AMP CAPITAL

GENERATIONAL SHIFT SEES JAPANESE INVESTORS FLOCK TO REAL ASSETS

Since the Japanese ‘bubble economy’ burst at the end of the 1980s, it has seen sub-par growth, recessions, deflation and a secular bear market in shares and property. These events have had a lasting impact on the funds management industry and on the long-term asset allocation strategies of Japanese institutional investors. On the one hand, it has promoted more cautious investment strategies and a greater focus on portfolio risk management. On the other hand, the prolonged low-yield environment has heightened the need for return-enhancing strategies and increased the appetite for alternative assets.

“The aging and decreasing population is a serious problem in many developed countries today. In Japan’s case, these demographic changes are taking place at a more rapid pace than any other country has ever experienced.”

— Toshihiko Fukui, Japanese economist and banker, served as Governor of the Bank of Japan 2003-2008

KEY POINTS

- With yields on Japanese Government Bonds near zero or negative, investors will continue to seek higher yielding alternatives.
- The shift by the Government Pension Investment Fund of Japan (GPIF) and other institutional investors away from bonds into riskier asset classes reflects a shift from cash and bonds to equity-style investing.
- Over the next three-five years it is unlikely that Japanese investors will become direct investors in infrastructure (like Canadian or Australian institutional investors). Rather, they will continue to invest through fund managers.
- Early investors in global listed infrastructure should benefit as the sector continues to mature and grow over time.
- Japanese deployment of capital offshore is positive for liquidity, and will continue to support the ongoing globalisation of the direct real estate sector.
- We expect the income stream from real assets will continue to be favoured by Japanese investors, and will also be sought by long-term asset allocators as a diversifier of risk in portfolio construction.

INSIGHTS
IDEAS
RESULTS

Today, Japan's asset management industry is on a new growth phase; its AUM (approaching 500 trillion yen) and asset management revenues both surpassed their 2007 peaks in 2016 and are likely to keep growing. Japanese institutional investors typically have longer term liabilities and over the last decade have been looking for new sources of long-term, inflation-protected returns. They represent a potentially major source of long-term financing for real assets.

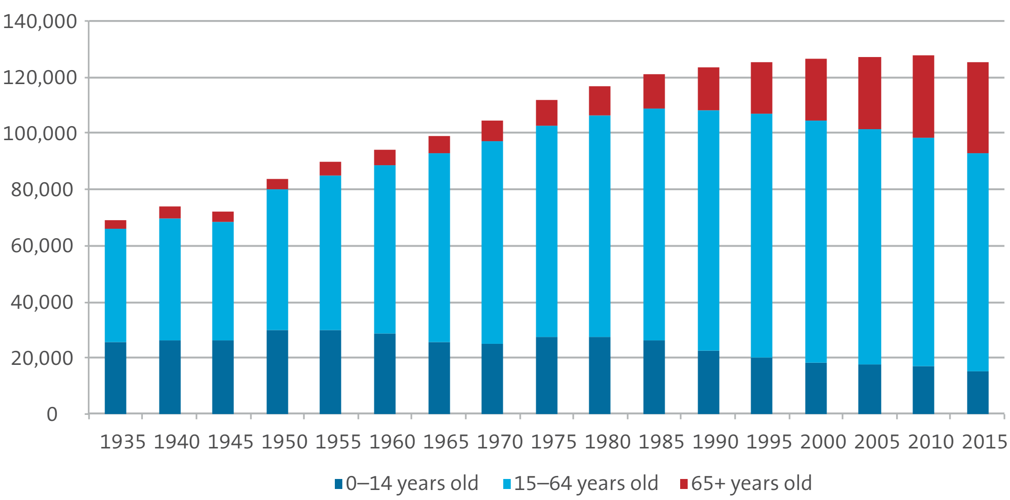
The institutional investment environment in Japan is undergoing a transformation. This paper examines the factors that we believe will result in Japanese investors increasingly allocating to real assets.

DEMOGRAPHICS MATTER: JAPAN'S POPULATION IS AGEING

Since 1935, the proportion of over 65-year olds in Japan has increased dramatically from 5% in 1935; 10% in 1985 and 26% in 2015. Baby-boomers (born in 1947-1949) are retiring at a rapid pace. The Health and Welfare Ministry has estimated that over-65s will account for 40% of the population by 2060. In 2012, the mandatory retirement age was raised to 65 from 60 in recognition of the swelling pension costs of an ageing society.

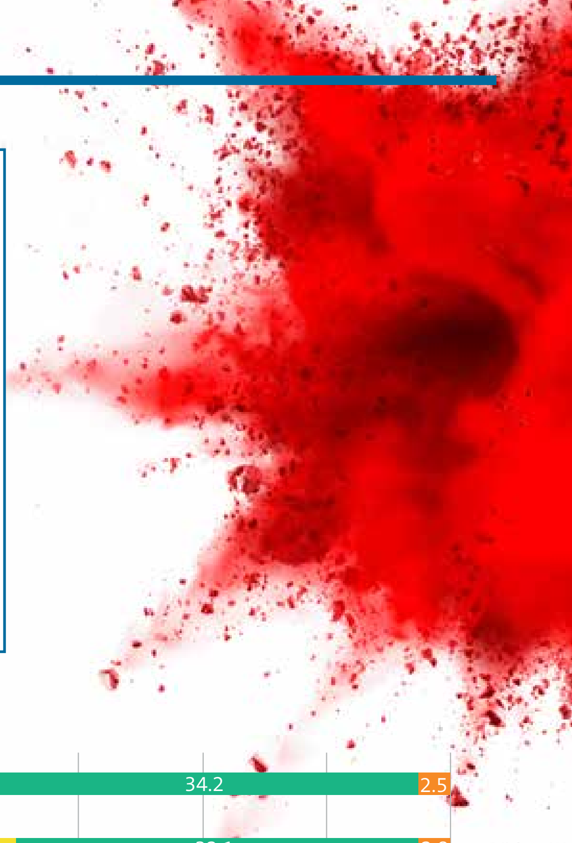
Japan's population demographic, reflected in figure 1, is placing significant pressure on defined benefit pension schemes. A structural shift in asset allocation away from Japanese Government Bonds to risk-based assets, led by the Government Pension Investment Fund (GPIF), is currently underway to stabilise the unfunded liability gap, however, the key focus is still on protecting the value of assets.

Figure 1: Japan's population by age groups



Source: Statistics Bureau, Ministry of Internal Affairs and Communications Japan, Population Census, October 2015

> Over the past few years, asset managers have been targeting the baby-boomer generation's retirement benefits.

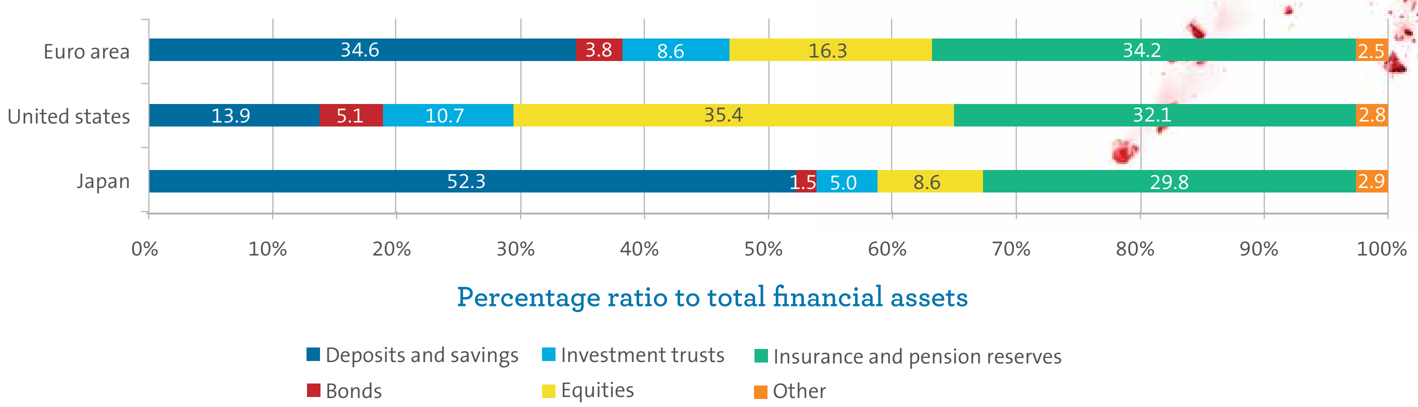


THE JAPANESE PROPENSITY TO SAVE: WHAT DOES IT MEAN FOR REAL ASSETS?

According to the Central Council for Financial Services Information, as 31 December 2016, deposits accounted for over 50% of all financial assets in Japan. In comparison, investment trusts accounted for only a small portion of the market – see figure 2. While over the past decade the allocation to investment products has been substantial, current Japanese policies are also encouraging the shift from deposits to investments.

Warren Potter, AMP Capital Senior Portfolio Manager – Global Fixed Income, emphasises that the working-age-to-dependent-population ratio peaked in 1992 and has been in decline since this time. He points to very high corporate savings that offset government deficits and a high – and increasing – saving rate for those aged 25-45. By contrast, those aged over 60 save less or draw into their savings. Given the fact that the bulk of wealth lies with the older cohort, he believes there will be good demand for higher-yielding real assets such as property and infrastructure.

Figure 2: Japan has a significantly higher savings rate, compared to the US and Eurozone



Source: Bank of Japan, Flow of funds – Overview of Japan, the US and Eurozone, as at 22 December 2016

'ABENOMICS' FOUR YEARS ON: THE LONG PATH TOWARDS FISCAL HEALTH

Abenomics refers to the economic policies advocated by Shinzo Abe since his election as Japanese prime minister in December 2012. Abenomics is based upon 'three policy arrows' of fiscal stimulus, monetary easing and structural reforms, all with the aim of boosting inflation to 2% p.a. and real economic growth to 2% p.a. Four years on, despite significant monetary and fiscal stimulus Japan is still struggling to achieve these targets. Over this period, there has been a particular lack of progress with structural reform. These structural reforms are predominantly microeconomic policy changes aimed to boost economic performance.

STRUCTURAL REFORM: HITS AND MISSES

HITS

- Increased female and elderly participation in workforce
- Some increase in the number of foreign workers
- Some focus on productivity enhancing technologies (robots, artificial intelligence)
- Moves to liberalise trade and remove protection from agriculture

MISSES

- No meaningful relaxation of immigration
- No significant corporate tax reform
- Rigidities in labour market supressing meaningful wage growth

According to the Organisation for Economic Cooperation and Development, Japan has the highest level of debt among advanced nations, with its combined state and local government deficit expected to reach 5.7% of gross domestic product in 2016. The International Monetary Fund suggests that government debt could reach 250% of GDP in 2017, a figure larger than the debt owed by Greece. In 2025, medical and nursing care spending is expected to soar as all baby boomers will be aged 75 or older.

In 2016, there were two major policy developments:

> **Yield curve control:** In September, the Bank of Japan's (BoJ) policy board adopted an aggressive framework called the 'Quantitative and Qualitative Monetary Easing with Yield Curve Control' whereby 10-year Japanese Government Bond yields are anchored at zero. By controlling the level of 10-year yields coupled with a policy rate set at -0.1% the BoJ is effectively holding government bond yields close to zero right across the yield curve

> **Consumption tax delayed** In June, the proposed increase in consumption tax (from 8% to 10%) was postponed by the Abe Government for a second time until at least October 2017. It is likely the tax increase could be delayed further. A previous increase in consumption tax caused the economy to slow considerably and the Government would be loath to make the same mistake again.

In order for Abenomics to begin to get some traction towards its objectives, Warren Potter AMP Capital Senior Portfolio Manager notes that there needs to be more progress on structural reforms coupled with some additional fiscal stimulus. He suggests that the yield curve control policy adopted by the BoJ effectively allows the government to borrow at zero rates – which is a step short of 'helicopter money'. The Abe government could look at more fiscal spending – and increasing government deficits – without incurring significant cost because of the zero interest rates. This policy would have the benefit of both providing a boost to economic activity while addressing a technical issue whereby the BoJ was running out of Japanese Government Bonds to buy (due to a number of years of significant asset purchasing by the central bank).

The political appetite for increased fiscal spending is hard to gauge. There are signs that the Abe government may remove controls on military spending (Japan's constitution, imposed following World War 2, forbids it to have a military and wage war, although it is permitted a self-defence force). The United States has been pressuring Japan to assume more of the defence burden for the country. US President Donald Trump is likely to continue this pressure. A ramp up in defence spending could be a source of greater fiscal stimulus.

Warren Potter says that Japan continues to be a useful test case for the rest of the world to see whether economic policies can be used to combat the pressures of demographics and an ageing population.

Implications for investors:

With interest rates at or close to zero this is not a supportive environment to continue to own Japanese Government Bonds and higher yielding alternatives should prove to be more attractive.

JAPAN'S ECONOMIC SCORECARD: FRAGILE BUT SLOWLY IMPROVING

Over the course of two 'lost decades', Japan has struggled to maintain its competitive edge. According to AMP Capital's Investment Strategy and Economics team, Japanese growth is fragile but improving. The BoJ's 0% yield target on 10-year government bonds has capped its bond yields in the face of the global bond sell-off that started at the end of 2016. Its commitment to overshoot on its inflation target has been extended. It now expects to achieve 2.0% inflation by fiscal 2018 rather than fiscal 2017. Our inflation forecast of 1.0% is lower – see figure 3.

Figure 3: AMP Capital global economic indicators: Japan

PORTFOLIO	2015 (actual)	2016 (actual)	2017 (forecast)	2018 (forecast)
GDP growth (year average)	0.5	1.0	0.5	0.6
Inflation (year-ended)	0.1	0.0	0.7	1.0
Interest rates – policy rate	0.1	-0.1	-0.1	-0.1
Bond yields (10-year)	0.3	0.0	0.0	0.0
FX (year-end) USD/YEN	120	107	115	115

Source: AMP Capital, as at 31 December 2016

JAPAN'S INSTITUTIONAL MARKET IS ENTERING A NEW GROWTH PHASE

The Japanese institutional market is comprised of three segments: corporate pensions, public pensions and financial institutions. Japanese pension funds are among the world's largest by assets under management (approximately US$2.75 trillion; growing by 2.0% year-on-year in 2015).[1] The dominant pension scheme is defined benefit, comprising over 95% of all plans, with a significant portion having large unfunded liabilities. Defined contribution schemes, whilst small, are growing and attracting strong flows.

In June 2016, GPIF announced a 5% allocation to alternative assets, equivalent to US$75 billion split across infrastructure, real estate and private equity or US$25 billion each if equally split. To date, GPIF has only made initial steps into these asset classes. This shift by GPIF, other financial institutions and pension funds away from bonds into riskier asset classes is a transition from cash and bonds to equity-style investing.

INSIGHTS ON INSTITUTIONAL INVESTOR SENTIMENT

AMP Capital is committed to providing investment solutions to the Japanese market. Toshiaki Yamashita, AMP Capital Managing Director -- Japan and Daisuke Imaeda, AMP Capital Head of Institutional, make the following observations on the Japanese customer:

> **Thirst for yield:** Investors have been frustrated by prolonged low growth and limited domestic investment opportunities over the past decade. 'Funded investment' entities, pension plans, banks, and insurers require a sustainable spread over their funding cost and will seek assets that can consistently generate a low- to mid-single digit yield.

> **Risk aversion:** A more conservative risk appetite has played out through a skewed allocation to bonds and credit in preference to equity (or a search for alternative beta within an equity allocation) and a resistance to foreign exchange risk. In general, Japan's ageing population is unable to accommodate volatility or illiquidity in their portfolio.

> **Institutional behaviour:** A culture of collective decision making and asymmetric employee evaluation practices (points 'off' for mistakes rather than 'on' for achievement) has served to amplify Japanese institutional investors' risk aversion. This may see them engage external parties (such as consultants or intermediaries) for additional oversight, product due diligence audits and other periodical reporting. They value proven investment themes and managers.

> **Quest for new alternatives:** Japanese institutional investors are hungry for investment alternatives. In the current environment of constrained growth, the focus in Japan has shifted from liquid alternatives to real asset (illiquid) alternatives.

In the following section, we provide perspectives from members of AMP Capital's real asset investment team on the investment climate in Japan.

Direct infrastructure equity perspective

Japan's economy has been stagnant and investment returns have been typically low. The Japanese government is making a conscious effort to encourage investors to diversify their investment base. Japanese investors are now looking for investments outside of Japan across a range of asset classes. In alternatives, we're seeing an increasing number of Japanese corporate pension funds investing into infrastructure, across both equity and debt.

To date, Japanese investors have committed circa A$4 billion to AMP Capital-managed alternative funds.

Large institutional investors such as public pension plans and financial institutions (namely insurance companies) are also changing their processes to assess the risk involved in alternatives and making allocations to this asset class.

We expect infrastructure pricing trends in 2017 will continue to reflect the investor hunt for yield. In a 'lower for longer' interest rate environment, infrastructure assets where cash yield (as opposed to capital growth) constitutes a high proportion of return will continue to be highly priced, particularly in the core infrastructure space.

Our focus remains on the mid-market, with sector, geography and ticket size (level of equity relative to debt) the three key elements we consider in the search for high-quality assets.

Over the next three-five years we do not expect Japanese investors will become direct investors (like Canadian or Australian big institutional investors). Rather, they will continue to invest through fund managers.

MANISH AGGARWAL
AMP Capital Investment and Operations Principal

BOE PAHARI
AMP Capital Global Head of Infrastructure Equity

KEY POINT:

As Japanese investors increasingly look to alternatives, we expect Japanese pension funds will continue to increase their allocation to infrastructure.

Direct infrastructure debt perspective

ANDREW JONES
AMP Capital
Global Head of
Infrastructure Debt

The unlisted debt market has risen in prominence over a relatively short period of time, with debt funds representing just 6% of funds closed in 2009, compared with almost a quarter of funds closed in 2015. The largest proportion of investors with a preference for unlisted infrastructure debt is based in Asia, indicating potential growth in this market. The vast majority of investors in the unlisted debt market have $1 billion or more in assets under management, with a significant proportion holding $100 billion or more.

In Japan, banks and investment banks make up the largest proportion of investors with a preference for unlisted infrastructure debt; these investors tend to have the resources and expertise to invest in the market as well as a more positive sentiment since the financial crisis.

For Japanese institutional investors, infrastructure debt represents an asset class underpinned by defensive assets capable of generating consistent cash flows across market cycles, often in a highly regulated environment. Debt holders rank ahead of equity holders in the capital structure, creating an extra degree of security.

Currently in the global infrastructure debt market, there are strong deal flow opportunities with limited competition from alternative junior lenders. These factors provide the potential to generate attractive risk-adjusted returns focused on cash yield.

While core infrastructure assets are expected to continue to command full prices from an equity perspective in 2017, we expect the banking market to continue to maintain the discipline which has been evident over recent years in terms of the amount of leverage available to borrowers. Spreads in the senior debt space will remain tight through next year. This combination of factors should continue to support attractive market dynamics for mezzanine investors.

KEY POINT:

We expect Japanese institutional capital to continue to target the infrastructure debt space in a search for yield.

Listed infrastructure perspective

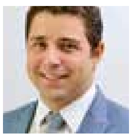
The Japanese retail market has been an early adopter of global listed infrastructure and this has seen the success of several large retail funds. Retail interest is now beginning to broaden to the institutional and pension market.

There are several factors driving the interest in global listed infrastructure assets:

- **Access to direct investments:** Direct infrastructure allocations may not be attainable (or not in a timely fashion). Institutional investors may find it difficult to deploy the required capital in the direct market due to the increased amount of capital being raised and the limited number of assets for sale in the market.
- **Market size:** The direct infrastructure market is significantly smaller compared to the US$2.3 trillion size of the global listed infrastructure sector which has tripled in size over the past 13 years. This has led many funds to make investments in listed infrastructure in order to gain more immediate exposure to the sector with the aim that they can then drawdown funds from their listed allocation as and when they find direct opportunities.
- **The need for liquidity:** The need for liquidity is an important consideration for many public pension funds. Pension funds that are positive on the outlook for real asset investments but require higher liquidity in their funds are increasingly looking at listed infrastructure as it provides exposure to the same growth opportunities in infrastructure while also offering the daily liquidity required to manage their overall portfolio needs.

The global listed infrastructure sector is highly fragmented and still maturing. Interestingly, only about 3% of the US$2.3 trillion currently invested in global listed infrastructure is managed by dedicated infrastructure specialists. As a point of comparison, 30% of the US$1.5 trillion invested in global listed real estate is managed by dedicated investment professionals. The potential for greater market efficiency presents opportunities for early investors.

GIUSEPPE CORONA
AMP Capital
Head of Global Listed Infrastructure



JONATHAN REYES
AMP Capital Portfolio Manager/Analyst

KEY POINT:

Given the fact that global listed infrastructure is over 50% larger than the global listed real estate market, early investors in this asset class should benefit as the sector continues to mature and grow over time.

Listed real estate perspective

JAMES MAYDEW
AMP Capital
Head of Global
Listed Real Estate

Over the past 10 years, Japanese retail investors have been a significant investor in global listed real estate, but in particular the US REIT market. What we have seen for many years in Japan, but also a substantial step up as a consequence of negative interest rate policy in 2016, is an increasing pursuit of yield. Interestingly, Japanese investors have sought that income yield from the US REIT market over all other markets, and this has caused significant dislocations in relative valuation between different sectors of the global listed real estate market. In short, those with more growth have become significantly cheaper than those with a higher distribution yield as a consequence of this asset flow.

We view this dynamic to be one that creates value opportunities in less crowded, less yield-orientated trades, but may take time to come to fruition if the thirst for yield does not abate as a consequence of Japanese central bank policy. This is not just a global asset flow phenomena, as the BoJ is also the marginal buyer of domestic Japanese REITs as it diversifies away from Japanese Government Bonds, seeking a stable, income yield, with a spread to the risk free rate and underpinned by hard assets.

Figure 4 shows that Japan has been the second biggest market for asset exchange-traded fund flow in listed real estate in 2016 behind the US, and given the BoJ has increased its allocation to Japanese REITs from 5% to 10% during 2016, we don't expect this trend to change any time shortly.

Figure 4: Flows into listed real estate ETFs

	AUM US$MILLION	12-MONTH YIELD	1-DAY FLOW (US$)	1-WEEK FLOW (US$)	YTD FLOW (US$)	1-YEAR FLOW (US$)	3-YEAR FLOW (US$)
Asia Pacific region	309	2.61%	0	0	83	85	45
Asia Pacific region ex-Japan	31		0	0	0	0	0
Australia	1,108	4.42%	0	(0)	85	120	482
Canada	1,442	5.18%	0	(9)	61	100	(31)
China	56	4.45%	0	0	38	37	22
European region	1,296	2.84%	0	(4)	164	611	660
Global	7,184	3.88%	0	8	407	474	2,552
International	8,908	3.04%	20	(38)	45	(262)	2,957
Israel	1,125		0	0	0	0	209
Japan	5,118	2.87%	5	139	1,573	1,646	3,443
North American region	23	4.69%	0	1	13	14	16
Switzerland	429	2.68%	0	0	60	66	211
UK	943	2.57%	0	0	98	33	309
US	55,338	3.98%	(80)	(385)	8,111	9,793	16,101
Total	**83,309**	**3.75%**	**(55)**	**(288)**	**10,738**	**12,716**	**26,977**

Source: AMP Capital

We recognise the value that income yield delivers to an investor, especially in a market such as Japan with challenging demographics. We do, however, feel greater emphasis should be put on risk-adjusted total returns (capital and income) of which risk and yield can at times become significantly mispriced, a factor we have seen occur in 2016. This creates opportunities for active managers.

Both global listed and unlisted real estate markets are currently in a 'goldilocks' environment, meaning interest rates are still very low by historical standards; inflation is low; supply is in check for most markets and leasing fundamentals are robust in the main cities. This favourable landscape continues to drive allocations to the real estate market as a whole, especially as the market seeks the diversification benefits, stable cash flows and the income yield it delivers in a low growth, demographically challenged world.

KEY POINT:

Real estate can deliver income return and continues to be a solid diversifier of risk in portfolio construction, which is especially sought in periods of significant volatility.

Even when cash rates start rising, the demand for these characteristics will continue to be sought after, so we anticipate the asset class to continue to be well bid from Japanese and global investors alike. There is currently, and has been for several years, a wall of capital looking for high quality real estate, so we feel this demand is a multi-year trend, especially from those investors that are well short of the >10% real estate allocation they are seeking and actually need. This need is exasperated given many fixed income allocations especially in Japan are currently not delivering the income needs for their clients.

Direct real estate perspective

MICHAEL KINGCOTT
AMP Capital
Head of Property
Investment Strategy

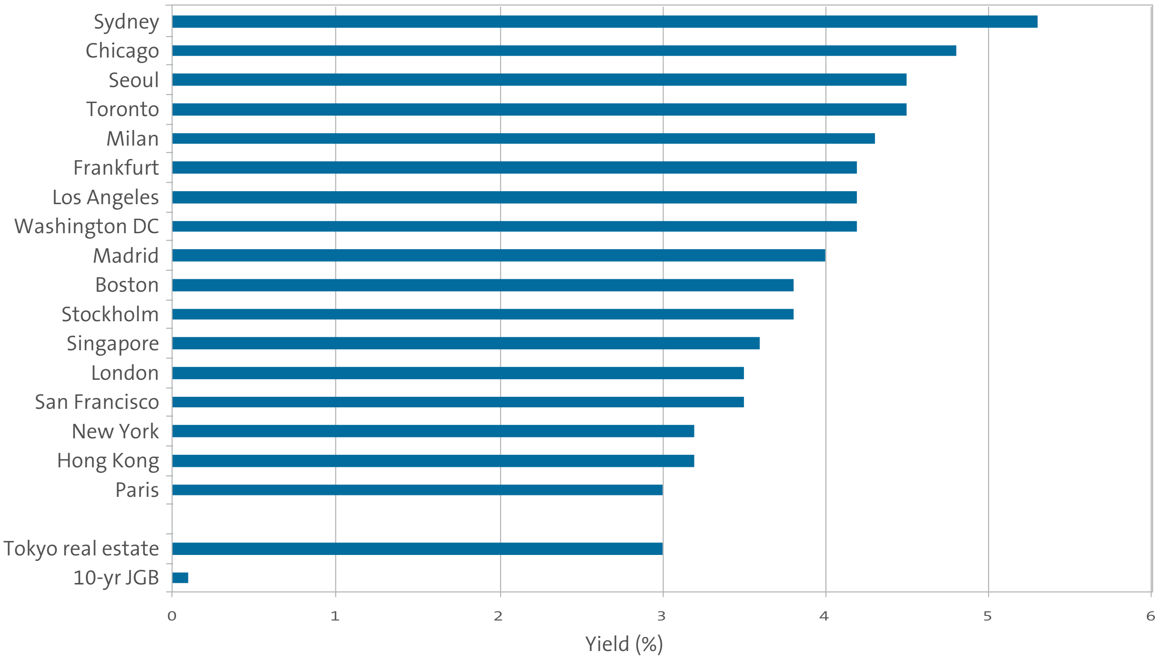
Japan's demographic profile as an ageing society combined with their desire for yield to fund retirement means direct real estate represents a compelling proposition for many Japanese investors. When compared to Japan's Government Bonds, local and international real estate is attractive on a relative income yield basis -- see figure 5. As per James Maydew's comment, leasing fundamentals for direct global commercial real estate are favourable in the current environment. Assuming there is no blow-out in bond yields or a recession, we expect the sector to continue to perform, driven by investors' appetite for yield. However, investors must be conscious that the easy gains in property value are mostly past. Moving forward, rising property prices will be linked more to the improvement in property fundamentals (rents and vacancies), than from capitulation rate compression.

The opportunity for Japanese pension funds to allocate 5% to alternatives potentially means approximately US$230 billion worth of capital could be directed to the sector over the long term. This is positive for global property funds management platforms. Over the medium-term, we expect to see some of this Japanese capital deployed into funds and separate account mandates with best-of-breed managers in each of the regions.

KEY POINT:

The impact of Japanese deployment offshore is positive for liquidity, continuing to support the ongoing globalisation of the direct real estate sector.

Figure 5: Global prime office yields



Source: Global Market Perspective, Q4 2016, JLL Research, Bloomberg, as at 31 December 2016

IN SUMMARY

- Japan is on a long path towards fiscal health.
- Investors are shifting away from bonds into higher risk asset classes.
- As Japanese investors increasingly look to alternatives, we expect Japanese pension funds will continue to increase their allocation to both listed and direct infrastructure.
- From a real estate perspective, institutional investors need to focus on markets and assets that can deliver rental growth and occupancy increases to counterbalance the threat of rising capitalisation rates as global interest rates rise.

1 Global Pension Assets Study, Willis Towers Watson, 2016.