Firstlinks
a Morningstar company

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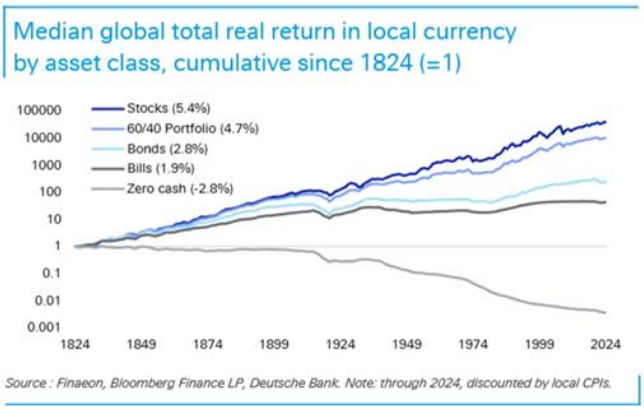
Editorial

Undoubtedly, your email inboxes are full of market predictions for the year ahead. Yet, forecasting the short term is exceeding difficult. I've found that it often helps to zoom out and look at long-term data to guide investment decisions.

A new report from Deutsche Bank, aptly titled 'The Ultimate Guide to Long-term Investing', can help with that. It explores data from 78 countries over more than 200 years to see how different asset classes and countries have performed.

Here's what the report found:

1. Investors have been consistently rewarded for taking risks and compounding dividends and coupons from equities and bonds. Global inflation-adjusted returns in US dollars over the past 200 years show equities returning 4.9% per annum, government bonds 2.6%, gold 0.4%, and cash -2%.



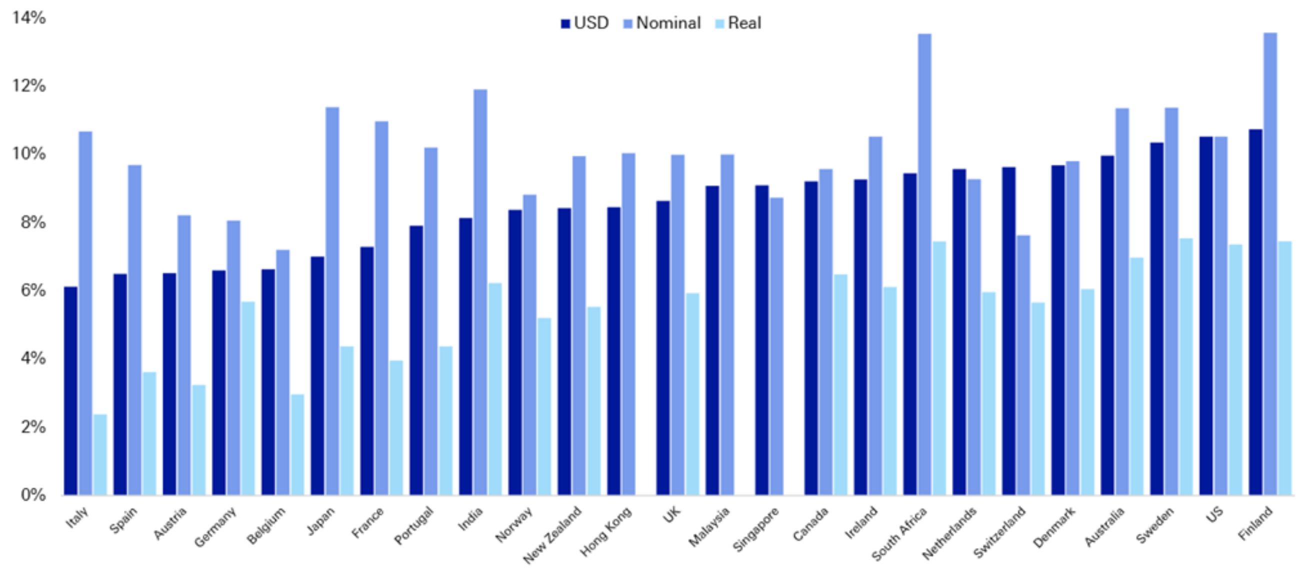
2. The 60/40 portfolio has delivered strong performance, close to that of equities, over the long term. Deutsche says this is due to the imperfect correlation between stocks and bonds, which provides diversification benefits. Also, bonds offer more stable returns, which enhances the compounding of returns, especially in periods when equities suffer from bear markets.

Along with the US and Denmark, Australia has had the highest 60/40 returns, at 5.5% in real US dollar terms over the past century.

3. Gold has beaten inflation but badly trailed stocks and bonds. Gold has returned 0.4% in real US dollar terms over the past 200 years. This century, though, it's been the best performing asset, returning 7.45% p.a. in real terms, bettering the likes of US equities (5.8% p.a.) and US government bonds (0.9%).

4. Globally, the best countries to have invested in over the past century were some of the most stable. Over the last 100 years, Sweden has delivered the highest stock market real returns (7.5%), followed by the US (7.2%) and Australia (6.9%). By contrast, Italy has had the worst equity returns of 2.5%. Interestingly, though, Italy has been the best performer in developed markets over the past five years, with 12.2% real returns.

Total returns of stock markets in our sample economies since 1924 (p.a.)

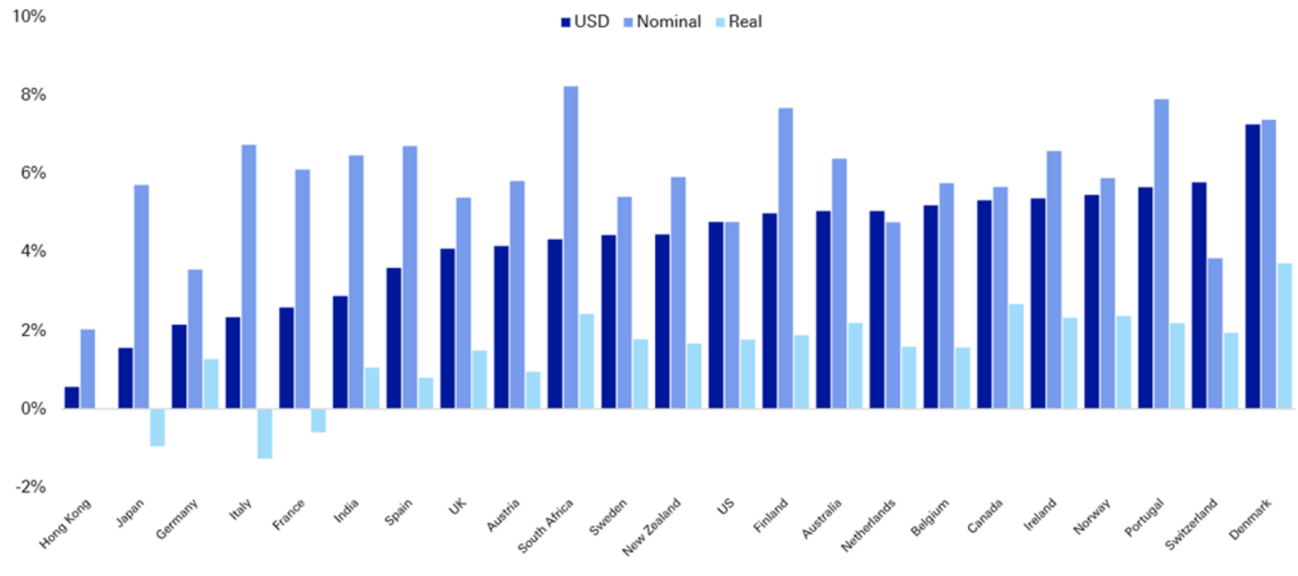


Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank.

5. Bonds have lost money in real terms in some countries over the past 100 years. Italy (1.1%), Japan (1.1%), and France (-0.5%) are examples. What do these countries have in common? They've all carried some of the highest debt burdens.

Meanwhile, Australian bonds have returned 1.9% in real US dollar terms over the period.

Total returns of bonds in our sample economies since 1924 (p.a.)

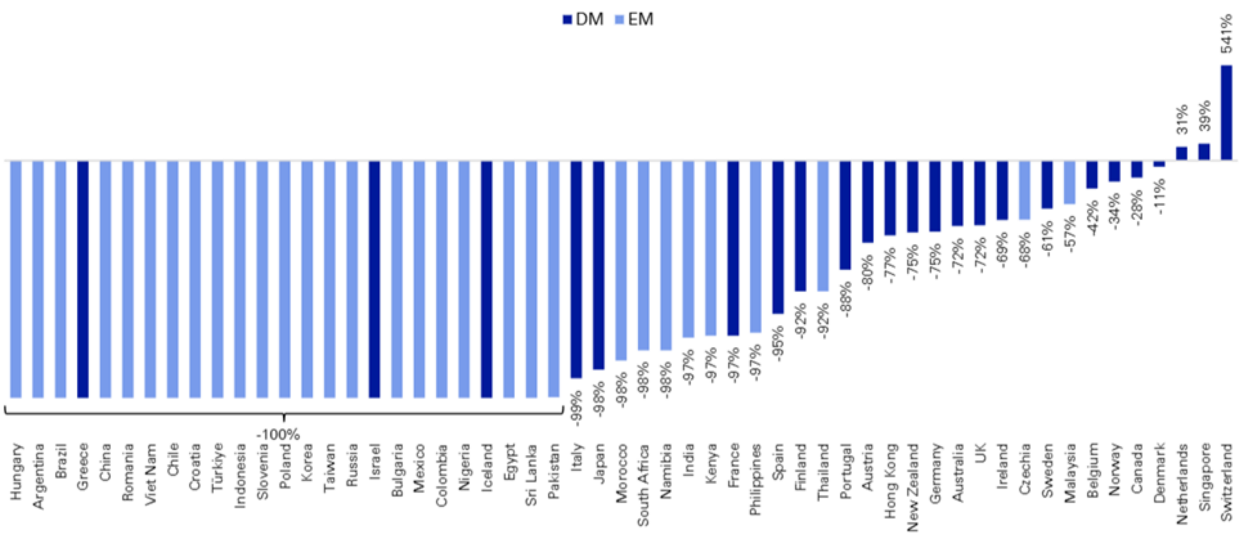


Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank.

6. Only three countries — Switzerland, Singapore, and the Netherlands — have currencies which have strengthened against the US dollar over the past century. The currencies of 25 counties have declined by more than 99%.

Australia’s currency has fallen 72% over the period!

Currency returns since end of 1924 versus USD, log scale. Only three have out performed the US Dollar with 25 out of 55 falling more than -99%.



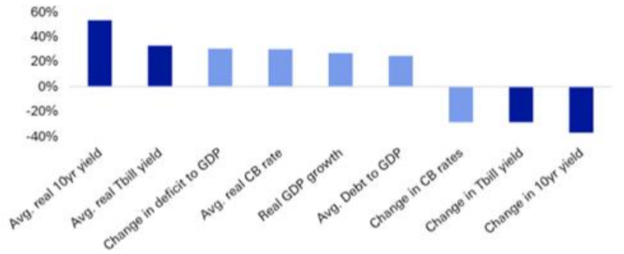
Source : Finaeon, Bloomberg Finance LP, Deutsche Bank.

“In nearly all cases, inflation has led to long-term depreciation of those currencies against the [US] dollar,” Deutsche says.

7. Starting valuations matter a great deal to long-term returns. The first chart on the right below shows that low price-to-earnings ratio at the start of a 25 year period are predictive of higher real stock market returns.

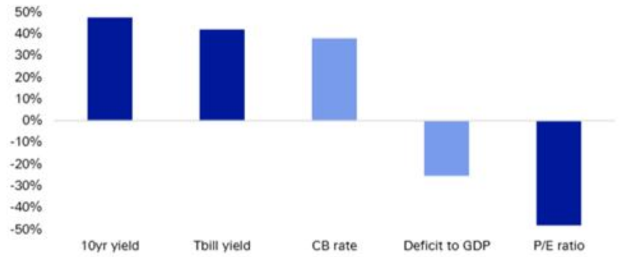
Interestingly, high starting interest rates and bond yields also precede strong equity returns. This may be due to both normally being associated with lower equity valuations.

Median correlation between selected indicators and contemporaneous 25yr real stock returns across our sample economies. Economic data in light blue.



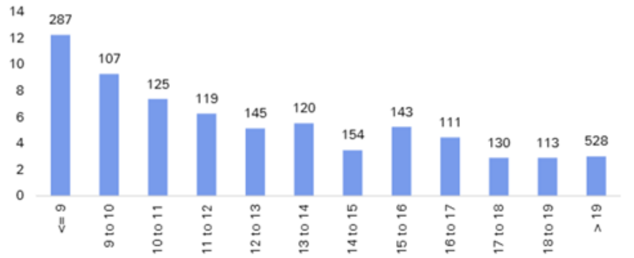
Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank. Note: only for economies with more than 20 years of data.

Median correlation between selected indicators (at the start of the period) and forward 25yr real stock returns across our sample economies. Economic data in light blue.



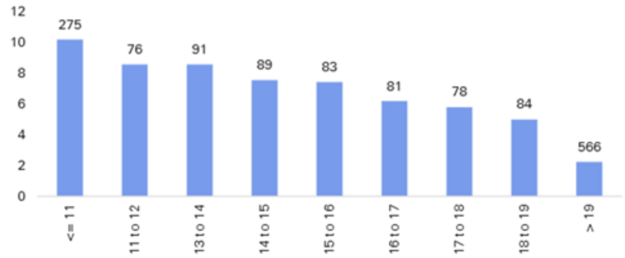
Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank. Note: only for economies with more than 20 years of data.

Median 5-yr real total stock return by buckets of starting P/E ratio



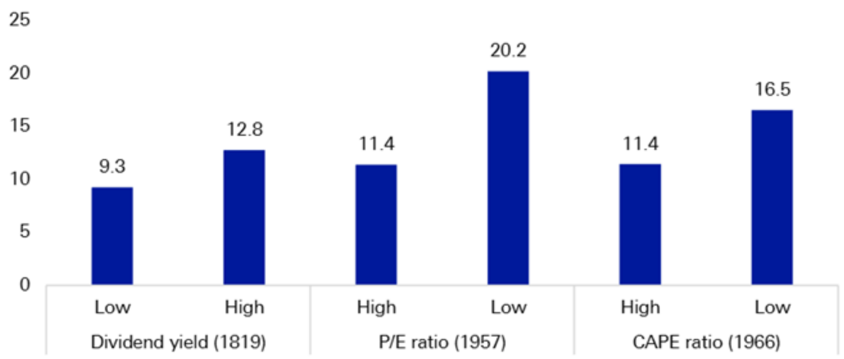
Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank. Note: data labels above each column are the number of observations within each interval.

Median 5-yr real total stock return by buckets of starting CAPE ratio



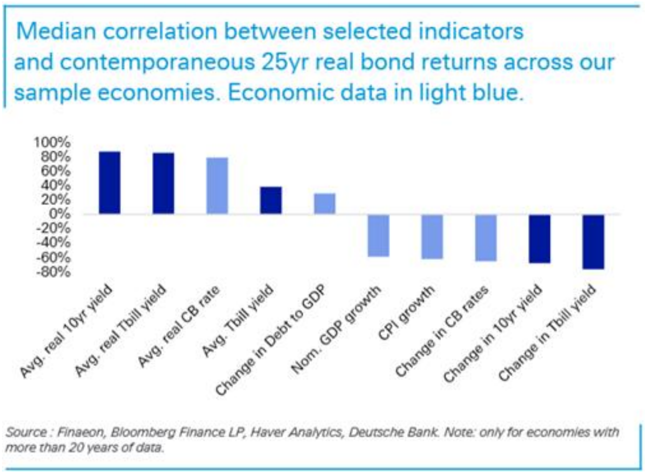
Source : Finaeon, Bloomberg Finance LP, Haver Analytics, Deutsche Bank. Note: data labels above each column are the number of observations within each interval.

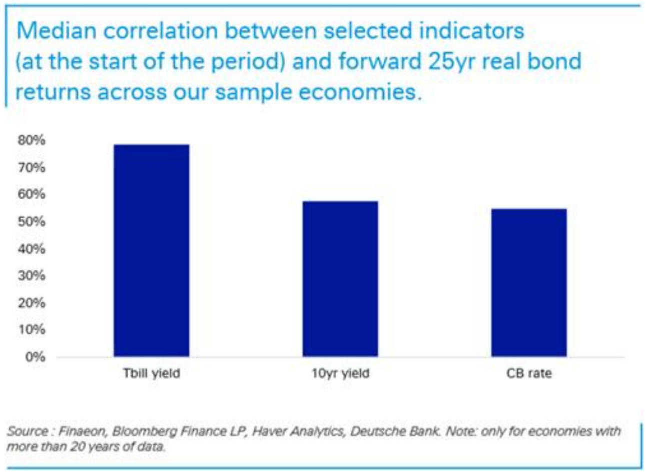
Average annual USD return of equity portfolios invested in economies with valuations above and below sample median, rebalanced annually. Valuations matter.



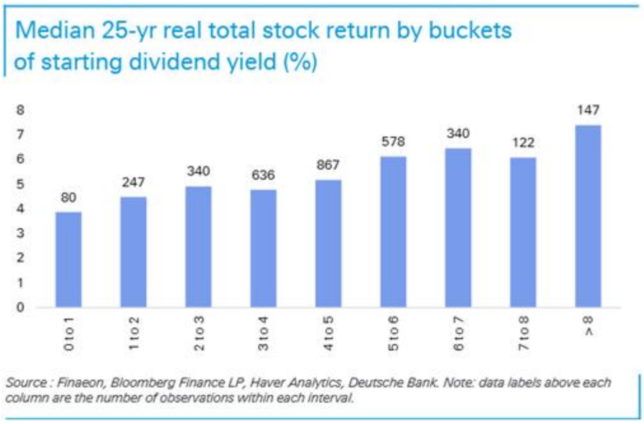
Source : Finaeon, Bloomberg Finance LP, Deutsche Bank.

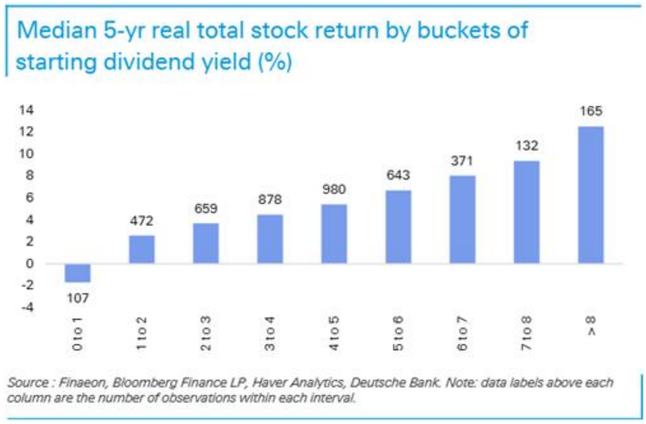
For bonds, the picture is similar. Higher interest rates and bond yields precede stronger real bond market returns.





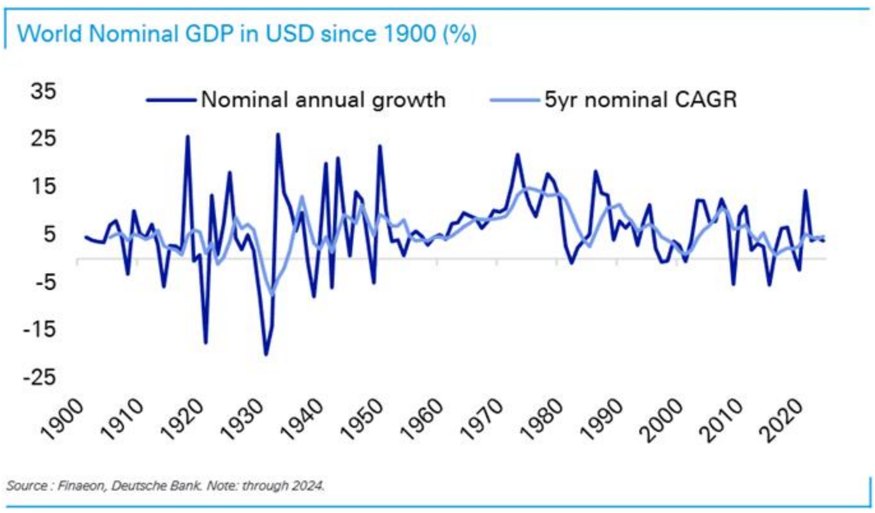
8. Higher starting dividend yields are also equated with stronger stock market returns.



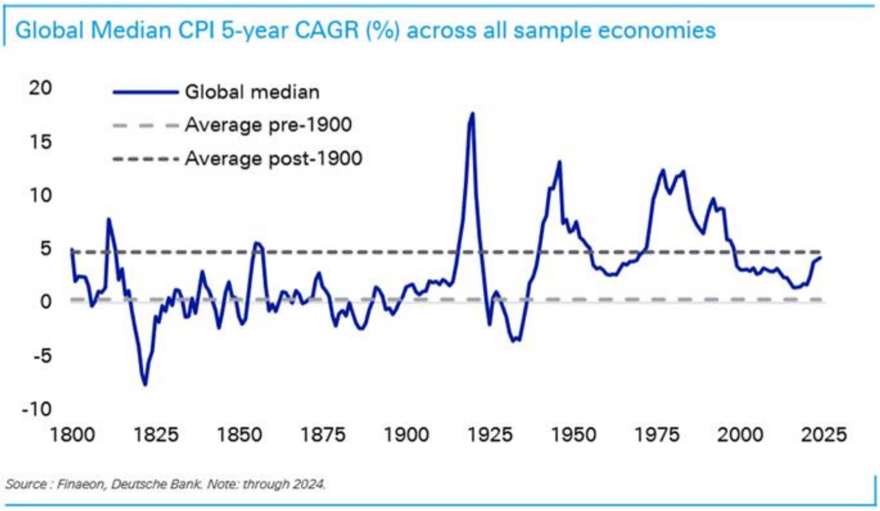


9. Nominal GDP growth drives asset-class returns. It impacts corporate earnings, household incomes, interest rates, and government revenues. Therefore, asset prices ultimately reflect claims on nominal GDP growth. But how that growth is distributed between equities and bonds depends on the mix of inflation and real economic growth.

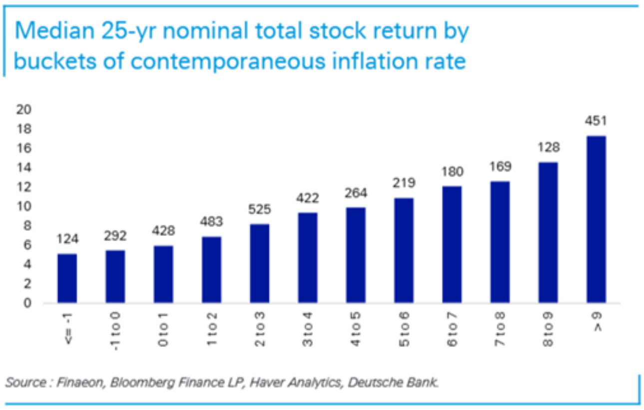
The good news is that the IMF forecasts global nominal GDP growth of 5% in US dollar terms through to 2030 – largely in line with the 4.8% since 1900, excluding the abnormal high growth rates from 1960-1989 (which was marked by strong population growth and high inflation).

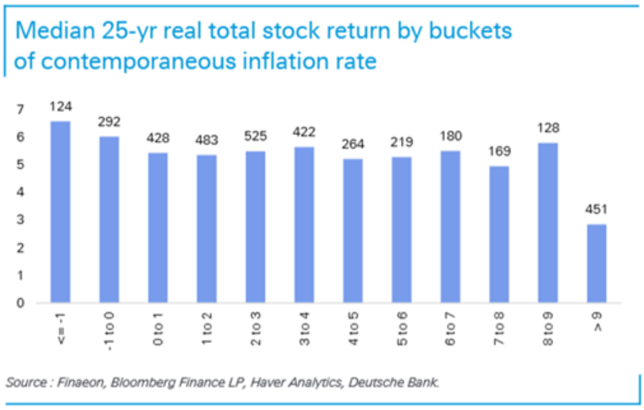


10. We seem to be in a structurally higher inflation world. Global inflation started to rise from the early 1900s as the world gradually loosened its ties to gold-based money. Those ties were severed in 1971, and since then no economy has managed to keep average inflation below 2% per year.

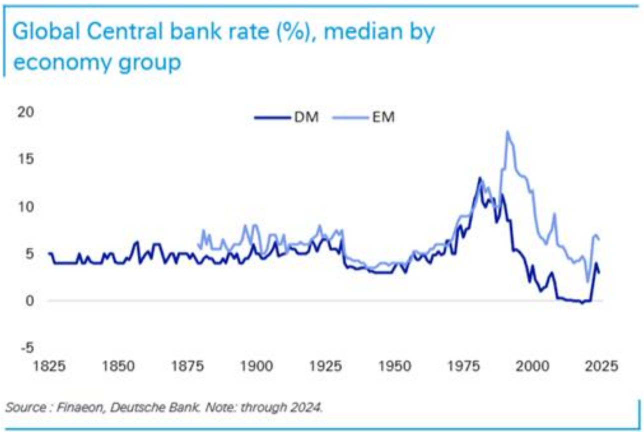


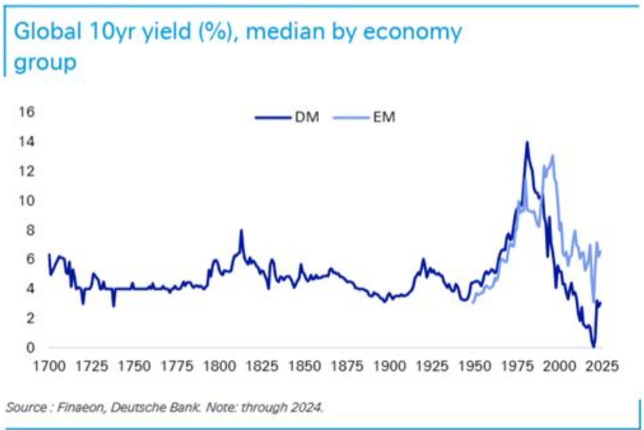
11. Historically, stocks have provided a good hedge against inflation.



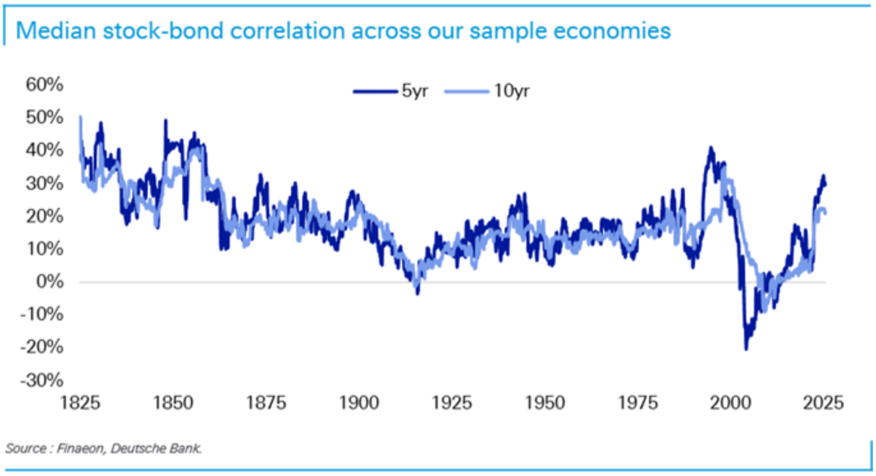


12. Interest rates and bond yields in developed markets remain low versus history.





13. Stocks and bonds have tended to have a positive correlation – their prices have moved together, rather than inversely. That changed in recent decades as globalization deepened and economies became more intertwined. With globalization starting to reverse, we've seen stocks and bonds becoming positively correlated again.



I hope this gives you some things to consider as we head into the Christmas break.

Speaking of the break, *Firstlinks* will be taking next week off, and returning on January 1. See you in the new year and stay safe.

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In my article this week, I revisit my 2023 piece, 'Australian stocks will crush housing over the next decade,' and look at where things stand today. The performance of stocks versus real estate since then may surprise you.

On the topic of comparing stocks to property and which is best, **Noel Whittaker** also offers a practical guide on the pros and cons of each asset class. As usual with Noel, it's written in an informative, yet easy-to-understand way.

James Gruber

Also in this week's edition...

Orbis' Alec Cutler boldly asks: what if Trump is right? By this he means that Trump could well be correct on two important global trends: nations rebalancing from aspirational wants towards foundational needs and from dependence on global support to being self-reliant. Alec explores the implications of these trends for global sectors and stocks.

Gold is set for its best annual returns since 1971. Can the good times continue? **Shaokai Fan** runs through the primary drivers which will shape the outlook for gold in 2026 and beyond.

In a series of *Firstlinks* articles this year, Clime's John Abernethy has questioned many aspects of defined benefit pensions for Commonwealth public servants. **Paul Lindwall** offers an attempted rebuttal to John, suggesting these pensions aren't the problem they're made out to be.

Demand for global air travel remains strong, yet it's being held back by a lack of new planes. That constraint should soon ease, and **First Sentier's William Thackray** thinks airport stocks will be long-term beneficiaries.

What is the future of search in the age of AI? **Magellan** looks at the swiftly changing landscape for Google search as AI innovates. It believes there's plenty of room for both search and AI to thrive.

Lastly, in this week's whitepaper, **Orbis** explores six key questions investors should be asking for 2026 to test their assumptions and sharpen their thinking.

Curated by James Gruber and Leisa Bell

Australian stocks will crush housing over the next decade, 2025 edition

James Gruber

In December 2023, I made a bold prediction: returns from Australian shares would handily beat those from residential property over the next 10 years.

In that article, I explained how Australian housing was ludicrously priced, up to 40% overvalued. And that property was far more expensive than the ‘Magnificent Seven’ US tech stocks, which were richly valued yet had infinitely better growth prospects.

I went into detail on why I thought future housing performance would disappoint, with forecast 2-5% annual returns over the coming decade (ending November 2033). I said the bottom end of those return estimates was the most likely scenario and, if right, it meant property gains would struggle to keep pace with inflation.

Meanwhile, Australian stocks were much more reasonably priced then, trading at price-to-earnings multiples in line with history. I surmised that ASX share returns were likely to be far superior to those of housing, in the range of 6.5-10% over the subsequent 10-year period. I suggested the middle of that range was most probable, though that depended on whether company earnings picked up.

Where we stand today

How is it played out to date? If I took a poll of readers, the majority might suggest that property has outperformed shares over the past 24 months. After all, there’s been breathless commentary on the latest “property boom” and equally breathless press on Australian stocks being ho-hum.

If you guessed that property has had superior returns, you’d be wrong. Very wrong.

Over the past 12 months, property has done better, though only marginally. Housing in the capital cities has risen 7.1% compared to ASX 200 returns of 5.5% (including dividends).

Over the past two years, it’s a different story. The ASX 200 is up a cumulative 30.2%, at a compound annual growth rate (CAGR) of 14.1%. That compares to housing where prices have increased by a total of 12.9%, or 6.2% CAGR.

Shares versus property returns

	ASX 200	Housing
12 months to Nov-24	23.4%	5.4%
12-months to Nov 25	5.5%	7.1%
Cumulative 2yr return	30.2%	12.9%
CAGR	14.1%	6.2%

Note: ASX 200 returns include dividends. Housing = capital city returns. Sources: Morningstar, Cotality, Firstlinks

Thus far, my forecast of shares handily beating property is working out. However, it's worth noting that the annual returns for both shares and property are above my initial estimates made in December 2023.

What's driven share gains?

The past year hasn't been great for ASX shares, though it hasn't been a disaster. Total 12 month returns of 5.47%, including dividends, are well below historical average returns of close to 10% per annum (p.a.). And they've badly trailed other developed markets, including the US, where the S&P 500 has returned 15% including dividends over the past year.

Why has the ASX lagged? A few reasons.

First, bank share prices have pulled back after a huge, and largely unwarranted, run up. For instance, CBA shares peaked at $192 in late June and have since tanked 21%.

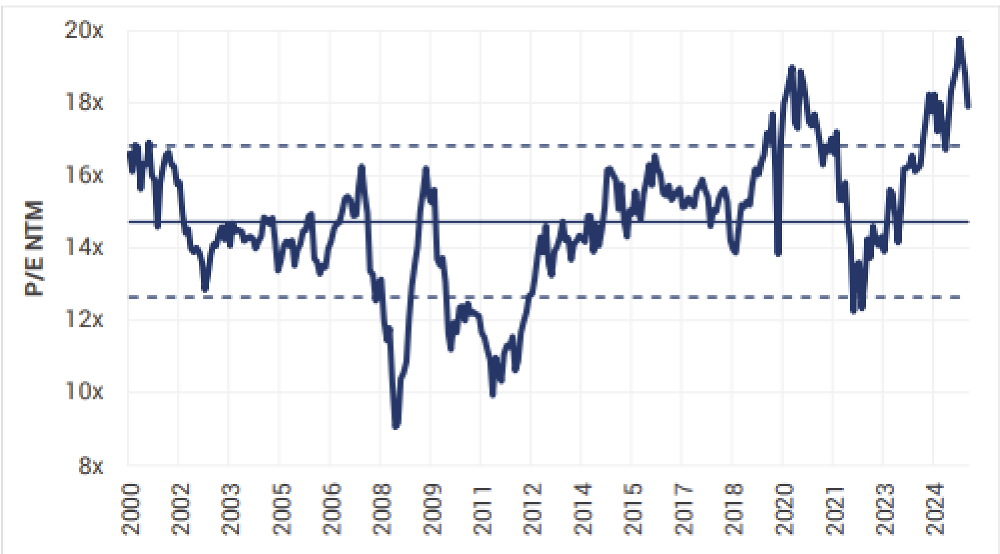
Second, other index heavyweights haven't picked up the slack. Despite a market rotation away from banks, BHP was only up 3% over the past year. CSL has also continued to disappoint, down 34% over the 12 months as turnaround efforts failed to gain traction with investors.

Third, the bigger picture is that company earnings haven't met market forecasts. In fact, earnings growth has been negative for three consecutive years.

With earnings having gone nowhere, valuation expansion has driven the 30% increase in the ASX 200 since my initial article in 2023. In simple terms, that means investors have been willing to pay a higher price for company earnings.

The ASX 200 is now trading at a price-to-earnings (P/E) ratio of 17.9x, well above its 20-year average of 14.7x.

ASX 200 PER, NTM



Source: Goldman Sachs Research/YCM, Dec 2025.

Despite the recent drop in CBA shares, bank valuations remain 40% above their long run average. Meanwhile, resource and health stocks appear reasonably priced.

ASX 200 valuation metrics vs 20-year long-run average

PE NTM	ASX 200	Industrials	Banks	Resources	Healthcare
Current	17.9	23.2	18.7	14.0	22.5
20-year Average	14.7	18.8	13.3	13.3	24.4
Premium/(Discount)	*+22%*	*+23%*	*+40%*	*+6%*	*-8%*

Source: Goldman Sachs Research/YCM, Dec 2025.

A property bounce

Two factors are behind property price increases over the past few years.

First, there's been muted supply of new housing. Construction firms have struggled with high costs, making building homes largely unviable. Federal Government commitments to boost supply haven't worked either. The government pledged to build 1.2 million homes over five years, yet one year on, they've only completed 174,000 homes, well below their 240,000 annual target. Red tape and struggles to get qualified tradies have restricted supply.

Second, housing demand has picked up. RBA interest rate cuts starting in February this year have played their part. Lower rates boost the relative appeal of housing as an investment and they allow home buyers to borrow more.

Over the past 45 years, five of the last seven rate cutting cycles have led to property price rises. The only exceptions were those that began during the recessions of the 1980s and 1990s. And the average gain in housing prices after the first RBA rate cut is 4% over 12 months and 8% over 18 months.

Australian average home prices after first RBA rate cut

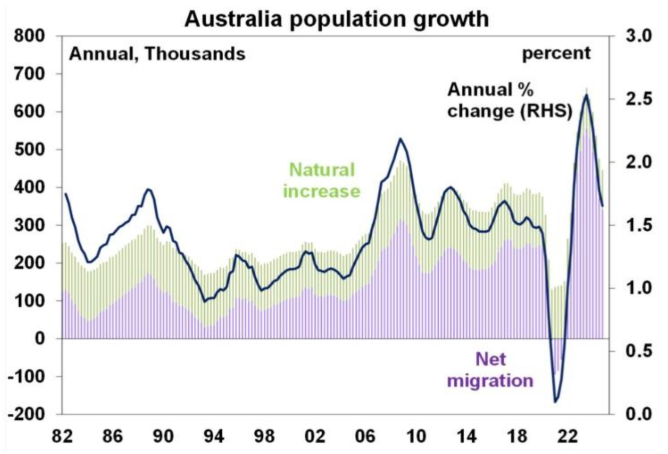
First RBA rate cut	+3mths	+6mths	+12mths	+18mths
May 1982	-1.4	-2.0	-4.5	-2.6
Jan 1986	-0.6	-0.3	2.6	7.9
Jan 1990	1.7	0.6	-0.1	-2.0
July 1996	1.0	2.5	6.9	10.9
Feb 2001	3.6	8.5	16.2	25.8
Sep 2008	-2.2	-1.3	4.9	11.6
Nov 2011	-0.5	0.5	1.4	4.4
Feb 2025	1.4	NA	NA	NA
Average	**0.2**	**1.2**	**3.9**	**8.0**
Median	**-0.5**	**0.5**	**2.6**	**7.9**

Cotality. Australian recessions are in red. The GFC is in blue. Source: RBA, Cotality, AMP

The property price rises this year following the first RBA cut are in line with these historical averages.

Government policies to help first home buyers have also stoked demand. The government's low deposit guarantee scheme allowing first home buyers to access loans with a 5% deposit was brought forward to October 1 this year. Recently, the government's Help to Buy Scheme started, provided 10,000 places a year where the government will take a 30-40% equity stake in the purchase price of a property for an owner occupier.

Strong population growth has also fuelled demand for housing. Yes, that growth has slowed since last year, but it remains well above historical levels.

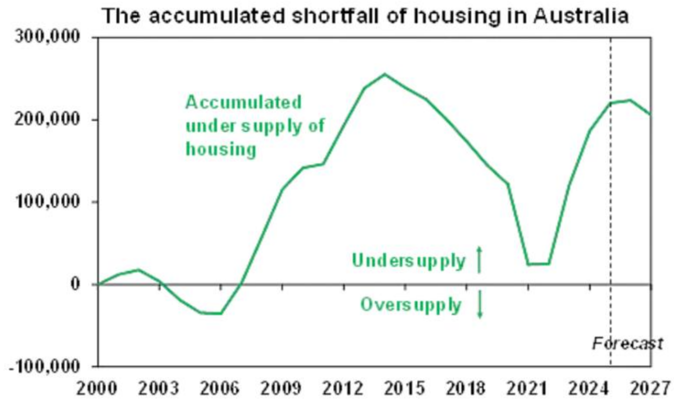


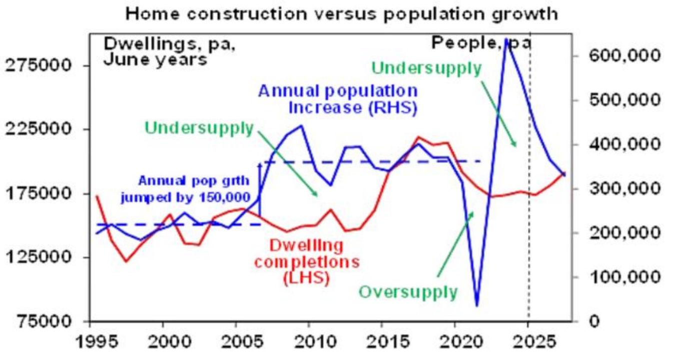
Source: AMP

AMP chief economist Shane Oliver estimates that the supply-demand imbalance has led to a cumulative shortage of at least 220,000 homes:

"Up until 2005 the housing market was in rough balance. It then went into a massive shortfall of about 250,000 dwellings by 2014 as underlying demand surged with booming immigration. This shortfall was then cut into by the 2015-20 unit building boom and the pandemic induced hit to immigration.

But it's since rebounded again to around 220,000 dwellings, or possibly as high as 300,000 if the pandemic induced fall in household size is allowed for. The shortfall is confirmed by low rental vacancy rates."





Home construction rates vs Australian population growth (Source: ABS, AMP)

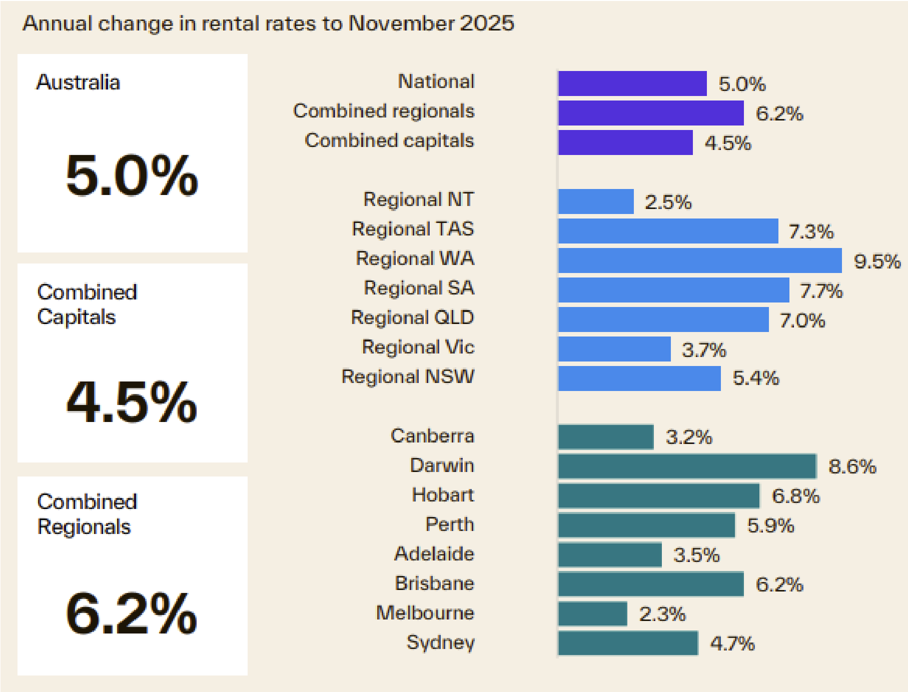
On those rental vacancies, the latest figures confirm a still tight rental market, despite a minor tick up in vacancy rates in November. Over the past year, Sydney has been the largest driver for falling vacancy rates.

Vacancy rate – November 2025

City	Nov 2024 Vacancies	Nov 2024 Vacancy Rate	Oct 2025 Vacancies	Oct 2025 Vacancy Rate	Nov 2025 Vacancies	Nov 2025 Vacancy Rate
Sydney	13,093	1.8%	9,553	1.3%	10,720	**1.4%**
Melbourne	10,755	2.0%	9,713	1.8%	10,451	**2.0%**
Brisbane	3,918	1.1%	3,391	1.0%	3,645	**1.0%**
Perth	1,162	0.6%	1,304	0.7%	1,311	**0.7%**
Adelaide	1,061	0.7%	1,215	0.8%	1,237	**0.8%**
Canberra	1,034	1.7%	860	1.4%	942	**1.5%**
Darwin	409	1.6%	181	0.7%	250	**1.0%**
Hobart	192	0.7%	107	0.4%	109	**0.4%**
National	**41,894**	**1.4%**	**36,152**	**1.2%**	**38,690**	**1.3%**

Source: SQM Research

Falling vacancies have led to continued growth in rents.



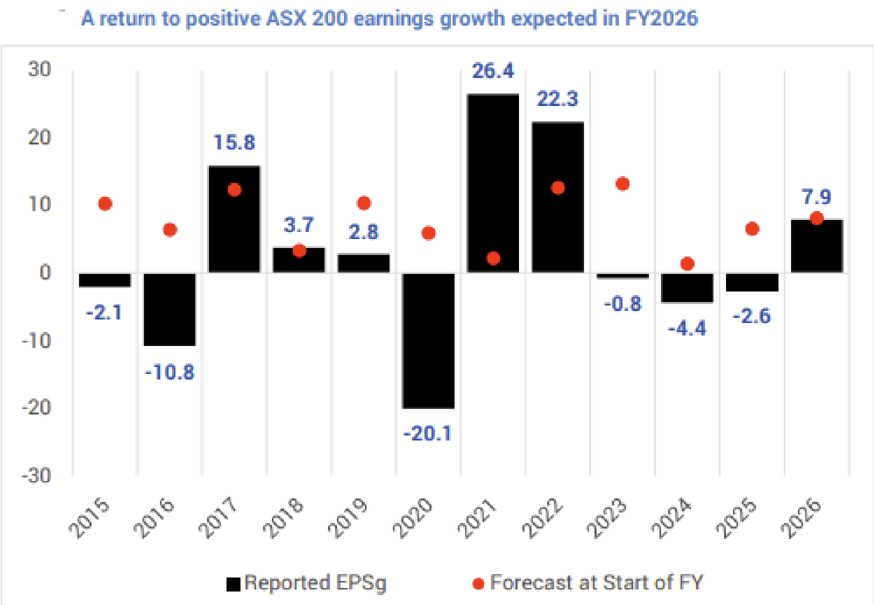
Source: Cotality

Where to from here?

I remain comfortable with my initial forecasts for decade-long stock and property returns.

It wouldn't be a surprise to see a pullback in stocks in the short term given excessive market valuations compared to history.

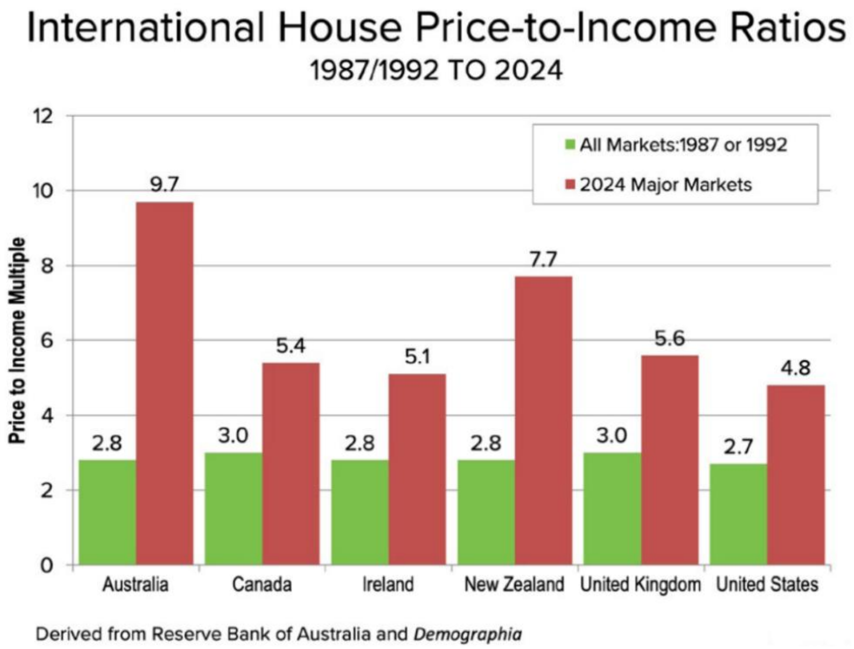
The medium term outlook for shares will depend on earnings growth coming through. The good news is that we are starting to see better company profits. The market now expects ASX 200 earnings growth of 7.9% in the 2026 financial year.



Source: Goldman Sachs Research/YCM, Dec 2025.

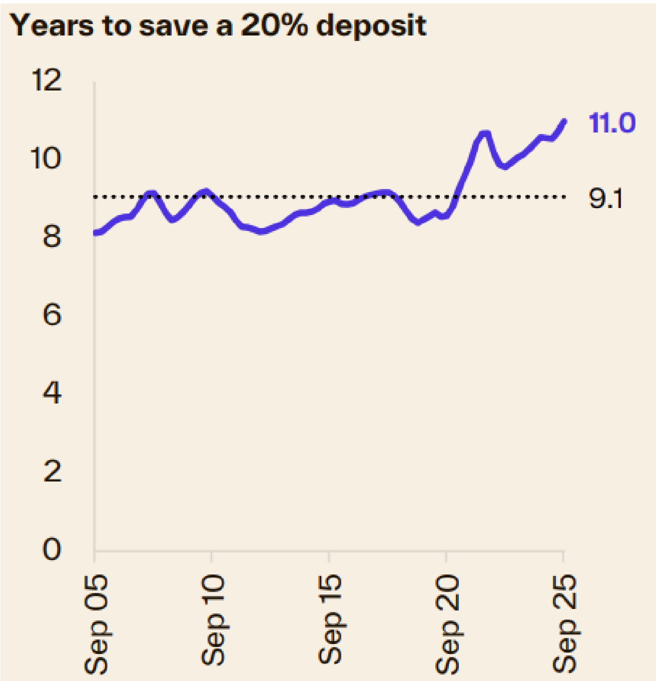
For property, the sugar rush for demand from RBA cuts is over, with the next move in rates likely to be up.

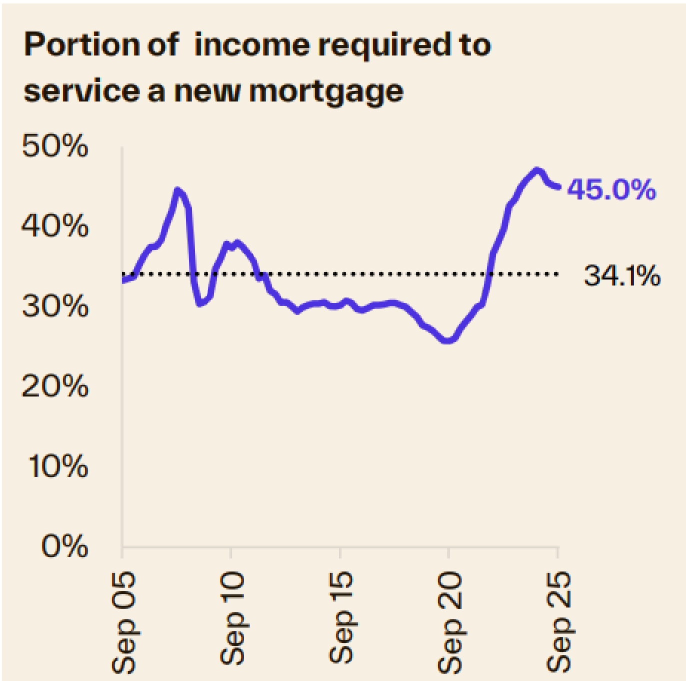
That said, housing supply will still struggle to keep up with demand in the near term. Migration levels remain too high and government policies to help first home buyers only fuels purchases and higher prices (and sadly, the government knows this).



Affordability is the biggest handbrake on higher property prices. Nationwide, the house price to income ratio is 9.7x, up from just 2.8x almost 40 years ago.

A 20% deposit now takes a record 11.0 years to save, up from 10.6 a year prior, and a 20-year average of 9.1 years. And the portion of income required to service a mortgage is 45%. That's down from 47.1% a year ago, though it is well above the 20-year average of 34%.

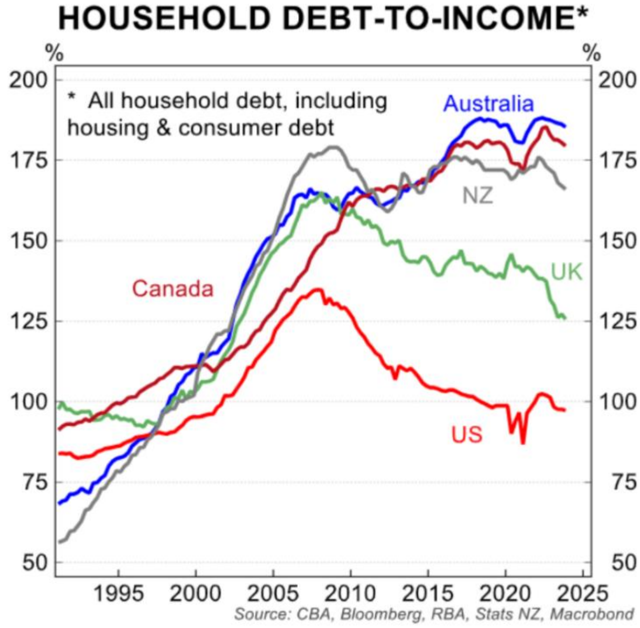




Note: Assumes a 15% per annum household savings rates. Source: Cotality

Meanwhile, Australians are swimming in debt, with household debt to income ratios of 182%, among the highest in the developed world.

Affordability is likely to put a cap on house prices. Put simply, property price growth can't continue to exceed income growth as it will result in ever more unaffordable home prices, and given our debt levels, there's a limit to how long that can go on.



Politics is the biggest long-term wildcard for property. It's becoming clear that younger generations are getting fed up with rising house prices, and government policies that stoke demand and further increase prices. Their anger is finding its way to the ballot box as record numbers move away voting for the major political parties.

As the young increase in numbers in future elections, this may increase pressure on the government to use blunter tools to cap house prices.

James Gruber is Editor at Firstlinks.

Property versus shares - a practical guide for investors

Noel Whittaker

Every few weeks I get an email from somebody who's been approached by a property promoter offering to "build them wealth" through an investment home. These people — often called *property spruikers* — make their money not from investment success but from the generous commissions they load into the deal.

They tell the potential victim that the guaranteed secret of wealth is negative gearing into residential property. Next come baffling charts showing how rental income will supposedly pay off your home faster. The clincher? A massive tax refund at the end. Given today's property prices, most people can't imagine buying an investment property. But the spruikers have the solution: start a self-managed super fund, roll in your existing super, and you're off. But picking your own property is hard, and they tell you that older properties lack the tax benefits of new ones. The fix? The spruiker finds a block of land and builds a property for you. What they don't tell you about is their hefty commissions hidden in the price. It's a recipe for disaster.

That said, the topic always sparks debate. It's the old question: *Which is better — property or shares?* I've been comparing the two for decades, and while both have their place, the differences are stark.

The first major distinction is **entry and exit costs**. With shares, there are almost none. You can buy or sell thousands of dollars' worth of investments with the click of a mouse, paying only a small brokerage fee. Property, on the other hand, is loaded with costs from the start — stamp duty, legal fees, building inspections, and mortgage costs. Then, when you sell, you'll pay agents' commissions and advertising expenses. These add up to tens of thousands of dollars and can wipe out years of growth.

Next comes **the ability to add value**. In theory, you can improve a property by renovating, extending, or landscaping, but that's only possible if you own a standalone house. Apartments can't be improved beyond a lick of paint or new carpet — and they still get older and more tired-looking every year. The key to property success has always been to buy a home with potential to improve, but those sorts of properties are now prohibitively expensive in most major cities.

Another important factor is **liquidity**. If I have a million dollars in shares and you have a million in property, and we both need $100,000, I can sell part of my portfolio and have the money in the bank within 24 hours. You can't sell the back bedroom. To release cash, you either have to borrow against your property or sell the entire thing — triggering capital gains tax and transaction costs in the process.

Then we have **tax-advantaged income**. Dividends from Australian companies often come with franking credits, which means the tax has already been paid at the company level. For many retirees, that makes dividends virtually tax-free. With property, by contrast, every dollar of rent is taxed at your full marginal rate, and the net yield after costs is often poor. Negative gearing helps offset this while you're working, but it's of little use in retirement when you no longer have salary income to offset.

Ongoing costs are another big difference. Shares don't require maintenance, insurance, or repairs. You can hold them for decades at negligible cost. Property ownership is a never-ending list of bills — land tax, council rates, insurance, maintenance, repairs, and the occasional vacancy when you receive no income at all. Over time, these expenses erode returns far more than most investors realise.

The **regulatory climate** is also shifting against landlords. In many states, politicians have discovered that bashing landlords wins votes. We now have rent freezes, limits on rent increases, and rules that prevent owners from refusing 'reasonable requests' from tenants. Those requests might include pets, extra occupants, or even air conditioners. All these changes reduce flexibility and increase costs for landlords.

Finally, consider **diversification and simplicity**. With property, success depends on picking the right location, builder, and tenant — and then hoping for the best. With shares, you can simply buy an index fund like the SPDR S&P/ASX 200 (ASX: STW) ETF that invests across the top 200 companies in Australia. There's no need to make further decisions, and history shows the Australian share market has averaged about 9% a year over more than a century.

Of course, property and shares each have their advantages. Property offers the comfort of something tangible, and leverage through borrowing can magnify returns — or losses. Shares offer liquidity, diversification, and ease of management. The ideal portfolio often includes both, but in my view, the argument that property is 'safer' simply doesn't hold water.

The bottom line is that every investment involves risk, but the greatest risk of all is misunderstanding what you're getting into. Property promoters will always tell you what you want to hear. The smart investor looks beyond the sales pitch, crunches the numbers, and asks one simple question:

If this is such a great deal, why are they selling it to me?

Noel Whittaker is the author of Making Money Made Simple and numerous other books on personal finance. His advice is general in nature and readers should seek their own professional advice before making any financial decisions. Email: noel@noelwhittaker.com.au.

What if Trump is right?

Alec Cutler

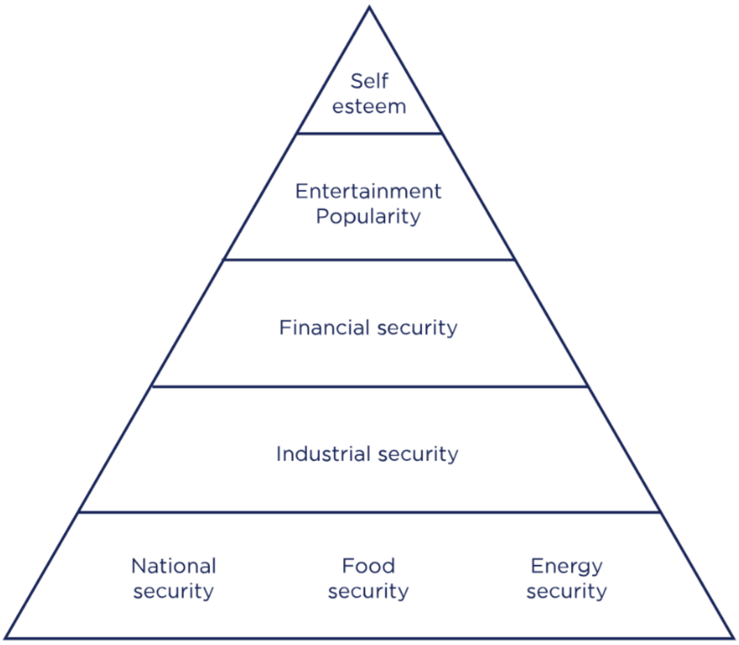
On two big trends, President Donald Trump may well be right:

1. Nations must rebalance from aspirational wants towards foundational needs.
2. Nations can no longer depend on global support, so they must rebuild self-reliance. Trump's own policies have accelerated these trends and made them more visible, but the seeds of both shifts predate his presidency by years.

The pyramid of needs

To understand these changes, we borrow a concept from psychology. Many will be familiar with Maslow's hierarchy of needs: the idea that humans must secure basic needs like food and shelter before pursuing aspirational wants such as entertainment and self-esteem. We believe the same framework applies to nations. Without military, energy, and industrial security, societies have little hope of pursuing a happier future.

The hierarchy of needs of a nation



Illustrative only. Source: Orbis.

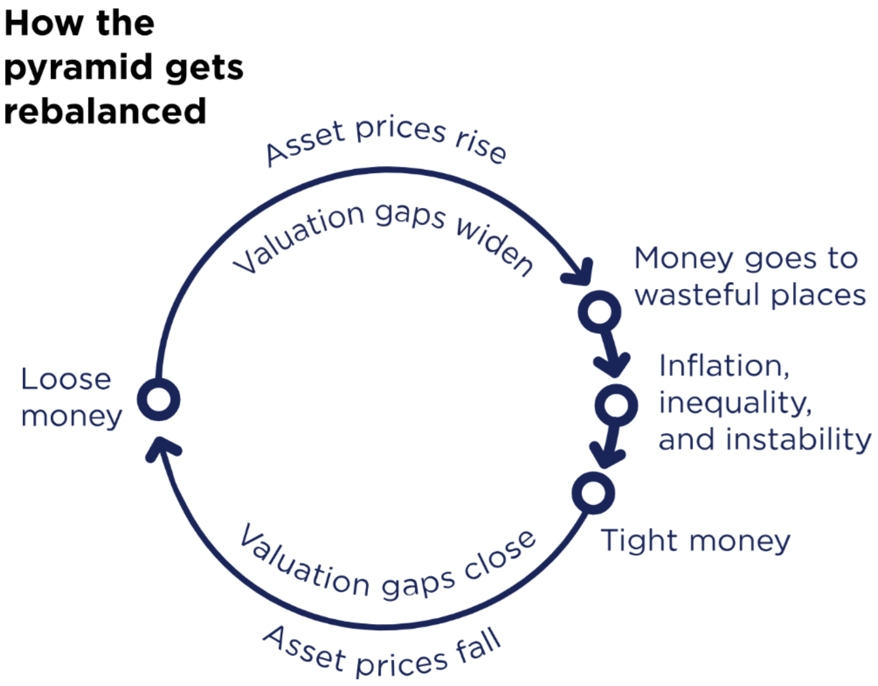
How we got here

In recent decades, this pyramid has been upended, initially by a very benign force: abundance.

After the fall of the Berlin Wall, the West reaped the "Peace Dividend" on defense spending. A decade later, China joined the World Trade Organisation, accelerating globalisation and letting consumers get goods cheaply from anywhere in the world. A decade after that, the shale revolution in the US brought down energy prices globally. Throughout this period, rich nations welcomed millions of economic migrants. With an abundant supply of goods, energy, and workers—and less fretting about defense—society felt its basic needs were met. Inflation was low, allowing interest rates to decline. Money became abundant.

This sets off a cycle. When money is loose and society feels its basic needs are met, people start spending on luxuries and fun. Investors notice that and start throwing money at whoever has the grandest dreams for the future. Rising valuations signal to companies at the top of the pyramid to invest more, drawing in yet more resources.

This cycle plays out at the broad level of markets and the narrow level of companies. Mark Zuckerberg burns $46 billion building the metaverse—a digital playground that no one else wanted to play in. Bernard Looney announces that BP, an oil and gas company, will cut production of its key products by 40%. Office sub-lessor Adam Neumann gets rich promising to elevate the world's consciousness (and crashing WeWork). In times of abundance, money goes to wasteful places.



Illustrative only. Source: Orbis.

The dangers of imbalance: inflation, inequality, and instability

With resources rushing to the top of the pyramid, the base gets starved of capital. The result is shortages of things society actually needs. Those shortages cause inflation for normal people. Meanwhile, the Neumanns, Zuckerbergs, and Musks of the world are getting rich, increasing inequality. Put inflation and inequality together, and you get instability—society's alarm bell that something needs to change. Conditions were ripe for Trump's wrecking ball before he ever descended that escalator.

Rebalancing the pyramid: AI case study

Each step in the cycle sows the seeds of the next. Higher inflation attracts higher interest rates, and with money tighter, people think more carefully about where to invest it. But the cycle does not depend on central banks or governments. If the pyramid can get unbalanced organically, it can get rebalanced the same way. Here, AI is a great example.

OpenAI chief Sam Altman has described AI as a bigger deal than the industrial revolution. It may be, and some of its applications are in crucial areas seen by companies or governments as existential needs. But his latest idea, Sora 2, is essentially a TikTok clone where all the videos are AI slop—prime top-of-pyramid stuff.

If you *want* AI, you need a whole bunch of things from the base of the pyramid. For a start, you need chips. Taiwan Semiconductor Manufacturing Company makes all of the world's leading-edge AI chips, whether they are designed by Nvidia, Broadcom, or AMD, yet it trades at a discount to those companies. Although AI is more memory-hungry than conventional computing, the memory makers Samsung Electronics, SK Square, and Micron Technology also trade at discounts.

Chips are of little use without related infrastructure, much of which might be built by Balfour Beatty, a construction firm with a roster of anonymous data-centre clients on its website. Those buildings sit on top of foundations laid by Keller, the world's leader in geoengineering.

Data centres can't connect to electricity grids without transformers from Siemens Energy and its competitors, who are less able to increase capacity because Silicon Valley has hoovered up the most talented engineers. Grid power has to come from somewhere and has to be reliable. That bodes well for gas producer Shell and gas transporters Kinder Morgan and Enbridge. And amid all this, nuclear power is having a renaissance. As nuclear reactor providers to navies, BWXT and Rolls Royce are highly competitive for small reactor projects.

The rebalancing is happening already. Corporate customers are sending money towards the base of the pyramid, but in many cases, capital is still too scarce. For us, that's appealing, as it suggests a higher return on that capital. For the businesses, it leads them to respond not by increasing supply but by increasing prices. That inflation, in turn, promises to keep the cycle moving.

It took decades for the pyramid of needs to get this unbalanced. Trump may have accelerated the reckoning, but the great rebalancing is just getting started.

Alec Cutler is a Director of [Orbis Investment Management](), a sponsor of Firstlinks. Based in Bermuda, he leads the multi-asset team and has overall responsibility for the Orbis Global Balanced and Global Cautious Strategies.

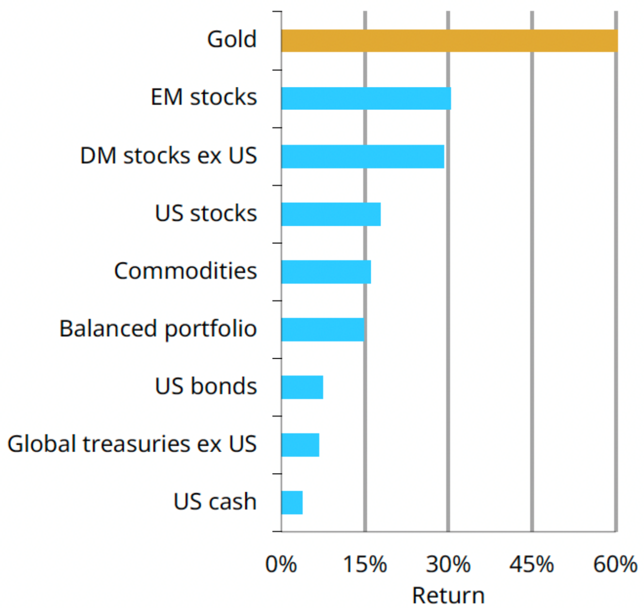
After a stellar 2025, can gold shine again next year?

Shaokai Fan

Heightened geopolitical and economic uncertainty combined with a weaker US dollar have driven investor demand for gold as investors seek hedges against volatility and inflation, creating significant price momentum in 2025. With bond markets lacklustre and equities highly concentrated, investors across all regions from West to East have been party to the rally.

Australian investors have not missed out. Inflows to Australian gold ETFs have netted almost A$1.5 billion (US$935 million) year-to-date as investors have turned to gold for its diversification benefits, stability and capital gains. The World Gold Council's November ETF report shows total Assets Under Management (AUM) in Australian gold ETFs now sits at A$10.5 billion (US$6.9 billion) by the end of November [1].

Figure 1: Gold takes a place on the podium in 2025
Y-t-d returns for gold and key asset classes in USD*



*Data as of 28 November 2025. Indices used Bloomberg Barclays Global Treasury ex US, Bloomberg Barclays US Bond Aggregate, ICE BofA US 3-Month Treasury Bills, New Frontier Global Institutional Portfolio Index, MSCI World ex US Total Return Index, Bloomberg Commodity Total Return Index, MSCI EM Total Return Index, LBMA Gold Price PM USD, MSCI US Total Return Index. Note that while gold's return over the period was 60.6%, the chart shows 60% for simplicity.
Sources: Bloomberg, World Gold Council

So, what can we expect in 2026?

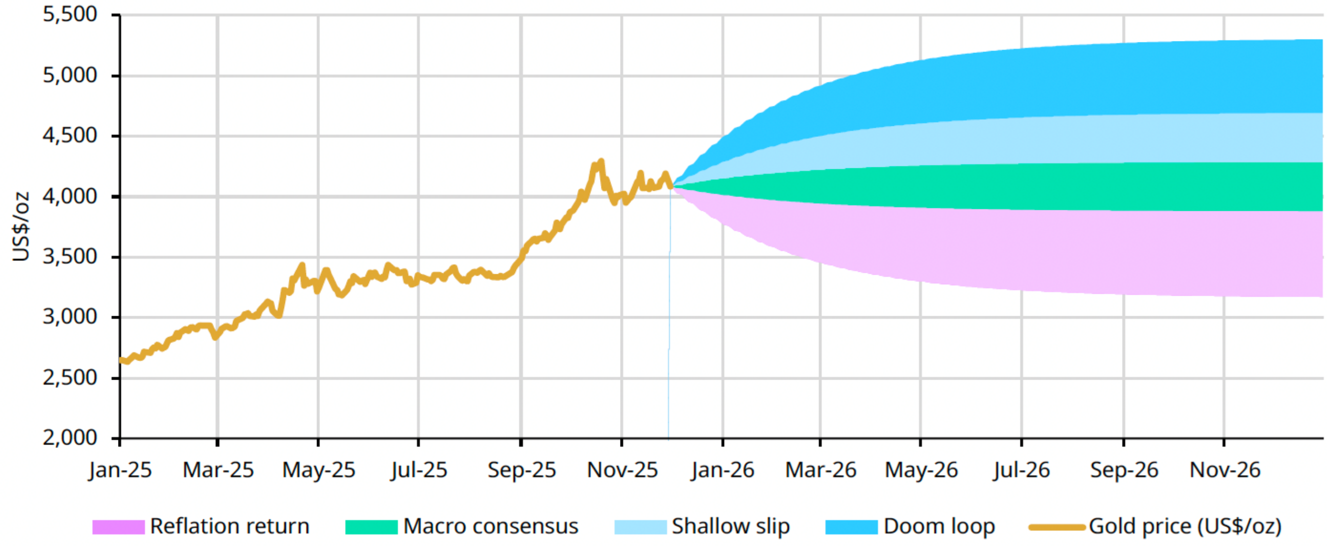
Concerns about a softening US labour market are mounting, while there is ongoing debate about inflation, as there is in Australia. Will inflation stay stubbornly high or even face renewed upward pressure?

Markets are largely pricing in a continuation of the status quo, but divergences in macro data and the ongoing geoeconomics volatility mean there will be nuances and no-one can discount the possibility of more extreme events.

So, the [World Gold Council's 2026 Gold Outlook] has examined three potential scenarios other than the market consensus.

Figure 2: Continued market volatility and geoeconomic risk could push gold higher, but a reduction in risk premia could put pressure on its performance.

2026 implied gold performance based on hypothetical macroeconomic scenarios*



*Ranges are not price forecasts but hypothetical illustrations of the potential scenario outcomes. Macro consensus implies -5% – 5% upside, Shallow slip implies 5% - 15% upside, Doom loop implies 15% – 30% upside, and the Reflation return implies 5% - 20% downside. For more details, see Table 2, p9.
Source: Bloomberg, Oxford Economics, World Gold Council

1. Based on the LBMA Gold Price PM USD as of 28 November 2025.

1. A shallow slip in macroeconomic conditions (moderately bullish)

This scenario sees a potential reset in the AI boom on equity markets acting as a drag on the wider market and the main indices. This would amplify market volatility and encourage further de-risking.

At the same time, the US labour market could track softer and consumer spending could weaken, creating a broader slowdown in global growth. If this occurs, the US Federal Reserve would likely cut rates faster and deeper than current expectations, responding to the economic uncertainty and expectations of cooler inflation.

The impact on gold in this scenario would be moderately bullish, creating a supportive environment for continued gold demand and a rise in the price. Our analysis – see notes under chart 2 – suggests that, in this environment, gold could rise between 5% and 15% on current levels, depending on the magnitude of the rate cuts and the severity of the economic slowdown.[2]

Central bank buying would continue, and there may be new entrants into investment markets, such as Chinese insurers or Indian pension funds.

A 5% to 15% rise in the gold price would represent a solid return and a normal year, but coming after the stellar performance of 2026 it would still be a noteworthy follow-up.

2. The doom loop (bullish)

This is the most bearish scenario for the economy but one that would have the most positive impact on the gold price. It reflects the chance that the global economy could move into a deeper and more synchronised slowdown.

Geopolitical risks could manifest larger as unresolved regional conflicts continue or even intensify, or a new flashpoint could emerge to further erode confidence.

This could occur alongside tensions around trade, fragmenting the market environment and impacting confidence and investment.

Business investment and consumer spending could be scaled back.

If the US growth was to weaken further and inflation fall below target, this ‘doom and gloom’ scenario could prompt some aggressive rate cutting from the Fed which would drive the US dollar lower and see long-term yields decline sharply.

A combination of these factors in the ‘doom loop’ would create exceptionally strong tailwinds for gold as investors sought out safety.

In this scenario gold could move sharply higher, and our analysis shows a potential surge of between 15% and 30% over 2026.

The main beneficiary of this would likely be gold ETFs, which have seen US$77 billion in inflows between January and November this year, and this would offset a potential weakness in demand for gold in other areas of the market, such as jewellery or technology.

3. Reflation Return

This is the most bearish scenario in terms of its impact on the gold price. In this environment, the Trump administration’s economic policies are successful, and the fiscal support delivers stronger than expected growth.

Reflation would take hold and lift global growth on a higher trajectory, forcing the Fed to hold or even hike rates in 2026. This would push long-term yields higher and strengthen the US dollar, increasing the opportunity cost of holding gold and forcing a re-allocation of capital back to US assets.

With economic sentiment improving, the environment would move to risk-on.

Gold ETFs would see sustained outflows as investors rotated back into equities and higher yielding assets.

All of this would have a negative impact on the gold price, resulting in a correction of between 5% to 20% on current levels.

Taken together, higher opportunity costs, risk-on sentiment and negative price momentum could create a challenging environment for gold if these reflation conditions are borne out.

Wildcards

Beyond these scenarios, central bank demand – which was a significant driver of demand in 2025 - could become unpredictable. While there are good reasons to expect central bank buying to continue, the buying process is often dictated by policy rather than by market conditions alone.

If central banks pull back on buying, this could create additional headwinds for gold.

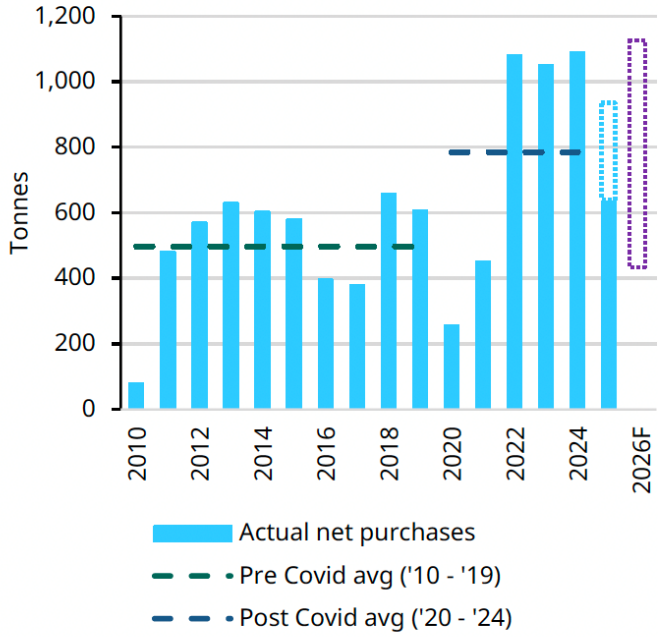
Another wildcard could be recycling flows, where the gold used in jewellery and technology comes from repurposing rather than from mines.

Recycling was muted over 2025, a factor linked to a notable increase in the use of gold as collateral for loans.

In India, for example, consumers pledged more than 200 tonnes of jewellery through the formal sector, and anecdotal evidence suggests there is almost as much gold backing loans in the informal sector.

Figure 3: Central bank demand has been an important contributor to gold's performance

Actual and estimated annual central bank demand*



*2025 data as of Q3 2025. The dotted blue bar represents our full-year 2025 estimate of 750–900t. For 2026, the dotted purple line represents a wide-ranging forecast that will depend on macro and policy drivers.
Source: Metals Focus, Refinitiv GFMS, World Gold Council

Subdued recycling would continue to provide support for the gold price, but an economic slowdown in India could force the liquidation of gold backed collateral and boost secondary supply.

This would ultimately work to undermine the gold price.

Final thoughts

The gold outlook for 2026 is defined by the uncertainty of the economic environment.

Uncertainty is likely to continue in 2026, but what forms it may make and how severe it could be are unknowns as we move into the new year.

Investors will have their own views on the likely path of the global economy and the forces which may shape it in 2026.

Mapping those views against our three scenarios may clarify where gold might fit into assessments and forecasts for the year to come. Ultimately, the diversity of possible outcomes highlights the value of scenario-based planning.

In a world where shocks and surprises are increasingly the norm, gold's capacity to provide diversification and downside protection remains as relevant as ever.

Figure 4: Gold responds to a combination of factors that influence its role as an asset

Hypothetical macroeconomic scenarios and their implied gold performance for 2026*

Economic scenario	Current consensus	A shallow slip	The doom loop	Reflation return
Expected Fed funds rate	*Current 3.75% - 4.00%; 75bps lower*	*Current 3.75% - 4.00% 120bps lower*	*Current 3.75% - 4.00% 175bps lower*	*Current 3.75% - 4.00%; 25bps – 50bps higher*
Opportunity cost	10yr yields: stable	10yr yields: fall 30 – 40bps	10yr yields: fall by more than 100bps	10yr yields: rise by at least 20bps
	USD: slightly higher	USD: flat to lower	USD: downside pressure	USD: moves materially higher
Economic expansion	Stable trend global growth	Global growth slightly slows	Global growth materially slows	Strong reflation; global growth up 3%
Risk & uncertainty	Inflation flat	Inflation drops by c.30bps	Inflation falls below 2%	Inflation rises by more than 1%
	Neutral risk positioning	Risk-off positioning	Broad risk-off positioning	Risk-on positioning
	Geopolitical risk elevated but stable	Geopolitical risk spikes then falls	Geopolitical risk spikes	Geopolitical risk falls
Momentum	Commodities flat	Commodities drop	Broad commodities selloff	Commodities rebound
	Slight unwind of gold net positioning	Gold net positioning rises	Gold net positioning materially increases	Gold net positioning falls significantly
Implied gold performance	Rangebound	Moderately higher	Higher	Lower

Colour key (effect on gold)	Negative		Neutral		Positive

*Data as of 28 November 2025. Hypothetical scenarios constructed based on Bloomberg consensus expectations, current market prices, Oxford Economics forecast, and historical performance. Impact on gold performance based on average annual prices as implied by the Gold Valuation Framework.
Source: Bloomberg, Oxford Economics, World Gold Council

[1] Converted from USD to AUD using an exchange rate of 0.6536 (USD/AUD), 28 November 2025
[2] All hypothetical implied impact on gold from various macro scenarios are performances implied by our Gold Valuation Framework base on various inputs, see: Gold Outlook 2026: Push ahead or pull back | World Gold Council for more details.

Shaokai Fan is Head of Asia Pacific ex-China and Global Head of Central Banks, at World Gold Council, a sponsor of Firstlinks. This article is for general informational and educational purposes only and does not amount to direct or indirect investment advice or assistance. You should consult with your professional advisers regarding any such product or service, take into account your individual financial needs and circumstances and carefully consider the risks associated with any investment decision.

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Critics of Commonwealth defined benefit schemes have it wrong

Paul Lindwall

In a series of recent articles on firstlinks.com.au, Clime's John Abernethy has repeatedly returned to a favourite target: defined benefit (DB) pensions in the Commonwealth public sector. His commentary often features references to “hidden liabilities”, questionable forecasts, alleged actuarial errors and warnings of a looming fiscal crisis. He has even speculated that the Future Fund might one day be transformed into a repository for distressed mortgages as a way of dealing with supposed shortfalls in its ability to meet DB pension liabilities.

It is a compelling story, but inaccurate. The analysis mis-characterises the nature of defined benefit pensions, misrepresents public finance and actuarial practice, and consistently overstates the fiscal significance of what is in reality a closed and declining set of obligations. The rhetoric also omits important contextual facts about how these schemes operate and who actually receives these pensions.

What follows is an attempt to rebut his arguments.

1. ‘Unfunded’ DB pensions exist because government chose not to pre-fund them

Abernethy often states and implies that the ‘unfunded’ status of Commonwealth DB pensions reflects excessive generosity or impropriety. This misunderstands history. Successive governments decided to pay Commonwealth superannuation benefits directly from consolidated revenue rather than building investment pools. This was a conventional public finance practice throughout the 20th century, in Australia and elsewhere.

The unfunded nature of the liability tells us nothing about the generosity of the benefit itself. Had governments elected to accumulate contributions, the liabilities would now be fully funded. The choice was made by governments, not by public servants, judges, military personnel or politicians, and certainly not by the average Commonwealth Superannuation Scheme (CSS) or Public Sector Superannuation Scheme (PSS) member. Indeed, some state government DB pensions are fully funded, which provides tax benefits to the recipient.

2. Defined benefit pensions are bought through compulsory contributions

There is nothing free or unearned about a CSS or PSS pension. Members have always made compulsory contributions. In the PSS, members could contribute up to 10% of salary from after-tax income. The employer contribution is notionally 15.4% (this is foregone by the employee just like the superannuation contribution made by defined contribution members through the superannuation guarantee). The effective total contribution rate is therefore up to 25.4% of salary. This is greatly in excess of what many accumulation fund members contribute today through a combination of compulsory superannuation guarantee and salary sacrifice. Most public servants today on a defined contribution scheme have the 15.4% employer contribution with no additional contributions. It is unsurprising that a person putting away 25.4% of his or her income for 40 years will end up with a sizeable pension.

In the CSS, compulsory member contributions were mandatory for every year of service. These funds were, quite literally, paid for by the people who earned them.

Furthermore, many DB members did not work many years or did not progress to senior levels. These individuals receive quite modest pensions. For some, their DB pension is low enough to allow partial access to the age pension and the accompanying health concession card. This hardly resembles the picture of “excessive entitlements” that Abernethy paints.

3. Defined benefit pensions are fully taxed, unlike large accumulation pensions

Abernethy repeatedly suggests that DB pensions enjoy unusually favourable tax treatment. This is incorrect. CSS and PSS pensions are assessable income taxed at marginal tax rates, with adjustments for age-related offsets (over 60). By contrast, a retiree with, say, $1.9 million in a defined contribution pension account can draw down income entirely tax-free, and all earnings are tax free. They can take money from the fund and do as they please. The CSS or PSS pensioner may only live a couple of years and then (unless there is a surviving spouse) the government’s payments cease with nothing owing to the estate.

The comparison is stark. A DB pensioner with the taxable benefit pays income tax every year. An accumulation pensioner drawing a pension from the accumulation scheme is tax-free.

If the public debate is to focus on fairness, it is extraordinary that DB pensions attract such scrutiny when accumulation funds of several million dollars attract so little scrutiny despite their complete exemption from income tax in retirement.

4. Defined benefit pensioners cannot receive the age pension unless the DB pension is modest

DB recipients with moderate or high pensions are ineligible for the age pension. There is no double dipping in these cases. Only DB members who receive small pensions arising from short service or lower classifications can qualify for the age pension. These individuals are hardly the affluent elite that Abernethy insinuates.

Meanwhile, wealthy retirees with large accumulation balances often structure their assets to qualify for a part-age pension or the Commonwealth Seniors Health Card. DB pensioners with moderate or high pensions cannot do so.[1]

5. CPI indexation is not a windfall and erodes real income over time

Abernethy highlights CPI indexation as if it creates rapidly escalating pension benefits. This interpretation is wrong. CPI indexation maintains the nominal value of a pension but does not increase real purchasing power. Because DB pensions are taxable, the real after-tax pension falls over time. The pension does not ‘grow’ relative to living standards. It simply avoids inflationary erosion.

Moreover, Abernethy does not mention that the largest defined benefit scheme in Australia is the age pension itself. The age pension has more generous indexation than CSS and PSS since it is benchmarked to wages as well as prices. Correcting the record on indexation therefore undermines his entire argument.

6. Defined benefit members surrender all market returns

A central feature of defined benefit pensions is that the benefit formula is fixed. Members do not participate in market gains. They cannot benefit from sharemarket growth or long-term compounding.

They cannot adjust investment strategy. They bear no investment risk but equally forfeit all investment upside.

By contrast, a three-million-dollar accumulation account can compound tax-free over decades. It can grow substantially in real terms and, importantly, can be passed to beneficiaries. DB pensions have no estate value. They expire at the death of the member or surviving spouse. The present value of the pension therefore declines each year as life expectancy shortens.

In the entire Australian superannuation system, defined benefit pensions are the least capable of facilitating intergenerational wealth transfer. Indeed, if a CSS or PSS pensioner who has no partner dies after a couple of years, the Government gets the entire benefit from the short life. There is no estate to pass on.

7. Abernethy misinterprets the valuation of DB liabilities and the Future Fund

Abernethy frequently criticises the Commonwealth Actuary for “mis-forecasting” liabilities. This criticism reflects a misunderstanding of how long-term liabilities are measured. DB liabilities change when discount rates move, when longevity assumptions shift, when inflation changes or when military and judicial schemes evolve. This is normal actuarial practice. Liability revaluation does not mean pensions are ‘out of control’.

Similarly, the Future Fund was never required to take over pension payments immediately. The timetable is flexible and intended to ensure that the Fund accumulates a sufficient buffer. Nothing in the Fund’s behaviour suggests a crisis or scandal. The suggestion that it may become a ‘bad bank’ for distressed mortgages is speculation without policy foundation.

8. Many other defined benefit schemes exist and always have

Abernethy speaks as if Commonwealth CSS and PSS schemes are uniquely problematic. Yet DB arrangements exist across the public and private sectors. They include military superannuation, judicial pensions, political pensions, state public sector schemes and corporate DB schemes such as those historically operated by Qantas and Telstra.

DB pensions are not a strange anomaly. They are a longstanding and legitimate retirement structure that Australia, like most advanced economies, has largely closed to new entrants but continues to honour for existing members. One could argue that Australia would have been better keeping these schemes. But long-term public servants signed up to them and worked for decades to earn the benefits they provide. They are not a gift, or unreasonable, they are part of the salary package that the Government then provided. Nowadays, the real salaries are much higher than for retired public servants, but there is no defined benefit scheme.

Conclusion

Abernethy’s arguments misinterpret history, economics and actuarial practice. Defined benefit pensions are:

- paid for through compulsory contributions
- fully taxed
- closed to new entrants
- declining in real value

- incapable of generating or transferring capital
- modest for many members
- predictable in cost and actuarially managed

Despite repeated attempts to portray DB pensions as a fiscal time-bomb, the evidence shows that they are stable, understood and entirely compatible with Australia's retirement income system. The real policy concerns around equity and intergenerational wealth lie within the accumulation system, not the defined benefit schemes.

Defined benefit pensions are not the problem they are made out to be, and there is no substantive basis for additional taxation or reform directed at their recipients.

[1] For the 2025 financial year, the income test allows the full pension if income is less than $212 per fortnight and the part pension cuts out at $2444.60 per fortnight (ie: $63,559.60 per annum). The assets test for a single homeowner cuts out at $686,250 (owner-occupied home doesn't count) and there are different thresholds for couples and non-homeowners. Defined benefit pensions, on a fixed income, cannot escape the income test, whereas there is more scope for defined contribution members to manipulate their affairs to qualify for the age pension and pensioner concession card.

Paul Lindwall is a former senior Australian Treasury official and former Commissioner of the Productivity Commission.

Why airport stocks deserve a place in long-term portfolios

William Thackray

Airports have seen phenomenal traffic growth as people prioritise travel and experiences in the face of cost-of-living pressures.

The rate of growth in the near-term is seemingly not a demand story, but rather a question of whether airlines and aircraft manufacturers can keep pace with an insatiable demand to travel.

In the medium-term we expect demand from baby boomers, millennials and Asia's emerging middle class will continue to drive strong global traffic growth. We explore what this means for listed airport companies.

The state of flight

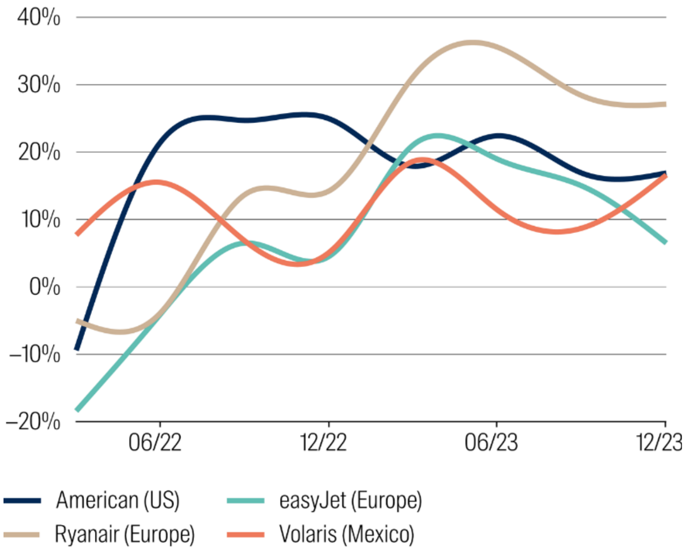
We have observed a three-stage recovery of airline capacity since 2022. All of which have been acutely felt by travellers, both in terms of their patience and their hip pocket.

The first stage in 2022 and 2023 – by far the most challenging for travellers – was characterised by low levels of operational readiness for most airlines and airports. This led to low levels of flight availability, delays, cancellations and a poor overall travel experience. Airlines took advantage of the demand-supply mismatch, with ticket prices hitting levels 20–40% higher than 2019.[1]

Then during late 2023 and 2024 we saw improvements in seat capacity as more planes returned to the skies and operational readiness improved. We saw low-cost carrier (LCCs) such as Ryanair in Europe and Volaris in Mexico perform particularly well, with their operating agility and healthy balance sheets allowing them to move more quickly to capitalise on strong traveller demand. Unfortunately for travellers whilst the experience started to improve, ticket prices remained elevated. Strong traveller demand resulted in any additional capacity being quickly absorbed, allowing airlines to largely sustain the pricing gains they'd made.

Airfares vs 2019

Airfares based on revenue per available seat mile

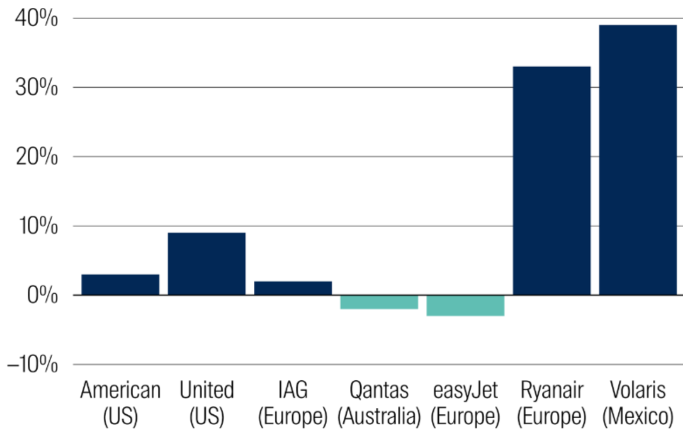


Source: Company data.

More recently, capacity and pricing growth have somewhat normalised. Pricing has even gone backwards in some regions. For example, the US has seen pricing declines of between 5% and 10% in periods through 2024 and 2025, driven in large part by overcapacity on leisure-orientated routes. In Europe demand has continued to be robust and capacity additions have been modest, leading to strong pricing trends particularly during holiday travel periods.

2024 capacity vs 2019

Capacity = Available seat miles/available seat kilometres



Source: Company reports.

Stuck in a holding pattern

The key constraint we see to further upside to traffic growth in the near term is the lack of new aircraft becoming available to continue to satisfy demand growth. The world's two dominant aircraft manufacturers, Boeing and Airbus, remain nowhere near their previous rates of aircraft production. Total industry output is still running 30% below the highs seen in 2018. This hasn't stopped them from taking orders for new planes though, with outstanding orders for new planes reaching a record high of over 17,000.[2]

Boeing's 737-Max, the aircraft responsible for much of the world's short-haul traffic growth, has over 4,500 outstanding orders alone. Even if Boeing were to lift their production rates from the currently capped 38 aircraft deliveries per month to the targeted 47 deliveries per month, their order book would still take more than seven years to clear.

We expect these capacity growth headwinds to ease in 2027 as aircraft production rates improve, allowing airlines to receive new aircraft and put them to work. This should see downward pressure on ticket pricing, with the additional capacity leading to a more competitive market for airlines. Both of which bode well for traffic growth.

As a result, we are positioning the portfolio towards those airports where earnings growth is not predicated on significant capacity additions in 2026. We find this in Zurich Airport and in Groupe ADP's Charles De Gaulle and Orly airports in Paris. We believe the market has suitably conservative expectations on traffic growth for both companies, and we see earnings upside potential from other areas of their businesses such as retail and their international operations.

SKI season

As we see these supply-side constraints ease our expectation is that strong demand growth will continue. The trends of baby boomers 'spending the kid's inheritance' (SKI) and millennial/ Gen-Z 'fear-of-missing-out' (FOMO) travel should continue to fuel growth.

The SKI phenomenon has been cited by airlines as a positive source of growth, particularly when it comes to the strong performance they have seen in their premium (premium economy/ business/first class) cabins. A recent survey of US retirees found that 63% of Americans nearing retirement saw travel as an important retirement goal. Another survey found that just 6% of retirees felt leaving a financial inheritance was more important than creating travel memories. The same survey found 68% of retirees don't worry about spending their children's inheritance when travelling.[3]

At the opposite end of the age spectrum, we find that younger generations are prioritising

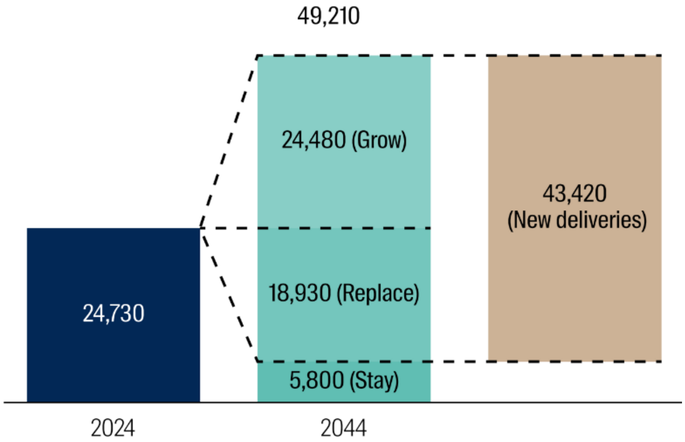
Aircraft demand outpacing supply capacity

Boeing 737 order backlog and deliveries

Source: Boeing. Data as at 30 September 2025.

Airbus forecast of demand growth

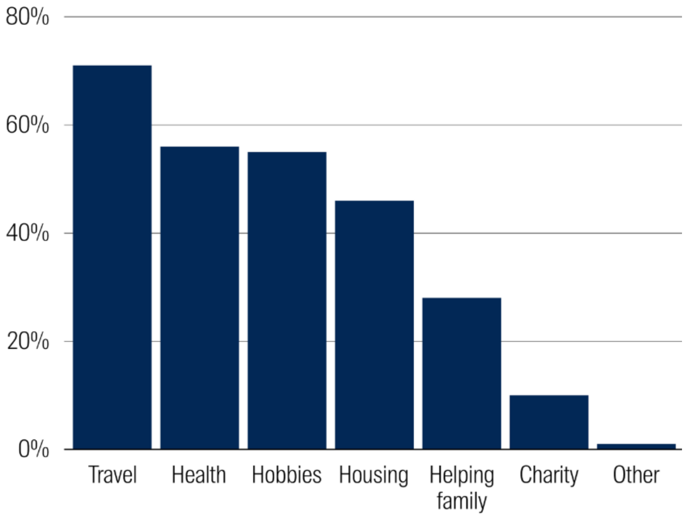
Fleet in service (# aircraft)



Source: Airbus GMF 2025, Cirium May 2025.

What are your spending priorities for retirement?

Survey of 2,000 Australians



Source: Equipsuper. Data as at July 2024.

travel more than ever before. A recent McKinsey report noted that 76% of Gen Zers agreed with the statement 'I am more interested in travel than I used to be'. Even more surprisingly, just 15% said they were trying to save money by reducing the number of trips they go on.

The combined impacts of home ownership affordability challenges, climate anxiety and social media 'travel influencers' are all driving this shift. Leading the FOMO generation to live for today rather than save for tomorrow.

We see these two generational shifts as structural rather than cyclical drivers of traffic demand growth, helping to drive long-run traffic growth expectations higher. This is in turn creating a multi-year earnings and valuation uplift opportunity for the airport sector.

Indi-go global

In the 1990s global tourism growth was fuelled by demand from Japanese tourists to see the world. Then we saw the rise of China's middle class in the mid-2000s up until the pandemic.

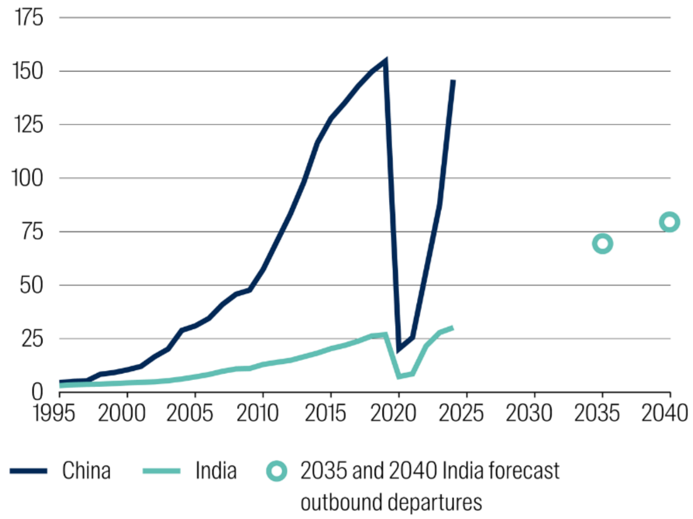
Looking forward we believe the story will undoubtedly be outbound tourism growth from Indian travellers. At the same time, we believe that growth from China is far from over. We anticipate that China's emerging middle class will once again support strong travel demand growth as the country's domestic economic outlook improves. As a result, we expect dual tailwinds out of Asia as these two countries with a combined 2.8 billion people drive global tourism growth.

Indian airlines are ready to meet this demand as well. As highlighted below, the big three local airlines have a combined 1,680 new planes on order.[4] This compares to a combined current fleet of 739 aircraft. A phenomenal increase in capacity even once you assume retirements of some of the existing fleet. As a result, once the aircraft manufacturer issues previously noted are resolved, this is the region where we expect to see the most significant further acceleration in traffic growth.

This is one of the reasons we see significant valuation upside in portfolio companies Flughafen Zurich and Groupe ADP.

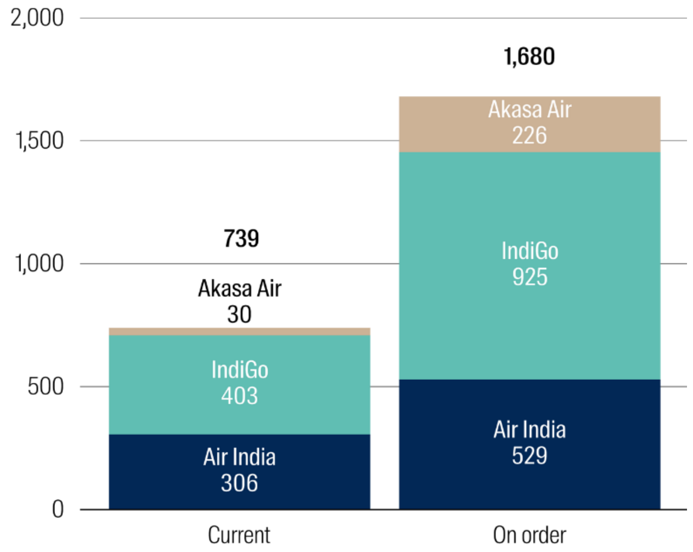
Back to the future

Outbound departures (millions)



Source: World Bank, CEIC, Travel China Guide, McKinsey, DFAT. Data as at 30 September 2025.

Growth in aircraft fleet in India



Source: FlightRadar24, Company reports. Data as at 30 September 2025.

Flughafen Zurich, whose primary activity is the operation of Zurich Airport, recently completed the development of Delhi's Noida International Airport. This airport is expected to have 8 million passengers in its first full year of operations, which we believe is an unprecedented level of growth for a new secondary airport. We expect Flughafen Zurich will be able to realise significant value from their investment in the near-term via a minority stake sale to an institutional investor looking for exposure to this significant growth in Indian tourism.

Groupe ADP is another portfolio company that identified India as a growth market early, acquiring a 49% interest in leading listed Indian airport operator GMR for €1.36 billion in February 2020. This stake today is worth over €4 billion based on market pricing,[5] a 3x increase on their initial investment. We believe the market is placing very little value on this investment currently; something which we believe could shift as GMR management increasingly focuses on returning capital to shareholders via dividends as the company moves out of its capital-intensive investment phase.

Building for growth

We are seeing airport companies positioning for this growth, with increased investment in the infrastructure to accommodate the additional passengers they expect to serve. Within our universe, Auckland Airport, ADP's Paris airports, Aena's Spanish airports, Vinci's Gatwick Airport, Vinci's Lisbon Airport, Zurich Airport, and all of Mexico's three main airport operators are entering large investment programs.

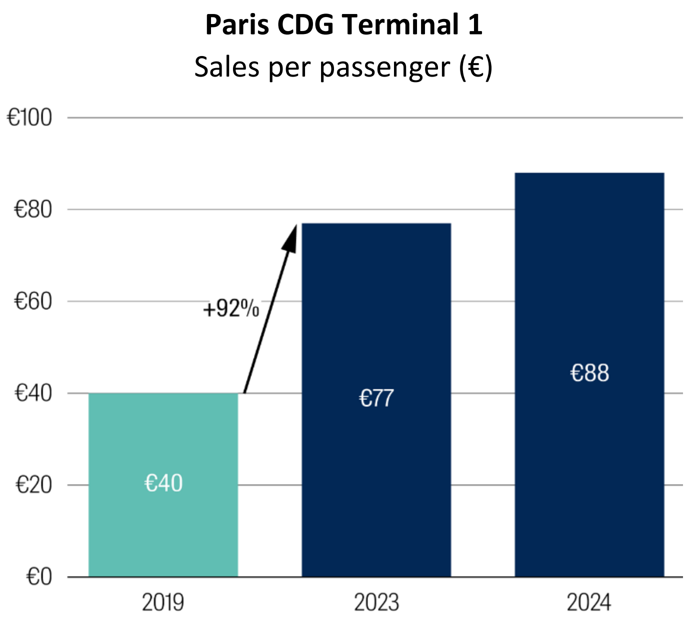
Portfolio company GAP is the operator of twelve airports in Mexico, including the high growth airports of Guadalajara, Tijuana and Los Cabos. In late 2024 they agreed with the regulator to a US$2.4 billion capex program. This will enable them to expand their airports to cater to the significant demand growth they are seeing. In exchange for this investment, the local aviation regulator approved a ~30% increase in the aeronautical fees they are allowed to charge to the airlines. This highlights the strong earnings growth we are seeing as airports look to expand capacity in order to serve this passenger demand growth.

Zurich Airport is in the early stage of planning the reconstruction and expansion of their Dock A terminal infrastructure and control tower, which is approaching the end of its useful life. The new CHF1 billion+ terminal infrastructure will allow Zurich Airport to more efficiently handle the processing of passengers. This should both lift the terminal's passenger capacity and improve the overall customer experience and the retail offering being provided to travellers.

This highlights how the expansion benefits for airport companies are two-fold, providing upside to aeronautical charges as well as improving the quality of the retail offering. These commercial segment earnings largely fall outside the regulated operations of the airport, allowing airport operators to generate returns over and above their regulated return.

New or renovated terminals can lead to a meaningful step-change in commercial revenues, as a higher quality retail offering drives higher sales per passenger (SPP). Most recently we saw this with the Terminal 1 renovation at Groupe ADP's Charles De Gaulle Airport. By the end of 2023, ADP had seen a 92% increase in the SPP for Terminal 1 following the opening of the refurbished terminal in 2022.

This becomes an even more impressive figure when you factor in much lower contributions from high-spending Chinese passengers in 2023/2024, who in 2019 accounted for only 2.1% of the traffic but 15.4% of retail revenues.



Source: Company reports; First Sentier Investors estimates. Data as at 30 September 2025.

Conclusion

In summary, we are seeing significant traffic momentum from generational trends such as SKI and FOMO that we believe are here to stay. This, coupled with growth in travel demand out of Asia, has led to a meaningful step-change in the long-run passenger traffic growth outlook for a number of airports.

While near-term traffic growth may be constrained by aircraft availability, the long-term nature of infrastructure means these companies are planning for long-term growth now. We believe this will be a positive multi-year earnings growth driver for the airports sector.

[1] Company Reports
[2] IATA
[3] Grey Gap Year Report 2025, Australian Seniors
[4] Boeing and Airbus company reports
[5] Bloomberg; as at 3rd October 2025.

William Thackray is a Senior Analyst, Global Listed Infrastructure at First Sentier Investors (Australia) Ltd, a sponsor of Firstlinks. This material contains general information only. It is not intended to provide you with financial product advice and does not take into account your objectives, financial situation or needs.

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What is the future of search in the age of AI?

Magellan Global Equities Team

For two decades, the search box has been the undisputed gateway to the internet, a frictionless tool embedded in our daily lives. But this familiar landscape is undergoing a transformational change, driven by the rapid emergence of Generative AI (GenAI).

This evolution is forcing us to reconsider not just how we find information, but how the companies that provide it will create value in the coming years. The two leaders in consumer-facing GenAI[1] tools are OpenAI (via ChatGPT) and Alphabet (via Gemini).

The new landscape of search

When ChatGPT launched in 2022, it acquired 100 million users in just two months, a pace unmatched by any prior consumer technology. Its first-to-market user-friendly GenAI tool has catapulted ChatGPT to the most-used app in the world, but still behind Google.com as the most frequented website. Current usage statistics include:

	Alphabet/Google/Gemini	OpenAI/ChatGPT
Most-frequented website	#1	Top 5
Search-like queries	14 billion daily	40 million daily
GenAI monthly active users	450 million	800 million

Currently, however, traditional search and GenAI serve distinct purposes. Google Search has long been the master of specific intent. Its usage is dominated by informational queries (e.g., “what is the weather in Brisbane?”) at ~55%, navigational queries (e.g., “Australian Museum website”) at ~30%, and commercial queries (e.g., “buy flights to Melbourne”) at ~15%. GenAI, on the other hand, excels at complexity. Around 70% of its use is for deep research and assistance, such as summarising reports or helping with homework. The remaining 30% comprises more search-like queries.

The who of the future of search

These two worlds of Search and GenAI, in our view, are rapidly converging. The future of Search isn’t a battle of one versus the other, but a synthesis of both. Magellan expect features and use cases to emerge that improve the experience for informational, navigational, commercial and deep research needs, as well as the emergence of agentic AI[2] use cases.

At present, ChatGPT has the GenAI mindshare of the consumer given its first-mover advantage. Google has Search mindshare – and isn’t standing still on GenAI. Google, the pioneer of AI, is now integrating AI Overview into its core Search product, already reaching over 1.5 billion users of the tool, and over 450 million monthly active users (MAU) of the Gemini app. In addition, Alphabet’s scale and interconnected ecosystem are strategic advantages in driving future growth. Alphabet’s assets include YouTube (>2.7 billion MAU), Android (>3.5 billion users), Chrome (>3.5 billion users), Gmail (>1.8 billion MAU), Google Cloud, and Waymo. This powerful consumer base and diversified platform, combined with Alphabet’s GenAI capabilities, is a powerful platform to drive the adoption of GenAI and Agentic AI use cases. The breadth and depth of these services should enable Google to customise the AI experience for its users, which is hard to replicate.

Image: IStock and Adobe Stock

Monetisation in the GenAI search era

The most critical question for investors is how this new technology will be monetised. Alphabet's current model is a digital advertising fortress, with Search ad revenue representing a ~$200 billion annual revenue stream, and an estimated 90% market share in search. Impressively, this revenue is generated from ads being shown on only about 20% of searches. The future, however, points to a more diversified revenue stack, and more, albeit still concentrated, competition. For example, OpenAI currently generates US$12 billion in revenue and is aiming to grow 10x by 2029.

At Magellan, we see four key pillars emerging:

- Continued Google Search ad revenue: The foundational, highly profitable core business will remain, albeit it will likely be smaller over the medium to long term.
- GenAI subscription revenue: Premium tiers for advanced AI features are already being rolled out, creating a recurring revenue stream.
- GenAI ad revenue: As AI provides more comprehensive answers, new, native advertising formats will be integrated directly into the generated content.
- Agent revenue: This is the most transformative opportunity: an AI 'agent' that moves beyond providing information to completing tangible tasks. For example, users could engage an agent for booking an entire holiday, scheduling appointments or ordering products. The agent will be able to guide the consumer through the entire process from planning to discovery and purchase and is likely to take a small commission for the service. This moves GenAI players from an information provider to a commerce enabler.

In summary, the world of search is evolving, creating a powerful new monetisation model. Magellan view that Alphabet is far more than just a search engine; it's a diversified ecosystem supercharged by AI and primed to lead in the future of search.

1 Generative AI or GenAI is a class of AI algorithm that can create new content such as text, images, audio and code based on learnings from existing data. GenAI responds to user prompts.
2 Agentic AI is an AI system that can autonomously and proactively act to achieve goals. Agentic AI can independently plan or make decisions to complete tasks.

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