CAPITAL EDITION

STRENGTH IN UNITY

How camaraderie and hunger drive a powerful and high-performing global investment team

FUTURE READY

The real estate sector is charging ahead with plans to tackle and evolve from the climate change crisis

THE GOOD FIGHT

Learnings from a catastrophic injury and a focus on the transformative power of capital is what drives investment manager Julie-Anne Mizzi

WHAT'S NEXT FOR AIRPORT RETAIL?

The familiar airport retail experience is set for a makeover

ASSET SHOWCASE

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Letter from the Managing Editor

Welcome to the latest issue of Capital Edition, our monthly publication designed to spotlight AMP Capital's investments, people and ideas.

Having culture and strategy on the same blueprint, and focusing on it with equal magnitude, is an absolute imperative for head of AMP Capital's global listed real estate team, James Maydew. In our cover story this month, James shares the cultural principles he uses to lead a team competing on the global stage. James is inspired by the New Zealand All Blacks, the rugby team regarded by many as the most successful sports team in history, and the Navy SEALs, the team of high calibre, multi-talented individuals who go through arguably the toughest screening and training regime of any job. With this framework, the culture of the global listed real estate team continually evolves and innovates to drive improvement and stay ahead of the competition.

This month, we also reveal how climate change is impacting the real estate sector, and how leaders and businesses are standing up to the task of tackling it. This is critical for the future of the industry, particularly considering The World Economic Forum's Global Risks Landscape Report, released just last year, said seven of the 10 top risks for business are climate related. The climate has a substantial impact on real estate – it can directly damage individual buildings, decrease their value or even lead to assets being rendered unusable. In the face of risk, the real estate sector is taking the opportunity to lead the way in other ESG initiatives such as improving power sustainability and treatment of natural surrounds, including people and local communities.

Also, in this issue of Capital Edition, we meet Julie-Anne Mizzi, AMP Capital's global head of social care. Julie-Anne shares her innate passion for investing in infrastructure for those who need it. Her rich life experience colours this view – she experienced life-changing trauma as a teenager, grew up in and around the family business, and had an utmost focus on intellect as her core skill. Julie-Anne's moral compass guides her strategy, but that doesn't shadow her unshakable focus on financial returns, which are non-negotiable to ensure long-term sustainability and service.

Finally, we've brought back our senior economist Diana Mousina by popular demand, to share her views on how the economic rate of productivity is more closely linked to the growth rate of GDP per capita than people believe.

I hope you enjoy Capital Edition and I'd love to hear your feedback. □

Many thanks.

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Features

How the real estate sector is tackling climate change

Weaving sustainability into the real estate sector is beyond an ethical cause, it's imperative for long-term investment prospects. Progressive and forward-facing players are already leaping to the challenge for their stakeholders, their employees and the world we live in.

Story by SIMON ANDERSON

Stepping back in time

At some point during the late eighth and ninth centuries, the Maya civilisation in what is now Mexico and Guatemala disappeared. It was a dominant civilisation in that region of the world, known for its expertise in agriculture, pottery and mathematics.

Sometime during the 15th century, the Viking population of Greenland who had migrated from Iceland around 1,000 AD, became extinct. The Vikings were great builders and users of natural resources such as timber and soil.

While historians aren't definitive, the consensus is that both great civilisations disappeared as a result of the environment around them changing. The Maya civilisation suffered at the hand of a long drought, while the Vikings couldn't adapt to a fall in temperatures.

In that sense, climate change has always played a role in civilisations. Sometimes its impact has been marginal, and in other instances, such as the Maya people or the Vikings of Greenland, it has been catastrophic.

Two decades into the 21st century, climate change, no matter what the causation, is a major challenge for society. For business, it has become the major risk to long-term performance.

The World Economic Forum's Global Risks Landscape Report, released last year, said seven of the 10 top risks for business are climate related[1]. They range from weather events and major natural disasters through to large-scale involuntary migration due to climate change, and collapses in ecosystems.

The World Economic Forum's top 10 global risks

1. Extreme weather events.
2. Failure of climate change mitigation and adaption.
3. Major natural disasters.
4. Massive incidences of data fraud/theft.
5. Large-scale cyber attacks.
6. Man-made environmental damage and disasters.
7. Large-scale involuntary migration, due to climate change.
8. Major biodiversity loss and ecosystem collapse.
9. Water crisis.
10. Asset bubbles in a major economy.

The major global instrument to deal with the crisis – the Paris Agreement signed in 2015 – is under threat after the United States recently announced it was withdrawing from its commitments. While there is disagreement among governments about climate change, the private sector has gradually been developing a consensus about the need to act.

Sectors including energy, agriculture, manufacturing and transport are working individually and collectively towards meeting the crisis. According to the United States Environmental Protection Agency, commercial and residential real estate is the fourth largest greenhouse gas emitter[2]. It is also a sector which has taken big steps to address the problem. >

On a global scale, the last four years were the four hottest on record, and winter temperatures in the Arctic have risen by 3°C since 1990

– United Nations, 2019

1. https://www.weforum.org/reports/the-global-risks-report-2019
2. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions

Case study: Green alpha

As explained by Head of Real Estate Research at AMP Capital, Luke Dixon, green alpha is a relatively new term and is a way of quantifying the proportion of a return from an asset that is attributed to sustainability and energy efficiency initiatives.

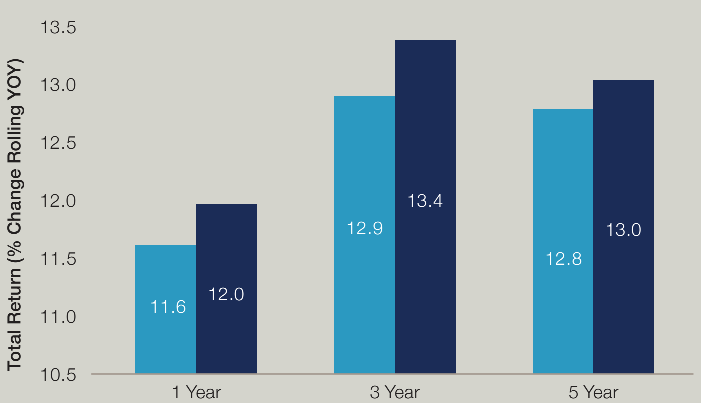
From a real estate perspective, maximising returns is primarily linked to boosting rental income and keeping operational costs down. Cutting energy costs is a relatively simple method to boost income yields. According to market evidence and international studies into green buildings, this can make significant differences to the return an asset delivers over its life. More sophisticated energy procurement strategies, such as three-to-five year fixed-price contracts can also help.

Asset valuations and returns are showing a growing divergence between high-standard green buildings and their less-green peers. According to the MSCI Green Property Investment Digest, over the past three years, prime CBD office buildings in Australia with a NABERS star rating higher than four stars (the maximum is six) have delivered a total return to their investors of 13.4 per cent, versus 12.9 per cent for all other assets in this category. The NABERS rating system aims to help building owners understand how their asset impacts the environment[3].

Green alpha, and the positive boost it provides to total returns, has become a part of an asset manager's toolkit. Greener buildings, apart from delivering superior returns, tend to offer investors lower systemic risk with a more stable income profile, lower incentives and enhanced tenant "stickiness" which can reduce the vacancy of a portfolio.

Prime CBD office total returns: green vs the rest

Prime office average vs Prime office 4-6 Stars NABERS



Sources: MSCI, AMPC RE Research, 2019

3. https://www.nabers.gov.au/
4. https://www.unglobalcompact.org/docs/issues_doc/Financial_markets/who_cares_who_wins.pdf

"Until now, most investors have not got to the point of avoiding assets deemed as high risk on the basis of climate change and sustainability. But it is inevitable"

Drivers of change

The real estate sector has adopted new practices in response to greenhouse gas emissions, but it hasn't always been for altruistic reasons. Rather it is a reflection on what investors, customers, directors and employees want.

Australian real estate companies are in the process of carrying out, or have already undertaken analysis, of exposure to the physical risks associated with climate change, the worst of which are expected to be heatwaves and severe storms. New asset acquisitions are being screened for climate resilience, and this will start to be reflected in valuations.

Climate change is only part of the upheaval going on in the sector. More broadly, real estate is addressing environmental, social and governance (ESG) challenges. ESG is a term popularised in a 2005 United Nations landmark study Who Cares Wins[4] that showed better consideration of each of the three factors would contribute to stronger financial markets and the sustainable development of society.

1. Customers

Tenants, employees and their visitors look for recycling bins when throwing out garbage. They expect lights that turn off when no-one is in a room and demand efficient elevators. They want somewhere to leave their bikes and have a shower when they ride to work. In short: customers are driving the push to consider ESG.

Tenants, or customers of landlords, look for buildings that reduce exposure to ESG costs such as energy. Just as importantly, they minimise exposure to ESG risks. This involves ensuring a safe and comfortable workspace, supporting people's health and wellbeing, and addressing social issues.

In 2019, customers expect a building will align with their corporate sustainability beliefs and commitments.

2. Investors

Investors are looking for ESG initiatives and opportunities. According to data from Deutsche Bank and the Global Sustainable Investment Alliance, investors are set to triple the amount of global assets with an ESG mandate over the next decade[5], from the current level of around $30 trillion.

Those opportunities aren't just investments. They also refer to mitigating investment and reputational risk, and taking evidence-based ESG action that supports strong, long-term risk-adjusted returns. As part of the process, investors want reporting that is transparent, benchmarked and aligned to global standards.

Real estate investors are particularly cognisant of ESG initiatives. According to the 2019 PERE ESG Investor Survey[6], 70 per cent of institutional real estate investors have an explicit ESG policy in place, and nearly all respondents said that ESG principles have a role in shaping their investment decision-making.

The survey shows that 35 per cent of investors already expect ESG action from their investment managers, with a further 13 per cent saying they will require ESG initiatives in the next three to five years. Investors are appointing in-house ESG experts and insisting on participation in global ESG benchmarks.

Investors in real estate also want participation in global initiatives such as the WGBC (World Green Building Council) Net Zero Carbon Buildings Commitment; RE100 (Renewable Energy 100), Science Based Targets (SBT), and demonstrated alignment with the UN Sustainable Development Goals (SDGs) and Global Reporting Initiative (GRI).

It isn't just big investors. Retail, or direct 'mum and dad' investors, look for ESG credentials as well. In Australia, the Responsible Investment Association Australia (RIAA)[7] found that 92 per cent of Australians expect their superannuation or other investments to be invested responsibly and ethically.

Significantly, four out of five Australians would consider switching their superannuation or other investments to another provider if their current fund engaged in activities inconsistent with their values.

3. Employees

"Employees want to be proud of where they work and want its purpose, mission, and culture to reflect, or at least not oppose, their values," posted Paris-based Deloitte Global Head of Sustainability, Olivier Jan recently. "This is especially true of younger professionals. Corporate value statements and management's cultural messaging may mean little to these workers in the face of negative ESG impacts, which can compromise an organisation's ability to attract talent.

"A favourable ESG profile and an absence of negatives can be an asset, particularly in areas where talent is scarce and competition is strong," he said in a Harvard Law School Forum on Corporate Governance and Financial Regulation[8].

It eloquently captures the mood of employees. People want to work for a company that they can be proud of, that is trustworthy, has integrity and is committed to doing the right thing.

"Investors are looking for ESG initiatives and opportunities. According to data from Deutsche Bank and the Global Sustainable Investment Alliance, investors are set to triple the amount of global assets with an ESG mandate over the next decade[5], from the current level of around $30 trillion"

5. Appeared in Financial Times. https://www.ft.com/content/8d65431c-de0c-11e9-b112-9624ec9edc59
6. https://d16yj43vx3i1f6.cloudfront.net/uploads/2019/07/PERE_ESG.pdf
7. https://responsibleinvestment.org/wp-content/uploads/2017/11/From-values-to-riches-Charting-consumer-attitudes-and-demand-for-responsible
8. https://corpgov.law.harvard.edu/2019/02/25/the-board-and-esg/

4. Directors

Directors duties increasingly include the impact of climate change and ESG responsibilities. It is now accepted in Australian Corporate Law that directors' duties encompass an obligation to understand climate-change related risks and opportunities, take appropriate action to transition to a zero carbon future, and manage the risks associated with the physical impacts of climate change.

These obligations have been reinforced by the G20 through the Task Force on Climate-related Financial Disclosures (TCFD) and large companies are expected to work towards TCFD compliant financial reporting. Eventually that will encourage real estate companies to declare ongoing energy efficiency improvements, install on-site solar generation, procure 100 per cent renewable electricity and buy carbon offset credits to compensate for any unavoidable residual emissions.

The real estate sector's role

Sustainability has become a dominant global economic risk and business megatrend that will transform business, industries and society. Until now, most investors have not got to the point of avoiding assets deemed as high risk on the basis of climate change and sustainability. But it is inevitable.

The real estate sector holds many of the solutions to alleviate ESG concerns. These include targets for zero net carbon output, energy efficiency and adoption of renewables. It includes peak energy demand reduction, electrification of buildings, refrigerants, climate change resilience assessments, waste avoidance and recovery and water efficiency initiatives. The opportunity for the real estate sector isn't only in physical buildings. It is also in health and the wellbeing of customers and employees, social sustainability, inclusion and diversity, accessibility and electric vehicle take up.

Sustainable development goals

Demonstrating and recording progress against climate change and other ESG goals is best done against the United Nations Sustainable Development Goals – a collection of 17 global goals for 2030. >

How the real estate sector can channel change

Improve energy efficiency and increase use of renewable energy.

Strengthen resilience to climate-related hazards.

Improve resource efficiency, reduce waste generation and improve recycling, limit food waste and prevent marine pollution.

Increase water efficiency.

Protect natural heritage, limit biodiversity loss and improve access to green space.

Tobacco control.

Protect labour rights and promote safe and secure working environments.

Education, training and awareness raising about sustainability, developing partnerships that mobilise and share sustainability knowledge, expertise, technology and financial resources.

End all forms of discrimination against women, promote flexible work arrangements, monitor and promote gender diversity – particularly in leadership positions.

Improve accessibility for people with a disability.

Promote sustainable transport.

Identify and tackle corruption and bribery and address modern slavery.

Promote transparent sustainability disclosures and reporting.

Member states adopted the goals in 2015 and while governments are tasked with achieving them, the private sector have widely embraced the goals.

AMP Capital's real estate team mapped its sustainability targets against the SDGs. The exercise showed that that there were a number of specific SDGs that it could influence directly. The strongest correlations between the SDGs and real estate sustainability activities are in the table to the left.

Putting targets into practice

Reflecting on the demand to implement change and policies to both alleviate climate change and respect ESG initiatives, the real estate sector has undertaken a number of tangible steps. There is still some way to go but the sector is at the forefront of the ESG movement.

In Australia, the commercial real estate sector has almost universally adopted zero net carbon targets. The target dates vary from between 2020 for new buildings, and 2050 for existing buildings. Typically dates around 2030 have been targeted for carbon neutrality in real estate portfolios.

These targets normally include gas and electricity emissions with some also including more indirect emission sources such as tenant energy consumption, methane emissions from decomposing landfill, carbon emissions associated with water treatment and disposal. The next frontier includes initiatives to offset embodied carbon and other supply chain impacts.

Also almost universally adopted in the Australian market are energy efficiency targets, using the federal government's NABERS Energy standard as the performance benchmark.

Renewable energy targets are increasingly common and have triggered large rooftop solar photovoltaic installations. These are particularly well suited to shopping centres with large expanses of available roof area, seven-day trading, and with peak energy demand generally occurring during the day when the sun is shining and the panels are generating power.

In addition, some companies have commenced – and most are considering – various ways to cost effectively procure renewable energy. There is also a shift towards peak energy demand reduction strategies, such as demand response programs used in the United States.

Hydrofluorocarbon-based refrigerants punch well above their weight when it comes to global warming potential. In 2017, managing refrigerators was ranked the number one solution to climate change, by sustainability guru Paul Hawken[9]. Landlords are thinking more about their refrigeration options.

Commercial real estate owners and managers have a significant role in reducing the waste generated by building users and influencing them to adopt more sustainable consumption behaviours. Construction and operational waste targets are universal across real estate companies, including waste sent to landfill, collection of organic waste, disposal of electronic waste and greater education around recycling.

Water efficiency initiatives are omnipresent in the real estate sector, though not always as well developed as energy initiatives. They include everything from water efficient fixtures and fittings, rainwater collection capture, grey and blackwater recycling to landscape infiltration and other sustainable drainage systems.

9. https://drawdowniitkgp.wordpress.com/2017/12/07/top-solutions/

Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.

– Intergovernmental Panel on Climate Change, 2018

Case study: the rise of the smart home

"Smart homes" is about to become a catchcry. Innovation is sweeping through the residential real estate sector. There are smart barbeques that allow you to cook using an app, remote sous vide cookers to help get dinner on, smart beds with biometric sensors, and wi-fi pool cleaners, robotic vacuums and lawn mowers.

In Australia, more than 20 per cent of households already have a smart home management system and this is forecasted to double by 2023. The roll-out of a 5G network will underpin the surge. These systems are designed to optimise a household's use, storage and transfer of solar energy, and they can also be integrated with home automation systems that manage lighting, appliances, climate, security and entertainment systems.

Smart demonstration home projects have been piloting energy efficient technologies and design, including for the residential and volume-housing markets, for more than a decade. The homes are proving grounds for new ways of living that boast exciting, technology-forward features with enormous appeal.

At the core of the innovation is renewable, sustainable energy.

One such affordable and sustainable living pilot site is the 'House with No Bills'. Its first family took up residence in 2018, living rent-free in this prototype energy-efficient home to help demonstrate how real-time energy data and control through the cloud can transform how electricity is managed for the benefit of consumers and the power grid.

The home's solar photovoltaic (PV) and battery system provides energy that is either consumed, stored or sold into the grid depending on the artificial intelligence system's learned needs of its residents. Similar systems have been shown to save residents up to 80 per cent off their energy bills[10]. The House with No Bills project is creating a new way of living. The average cost of a home becoming 'smart' is $1,000-$2,000 per room, with most homes having an average of five smart rooms added[11].

More than just a building

Away from the physical building, the real estate sector is taking the opportunity to lead the way in other ESG initiatives. These include:

- Biodiversity: planting only native species, creating habitats for threatened and endangered species.
- Health and wellbeing: a major focus of most real estate companies including metric rating systems for evaluating the contribution of the building to occupant productivity and wellbeing.
- Social sustainability: social impact assessments of assets, supporting social enterprises, deepening charitable partnerships, improving stakeholder engagement.
- Inclusion and diversity efforts: gender equality including targets for women in senior roles.
- Reconciliation action plans: recognise and celebrate Aboriginal and Torres Strait Islander culture and promote indigenous employment.
- Accessibility: encouraging walking, running or cycling to work, or use of public transport; more could be done to improve accessibility of buildings given one in five Australians have some form of disability, according to the Australian Network on Disability.
- Electric vehicles: adoption in Australia has been comparatively slow, though there is increasing demand for charging infrastructure, increased use of share vehicles and pick-up and drop-off bays.

Further, 'green leases' – which incorporate rules around how a building is to be occupied and operated in a sustainable manner – are now relatively common in Australia. They will remain an important way to elicit the cooperation of building users in whole building sustainability initiatives.

Innovation in the sector to address ESG challenges is continuous. One example is the use of green bonds to secure favourable finance based on the strong sustainability credentials of Australian institutional real estate. Another is the creation of new funds focused on attracting impact investors or delivering enhanced social and environmental outcomes. A third is experimentation and scaling up of solutions like cross-laminated timber structures.

This innovation will continue. Energy services are likely to be increasingly incorporated into property management via embedded networks, solar power purchase agreements and district scale utilities. Expect to see the increasing deployment of Internet of Things sensors, advanced building management control systems using machine learning and artificial intelligence and a variety of other prop-tech initiatives.

Conclusion

Unlike the Maya civilisation of central America, or the Vikings of Greenland, society now better understands the causes and impact of climate change and broader ESG challenges. It is the responsibility of the current generation of governments and business leaders to find solutions. The real estate sector has taken on that challenge. It hasn't beaten it – there's still much to do – but it has shown leadership in the 21st century's greatest dilemma.

Want to learn more?

You can read the whitepaper, *Why Sustainability Matters in Real Estate,* from Head of Sustainability, Real Estate at AMP Capital, Chris Nunn. ☐

10. https://wattwatchers.com.au/wattwatchers-moves-into-mirvacs-house-with-no-bills-to-work-with-evergen-solar-storage-and-smarts/
11. https://www.fixr.com/costs/home-automation

The street in the sky

Quay Quarter Tower articulates the concept of a 'vertical village', as a series of stacked, pivoting forms respond to the urban context of Circular Quay's historic dress circle and views of Sydney's harbour and beyond[1]. The tower has over one acre of green space, with landscaped sky park and terraces in its vertical villages. Construction is currently underway, set for completion in 2022.

1. https://www.quayquartersydney.com.au/about-quay-quarter

Image is an artist's impression

Image is an artist's impression

The good fight

Julie-Anne Mizzi has an unrelenting focus on using capital to improve social infrastructure, a vision coloured by growing up in a migrant family, working in her father's deli, and once facing the prospect of never walking again.

Story by SEAN AYLMER
Pictures by NIC WALKER

"In the world of social infrastructure, it is fundamental that in doing your job well, you must be making the world a better place to live." So says Julie-Anne Mizzi, the quietly spoken, determined head of global social care at AMP Capital.

"For example, if we provide really high-quality schools, the matriculation rate of students goes up.

She continues: "Also, take social housing. At the moment, social housing doesn't make an economic return. But we know that the provision of really good social housing can actually reduce a lot of other costs in the long run, and I mean generational costs.

"We know that if we were to provide good social housing, there will be fewer police call-outs, fewer hospital presentations, you will need less juvenile justice and kids will stay in school longer. And by social housing I'm not talking about just the house. It's all the services that go around it that provide welfare, support and role models."

Mizzi is sitting in a meeting room at AMP Capital's headquarters at Circular Quay in Sydney. It is physically, and metaphorically, about as far away from her roots that the Harbour City allows.

Those roots – daughter of Maltese migrants who grew up in Western Sydney and worked in her father's delicatessen on weeknights and weekends – have clearly guided how she thinks about the world. Though Mizzi is difficult to define. She believes for-profit, capital allocation improves society while having a clear social justice bent.

"The idea in economics is that capital should go to highest and best use. I don't think we always do that," she explains. "In certain segments I think capital can be transformational. Where capital goes can make a difference. So, we have to get the parameters right so the capital goes to places where we want it to make a difference."

She is a true believer in the private sector providing social infrastructure.

"You have to be making a profit from the investment. If you aren't getting an appropriate return for the risk you are taking you won't continue to invest," she explains. "And infrastructure is so under-supplied. There is much need for more schooling and aged care. If the whole thing was profit neutral, then the capital wouldn't be available to invest in them."

Mizzi's world view was informed heavily by her parents, but the seminal moment in her life came before she had even finished school. The day before she was to start her final year, she was involved in a car accident and broke her neck.

It was an unstable fracture of her second vertebrae – colloquially known as the 'hang mans' fracture'. She spent the next six months in hospital.

"It really did shape me. I remember being drugged up, unable to speak and my dad at my bed crying, saying why did this happen to her. I couldn't speak but I thought who else would you want this to have happened to? I knew I had the resilience to get through it.

"I also realised very early on, when I didn't know if I was going to be able to move again, that my core skill was intellect. I was never very good at sport anyway, so it wasn't like I was an amazing athlete and had lost that ability," she says.

"And the other thing to come out of it was me thinking what else bad can happen to me!"

When she finally left hospital, her final year exams were just three months away. She had missed about two-thirds of the year.

"I decided to be a lawyer. I applied for dispensation given my accident."

Mizzi, 30 years on, can still recite the education department's response, word-for-word: "The illness, accident or unforeseen misadventure must occur immediately before or during your examination."

She missed out on getting into law by 2 marks out of 500.

Instead she did commerce at the University of New South Wales which led her to roles at New Zealand Insurance, in stockbroking, AMP for a stint, a UK-based quant fund and eventually AMP Capital. Nowadays she oversees the investment of hundreds of millions of dollars in schools, hospitals, aged care facilities, stadiums, prisons and water utilities – not a job for the faint hearted.

"You have to have a thematic. You have to have a view on macro trends," she explains. "To give an example: I don't want to invest in hospitals even though I want

"There's a lot more to it than making a financial return. From the investor's perspective you must deliver the non-financial return in order to ensure your financial return is sustainable"

to invest in aged care. The reason for that is that I think hospitals will become an outdated approach to providing care. More and more, we will see smaller, community-based health interactions that are focused on keeping us healthy, instead of giant hospitals that can only deal with episodes when we are not. And hospitals are very expensive; for the government, for insurers and for individuals."

"We need to find alternate ways of providing healthcare for the aged in lower cost environments, rather than sending people to acute hospitals. So, my macro theme is aged care rehabilitation outside the hospital system," she says.

"Then I map the potential universe of investments. Then take the opportunity when it comes."

"There is no such thing as a 'sure thing'. There is always risk and you need to know why you've made a decision, from a risk perspective. If it turns out to be wrong, you need to unpack that decision from a risk perspective," Mizzi says.

She returns to a favoured topic.

"There's a lot more to it than making a financial return. From the investor's perspective you must deliver the non-financial return in order to ensure your financial return is sustainable. In simple terms: If you don't have happy customers, your long-term client base is compromised, and you don't have a financial return.

"From society's perspective, and I'm constantly talking to government about this, we need to properly monitor and measure the non-financial return from the delivery of infrastructure. An example is social housing and the benefits it provides."

In the complex world of investing in social infrastructure, her overall philosophy is very simple. "I invest in infrastructure to make the world a better place."

But is it scary? She pauses and thinks about her response.

"Yes, because we are investing big licks of other people's money. Every time we come around to a valuation, I have a knot in my stomach and it stays there until I know the return we are giving back to investors. It is frightening." □

Strength in unity

World-class sports teams and special ops military divisions are collegiate, hard-working, and hungry for the same goals. The same can be said of AMP Capital's high-performing global listed real estate team, led by James Maydew.

Story by SEAN AYLMER
Portrait by NIC WALKER

The All Blacks rugby team and US Navy SEALs have almost nothing in common, except for the one thing that makes them the best at what they do: culture.

"The All Blacks and SEALs have a winning mentality and consistently need to deliver when the chips are down or when they're under pressure," Maydew says.

"This is achieved by having a clear strategy, practice makes perfect philosophy through structured training, and having the humility to recognise when things are not working and having confidence to pivot".

Maydew leads a team of 14 investors from around the globe who have the job of investing A$6.5 billion[1] worth of clients' money into listed real estate stocks. They operate out of Sydney, Hong Kong, London and Chicago and come from seven different nations if you agree Wales is different to England, which Maydew is clear in highlighting given his heritage. They have diverse socio-economic, cultural and geographic backgrounds and experience, yet still need to operate as a cohesive global unit operating across different time zones. As a team they are humble and recognise the absolute privilege of the responsibility they have.

Maydew, who has been in the team since 2007 and running it for three years, is a Welshman with a passion for sport who has used the cultures of two very different organisations to provide a basis for the team's culture. The first is the New Zealand All Blacks, the rugby team regarded as the most successful sports team in history with a win/loss ratio of 77 per cent over the past 116 years. The second is the United States Navy SEALs, the team of high calibre, multi-talented individuals who go through arguably the toughest screening and training regime of any job and have to operate in the harshest, most volatile environment.

1. As at September 30, 2019

Maydew sat down with Capital Edition to talk about the team, culture and why sport and the military is such a great teacher for the business world.

Why do you do what you do? What's your motivation?

As a team we talk about the importance of knowing what our purpose is, your reason for getting up in the morning, so when that alarm goes off we know what we need to do. For us, we believe we are in the business of helping families achieve their dreams and goals, so that they can achieve a better quality of life for their loved ones and retire with dignity – whilst minimising worry. Families rely on us. They trust us. As part of this, our job is focused on one specialist area, liquid real estate investing, it's simple and it's clear and puts every 1% decision (or said another way, each A$65m decision) we make, truly into perspective.

We are trusted to be the custodian of investors' capital and invest it in a thoughtful and productive manner, to ultimately improve our investors' futures and we take the responsibility very seriously.

How important is leadership in building a culture?

As a leader, it's your responsibility to create an environment for the team to thrive and a pathway to grow, but you have to ensure the core focus is the team and not about any one person – including the leader. If you look at the All Blacks, you might be captain, the kit person or the groundman but you will have a well-defined role to do. It's simple, if you have a well-considered strategy, can execute on your role and uphold your cultural values you stand for, you will succeed.

We also believe leadership is a mindset not a title. For leaders, the humility to admit and own mistakes and develop a plan to overcome them is essential to success. The most successful leaders are not driven by ego or personal agendas, they are simply focused on the mission (using a SEALs term) and how best to accomplish it. Our goal is for everyone in the team to have an ownership mindset and lead in every facet of their lives.

This introduces the concept of ownership, which the SEALs emphasise.

Yes, you have to own everything in your world. It means you take responsibility for everything – it's a no excuses, no blame philosophy and called extreme ownership. >

An asset tour in San Francisco, 2018

The team in China for a series of inspections, 2019

A debate during a team lunch in Shanghai, 2019

It's about calling out 'that's my problem', owning the problem allows you to own the solution and get it done.

In our team, I take responsibility for the outcomes we deliver, especially the mistakes and the problems, and if I can't deliver on our promises to our clients and overcome the team's challenges, I don't expect to be in the seat.

To ensure we can deliver, we have high levels of trust and use the military concept of decentralised command, the investors in the team are the stock picking specialists on the ground globally and I trust them to deliver, but that can only happen if we have clear lines of communication and I've given them the tools and right environment to thrive in their 'genius'.

Why do you have a culture statement?

Committing it to paper allows it to be enduring and real. We believe in it. It was built by us, owned by us and I'd recommend that if a team doesn't have one yet, take the time to build one together. It's immensely powerful. Ours is built around our purpose statement of 'delivering on our promises' and the behaviours and values that get us there. Importantly it also allows us to hold each other to account in everything we do as a team, especially when things go sideways.

Quite simply, unless you have a common belief, a common goal, common values and behaviours then it's difficult to have direction and clarity of what's expected of you.

Our culture is about 'delivering on our promises'. That's an all-encompassing statement, but is very clear and not open to mis-interpretation on what we are here to deliver to clients, stakeholders and to each other.

How do you develop a culture for a team of very diverse people?

Culture takes time and energy from all involved. If the team don't buy in and build it, it's simply a load of meaningless words on a page. How you devise a culture statement and what you stand for can be summarised for us in three parts. First, it's being very clear and transparent on what we're trying to achieve, especially important when you don't sit together each day as a team. Second it is giving everybody the time and energy to prepare and a structure of what we're looking to build using some common thread such as a book, video or podcast for everyone to focus their energy on. The third piece occurs at our offsite, it's not about one person talking, it's about the whole team talking and owning the process and sharing their learnings and how they can be implemented for our team to improve. When you build something together you are more likely to own it and ultimately believe in it.

We do annual offsites where we get the whole team together. We're a global team based in four different locations without the luxury of seeing each other daily, so getting together is vitally important. The week is always super productive and very hard working, but we also recognise the importance of getting away from the classroom, breaking bread, sharing stories and getting to know each other on a human level. That's how you forge a close culture and relationships.

We first built our culture statement back in 2016 and we did it by looking for assistance from external sources, including a Wallabies captain. Like many people, I'm sports orientated, and I believe in the power of teamwork, camaraderie and the benefits of mateship you see in team sport. So that was our starting point.

So a culture statement provides a path forward?

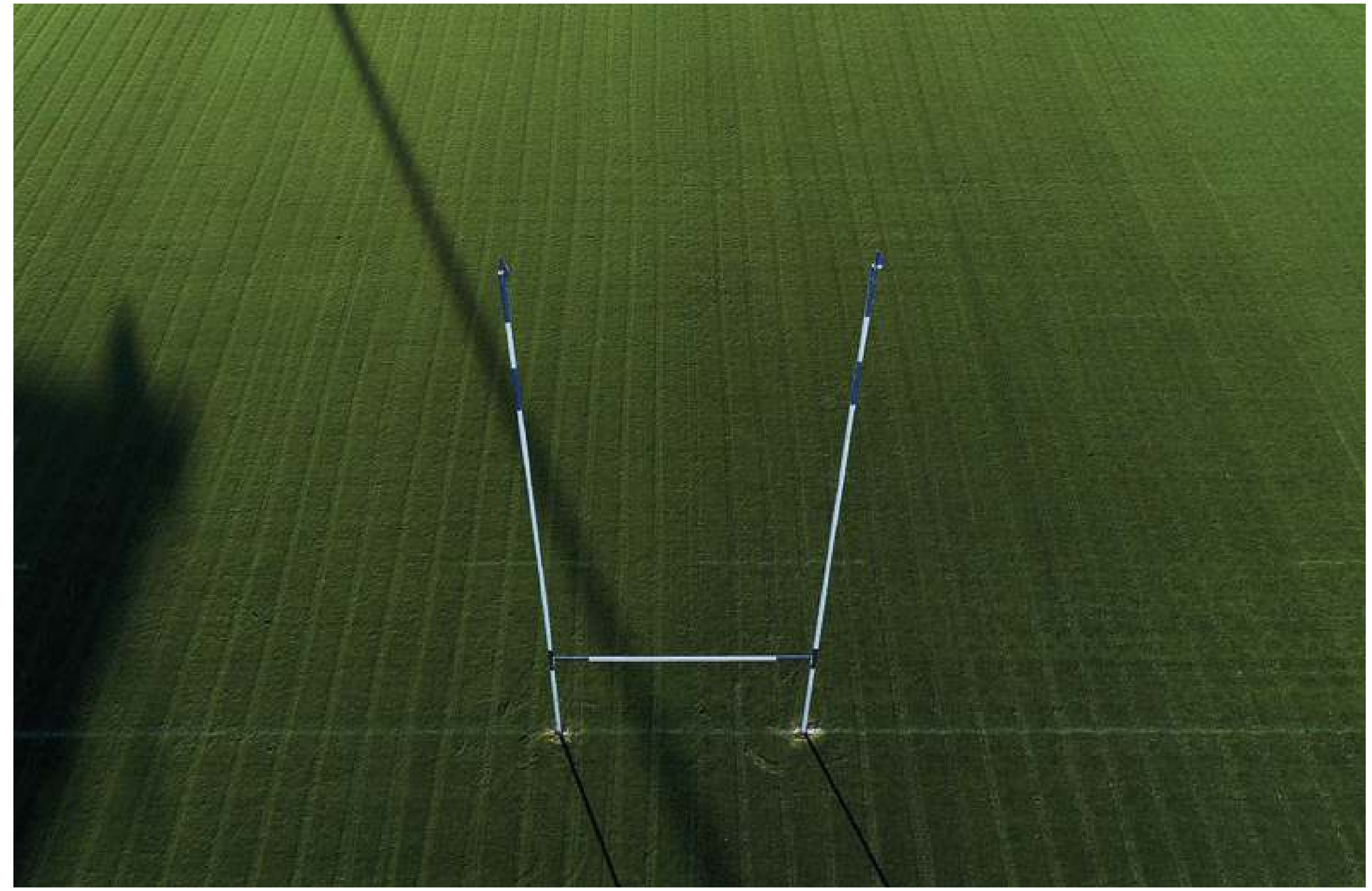
Yes, it's a pathway to allow us to progress, led by principles we believe in. Ultimately, it's all about delivering, improving and driving us forward. We have had new members in our team and they each bring in something different, something new, so our statement must always evolve with the team and the changing world. As an example, at the 2018 offsite, we had evolved our Asian team and they brought the Japanese philosophy of Kaizen to the global team – which means continuous improvement, which is now a central value in our culture, and has helped us continue to build our own team language.

Explain more about having your own language.

Having your own language creates an environment, a tribe of your own, your own culture, your own direction. A common language is a way to communicate where others don't quite understand it or follow it. It's a great way to create camaraderie which both the All Blacks and Navy SEALs have utilised.

Why did you and the team pick the All Blacks and Navy SEALs?

They are high performers at the highest level and have stood the test of time, but firstly they both believe in the power of the team over the individual. The All Blacks have concluded that collective character is vital to success and focus on getting the culture right and the results will come. We agree.



We use the 'sweep the sheds' mentality in our team taken from the All Black philosophy that no All Black is too good to sweep the sheds. Everyone in the team contributes, irrespective of how menial the task is or how senior their title. This removes ego and promotes humility. This is because no one person is too important to do the work that's got to get done. This forges a more thoughtful and respectful environment and the philosophy is 'better people off the field make better All Blacks on the field', which we find inspiring.

The Navy SEALs are a team of people that can excel in the harshest of environments where the body and mind are exposed to >

"Our culture is about delivering on our promises, about setting the expectation for success, it includes high performance as a minimum threshold and constantly resetting that benchmark higher. It's also about owning everything in your world. It means you take responsibility for everything – it's a no excuses, no blame philosophy and can be very powerful"

“As a global team, obviously a lot of people in the team have never even seen a game of rugby, but they have all read a book on the All Blacks and can all relate to its philosophy. It’s really about being a high-performing team and having a framework to sustain that in whatever you do”

some of the most challenging conditions which can determine your survival. Investing in the stock market can be volatile and things can go against you for large periods of time. If you’re true to your investment process, taking direction from the SEALs helps, as it provides perspective and helps you prepare for those tough times when things don’t go your way and you need to pivot.

How relevant are the All Blacks to your team members?

A lot of people in the team have never seen a game of rugby. But they can all relate to it in their own way. It’s really about being a high-performing team and what is expected of you. What you need is to have an enduring approach to whatever your chosen craft is and stick to it. The All Blacks craft is rugby and our craft is investing in liquid real estate, but our philosophy around a high-performance culture is similar.

How have the All Blacks been able to achieve win ratio of over 77 per cent over 116 years? It’s not just about practising more (although working harder than your competition is a clear assistance). They have worked hard on the culture and their team – what they stand for and what they want to leave as a legacy. They want to leave the jersey in a better place and believe in planting trees you will never see. It’s concepts like this that really build strong teams and it transcends countries, backgrounds and time zones.

What about the Navy SEALs?

The Navy SEALs have a simple idea which everyone can understand. Leadership is not a title, it’s a state of mind. Everyone in the team believes in the ownership of problems, mistakes and challenges. If you own the problem, you can deliver the solutions and move forward.

The team, each with a book detailing the leadership and team principles of the Navy SEALs, 2019

Are there similarities between the All Blacks and navy SEALs?

There are many, and that’s probably why it has been so straightforward for us to integrate into our own culture. Humility is a common theme. If you have an ego, or if you don’t have the ability to be humble, then that’s when you become too relaxed, not focused, too cocky, sloppy. You need humility to recognise when you are wrong and be humble enough to admit mistakes or error, especially in financial markets.

Another commonality is the power of the team over the power of the individual. You need to instil the central belief that, irrelevant of seniority, everybody does the hard yards, the menial work that has to be done. Richie McCaw the GOAT (greatest of all time) of rugby union was literally sweeping the mud from the changerooms post captaining the All Blacks to back-to-back rugby World Cups.

Strategy, planning and structure are also common themes, as is the goal of being the best at what your chosen craft is and developing both a winning and leadership mindset at all levels.

Sometimes it must be hard to get everyone on the same page. How do you deal with underperformers?

It’s important to recognise that the responsibility and accountability sits with a leader to create an environment that achieves the culture you want and find a way to get the best out of everyone if they’re falling behind. If you can’t, then that’s a failing on you as the leader and there is no one else to blame. Sometimes it is hard to get everybody to the same place, and as a leader must be loyal to the team and the mission above any individual and make hard decisions. If you have a culture statement that you’ve all built, then you all own it, you can use that culture statement as the basis for deciding to make those hard decisions.

A team building exercise in San Francisco, 2018

A team like the All Blacks is full of intensely competitive individuals. How do you manage that internal competition?

If you believe in free markets, competition is certainly not a bad thing, as that drives improvement and lifts everyone to that next level.

When it comes to incentives for individuals, there’s clearly an important element of what the individual contribution a person makes, but it’s outweighed by what the team ultimately delivers to the client. That is an important factor as we want to have a culture where individuals are willing to sacrifice their own contribution at a given point in time for the greater good of the client.

That makes it so important to have the right people, and why we spend so much energy on culture when we are in the hiring process. We want to ensure that we’re bringing on board the right people with the right frame of mind and a willingness to embrace our philosophy. In the end it’s about having the right people, in the right seats, doing the right role, and we ultimately spend more time with each other than we do our own families, so having culture carriers is vital.

“We use the ‘sweep the sheds’ mentality in our team taken from the All Black philosophy that no All Black is too good to sweep the sheds. Everyone in the team contributes, irrespective of how menial the task is or how senior their title”

Both the All Blacks and Navy SEALs see themselves as custodians rather than owners of a tradition. What’s your take?

We are immensely privileged to be the custodians of capital for many investors across the world, all A$6.5 billion of it, from mum and dad investors in Australia, NZ and Japan through to pension funds in China, Taiwan, Jordan and Netherlands.

As custodians, learning from the past and embracing the future is part of our Kaizen or continuous improvement. As part of this, one of the concepts that we focus on is debriefing, which is a SEALs term. After a mission, irrespective of how tired or injured a group is, they sit down and debrief on that mission so you can improve the next time around. It’s no different to our approach, assessing what’s working and what’s not. Everybody who’s been in our team has contributed to what’s here in front of us today and having a reflection on history is important.

Can your culture evolve?

The All Blacks believe that even when things are going well, when you’re on top of your game, you need to evolve, innovate and change your game to drive improvement and stay ahead of the competition.

The principles we use are hopefully enduring, but we have obviously evolved our culture statement as new team members join. We need it to evolve to represent the team as it evolves and the investment environment we operate in is also evolving, quickly. Clearly a lot of the behaviours and principles will be durable because they are central to what we believe in and stand for as individuals and will still be as relevant today as they are in 20 years’ time.

Finally, you’re Welsh, but do you support the All Blacks?

I’m a proud Welshman. Recently, when we used the New Zealand All Blacks as our central theme at one offsite in Sydney, it was the same hotel as the Australian Wallabies who were preparing to play the All Blacks that week. We invited the Wallabies captain in to our offsite to provide a few leadership words. He came in expecting to see a room of Wallabies fans but saw a global audience all sitting there each with an All Blacks book on high performance. It was quite embarrassing. □

The big changes heading to airport shopping

Regular travellers have no doubt been forced to walk through their fair share of duty free stores. Using that example, we illustrate how airport retail could change in the future for travellers and investors alike.

GIUSEPPE CORONA
Head of global listed infrastructure

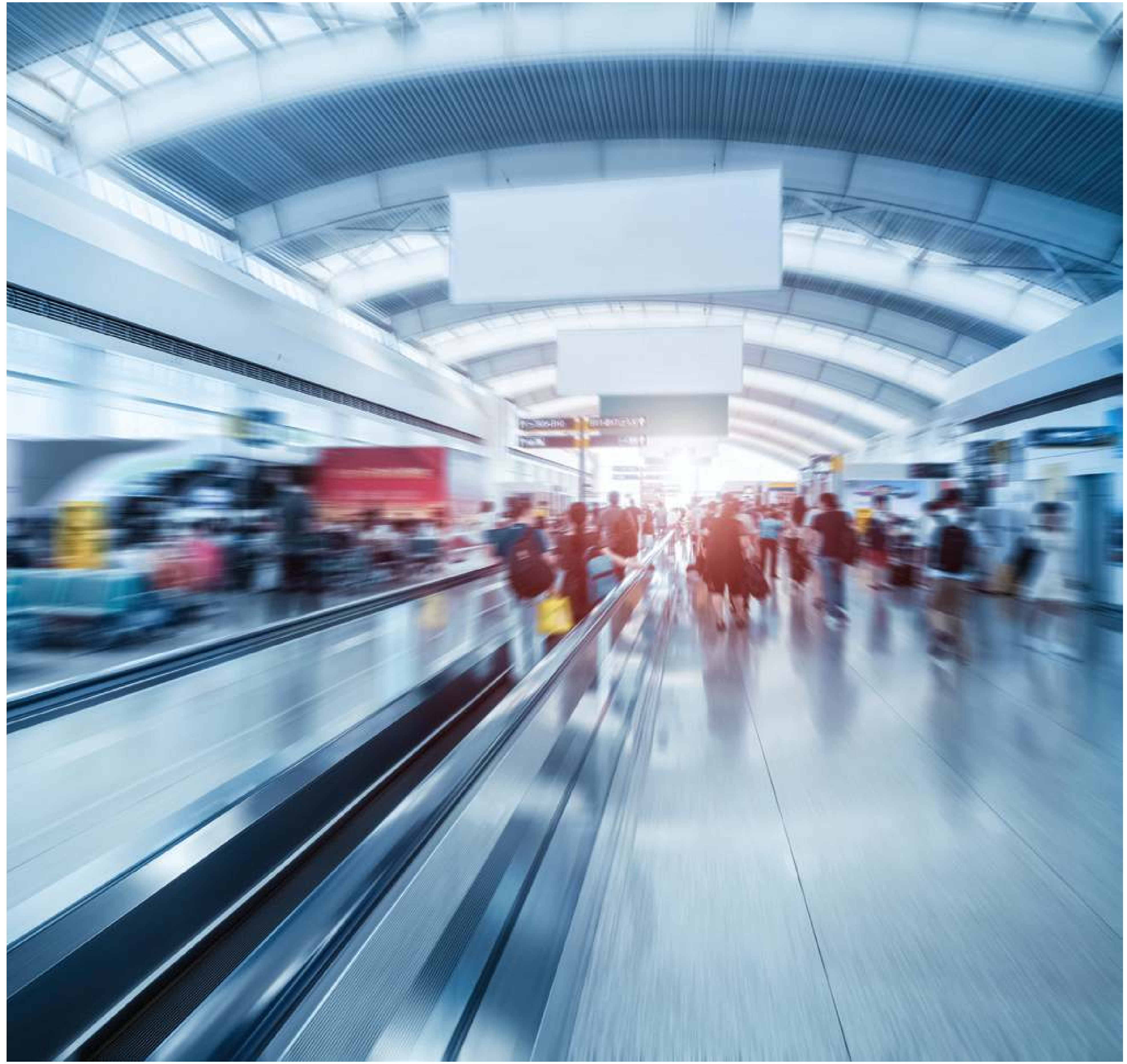
ANDY JONES
Portfolio manager/analyst, global listed infrastructure

Since the concept of duty free shopping was established in 1947, airport shopping has remained relatively stable – goods sold to international travellers in these shops are not subject to government taxes and levies, which means they can be sold more cheaply than in the high street.

Additional support for duty free shopping has arisen over the years. This is particularly the case as air travel has become more security conscious, thus creating longer dwell times and additional free time in the terminal.

Retailers find airports a great place to do business. They are treated to a captive and (hopefully) relaxed flow of potential customers, who have much higher browsing/purchase ratios than the average high street store. For the marketer, an airport is a fertile hunting ground. As a result of these various factors, sales density is far higher than high street outlets.

In return for this attractive set of circumstances, the retailer pays the airport operator (landlord) a rent. This rent is usually higher and more variable than that found in conventional retail outlets, but balanced with the lower cost of products (with i.e. no tax/duties) it historically enables the retailer to offer and pass on a price saving to the customer. >



The rent is usually structured as a minimum guaranteed rent, or a percentage of sales – whichever is higher.

Now, the main reason why people purchase in duty free stores has changed rapidly. Due to a range of factors, the price competitiveness of airport retail has narrowed versus online alternatives.

Data tracking travellers' spending patterns[1] show that the airport is no longer necessarily cheaper than downtown. Therefore, an industry which has grown around the idea of hard selling based on price needs to evolve to appeal to the emotional side of travellers rather than the rational side.

Duty free operators are increasingly recognising that change is needed to take customers on a brand journey and give them a unique experience. Duty free stores used to be designed to look the same around the world, so travellers could build familiarity.

"Duty free stores used to be designed to look the same around the world, so travellers could build familiarity. Now, the perceived best model is more around a 'sense of place' – making travellers feel like they are in a certain place, rather than making them feel like they are in an airport"

1. DF & TR industry by DFWC and M1nd Set/Data available only as of 2017

Now, the perceived best model is more around a 'sense of place' – making travellers feel like they are in a certain place, rather than making them feel like they are in an airport.

The challenge this presents to the retailer is a potential reduction in their economies of scale as shops become more tailored/bespoke in both appearance and product range, consequently squeezing profit margins.

Where to from here?

The duty free example is one in a variety of airport retail experiences which leads us to believe there are strains and frictions on the horizon for the historic retailer-landlord relationship.

In response we are already starting to see change. Both Paris Aeroport and Fraport have launched joint ventures with airport retailers – effectively shortening the value chain. On the surface this type of relationship allows for longer-term thinking about optimising passenger flows, retail strategy and a fairer sharing of revenue risks.

For the airport, we think this introduces more volatility to retail revenues and potentially more investment obligations to share the capex costs of a shorter 'storefront' cycle.

We also foresee an extension of digital collaboration across various players in the aviation value chain. Airport retail faces the same challenges of any retailer: that digital natives are today and tomorrow's buyer, and their relationship with a purchase is often more involved or planned than based around an impulsive decision.

This collaboration could entail pre-flight targeting (i.e. duty free offers sent via airline ticket confirmation emails), in-flight targeting, and other initiatives like click and collect or collect on arrival. As shown in the chart to the right, a more labour-intensive selling process can lead to better spending, but this also increases the cost to the retailer.

We are also seeing brands treating the travel retail channel more as a marketing and awareness venue, as opposed to a location for pure retailing. This is clearly challenging for retailers, as there is less 'on site' sales potential, and less revenue to pay high minimum guaranteed rents.

The showroom concept is arguably better served with a lower and less sales-dependent rental model, something which Zurich

What do people spend their money on in airports?

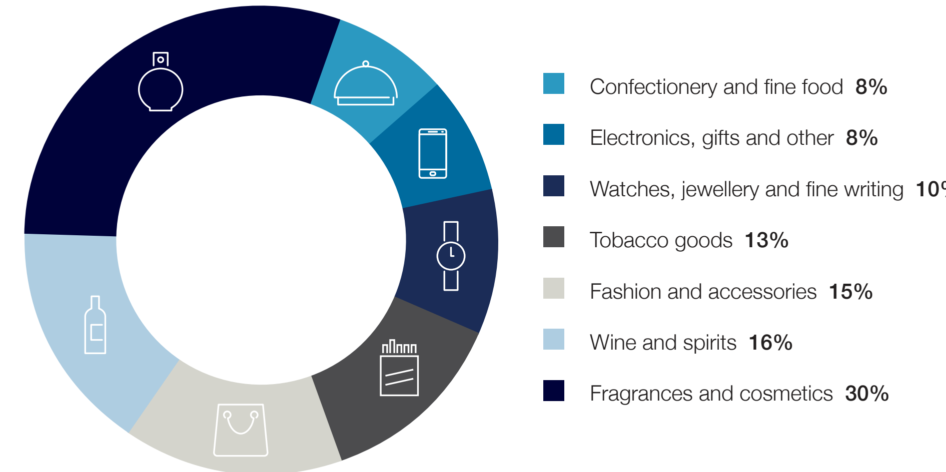


Chart 1
Source: Duty Free World Council, 2014 data

Airport has already floated as a likely development for airport retail.

For airport investors, all of these developments are a challenge, as the future of airport retail looks like a lower growth activity – potentially at or below passenger volume growth, rather than being a multiple of nominal GDP (and valued at a trading multiple some 50 per cent higher than regulated aviation activities).

Our analysis here has been mainly focused on the largest hub/capital city airports, which have a large and relatively slow growing base of passengers and highly developed retail offerings. This is often not the case at smaller secondary city or regional airports, which have a lot of floor space, but are underutilised from a passenger mix perspective. The current generation of aircraft deliveries (fuel efficient but smaller widebody aircraft) enable new routes to be served with a much smaller base of demand. This rapidly opens up secondary cities to new international routes, and gives the airport operator a huge opportunity to create a step change in retail revenues.

This vision for the future also has little impact on what is known as a single-till airport (rather than a dual-till). In this regulatory framework, retail profits are included in calculating the 'fair return' for the airport rather than being fully unregulated.

Unquestionably, the dual-till airport (which gets to keep its retail profits in full) is the best option if airport retail continues on the same path for the next 20 years as it has in the last 20. However, single-till airport regulation ensures that any underperformance is de-risked through tariffs charged to passengers.

Airlines already prefer the single-till model, which, ceteris paribus, means tariffs are lower and interests are more aligned. Airport retailers may soon find themselves joining this lobby.

AMP Capital's Global Listed Infrastructure investment team continuously looks for opportunities to make high-conviction investments with a long-term approach. This means selecting airports where believe we have a clear line of sight of a certain trajectory of revenues, or we can engage with and support management teams to recognise and respond to these factors before it is too late to change course.

At present our airport investments avoid large hub airports, which we expect to bear the most evident effects of our thesis. Instead, we see upside in select emerging markets airports where generally the marginal passenger is a first-time traveller, airports have the 'right' retail mix, and there is a long runway for passenger growth. □

Buildings of the future

What might a building look like in the years to come and how will it function? There are seemingly boundless options for the investors among us with a focus on sustainability, function and returns.

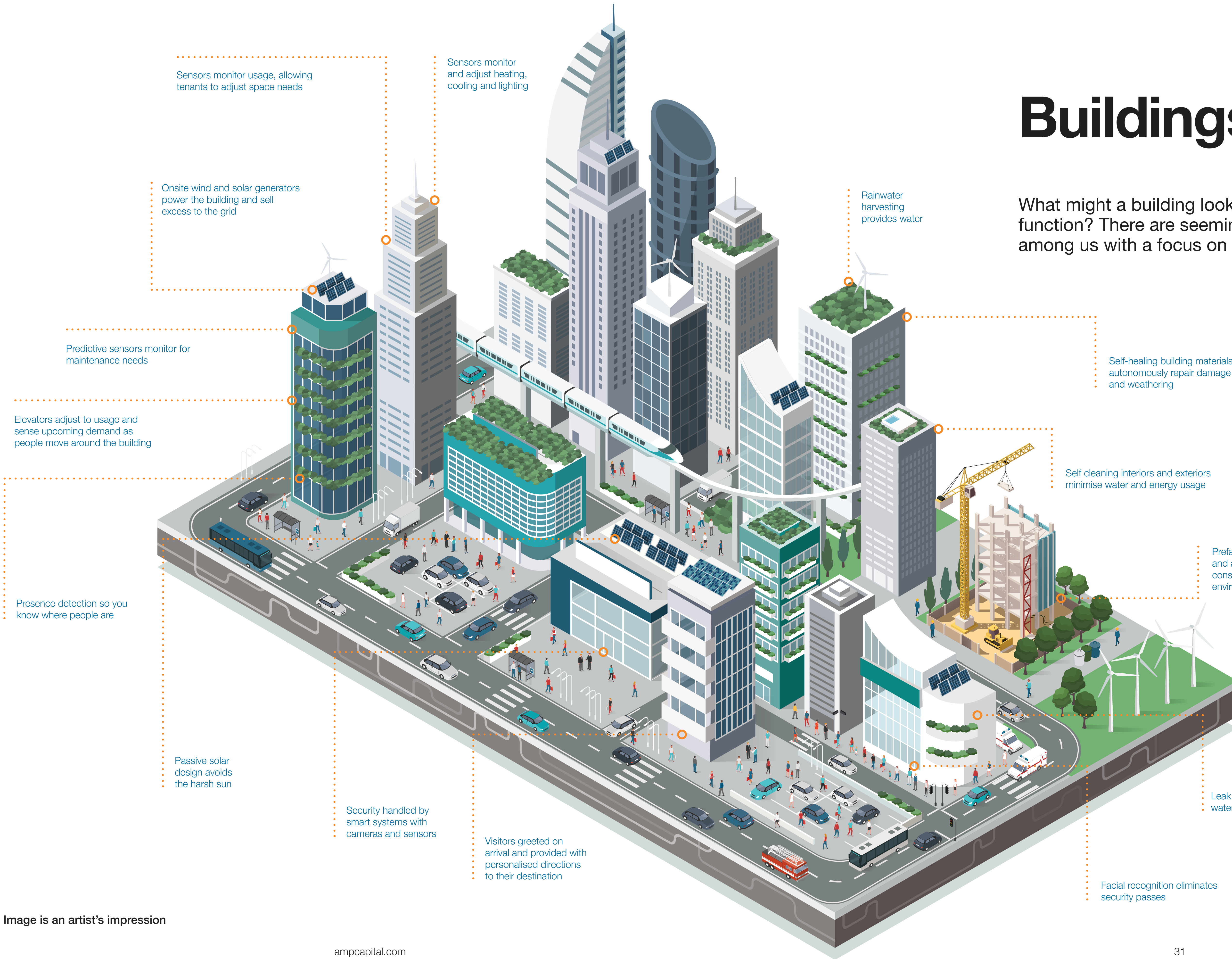


Image is an artist's impression

Office buildings are changing every year. New technologies, improved building techniques and clever design are delivering the most exciting architecture ever seen in the sector.

Developments in artificial intelligence, materials and environmental science are promising more amazing things to come.

Sustainability is driving many of the changes. Developers are making buildings more energy efficient, using passive solar design and smart sensors to reduce energy usage. Technology promises even more – energy harvested from the environment and put back into the grid, green building techniques eliminating carbon impact, space for plants and bird life in the office towers themselves.

Human scale changes are happening too. Street life will be drawn up into the towers with public zones for people to meet and socialise. Gardens will provide space for sitting or exercise, hundreds of metres above ground level.

More than that, buildings are becoming a second home as people seek to do more than just work. Facilities for play will be integrated into the fabric of the buildings, with bars, shopping and restaurants within easy reach of all floors.

Supporting the new designs is sophisticated new technology. Double and triple decker elevators moving people between floors more swiftly than ever. Sensors monitoring comfort conditions and reacting to the number of people in a room. Lights turning on and off as needed, saving energy and reducing carbon emissions.

In this illustration we take a look at what a building of the future might look like. ☐

Why we should pay more attention to sluggish global productivity

'Productivity' doesn't make for an exciting news topic, but it should be getting more focus on a global scale.

DIANA MOUSINA
Senior Economist, AMP Capital

Productivity growth is not tangible, which probably forms part of the reason it's hard to measure, and as a result, get excited about. Daily changes in share prices, as a point of comparison, have a meaning and a value that investors around the world over can understand and explain. It's harder to feel impacts of changes in productivity.

Get excited about productivity

Despite the barriers to understanding, productivity growth should be given more focus because it is a key driver of long-run living standards.

Since the Global Financial Crisis (GFC), productivity growth has increased by an average of only 0.3% annually across advanced economies. Prior to the GFC, it was running closer to 1%. Productivity growth in emerging and developing economies was also hit after the GFC.

But it wasn't just the GFC that caused a slowdown in productivity growth, it was already slowing before the crisis. In this piece, we take a look at recent outcomes in productivity growth, reasons behind the weakness, measures to lift productivity growth and the outlook for productivity.

What is productivity growth and how is it measured?

Productivity is a measure of how well inputs (labour and capital) are being used to create output:

Productivity growth = total output ÷ total inputs

Therefore, increasing productivity growth can be achieved by lifting output with the same inputs (making your inputs work harder) or cutting inputs and maintaining the same level of output (which is harder to do for businesses).

Measuring productivity growth can be difficult, especially in service-based areas because it is hard to get a measure of output in these industries. Some service areas, like healthcare and education for example, are not output intensive industries (and never will be because of their nature) so productivity is not measured for these sectors.

Because of these issues, productivity growth has typically been measured in the manufacturing industry or production industries where it is easier to compare output and inputs (particularly capital). This is problematic for advanced economies where services industries account for close to 70% of GDP growth. In this note, we use a measure of GDP per hour worked as our indicator of productivity growth.

Why is productivity growth important?

Productivity growth is a key driver of per capita GDP growth, wages growth and therefore living standards.

Businesses benefit from higher productivity growth via corporate profits, households from higher wages and government budgets from the increased revenue associated with rising corporate profits and household taxation.

Aren't we in the middle of an IT revolution? Why isn't it lifting productivity growth?

It is puzzling that productivity growth isn't stronger despite the significant innovations and improvements in technology over the past decade including bigger data allowances, faster computing speeds and leaps in robotics and machinery. Some commentators believe that it is down to a measurement problem. But poor productivity performance has been occurring for years so it is hard to continually blame the statisticians.

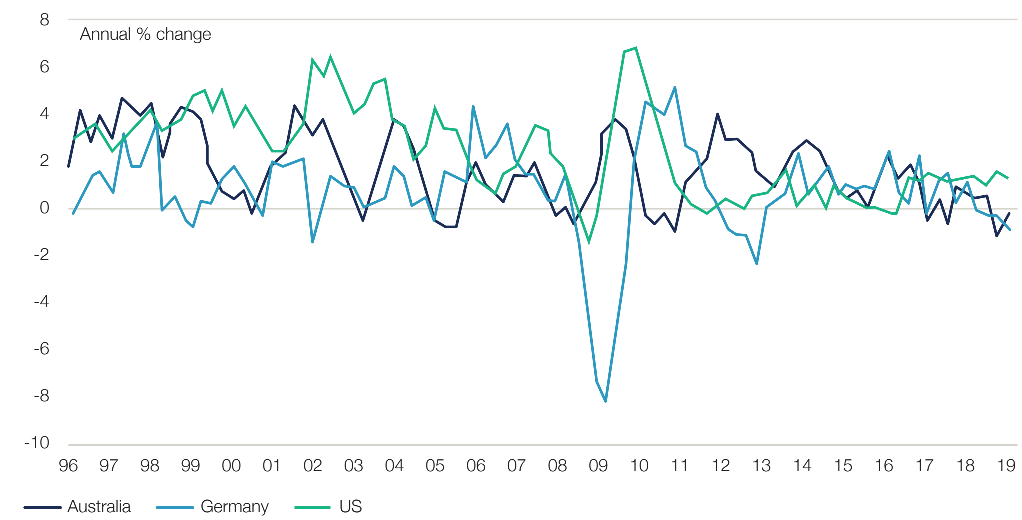
What this recent experience tells us is that new technologies, on their own, are not enough to make significant changes to productivity growth. Firms need to firstly adopt these new technologies and then change their practices, processes and operations using these new technologies which outweighs the cost of these new technologies.

How do we increase productivity growth?

The biggest driver of productivity growth is government policy. As an example, in Australia, the Productivity Commission has come out with recommendations on how to lift productivity growth with various recommendations across industries that aim to improve effectiveness of government institutions and how they operate with the private sector. Important issues for Australia include a review on taxation, energy policy and improving science and mathematics in schools and universities.

Ultimately, it is these government policies that impact the ease with which businesses can operate, support for innovation and level of administration therefore driving business sentiment and investment intentions. Business investment is an important longer-run driver of productivity growth.

Chart 1
Global productivity growth



Source: BLS, Eurostat, ABS, AMP Capital

> **"It is puzzling that productivity growth isn't stronger despite the significant innovations and improvements in technology over the past decade including bigger data allowances, faster computing speeds and leaps in robotics and machinery"**

Infrastructure spending also helps productivity growth in the longer run. However, it needs to be the appropriate infrastructure that has had the right cost/benefit analysis. Using Australia as an example again, the government has a 'priority list' that ranks the importance of infrastructure projects.

What is the outlook for productivity growth?

Negative hits to global growth in the current cycle post the GFC (like the Eurozone debt crisis, the oil price shock in 2015/16 and the current US/China trade dispute induced slowdown) tend to dampen productivity growth because of the hit to business confidence, investment plans and incomes. Each time there is a mid-cycle shock, the subsequent recovery in productivity growth will be drawn out. The continual hits to global growth since the GFC are one reason why productivity growth has been low.

The current trade dispute will be another hit to productivity growth through the uncertainty created for businesses, the disruption to global supply chains and production and the interruption to investment plans. As well, global trade and globalisation encourages investment in new technologies and better business practices.

Implications for investors

Low productivity growth tends to be disinflationary in the short-term as it is usually accompanied by subdued economic growth. However, in the longer run it tends to be inflationary as unit labour costs rise for businesses. However, there are no signs that low productivity growth over recent years is leading to higher inflation at the moment.

This is because economies are still operating with spare capacity which is keeping a lid on inflation. This low inflation, low growth environment means that more global central bank stimulus should be expected, especially to offset the negatives from the trade dispute. □

About AMP Capital

AMP Capital is a global investment manager offering private market and public market solutions to clients, with a strong focus on ESG.

Our home strength in Australia and New Zealand has enabled us to grow internationally, and today we have operations in Dubai, China, Hong Kong, India, Ireland, Japan, Luxembourg, the United Kingdom and the United States. With over 250 investment professionals working in 17 locations around the world, we're able to deliver the capabilities and investment solutions that help our clients achieve their financial goals. We also collaborate with a network of global investment partners, leveraging our shared capabilities to provide greater access to new investment opportunities.

We are entrusted to manage A$200 billion[1] in assets under management on behalf of our clients, across a range of single sector and diversified funds. We work with more than 300 international clients and manage almost A$19 billion in assets on their behalf[1].

Direct real estate

With a heritage spanning over 50 years, we actively manage real estate across all stages of the cycle. We realise true value for clients through the investment management, property management and development of a portfolio of some of the most iconic shopping centres, industrial estates and office buildings, from Australia's first skyscraper to the transformational Quay Quarter Sydney development.

Direct infrastructure

Backed by a truly global infrastructure platform, we're able to capture what we consider to be the best investment opportunities from around the world. It's earned us a name on a global stage, and a place as one of the top 10 infrastructure managers worldwide[2].

With 30 years' experience, we bring a breadth of insight that spans energy, power, transport, utilities, airports, seaports, communications infrastructure, social infrastructure, aged care and more. The combined expertise of close to 100 infrastructure investment specialists also allows us to cover all aspects of capital structure giving our clients more investment options for their future.

Public markets

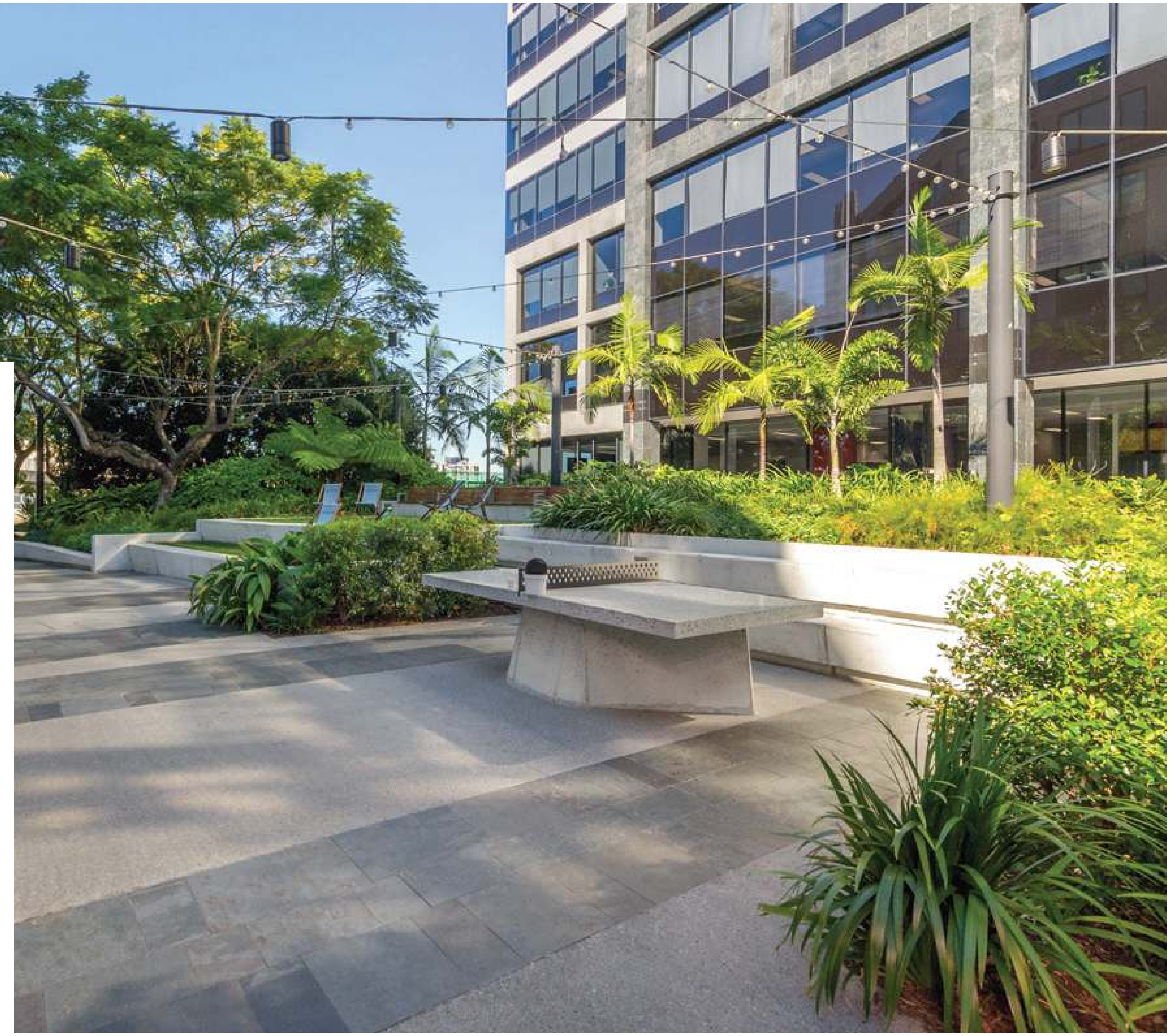
Our well-established public markets business, including fixed income, listed equities and multi-asset solutions, requires shifting from traditional actively managed products to a specialist active offering of targeted solutions which meet specific client needs. Our public markets team remains focused on delivering investments that match our client's needs as we manage A$140.7 billion[3] across our global fixed income, multi-asset solutions, Australian equities, global listed real estate, global listed infrastructure and global equities solutions.

ESG and responsible investment

We believe considering ESG factors provides greater insight into areas of risk and opportunity that impact the value, performance and reputation of investments we make on behalf of our clients.

We recognise that all investments we make have a purpose and a wider impact and it's up to us to help make it a positive one for our clients and the global markets and communities in which we invest.

By looking at what we do as part of a bigger picture, we've developed a portfolio of responsible investment options for our clients. We are one of the first investment managers globally to sign the UN-backed Principles for Responsible Investment (PRI)[4]. Many of our funds have been recognised for their ESG performance. We continue to challenge and evolve our thinking, our processes and product offerings to meet our clients' growing expectations, partnering with them as they too look to fulfil their own goals and commitments to responsible investing. □



MILTON GREEN IN THE AUSTRALIAN CITY OF BRISBANE, IS AN OFFICE PARK MANAGED BY AMP CAPITAL

1. As of 30 June 2019 Represents draw down amount on a fully funded basis
2. Willis Towers Watson Global Alternatives Survey 2017
3. As of 30 June 2019
4. www.unpri.org

CAPITAL EDITION

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