many new-builds will be local business people able to accept lower rents on a rebuild made possible by new-for-old insurance payouts.
- Alternatively, land prices may moderate substantially to allow more third-party development although if this happens, it will likely be over the longer-term.
- As demand for construction services overall slows, and if demand for new commercial construction services in Canterbury is slower than currently forecast, value for money may well increase. Industry sources cited anecdotal evidence of many more suppliers vying for smaller contracts that would have struggled to attract any bids a year ago. This implies that commercial construction businesses are a little concerned about their pipeline. This may result in a second wave of commercial construction consents through mid-2018 (with building to begin later).
- The timeline for the new convention centre is expected to be announced in the next few months after years of uncertainty. A firm timeline would provide impetus to further hotel and retail development in particular.

Wellington

- The Crown is engaged in a clearly-signalled drive to improve the efficiency of use of its office and retail space. This has a particularly big impact on Wellington, where around half of all office space is occupied by Government.
- In the year to 2015, for instance, the Crown cut its footprint by nearly 31,000 m² nationwide, reducing the space per worker from 19.2 m² to 18.4 m². The ultimate goal is to reduce space per worker to between 12 m² and 16 m², a decline of up to one-third.
- In Wellington, this would effectively cut the Government's demand for office space by up to 16% over the life of the space rationalisation programme.
- The reduction in footprint is likely to significantly increase vacancy rates in lower grade properties (as tenants cycle through to better quality properties) although the Crown does at times move into lower grade buildings after having them refurbished and if necessary earthquake-strengthened.
- Earthquake strengthening requirements will remove some stock from the market, at least temporarily, which will help overcome the short-term weakness in demand as the Crown consolidates its leases. Both policy on strengthening buildings and potential tenants' demand for safer buildings will see less resilient buildings removed from stock either permanently or to upgrade.
- At the same time, a significant boost in new floor area consented in recent months suggests that overall floor area will rise in 2017 and into 2018, further dampening overall vacancy rates, but implying significant confidence among investors in new high grade buildings who are able to sign up blue-chip tenants.



 While some conversion of vacant buildings into apartments is likely, not all buildings are suitable for this, which implies ongoing weakness in demand for lower grade buildings as new or refurbished buildings come on-stream.

Hamilton and Tauranga

- To a greater extent than Tauranga, Hamilton is expected to enjoy a halo effect on its commercial property given its proximity to Auckland.
- Hamilton is expected to benefit from location-agnostic businesses looking outside of Auckland for space. Some industry sources suggest this is already happening.
- Significant new investment in industrial space in Hamilton is expected to continue, especially in the light of inland hub investment, such as Tainui's Ruakura inland port, which has already received resource consent for 48 hectares of inland port and logistics areas.
- Strong population growth is expected over the next two years in both centres, which will drive further retail and office space requirements.
- Tauranga is expected to see some growth in its apartment market, and an increase in office space driven by pre-commitments.





Commercial property: Beyond mid-2018

- Beyond mid-2018, the changes in how people work and a weaker economy are likely to reduce the required rate of growth for office and retail space.
- Continuing low interest rates will still make commercial property a relatively attractive investment even at lower yields, but capital gains are expected to slow at this horizon.
- In Auckland, the supply of new space will likely be relatively well matched with demand although lower grade buildings could see a big upswing in vacancy rates.
- In Wellington, we expect much less demand for additional commercial space as the public sector consolidates its footprint.
- In Christchurch, leases on long-term city-fringe office space will begin to expire. More firms will look to return to the CBD, but the shift back may be tempered by higher rents in the CBD than many were used to paying pre-quakes.

Changing footprint of work: occupier demand

For more than a decade, businesses have talked about "work flexibility", meaning the ability of workers to work from home or elsewhere. A decade later, and the proportion of people actually working from home has not changed much at all. In fact, the proportion of workers in office-based industries who reported working at home on census day 2013 was less than one percentage point higher than in census 2006, and remained below 10%.

But industry sources and our own analysis suggest there are a number of reasons to expect that the floorspace per worker, especially in office and retail-based businesses, will fall:

- Technology has improved dramatically even compared to a decade ago, allowing far more reliable remote access to information and information sharing, meaning workers don't need to be in the same location to work on the same documents or other electronic files.
- Today's business leaders are more familiar and open to digital solutions than leaders 10 years ago. Many of the people making decisions on how to use technology to allow more flexible working were not in decision-making roles 10 years ago. With each passing year, people more comfortable with more modern technologies are moving into leadership roles.
- Evidence is already emerging that in the last three to five years, many large corporates have been reducing their

physical footprints, acknowledging that many of their workers work on-site at clients or from other remote locations such as home, coffee-shops or the airport lounge between flights. "Hot-desking" and its related concept "activity-based working" have become the norm in many office environments. This means more flexible work spaces and options for where workers work from.

- Businesses are displaying a clear preference for more
 efficient footprints, characterised by larger floorplates (rather
 than employees spread across multiple floors) and a resultant
 smaller footprint per worker. The changes in the public sector
 in Wellington are a prime example of this.
- The rise of the "desk as a service model", whereby the serviced office concept is extended to the point that larger businesses rent a certain number of desks and meeting room spaces from a building manager that provides these services directly. This negates the need for the tenant to lease a fixed space and arrange their own décor, furniture, phone services and the likes.
- In retail, a divergence is emerging between big box retail
 and malls on the one hand, and **stores as showrooms** on
 the other.⁴ The rise of online retailing over the last decade
 is turning many retailers to an "endless aisles" approach
 whereby their stores showcase key products, but customers
 do part of their spending in-store and part online, meaning
 smaller stores are required.
- The shift toward greater demand for services rather than manufactured products may well reduce demand for industrial space over time even though in the short term there is a shortage in some parts of the country, most notably Auckland. The current surge in demand appears to be as supply chain functions are consolidated into outsourced specialist logistics businesses with the scale to operate efficiently for a number of retail or other customers.

The Government's intentions in Wellington are the clearest example of this shift in working style and resultant fall in demand for office space. Over the next 15 years, we would expect to see quite dramatic reductions in floor space per worker in office accommodation, from 15 m² or more now to around 12 m² or even lower. The changes in industrial and retail space are likely to be less pronounced, but in both cases the rate of demand growth is likely to fall over time.

Emerging risks for investors

The **economy is expected to be clearly slowing by mid-2018,** including a sharp downturn in migration, which has already peaked. With a lot of new office space added in Auckland, falling demand from the public sector in Wellington, and balanced supply

⁴ See for instance, our report on retail: http://www.westpac.co.nz/assets/Business/Economic-Updates/2015/Bulletins-2015/Industry-Insights-Retail-December-2015.pdf



and demand in Christchurch, there will be downward pressure on yields in office properties as vacancy rates rise. Weaker demand will dampen rent growth and discourage capital gains. As one industry source put it: "The market will turn when analysts stop trusting valuations".

We expect interest rates in New Zealand to remain low at this longer-term horizon. Nevertheless, the gap between commercial lending rates and yields will likely have closed to a level that makes debt-funded investment far less attractive.

We expect spec-building of office space funded by debt to reduce sharply, as banks become more cautious about lending into 2018. Pre-commitment requirements may be even higher than today to receive funding for office and multi-occupier retail projects. As job growth softens, pre-commitments may be harder to come by, and a smaller number of projects will proceed. Most single-occupier and industrial space will be built with specific occupiers in mind.

Regional outlook

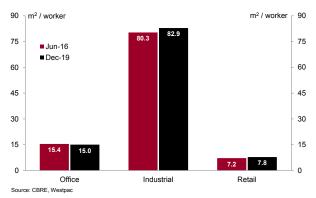
Between 2018 and 2021, we expect economic growth to slow. Nevertheless, we expect a further 65,000 workers to be added over the three years from mid-2018, compared to 89,000 in the two years to mid-2018.

Auckland

Factors driving the longer term outlook for Auckland include:

 A surge in the floor area being added to the commercial property market, particularly in office space: Many projects are in the process of being consented, or have already been consented, which gives us a fairly clear view of what is likely to eventuate over the next several years in this market.

Implied floor area per worker, Auckland



With the expected growth in office space, the average footprint per worker is expected to fall by around 2.4% in three and a half years. Industrial space per worker may actually grow slightly, as may retail space per worker.⁵

This means that the proposed delivery of office space to the market will not be sufficient to maintain the current footprint per worker. However, as we argue below, demand is likely to be for smaller footprints per worker, and the expected delivery of office space to the market in Auckland may be more than required.

- Reasonable, but lower yields: Some market commentators are forecasting strong rises in vacancy rates as a result of the growth in office space in Auckland. For instance, CBRE estimates that Auckland CBD vacancy rates may average 10.2% in 2019, compared to 7.8% in 2015 in their base scenario.
- Higher vacancy rates, especially in lower grade properties: The ongoing flight to Premium and A grade properties invariably implies higher vacancy rates in lower grade buildings if new space meets or exceeds demand, as we expect. If the more efficient use of floorspace leads to an even slower rise in demand for space, B and lower grade properties are most likely to see a rise in vacancy rates. Offsetting this, a weaker economy in 2018 may persuade some tenants to stay where they are rather than to move into higher grade properties, which may spread the higher vacancy rates more equally across different grades of space.
- Ongoing conversion of lower grade to apartments:
 B and lower grade properties are likely to be converted into apartments although the ability to do this and the financial viability of these conversions will vary dramatically from building to building.

Christchurch

There are a number of factors driving the outlook from mid-2018 for the Christchurch commercial property market:

- Rebuild wind-down: The Canterbury rebuild will be clearly
 winding down, both on the residential front and the nonresidential front. As a result, there may be a dip in the
 requirement for industrial retail and office space used to
 support the extra of 14,000 construction jobs associated with
 the rebuild.
- Expiring leases: The leases signed with suburban or city-fringe campus-style office accommodation providers in the wake of the earthquakes will continue to expire. Many businesses have expressed a commitment to moving back into the CBD. All else held equal, this could dramatically increase vacancy rates in the city-fringe offices.
- High rents in CBD: However, high construction costs may also mean that many businesses that have moved into cityfringe accommodation may not be able to afford to move back into the CBD at the rental rates that will be required. The overall result is expected to be a slow rate of new construction in the CBD, with the bulk of new stock expected to be supplied by local developers. This local development will in effect be subsidised by the new-for-old insurance payout that allows for construction despite the high construction costs.
- Lower land values: As a result, we may see land values in the CBD fall over the longer term as land owners acknowledge that demand for commercial space may stay subdued for some time.
- Reduced construction and land costs stimulate a second wave: The pricing out of much new development in the CBD in the short-term may mean that, as demand for non-residential building work in Christchurch falls away, building costs may fall. Accompanied by a revised view of commercial land values in the CBD, this may stimulate a smaller second wave of commercial building, beginning with buildings being consented through the second half of 2018.

⁵ Note that the retail space per workers is particularly low because of the long hours and shift-work nature of these jobs.



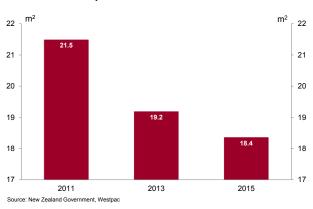
Wellington

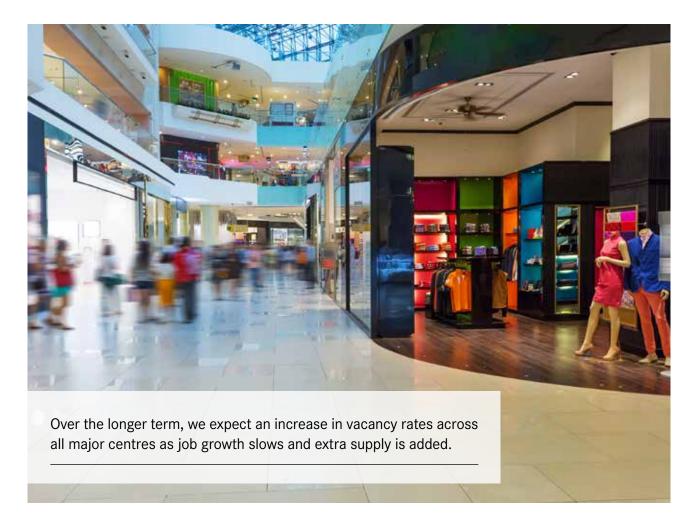
The main story in Wellington is the impact of Government downsizing its required space per worker. The impact is likely to be significant on that market. If the city's share of employment growth is similar to what it saw between 2011 and 2015, its office-based workforce should grow by about 3,800 by June 2021.

The additional 3,800 workers equates to around 5% of the current office-based workforce. These workers could be fully accommodated by the estimated reduction in office space by public sector employees, let alone any other moves toward more efficient floorplans by private sector businesses, or any net growth in office space by 2021.

CBRE estimates of new supply to 2019 suggest that office space will actually fall in Wellington to that horizon, in part as buildings are temporarily vacated for earthquake strengthening. In the light of the weakness in demand for office space with the public sector consolidation, this may be welcome relief for owners of other buildings.

Crown floor area per worker







Contact the Westpac economics team

Dominick Stephens, Chief Economist +64 9 336 5671 Michael Gordon, Senior Economist +64 9 336 5670 Satish Ranchhod, Senior Economist +64 9 336 5668 Anne Boniface, Senior Economist +64 9 336 5669 David Norman, Industry Economist +64 9 336 5656 Any questions email: economics@westpac.co.nz

Disclaimer

Things you should know: Each time someone visits our site, data is captured so that we can accurately evaluate the quality of our content and make improvements for you. We may at times use technology to capture data about you to help us to better understand you and your needs, including potentially for the purposes of assessing your individual reading habits and interests to allow us to provide suggestions regarding other reading material which may be suitable for you.

If you are located in Australia, this material and access to this website is provided to you solely for your own use and in your own capacity as a wholesale client of Westpac Institutional Bank being a division of Westpac Banking Corporation ABN 33 007 457 141 AFSL 233714 ('Westpac'). If you are located outside of Australia, this material and access to this website is provided to you as outlined below.

This material and this website contain general commentary only and does not constitute investment advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material and this website may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material and this website does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. The forecasts given in this material and this website are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions

or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Transactions involving carbon give rise to substantial risk (including regulatory risk) and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. Statements setting out a concise description of the characteristics of carbon units, Australian carbon credit units and eligible international emissions units (respectively) are available at www. cleanenergyregulator.gov.au as mentioned in section 202 of the Clean Energy Act 2011, section 162 of the Carbon Credits (Carbon Farming Initiative) Act 2011 and section 61 of the Australian National Registry of Emissions Units Act 2011. You should consider each such statement in deciding whether to acquire, or to continue to hold, any carbon unit, Australian carbon credit unit or eligible international emissions unit.

Additional information if you are located outside of Australia

New Zealand: The current disclosure statement for the New Zealand division of Westpac Banking Corporation ABN 33 007 457 141 or Westpac New Zealand Limited can be obtained at the internet address www.westpac.co.nz. Westpac Institutional Bank products and services are provided by either Westpac Banking Corporation ABN 33 007 457 141 incorporated in Australia (New Zealand division) or Westpac New Zealand Limited. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ OFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking license and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activity.

Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking Regulatory Commission (CBRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

Disclaimer continued

U.K.: Westpac Banking Corporation is registered in England as a branch (branch number BR000106), and is authorised and regulated by the Australian Prudential Regulatory Authority in Australia. WBC is authorised in the United Kingdom by the Prudential Regulation Authority. WBC is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority in the United Kingdom. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. This material and this website and any information contained therein is directed at a) persons who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services Act 2000 (Financial Promotion) Order 2005 or (b) high net worth entities, and other persons to whom it may otherwise be lawfully communicated, falling within Article 49(1) of the Order (all such persons together being referred to as "relevant persons"). The investments to which this material and this website relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this material and this website or any of its contents. In the same way, the information contained in this material and this website is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Services Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this material and this website to any third party. In particular this material and this website, website content and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ("WCM"), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under

the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.

For the purposes of Regulation AC only: Each analyst whose name appears in this report certifies that (1) the views expressed in this report accurately reflect the personal views of the analyst about any and all of the subject companies and their securities and (2) no part of the compensation of the analyst was, is, or will be, directly or indirectly related to the specific views or recommendations in this report.