Edition 577, 13 September 2024

Contents

Editorial

In 2001, Jim Collins released his bestselling book, *Good to Great: Why Some Companies Make the Leap ... and Others Don't.* In the book, Collins set out to identify the universal distinguishing characteristics that cause a company to go from good to great. He found characteristics such as Level 5 leadership, a culture of discipline, the hedgehog concept, and the flywheel.

If these concepts sound like corporate gobbledygook, that's because they are. A former business consultant, Collins couldn't resist vague consultant-speak and trying to fit backward-looking data and themes into a coherent, or in this case, not so coherent whole.

The book came to mind after recent revelations of Warren Buffett's sell-down of Apple (NYSE: AAPL), which I wrote about here. Buffett identified a great company in Apple in 2016 and bought it at a low valuation. The valuation is much steeper now though I suspect that's not the only reason why Buffett is selling. I think Apple has gone from a great business to a good business, and could turn into a mediocre one, and Buffett knows it.

Why? Because Apple has built several great growth businesses, first with the iPod and iPhone and then the iPad. If it can't build another growth business from here, revenue growth is likely to be anaemic and current valuations don't reflect that. And it means returns from the stock could be below-average or even miserable over the next decade.

Source: Morningstar

It got me thinking about other businesses which may be turning from great to good, or perhaps average. I'm going to suggest the big 4 banks, CSL, and Mineral Resources are heading that way, and that there are five tell-tale signs which show why.

The decline of the big 4 banks

It's been bizarre to witness soaring bank stocks over the past year, despite recent trading updates showing that their earnings are going backwards. The future looks bleak too. Credit growth is mediocre after a four-decade binge driven by Australia's housing bubble. Recent data shows that most bank loans are going to the wealthy, and the remainder of the population is being shut out. Combine this with greater competition in the mortgage space, and it's hard to see how this gets better.

It's true that the banks' deposit base looks as solid as ever. Though online banks and fintechs are nibbling away at this as well.

Cost cutting will get harder too. Yes, the banks can shut down more of their branches, yet a lot of that work has already been done. Technology could help, however progress will probably be slow.

All up, the earnings picture for the Big 4 banks looks poor, and that's without assuming any rise in bad debts, which remain at historically low levels.

The banks' big advantage is that they operate in an oligopoly backed by government. But that won't stop them going from good, or even great businesses, to average ones.

Source: Morningstar

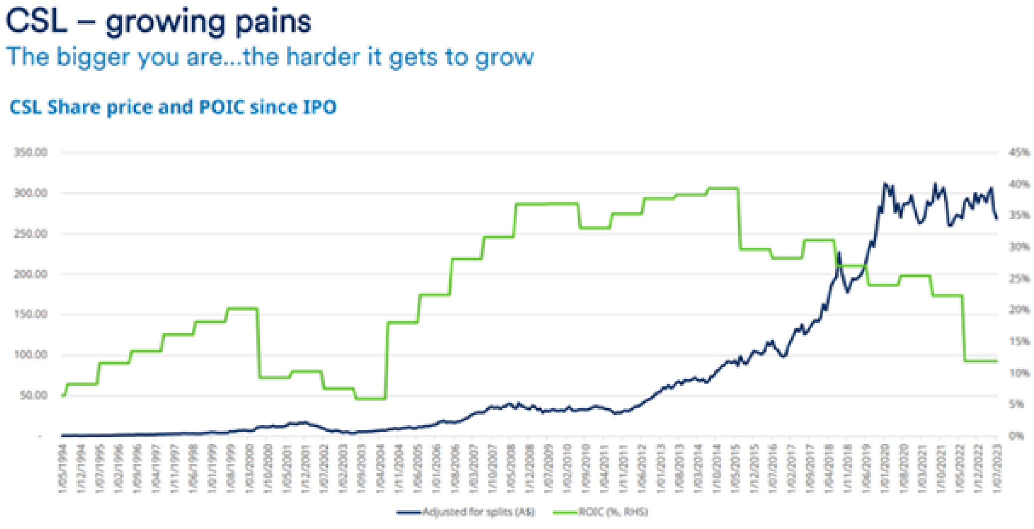
CSL: a big boat proving harder to move

After IPO'ing at $2.40 in 1994, CSL (ASX: CSL) has been a wonderful Australian success story. It's one of the few Australian companies that's become a global leader in its field. And shareholders have benefited mightily, with the stock price up a cool 126x over the past 30 years (excluding dividends).

With a market capitalization of $148 billion, though, size is becoming more of an issue. Growth is proving more difficult to come by, and acquisitions harder to find. This is best illustrated

Source: Morningstar

by the following chart.



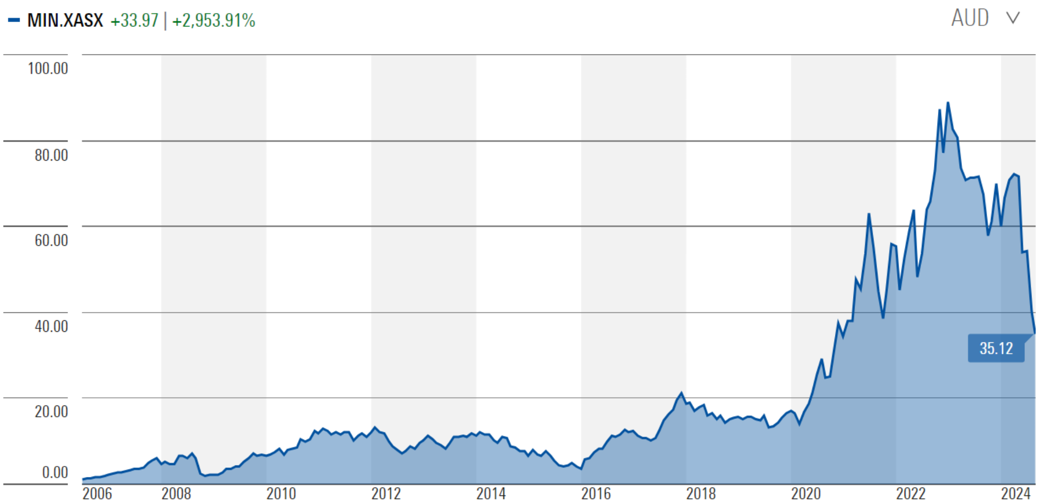
Source: Schroders

The chart shows that returns of capital have plummeted since 2015. In that year, CSL acquired the flu vaccine business of Novartis. Despite the success of this business, returns have declined. That trend has accelerated following the 2022 purchase of Vifor.

This doesn't rule out that returns may improve from here, but I'd suggest that the glory days of CSL are behind it, and tougher times may lay ahead.

Mineral Resources' red flags

Mineral Resources (ASX: MIN) has been another fantastic success story. It IPO'ed in 2006 at 90 cents and peaked above $96 early last year, before plummeting back to today's price of close to $35.



Source: Morningstar

The company owns a great mining services businesses that generates prodigious and relatively steady cashflow. It also has solid iron ore assets. However, the company piled into lithium mining at exactly the wrong time and piled on debt too. That's left a company vulnerable to two things it can't control: commodity prices and interest rates.

Chris Ellison is a successful entrepreneur who may have taken one too many risks. His recent erratic behaviour isn't reassuring.

5 tell-tale signs of great companies going bad

Here is my list of some of the tell-tale signs when wonderful businesses may be turning into mediocre ones:

- **Long growth runways get shorter.** It could be a technology that's maturing as with Apple, or a cyclical trend such as credit growth that's running out of steam a la Australian banks.
- **Size limits growth.** It's much harder to grow when you're a huge company versus being a minnow. CSL is the latest example of this.
- **Acquisitions go bad.** Many companies will reach for acquisitions to kickstart growth. Research suggests that most M&A is value destructive, and there's been a long history of Australian companies making bad acquisitions, especially overseas.
- **Management turns awry.** Buffett loved that Apple was buying back stock when the share price was cheap several years ago. He's likely less enamoured with recent purchases when the stock is arguably expensive. Bad management can turn a great company into a mediocre one.
- **New competition bites.** Wonderful businesses and sectors attract competition. That competition can eventually make headway and destroy companies which fail to adapt. Look at traditional department stores, television operators, phone companies, and the list goes on.

In my article this week, I look into whether it's possible to build a bulletproof investment portfolio that will perform well in any economic environment. So-called 'All Weather' portfolios have become trendy thanks to hedge fund titan Ray Dalio, and I run through what these portfolios are and their pros and cons.

And for those who are interested, I recently appeared on Morningstar's *Investing Compass* podcast talking about Australian stocks to buy and hold forever. Enjoy.

James Gruber

Also in this week's edition...

This week, APRA announced its long awaited proposed changes to bank regulatory capital funding. In short, the hybrid market for Australian banks will be phased out. **BondAdvisers' Charlie Callan and Jack Pobjoy** delve into the detail of the announcement and the potential opportunities and pitfalls ahead.

Schroders' Martin Conlon says plenty of money is sloshing around and it's ending up with those more inclined to invest than spend it, which is driving asset prices and markets higher. That's benefiting financial assets over real assets, and growth stocks over value ones. Conlon doesn't think this is sustainable, and he explains why.

The latest house price data shows Sydney continues to have the most expensive median dwelling value, but the gap between it and mid-sized cities like Brisbane and Adelaide has narrowed substantially. And, amazingly, Melbourne's housing values are now the sixth lowest across the eight capital cities. **Tim Lawless** details the key drivers of these trends.

Another ASX reporting season is over, and **Hugh Dive** lays out the key themes that came from it, including green shoots in consumer spending, signs of China's economic malaise, and higher interest rates having a different impact across companies. He identifies the winners and losers, and what's ahead for markets.

News Corp's plans to sell Foxtel are surprising given that streaming assets Kayo, Binge and Hubbl look likely to go with it. **Harry Morrow** and **Tom Keir** believe this and recent events in the US show the bind that legacy TV businesses find themselves in.

Artificial intelligence is taking the world by storm but how will it impact the investment industry? **Man AHL's Harry Moore** and colleagues reveal how their company is using AI to get a competitive edge.

Finally, in this week's whitepaper, the **Franklin Templeton Institute** examines how global equities have performed during previous Federal Reserve easing cycles.

Creating a bulletproof investment portfolio

James Gruber

Imagine owning an investment portfolio that could perform in any economic environment. In the deflationary bust of 2008. In the high inflation of the 1970s. In hyperinflation, a la Venezuela. And in the low inflation period of 2009-2021.

It'd be nice, wouldn't it? Having the reassurance that no matter what is thrown its way, your portfolio would be resilient enough to let you sleep easy at night.

Is it possible to build such a portfolio? There have been various attempts at it, and we're going to go through three examples of so-called All Weather portfolios today.

Ray Dalio's portfolio

Hedge fund titan, Ray Dalio, has been pioneer in the field. He's famous for founding Bridgewater Associates in 1975 and turning it into the US$124 billion giant that it is today.

Dalio is also known as a student of economic cycles. And it was his study of these cycles that led him and his colleagues to try to create a portfolio that could withstand any economic surprise that came its way. They set up the All Weather Fund in 1996, initially to just house Dalio's trust assets, but eventually to take external money.

As Bridgewater tells the story:

"Market participants might be surprised by inflation shifts or a growth bust and All Weather would chug along, providing attractive, relatively stable returns. The strategy was and is passive; in other words, this was the best portfolio Ray and his close associates could build without any requirement to predict future conditions."

Dalio knew from his reading of history that no single asset could provide safety at all times; it was only a portfolio of assets that could achieve steady returns under most, if not all, economic conditions.

Dalio's framework in more detail

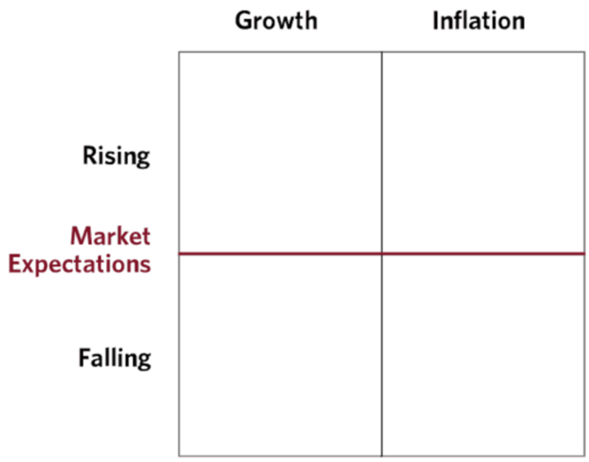
Dalio and Bridgewater broke down economic conditions into four categories:

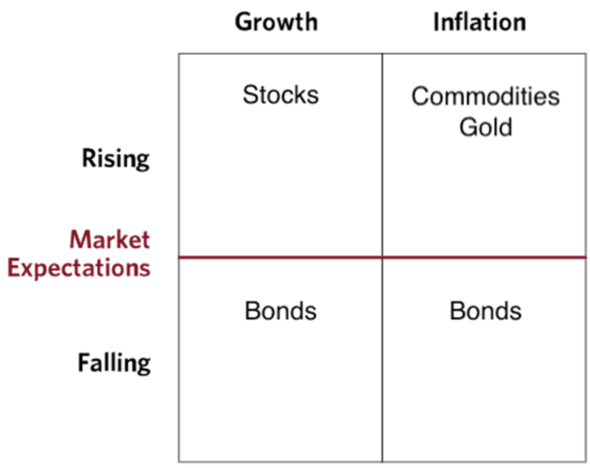
- Rising prices (inflation)
- Falling prices (deflation)
- Rising growth (bull markets)
- Falling growth (bear markets)

They put this into a matrix (top image).

The question then is which assets are best suited to the different economic environments. Dalio concluded that gold and commodities tend to do well during periods of rising prices, while bonds perform best during periods of falling prices. In times of rising growth, stocks do well, while in declining growth periods, bonds are usually the best asset to hold.

The key is that these different economic environments don't all occur with the same frequency. For instance, periods of high economic growth happen more often those of high inflation. In his portfolio, Dalio weighted the different assets accordingly (bottom image).





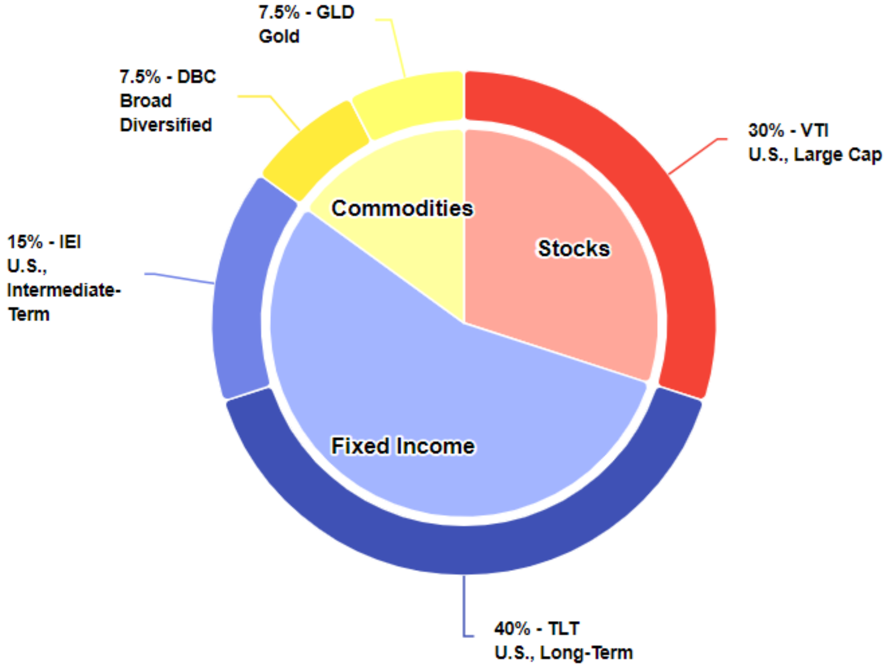
Source: Bridgewater

Dalio's All Weather Portfolio

Dalio has been circumspect about his portfolio's exact contents for much of its history (even to his own clients). However, he later revealed how an individual investor could set up an All Weather Portfolio via ETFs (right).

The portfolio has a heavy weighting to bonds, with 40% in long-term bonds, and 15% in intermediate bonds. Stocks are 30% of the portfolio, while commodities including gold make up the remaining 15%.

For Australian investors, you could switch the US stock and bond holdings to international ones, or a mix of Australian and international, depending on your needs.



Source: www.lazyportfolioetf.com

How has the All-Weather Portfolio performed?

Dalio's portfolio has performed reasonably well over time. It's returned 6.7%, 7.7%, and 6.3% per annum (p.a.) over periods of 20, 30, and 154 years respectively.

It's done that taking much less risk than most other portfolios. For example, $US1 has turned into US$10 over the past 50 years, and during that time, the maximum decline for the portfolio has been 21% (in 2022). And during the GFC, the portfolio only went down 12% from peak to trough.

Since 1871, positive returns have happened 96.1% of the time over three-year periods, and 98.6% of the time over five-year periods.

RAY DALIO ALL WEATHER PORTFOLIO

Advanced Metrics

Time Period: 1 January 1871 - 31 August 2024 (~154 years)

Metrics as of **Aug 31, 2024**

	YTD (8M)	1M	3M	6M	1Y	3Y	5Y	10Y	20Y	30Y	MAX (~154Y)
Investment Return (%)	7.48	1.67	6.07	7.57	12.05	-0.52	4.03	4.93	6.73	7.65	6.33
Infl. Adjusted Return (%)	5.83	1.67	5.96	6.72	9.42	-5.03	-0.10	2.05	4.07	5.01	4.13

Pending updates, the monthly inflation of Aug 2024 and beyond is set at 0%. Returns / Inflation rates over 1 year are annualized.

DRAWDOWN *Inflation Adjusted:*	Current	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Deepest Drawdown Depth (%)	-3.56	-7.43	-20.58	-20.58	-20.58	-20.58	-20.58	-37.02
Start to Recovery (# months)	32*	4	32*	32*	32*	32*	32*	68
Longest Drawdown Depth (%) Start to Recovery (# months)		same	same	same	same	same	same	same
Longest negative period (# months)		4	36*	46	46	46	46	84

*Drawdowns / Negative periods marked with * are in progress*

RISK INDICATORS	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Standard Deviation (%)	11.70	11.84	10.24	8.40	7.76	7.43	6.56
Sharpe Ratio	0.57	-0.32	0.19	0.41	0.68	0.72	0.36
Sortino Ratio	0.78	-0.45	0.26	0.57	0.91	0.97	0.51
Ulcer Index	2.72	12.15	9.50	7.06	5.29	4.44	4.58
Ratio: Return / Standard Deviation	1.03	-0.04	0.39	0.59	0.87	1.03	0.97
Ratio: Return / Deepest Drawdown	1.62	-0.03	0.20	0.24	0.33	0.37	0.17
Positive Months (%)	66.66	50.00	56.66	60.83	65.41	66.66	63.82

Source: www.lazyportfolioetf.com

All up, the portfolio has achieved its objective of providing steady returns through economic cycles.

Harry's Browne's Permanent Portfolio

The less well-known Harry Browne can also be considered a pioneer of the All Weather portfolio. Browne was a financial adviser and writer who wrote a book in 1970 predicting that high inflation was on the way and that investors should load up on commodities, especially silver and gold. As you can imagine, he made a personal fortune from getting this right.

However by the early 1980s, he knew the tide had turned and he became a passive investing advocate in the mold of John Bogle. That got him thinking about an investment portfolio that could perform under all circumstances.

He wrote a series of articles which culminated in the 1999 book called *Fail-Safe Investing*. He set out to build a bulletproof portfolio that would meet three requirements:

- Safety
- Stability
- Simplicity

Browne wanted to make sure that his portfolio could cover itself against all possible futures. He put those possible futures into four categories:

1. Prosperity. A period during which living standards are rising, the economy is growing, business is thriving, interest rates usually are falling, and unemployment is declining.

2. Inflation. A period when consumer prices generally are rising. They might be rising moderately, rapidly, or at a runaway rate.

3. Tight money or recession. A period during which the growth of the supply of money in circulation slows down. This leaves people with less cash than they expected to have, and usually leads to a recession – a period of poor economic conditions.

4. Deflation. The opposite of inflation. Consumer prices decline and the purchasing power value of money grows.

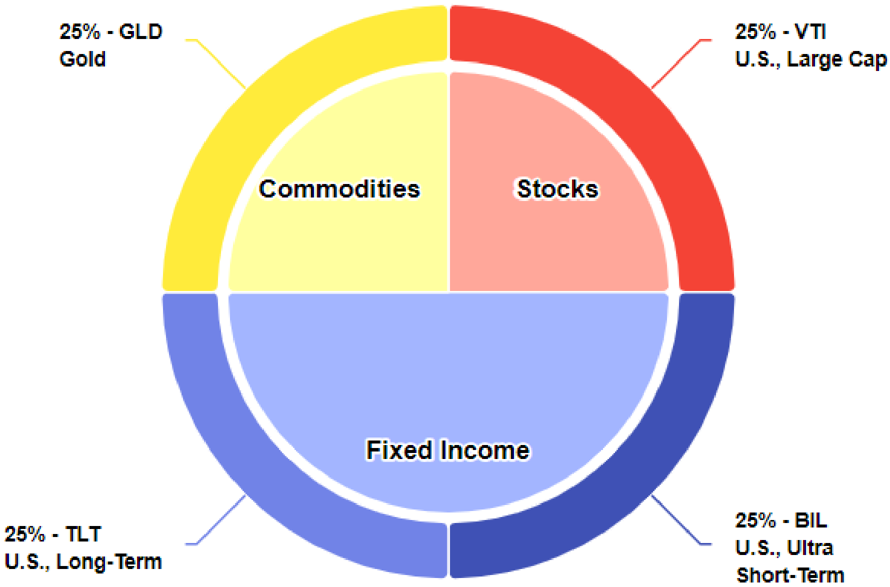
Browne theorised that if you were protected in these four situations, you'd be protected in all situations.

Note that if you're thinking that Browne's economic scenarios are similar to Dalio's, you're right.

Browne thought four investments could cover the different economic environments:

- Stocks to take advantage of prosperity. They tend to do poorly during periods of inflation, deflation, and tight money, but over time those periods don't undo the gains that stocks achieve during periods of prosperity.
- Bonds also take advantage of prosperity. Also, they profit when interest rates collapse during deflation. Bonds poor less well during times of inflation and tight money.
- Gold is a great asset during inflation. Though it generally does poorly during times of prosperity, tight money, and deflation.
- Cash is most profitable during a period of tight money. Cash is essentially neutral during a time of prosperity, and it's a big loser during times of inflation.

This formed the basis of Browne's Permanent Portfolio (right).



Source: www.lazyportfolioetf.com

The performance of Browne's Permanent Portfolio

The portfolio has provided the steady, low risk returns that Browne set out to achieve. It's returned 6.9%, 6.8%, and 5.8% p.a. over periods of 20, 30, and 154 years respectively. It's done that with remarkably low volatility. The largest peak to trough drawdown over the past 50 years has been 16% (in 2022). In 2008, the portfolio declined only 12% from the peak. And over every five year period since 1871, the portfolio has made money.

HARRY BROWNE PERMANENT PORTFOLIO

Advanced Metrics

Time Period: 1 January 1871 - 31 August 2024 (~154 years)

Metrics as of Aug 31, 2024

	YTD (8M)	1M	3M	6M	1Y	3Y	5Y	10Y	20Y	30Y	MAX (~154Y)
Investment Return (%)	10.64	1.72	5.96	10.11	15.91	3.08	5.66	5.47	6.93	6.81	5.83
Infl. Adjusted Return (%)	8.95	1.72	5.86	9.24	13.19	-1.59	1.46	2.58	4.26	4.19	3.63

Pending updates, the monthly inflation of Aug 2024 and beyond is set at 0%. Returns / Inflation rates over 1 year are annualized.

DRAWDOWN *Inflation Adjusted:*	Current	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Deepest Drawdown Depth (%)	0.00	-4.27	-15.92	-15.92	-15.92	-15.92	-15.92	-30.61
Start to Recovery (# months)		3	27	27	27	27	27	46
Longest Drawdown Depth (%)		same	same	same	same	same	same	-14.17
Start to Recovery (# months)								53
Longest negative period (# months)		2	30	40	40	40	40	80

RISK INDICATORS	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Standard Deviation (%)	8.74	9.47	8.57	7.35	7.12	6.63	5.81
Sharpe Ratio	1.21	-0.02	0.41	0.55	0.77	0.68	0.32
Sortino Ratio	1.58	-0.03	0.58	0.79	1.08	0.95	0.47
Ulcer Index	1.75	7.47	5.90	4.70	3.73	3.20	3.53
Ratio: Return / Standard Deviation	1.82	0.33	0.66	0.74	0.97	1.03	1.00
Ratio: Return / Deepest Drawdown	3.73	0.19	0.36	0.34	0.44	0.43	0.19
Positive Months (%)	66.66	55.55	58.33	58.33	60.83	63.05	64.20

Source: www.lazyportfolioetf.com

The pushback to Browne's portfolio is from the large holdings in both gold and bonds. Many wouldn't be comfortable with this. However, Browne's theory of how these assets could help a portfolio withstand certain economic conditions has proven relatively sound over time.

Note also the similarities between Browne and Dalio's portfolios.

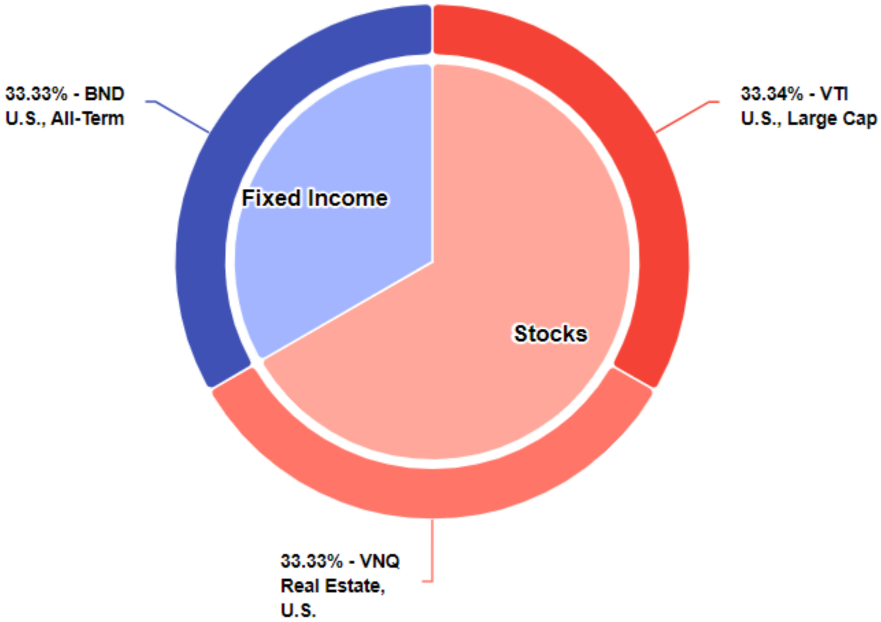
Firstlinks
a Morningstar company

The Talmud Portfolio

Dalio and Browne's strategies may be considered modern-day upgrades on a more ancient tradition of All Weather portfolios. The Talmud, a collection of Jewish texts from around 2,000 years ago, said:

"Let every man divide his money into three parts, and invest a third in land, a third in business, and a third let him keep in reserve."

US-based investment commentators suggest a Talmud strategy today might look something like this (right).



Source: www.lazyportfolioetf.com

The Talmud portfolio has generally performed better than Dalio or Browne's versions. It's returned 7.7%, 8.6%, and 7.8% p.a. over periods of 20, 30, and 154 years respectively.

However, it's achieved those returns by taking more risk. Drawdowns for the portfolio have been sharper. From peak to trough in 2022, it lost 23%. In 2009, it declined 40%.

ROGER GIBSON TALMUD PORTFOLIO

Advanced Metrics

Time Period: 1 January 1928 - 31 August 2024 (~97 years)

Metrics as of **Aug 31, 2024**

	YTD (8M)	1M	3M	6M	1Y	3Y	5Y	10Y	20Y	30Y	MAX (~97Y)
Investment Return (%)	10.45	2.92	9.09	9.80	17.96	1.95	6.83	6.98	7.65	8.61	7.83
Infl. Adjusted Return (%)	8.76	2.92	8.98	8.93	15.19	-2.67	2.59	4.05	4.97	5.95	4.65

Pending updates, the monthly inflation of Aug 2024 and beyond is set at 0%. Returns / Inflation rates over 1 year are annualized.

DRAWDOWN *Inflation Adjusted:*	*Current*	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Deepest Drawdown Depth (%)	0.00	-7.31	-22.88	-22.88	-22.88	-40.17	-40.17	-57.05
Start to Recovery (# months)		3	32	32	32	41	41	89
Longest Drawdown Depth (%) Start to Recovery (# months)		same	same	same	same	same	same	same
Longest negative period (# months)		4	34	35	35	55	65	160

RISK INDICATORS	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Standard Deviation (%)	13.82	14.84	14.09	11.49	12.09	10.89	12.35
Sharpe Ratio	0.91	-0.09	0.33	0.48	0.51	0.58	0.36
Sortino Ratio	1.24	-0.13	0.44	0.64	0.66	0.75	0.50
Ulcer Index	2.83	12.60	10.14	7.39	8.90	7.44	10.08
Ratio: Return / Standard Deviation	1.30	0.13	0.48	0.61	0.63	0.79	0.63
Ratio: Return / Deepest Drawdown	2.46	0.09	0.30	0.31	0.19	0.21	0.14
Positive Months (%)	66.66	52.77	63.33	66.66	66.66	67.22	63.36

Source: www.lazyportfolioetf.com

If having a portfolio that can prove resilient under all economic conditions is the goal, then this version of the Talmud doesn't pass the test.

Like much of finance, things can evolve and get better with time – from the Talmud, to Browne, to Dalio, you can see the progression towards more modern, sophisticated All Weather portfolios.

The pros and cons of All Weather portfolios

All Weather portfolios such as those mentioned are simple and easy to operate. They won't make you rich, but you won't lose your shirt either. Therefore, it suits the risk averse. It's also for the wealthy, who may want to focus more on wealth preservation.

The downside of the strategy is that the lower risk comes at the expense of returns. Those after high growth aren't going to find that with these portfolios.

It may also be difficult to hold portions of the portfolios over long periods. For instance, holding a lot of bonds over the past four years would have tested even seasoned investors.

How the All Weather Portfolios compare to 60/40

An obvious question is how the All Weather portfolios of Dalio and Browne compare to the more standard stock/bond allocations such as the 60/40. Generally, the 60/40 has delivered better returns, though with more risk attached.

Over the past 30 years, a 60/40 portfolio has returned 8.5% p.a. in US dollar terms, compared to Dalio's All Weather strategy of 7.7% p.a, and Browne's Permanent Portfolio of 6.8% p.a.

However, the 60/40 has had much larger drawdowns during that period. In 2022, Browne's portfolio did best, losing only 16% from peak to trough compared to the 60/40 and Dalio both declining 21%.

In 2009, the story was different. Dalio lost 12%, Browne 13% and the 60/40 went down 31%.

Drawdowns from other periods such as 2000-2002 and the 1970s were also much larger for 60/40 compared to the other portfolios.

That's reflected in risk measurements for 60/40 such as standard deviation in the table below.

STOCKS/BONDS 60/40 PORTFOLIO

Advanced Metrics

Time Period: 1 January 1871 - 31 August 2024 (~154 years)

Metrics as of **Aug 31, 2024**

	YTD (8M)	1M	3M	6M	1Y	3Y	5Y	10Y	20Y	30Y	MAX (~154Y)
Investment Return (%)	**12.20**	**1.88**	**6.33**	**8.64**	**18.66**	**3.96**	**9.19**	**8.16**	**7.98**	**8.49**	**7.71**
Infl. Adjusted Return (%)	10.49	1.88	6.22	7.78	15.88	-0.75	4.85	5.20	5.29	5.84	5.47

Pending updates, the monthly inflation of Aug 2024 and beyond is set at 0%. Returns / Inflation rates over 1 year are annualized.

DRAWDOWN *Inflation Adjusted:*	*Current*	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Deepest Drawdown Depth (%)	*0.00*	-6.10	-20.69	-20.69	-20.69	-30.55	-30.55	-62.03
Start to Recovery (# months)		3	26	26	26	36	36	83
Longest Drawdown Depth (%)		same	same	same	same	same	-21.56	same
Start to Recovery (# months)							41	
Longest negative period (# months)		2	28	34	34	55	110	154

RISK INDICATORS	1Y	3Y	5Y	10Y	20Y	30Y	MAX
Standard Deviation (%)	11.19	13.02	12.56	10.27	9.70	9.63	10.20
Sharpe Ratio	1.19	0.05	0.56	0.65	0.67	0.64	0.36
Sortino Ratio	1.59	0.07	0.74	0.87	0.88	0.84	0.51
Ulcer Index	2.25	9.81	7.86	5.78	6.72	6.90	9.22
Ratio: Return / Standard Deviation	1.67	0.30	0.73	0.79	0.82	0.88	0.76
Ratio: Return / Deepest Drawdown	3.06	0.19	0.44	0.39	0.26	0.28	0.12
Positive Months (%)	75.00	58.33	66.66	68.33	68.33	66.66	62.63

Source: lazyportfolioetf.com

Risk and return are interrelated

Last week, I went through how to build an investment portfolio from scratch. I'll repeat what I said in that article: there's no thing as a perfect portfolio. Each portfolio has trade-offs. All you can do is to allocate assets in a way that gives you a decent chance to achieve your goals.

And there's really one golden rule in asset allocation: risk and return are interrelated. If you want higher returns, you're generally going to have to take more risk. And vice versa.

James Gruber is the Editor of Firstlinks.

Last call on bank hybrids

Charlie Callan, Jack Pobjoy

On Tuesday 10 September 2024, APRA announced its long awaited proposed changes on a more effective capital framework for a financial crisis. It is a gutsy document that tears up the playbook on bank regulatory capital funding. APRA wants to simplify the capital framework for banks. It wants to remove Additional Tier 1 (AT1) bonds and replace it with mainly Tier 2 and some Common Equity Tier 1 (CET1) capital.

In short, the AT1 hybrid market for Australian banks will cease to exist. For insurers, it looks like it will remain unchanged, for now. APRA does not expect to see banks increase AT1 from current levels or extend call dates beyond 2032.

The transition will be orderly – or so APRA says. From Jan-2027, outstanding AT1 bank hybrids would be eligible for Tier 2 capital treatment until their first scheduled call date. What happens after that is not clear. It is also not clear what happens to bank-related NOHC structures like MQG and AMP.

There are obvious funding implications. More Tier 2 supply = wider spreads. Less AT1 supply = tighter spreads. There is a perceived assumption that AT1 investors will just pack-up and roll into Tier 2. Whilst this may be true for the institutional investor, for those that love hybrids for tax efficient franking credits, it seems just as likely they will stay in the hybrid market for up to the next eight years. The point here is that we do not think AT1 investors that have the ability to purchase OTC securities will just like-for-like transfer the demand into Tier 2.

Importantly, APRA's document has started what appears to be the unofficial transition for bank AT1 capital. It is unclear as to if any more AT1 bank hybrids will be issued. Strictly speaking, APRA does not expect AT1 levels to increase, so a refinance could be on the cards, so long as the call period is before Mar-2032 (NABPH's first call date). You can make the argument that until Dec-26, ASX-listed bank AT1 transactions could still occur (noting the term is still greater than five years to first call meeting reg-cap eligibility requirements). Assuming otherwise, i.e. no more bank hybrids, then the next ASX AT1 may be issued by CGF, which has CGFPC's first call in May-2026, closely followed by SUNPH in Jun-26. That is 1 ¾ years away!

Higher spreads in Tier 2 markets increases the risk of uneconomic non-call events. This is not being priced in, particularly for the non-major banks, where we expect the funding impact to be worst at the Tier 2 level – which is contrary to APRA's opinion. The risk of non-call is not present in the AT1 market.

These are proposed changes. There is still additional consultation being sought. But the Rubicon has been crossed, and it is highly likely that from Jan-2027 the new requirements will be effective, and the official transition will have started.

This will be a gold rush. There is some c.$43 billion in AT1 hybrids locally, the Big Five (including MQG and MBL) make up c.$38 billion of that. Investors will need other forms of income, ideally franked, to replace the AT1 redemptions that occur. There will be a raft of new product issuance to meet this. Winners include LITs, ETFs, MCIs, corporate hybrids, and structured products. We do not think the ASX Tier 2 market will return based on APRA's strong commentary surrounding the litigation risk of mis-selling, and the contagion risk it would "reintroduce" to the system.

The specific changes to the capital framework are as follows:

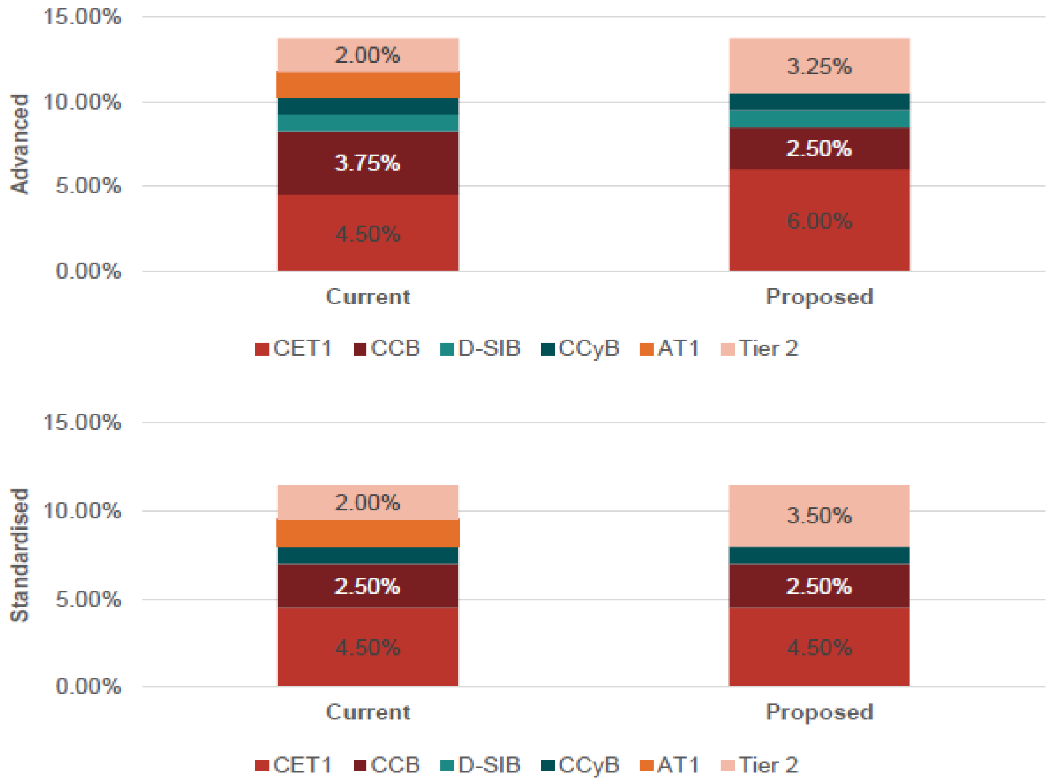
- Advanced banks (ANZ, CBA, NAB, WBC, MBL, ING)

  - Replace existing 1.5% AT1 with at least 0.25% CET1 and 1.25% Tier 2.
  - Increase the minimum CET1 from 4.5% to 6.0%.
  - Remove the Advanced portion of the capital conservation buffer of 1.25%.
  - Increase the minimum Total Capital ration to 9.25% via additional Tier 2.
  - This means the total capital plus CET1 buffer level of 13.75% remains unchanged.

- Standardised banks (all others)

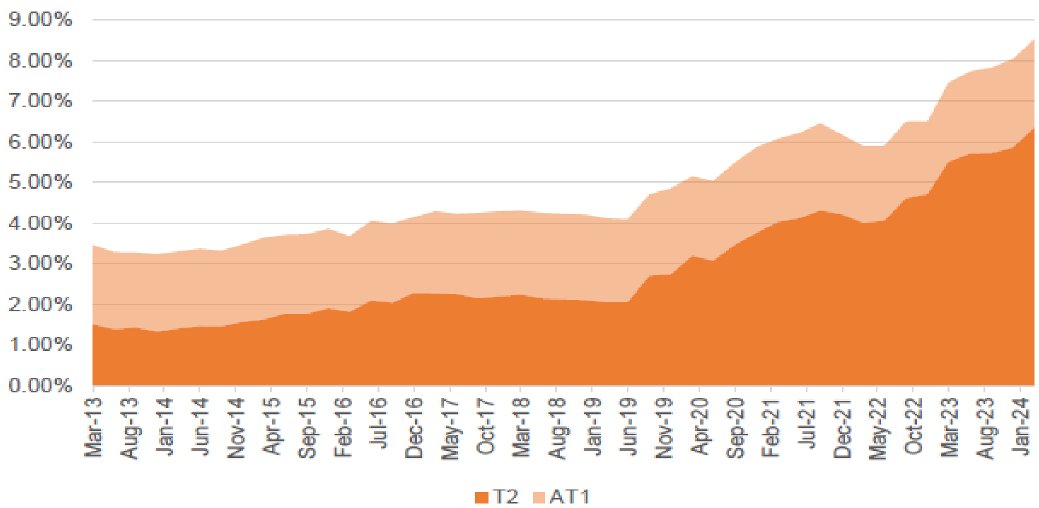
  - Fully replace AT1 with Tier 2 capital.
  - Remove the minimum Tier 1 Capital ratio.

Figure 1. Current vs Proposed Frameworks – Advanced vs Standardised Banks



Source: BondAdviser, APRA.

Figure 2. Major Bank Basel III Tier 2 and AT1 capital as a % of RWA



Source: BondAdviser, APRA.

Winners

Insurance: Biggest winners. There are no proposed changes to the insurance capital requirements. They will be able to issue ASX hybrids at much cheaper rates given the outsized demand. For reference, these three issuers (SUN, IAG, CGF) only have seven securities on the ASX worth a total of just c.$2.7 billion.

Mutuals: Whilst this has impacts to the cost of AT1 and Tier 2 (if outstanding), it likely makes the cost of Mutual Capital Instruments (MCIs) much cheaper. MCIs were not referenced in the report, and we think they will not be impacted. Like the insurers, mutuals will benefit from being able to issue ASX MCIs at tighter spreads via bigger bookbuilds.

Corporate Hybrids / Listed Bonds: Could we see the return of the ASX corporate hybrid market off the back of this change to the market? It is possible, and the insatiable demand for franking credits and steady income means some attractive funding rates could be found for crafty corporate boards.

Income LITs: Listed investment trusts have been shunned by new issuers since the removal of stamping fees. We expect investors to pile into existing private debt products (MXT, MOT), but also for new issuers and products to emerge to fill the gap.

Losers

Tier 2 bonds: Tier 2 bonds are at risk of three problems. (1) Higher supply, (2) credit ratings downgrade, (3) extension risk.

(1) The passive roll-over from listed-AT1 into unlisted-Tier 2 is not as simple as it sounds. Retail investors cannot access OTC markets and remaining suitors will likely progressively demand a higher premium to swallow up to $40 billion of fresh Tier 2 supply. We question whether $A Tier 2 and legacy AT1 valuations could converge as a result. While APRA has stated it will only require Tier 2 capital equivalent to 1.25% of RWAs to replace the 1.50% minimum requirement for AT1 capital, banks will likely continue to hold healthy buffers as they done historically (the Majors hold AT1 capital over 2% of RWAs for context) and as a preference over issuing more equity.

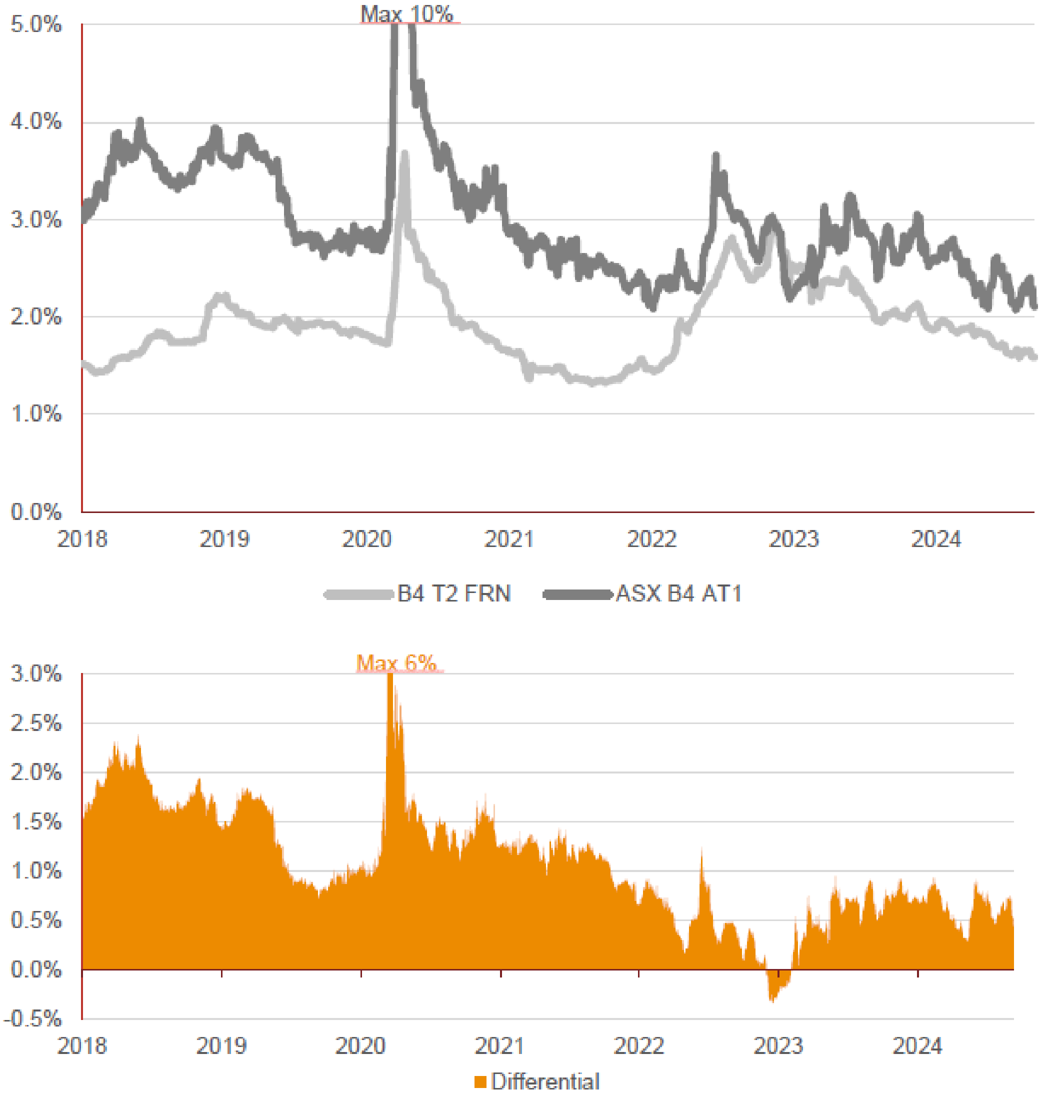
(2) Tier 2 instruments are currently notched-down up to 3 notches from senior unsecured ratings of Australian banks (A- versus AA- in the case of the Majors) and will become the secondary layer of loss absorption behind CET1 capital under APRA's proposals. While there is a lack of global precedent to go off, we question whether Tier 2 capital could be notched down further to account for the additional implied subordination. We note AT1 hybrids are typically 2 notches lower than Tier 2 instruments (or BBB for the Majors). This requires a deeper examination, which we will be doing over the coming days for our clients.

(3) If Tier 2 spreads trend wider over the coming the years, the outstanding vintage of Tier 2 bonds, issued at tight spreads, may not be called on first date given the uneconomic nature to the issuer of an early refinancing at a higher rate. APRA have been strong on this in the past, and if a 100bps differential opens up the risk is real. We note for this to occur, point (1) and (2) probably have to be correct.

Regional and smaller banks: These banks struggle to attract big orderbooks for Tier 2 as it is. They will have to pay away even more to get the local market to pay attention. Amplifying this is that they do not have great access to international debt capital markets. APRA is assuming that from an all in funding cost the Regionals and smaller banks will actually be better off. We are not convinced this will be the case and expect these bank Treasurers to be rueing the day given the loss of deep funding diversity.

Imputation credit investors: This change means there are less ways for investors to get access to a steady stream of franking credits outside volatile common equity ownership.

Figure 3. Major Bank Tier 2 vs AT1 5-year trading margin



Source: BondAdviser.

Charlie Callan, CFA and Jack Pobjoy are Directors at BondAdviser. This article is general information and does not consider the circumstances of any investor.

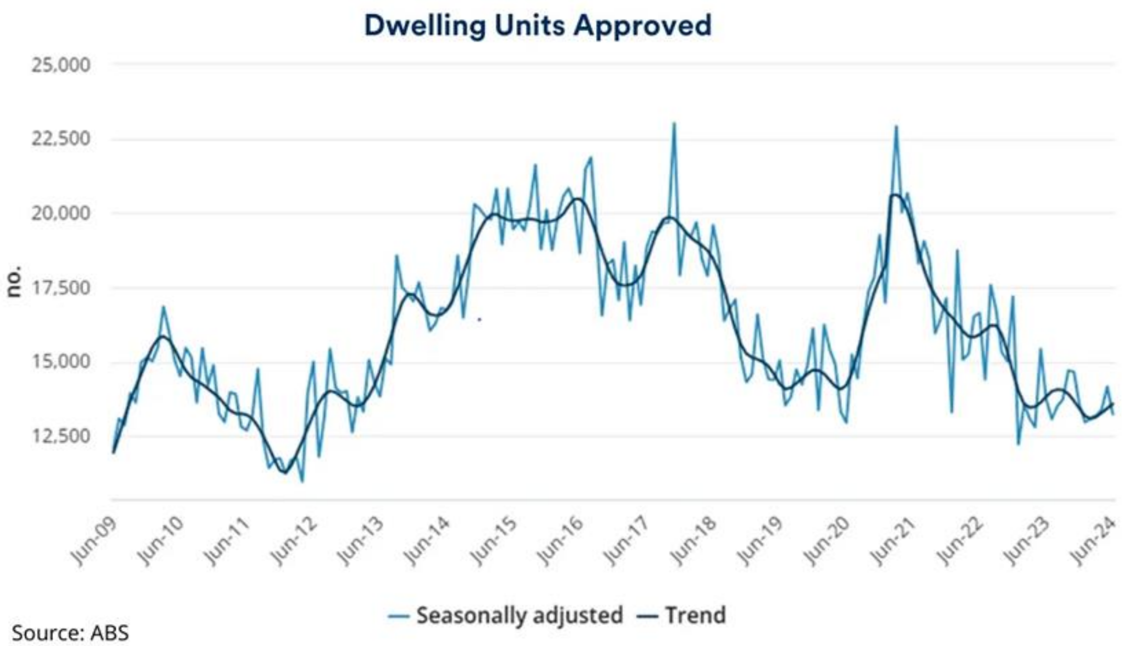
Reality bites

Martin Conlon

The tug of war between the real economy and financial economy in the economic Olympics saw the financial economy comfortably take gold. In one camp you have businesses pressured either by a Chinese economy seeking to export its way out of a weak domestic demand problem, or by a domestic economy with housing starts at historic lows relative to population. These sit alongside financial economy businesses buoyed by immigration and asset price bubbles.

Tensions are unevenly spread, and governments everywhere are short of ideas outside government spending and money printing. The quantity of money continues to expand at a rate beyond which the economy can feasibly create businesses to absorb it. And as this money remains dominantly in the hands of individuals, companies and superannuation funds without a need to spend it, asset prices continue to rise.

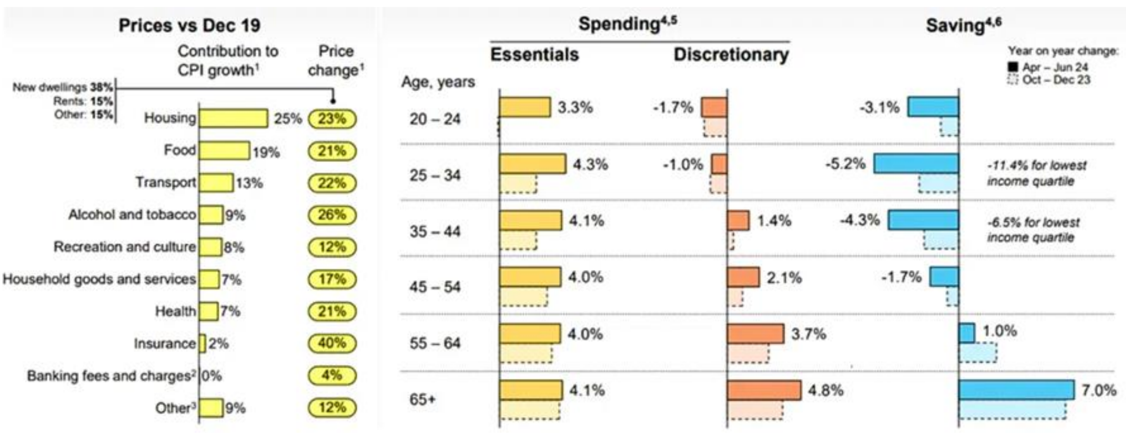
Economic sustainability continues to play a backseat role. As Javier Milei, the Argentinian President put it, "If printing money would end poverty, printing diplomas would end stupidity". It remains remarkable that many still believe interest rates and money create a magic elixir to 'grow' the economy and 'create' wealth when it should be obvious, they can do nothing more than shift wealth around.



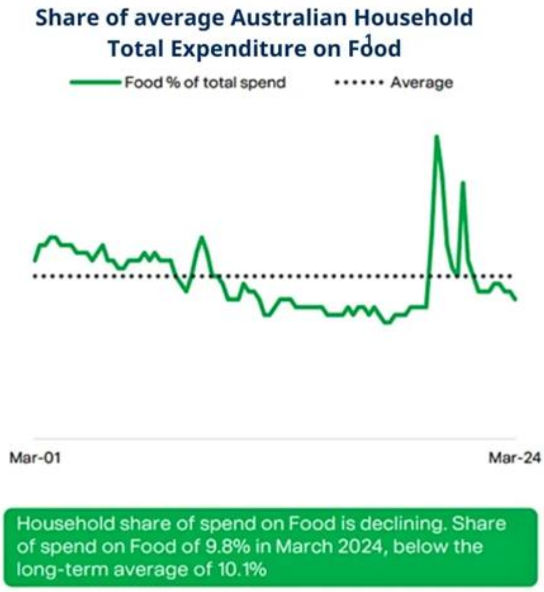
Source: ABS

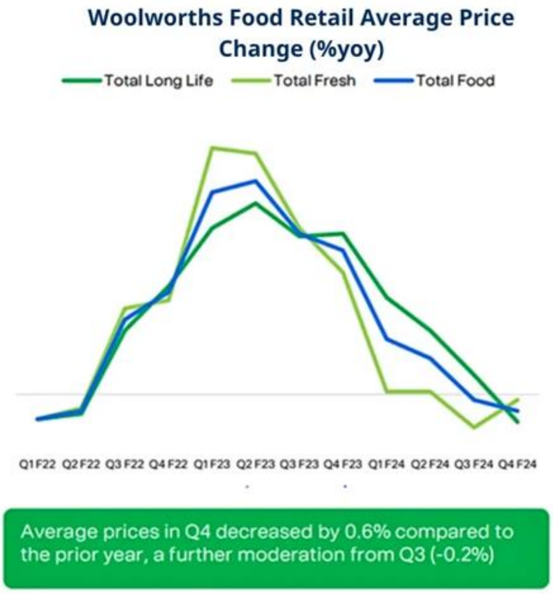
As part of their voluminous results presentation package, CBA provided their usual excellent insights into what's really happening in the economy through analysing their customer spending data. The most recent update showed exacerbation of the same ongoing trends; older demographics have increased saving without needing to curb spending at all, whilst younger demographics have been footing the bill.

Housing remains the major villain when it comes to both CPI contribution and wealth inequality. While Coles and Woolworths results and commentary indicate the food inflation issues are now largely behind us, housing isn't.



Source: CBA FY24 Results presentation





Source: Woolworths FY24 Result Presentation

In this light, a few other trends which CBA highlighted were interesting.

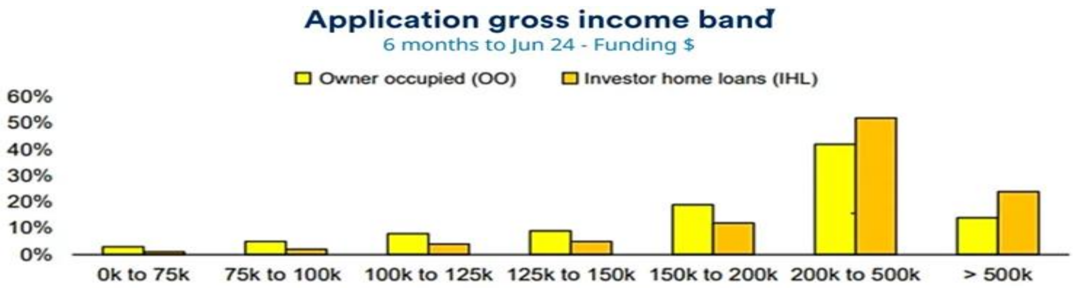
As very high levels of immigration and a raft of other policies providing artificial support to house prices and demand coincided with some of the lowest levels of supply addition in many years, house prices have remained supported despite appalling affordability.

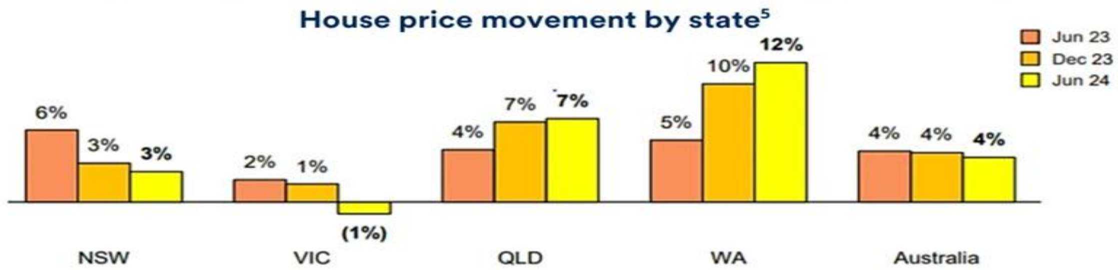
Positive house price movements have meant almost no consumer loan losses. More interestingly, despite most incremental loans being made to borrowers with very high levels of gross income, arrears are climbing. Seeing arrears levels climb quickly on loans only made in the last 1-2 years suggest finding creditworthy borrowers in Australia remains challenging. This contributes to our view that only very low levels of private sector credit growth look sustainable given the starting point.

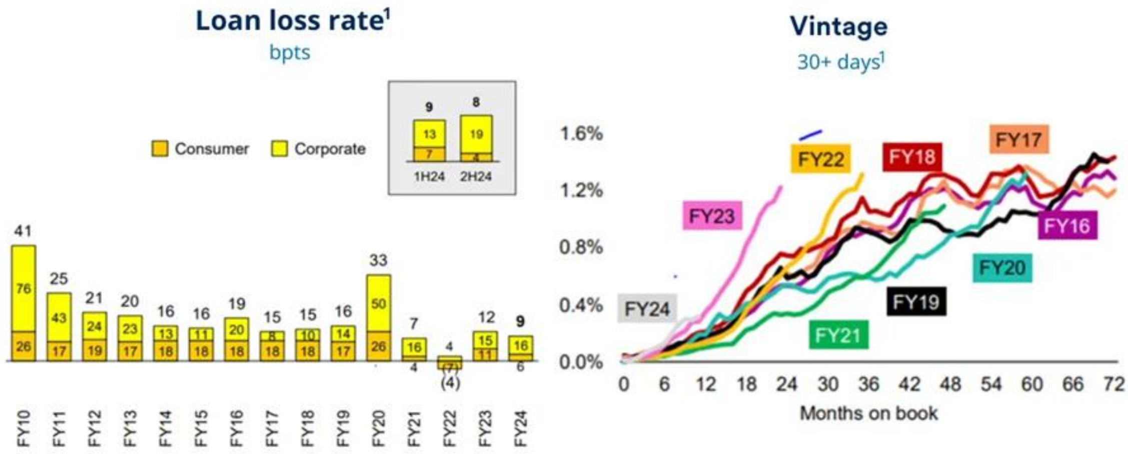
As China continues to grapple with the aftermath of funnelling vastly too much credit towards property over an extended period, it remains difficult to understand why so many believe the same economic principles don't apply here. On the positive side, corporate lending losses remain incredibly benign.

CBA has erudite and capable leadership. But we remain perplexed as to why an earnings yield of not much more than 4% and market capitalisation of around 10% of Australian GDP equates to an appealing investment proposition given a barely flat earnings outlook given limited volume growth, already reasonable net interest margins and still rising costs.

As falling commodity prices and resulting earnings declines see investors desert materials, energy and anything experiencing cyclical decline, it is perhaps not much more complex than flat being better than down.







5 Source: CBA FY24 Results presentation

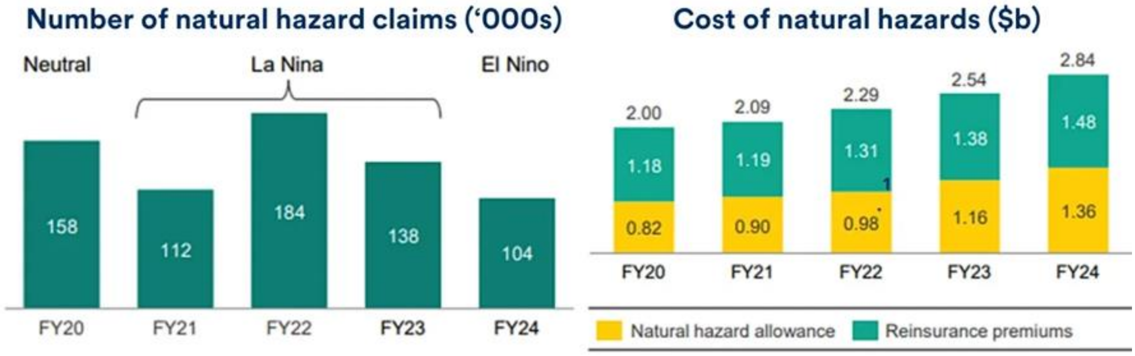
Outside banks, the insurance sector has been the other beneficiary of strongly rising pricing over recent years.

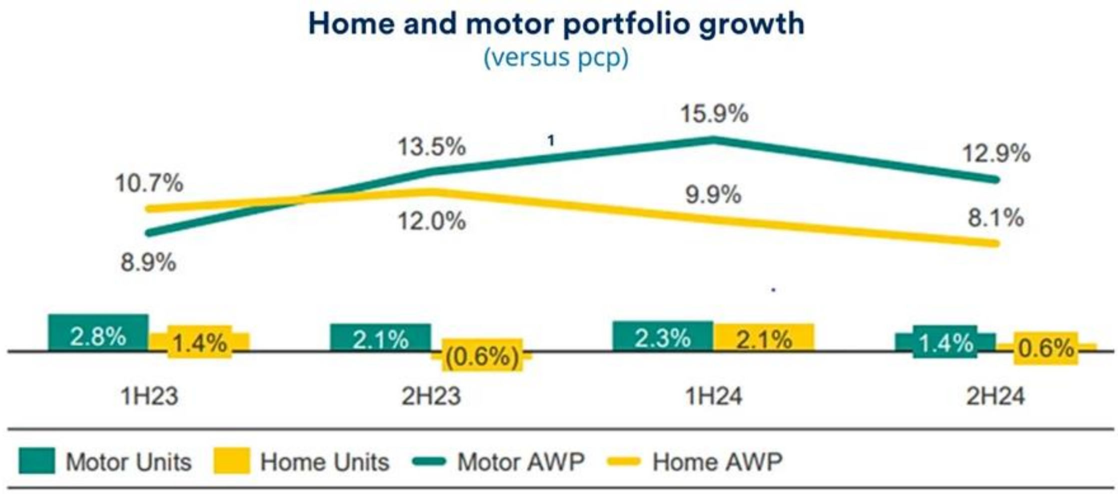
Insurance brokers have sidestepped the regulatory inquiries which have mired the rest of the financial services industry in worthless paperwork and online training courses, and have enjoyed a boom from commission revenues attached to sharply inflating premiums. Meanwhile, the insurers have continued to leak most of the growth in premiums in rising claims costs.

Contrary to popular wisdom, Suncorp data indicates the problems relate almost solely to increasing costs per claim rather than claim numbers. Blaming climate change for rising costs might be convenient, however, it is not supported by the data. Flexible plumbing pipes (shorter lives and greater failure rates), lower quality workmanship, fire risk from lithium batteries and building on flood plains are amongst the myriad of factors exaggerating the ballooning costs of labour and regulation, highlighting again the hidden costs of sacrificing the long-term for the short-term.

In the same vein, as sales of electric vehicles hit a few speed bumps, insurance costs (courtesy of higher repair costs and greater write-offs) and poor resale values are emerging as reasons why the total cost of ownership for EV's is far less persuasive (i.e. higher) than proponents would hope.

Along with headaches on shouldering the costs of charging and electricity transmission infrastructure, which is also becoming a barrier for data centre development, there is a long line of businesses with a preference for socialising the high costs of infrastructure on which their 'capital light' business piggyback. It is not easy to disembark the subsidy train and this train has an increasing number of passengers.





Source: Suncorp FY24 Result Presentation

The gold medallist in the 'capital light' love affair remains the technology sector, where investors continue to pile on astonishing large amounts of market value for astonishingly small earnings surprises. Meanwhile, much of the rest of the economy struggles to determine where their efficiency gains have gone as they digest yet another massive price increase from Microsoft or AWS, and put through a few more 'one-off' charges for a new ERP system or transitioning to the cloud.

Companies delivering earnings gains of vastly greater quantum saw nothing like the same dollar increments in valuation. The machines which increasingly dominate equity market price setting might create the ridiculous reactions to incremental information. Yet we remain amazed at the extent to which supposed fundamental investors can happily multiply earnings by whatever random number is necessary to justify copying this behaviour.

Wisetech Global (+25.1%) was probably the poster child for this behaviour during August.

Revenue growth of a little over $200 million (aided by acquisitions) saw EBIT growth of around $80 million aided by R&D capitalisation rising by $60 million. Nevertheless, guidance for rising EBITDA margins (up from 48% to 51-52%), was sufficient to whip investors into a frenzy, adding more than $9 billion in market value. Just the August share price increment was more than 24 times the total EBIT of the business in 2024. Crazy times indeed.

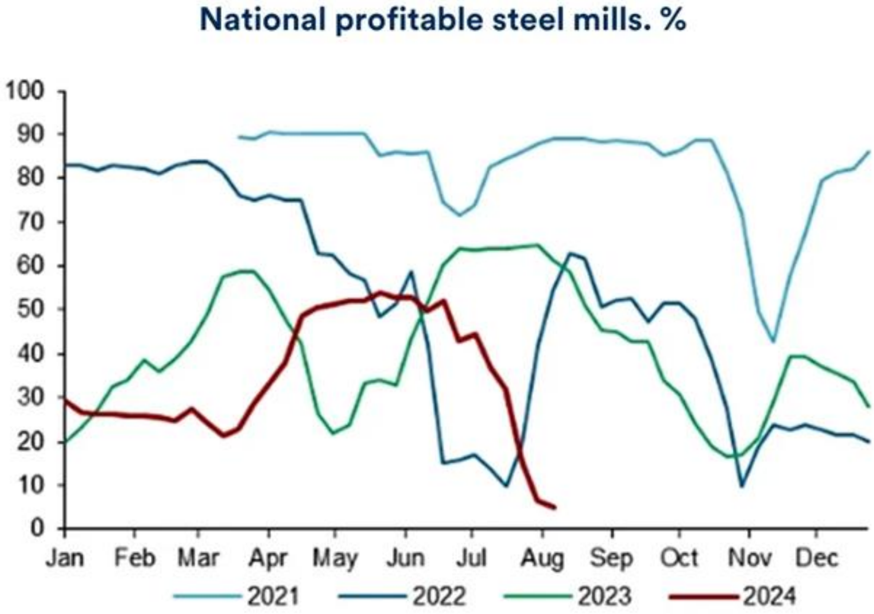
	2024 Revenue ($m)	EBIT ($m)	Market Capitalisation ($bn)	Current PE
Life 360	564	25	4.4	98
Technology One	498	148	7.7	65
Pro Medicus	162	108	16.0	200
CAR Group	1,101	488	14.8	45
REA	1,445	692	29.5	65
Wisetech Global	1,065	382	40.8	151

Source: Datastream, Schroders.

On the real economy side of the equation, life was more uncomfortable. While businesses such as Brambles, Telstra and Seven Group delivered strong results driven by efficiency gains and an ability to pass on higher costs to customers, those without this insulation suffered.

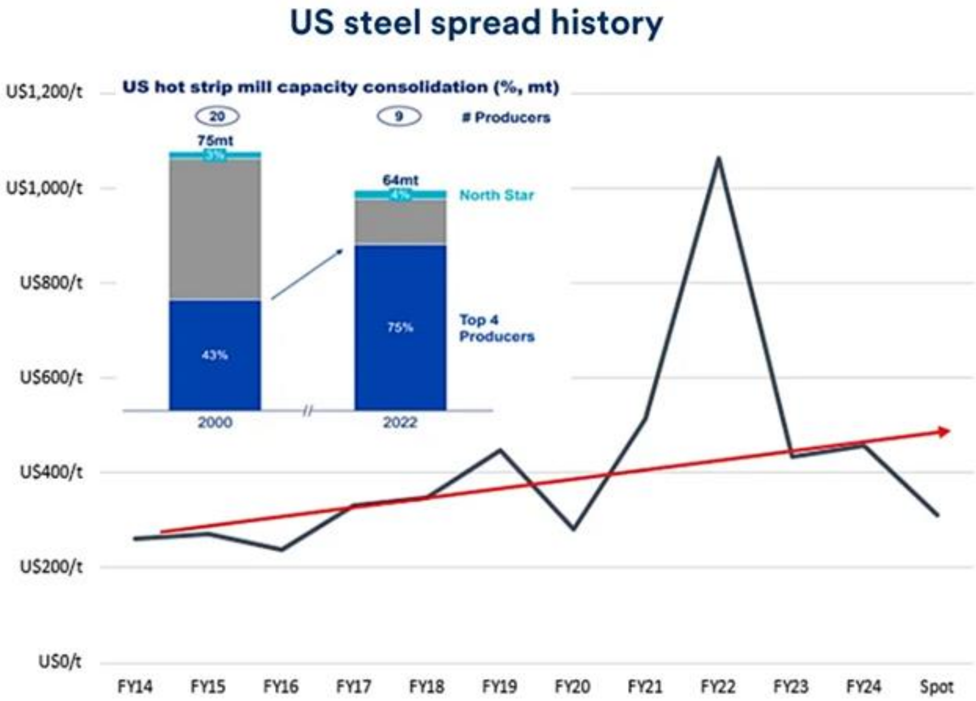
Generally falling commodity prices are impacting all resource producers, whilst the impact of China's increasing reliance on exports to drive growth despite abysmal profitability, is seeing price pressure transmitted globally. Steel markets are a major case in point. Despite successful strategies to build end market brands, highly capable companies such as Bluescope Steel are seeing margins crunched as Chinese steel exports near 100m tonnes, far in excess of the ability of rest of world demand to digest.

While all economic logic suggests loss making mills should eventually close, supply reduce (along with iron demand) and margins rebound through a combination of lower iron ore and/or higher steel prices, the time frame for logic to prevail is often longer than expected. We've seen this movie before. A healthy balance sheet and strong cost position means Bluescope remains well positioned to enjoy the inevitable improvement, and its through the cycle returns remain impressive.



Source: Schroders, Macquarie, UBS

In an investment landscape in which the incremental piece of information is the holy grail, while the starting point of being incredibly cheap or incredibly expensive means little, our inclination for patience and a focus on the long-term may be tantamount to shouting at the rain; we'll yell anyway.



Source: Schroders, Company reports.

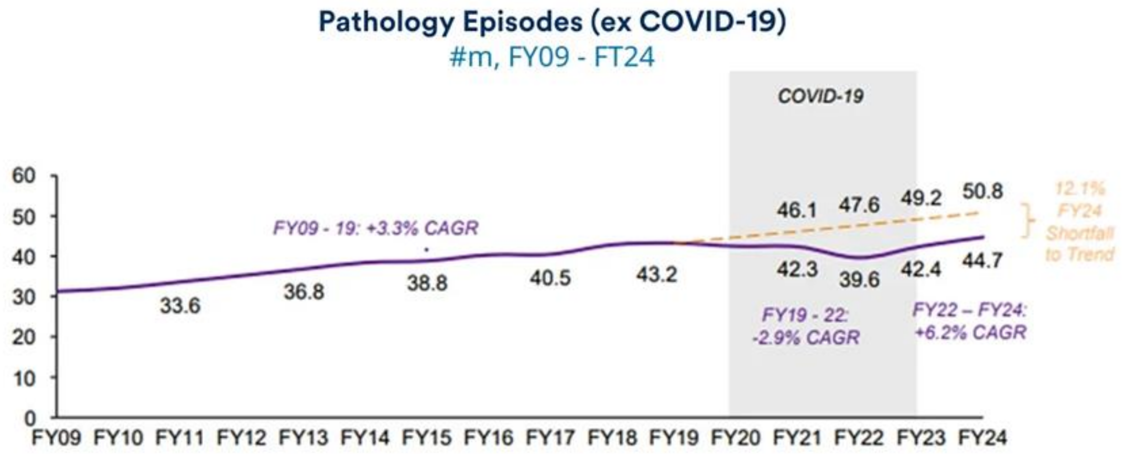
Of the many other more pedestrian results, a few themes were consistent. Large labour forces experiencing significant wage inflation and government or powerful payers disinclined to allow revenue to compensate for this cost inflation featured prominently.

Healthcare services companies such as Ramsay Healthcare, Sonic Healthcare, Healius, Capital Health, Integral Diagnostics and Australian Clinical Labs have all been in this camp over recent years. More drawn out recovery from COVID interruptions together with capacity addition, which has perhaps failed to adapt to trends towards day surgery and out of hospital care, means capacity utilisation remains challenged.

Pathology episodes are only just recovering to pre COVID levels. Cost processes more attuned to dealing with stable and growing demand have also struggled to deal efficiently with volatility. Gradual margin decline and erosion in return on capital has been the order of the day. Excessive gearing accumulated through years of growing size, rather than underlying profitability, has added to the pain as interest rates have risen. Reasons for pessimism abound.

We'd approach from a more positive standpoint. Management teams channelling Kevin Costner in Field of Dreams; "Build it and they will come", are increasingly meeting capital providers more inclined towards 'don't build it or you'll be gone'. Weak players in a challenged industry are likely to disappear and the threat of public hospitals being overwhelmed by demand may begin to force the government's hand.

Stand offs between hospitals and PHI's (Private Health Insurers) may well grow. As crucial services with substantially growing demand and (in the case of pathology and radiology) massive payoffs in quality of life and healthcare savings, together with significant potential gains through technology and AI, the scope for sentiment, valuations and profitability to expand as pessimism subsides is substantial.



Source: ACL FY24 Results Presentation.

Source: Company reports, Schroders.

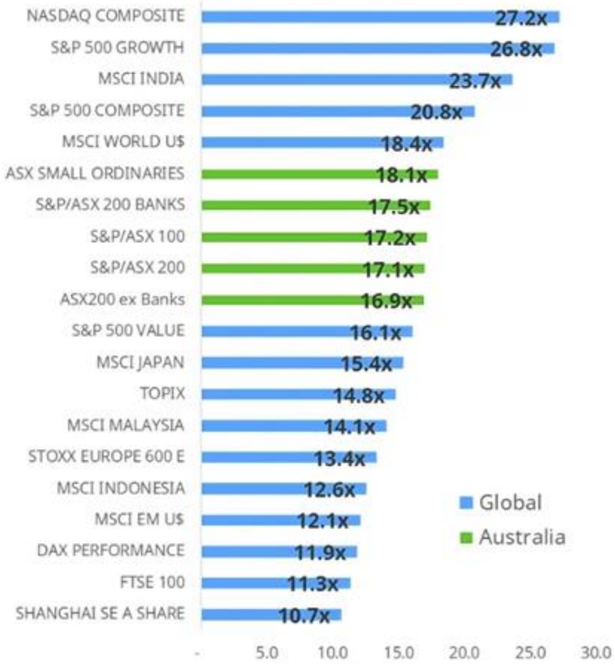
Outlook

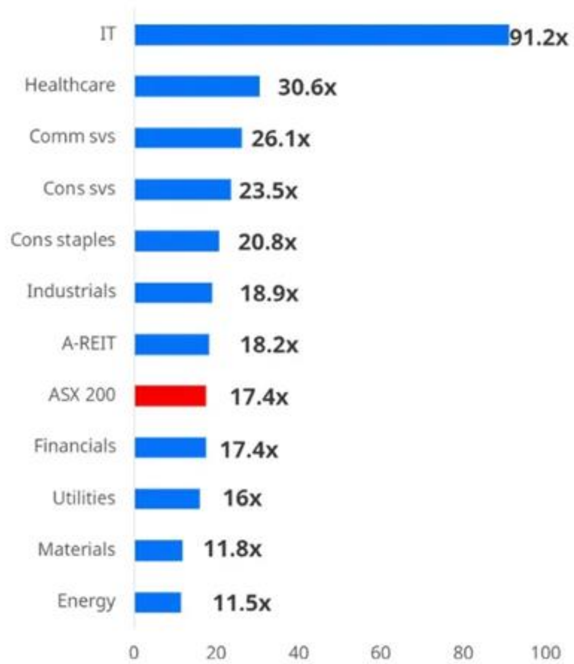
Many, including us, have been surprised at the resilience of equity markets to the interest rate rises which would normally prove a headwind.

It is clear interest rates are not inducing the same reactions as past cycles. Interestingly, given the much larger size of asset markets relative to the economy, the role interest rates have played in diverting more wealth towards the elderly and wealthy demographics with the propensity to save and invest rather than spend, and away from the demographics more likely to spend than invest, the potential for falling interest rates to impart the reverse impact seems somewhat logical.

As spending power is put back in the hands of those currently struggling, hopefully providing a boost to the real economy, the expectations that falling interest rates provide yet more impetus for equity markets may yet be challenged. The chorus of commentators determined to hit the 'nail' of inflation with the 'hammer' of interest rates, suggests there is not much nuance in the conversation.

Why interest rates are the best tool to quell inflation stemming from government spending, constrained housing supply, uncontrolled housing demand and high immigration levels remains a challenging one from our perspective.

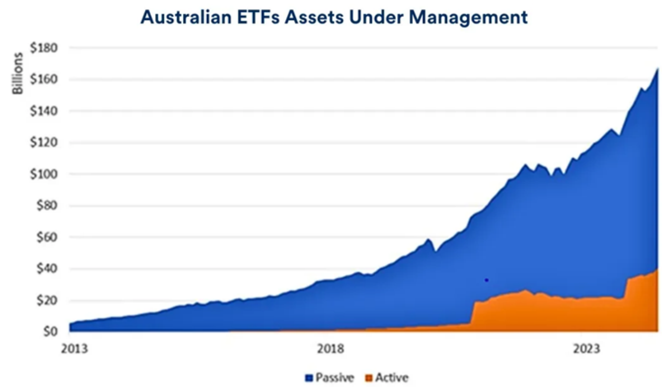




Source: Datastream, Schroders, ASX 200 12M fwd PE as at Aug 2024

The allure of growth remains as appealing and as highly valued as almost any time in history. At an overall market level, where growth is perceived (US technology, India) multiples know almost no bounds, while the mundane and challenged (Europe, China) remain friendless. Within the domestic equity market, where we have expected extreme bifurcation to close, it has only grown.

While volatility creates the perception of increasing risk, we would beg to differ. Financial leverage at the company level is not increasing and most companies have coped well with the challenges of volatile demand brought on by COVID and rising interest rates. As we have mentioned previously, volatility is a symptom of less trading volume setting the price on more market capitalisation. As the ASX statistics below show, cash market trading value has barely moved whilst market value has doubled. Passive free riders continue to grow.



Source: ASX Investor Presentations and Annual Reports, Vanguard

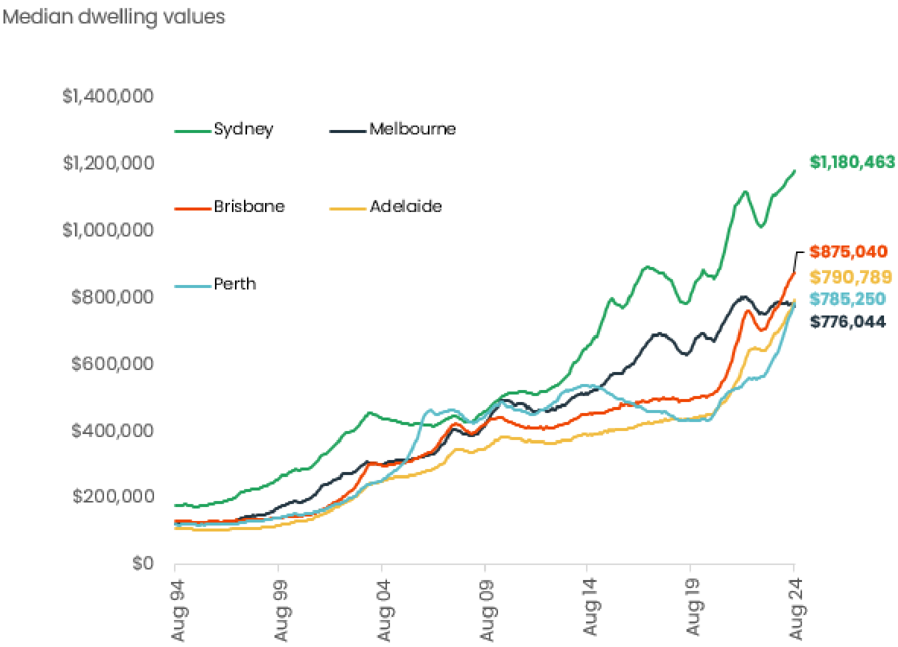
We remain of the (somewhat unpopular) view that risk escalates as the price paid for future cashflows escalates. Money is papering over a lot of cracks while buying reality is getting cheaper.

Martin Conlon is Head of Australian Equities at [Schroders](), a sponsor of Firstlinks. This article does not contain and should not be taken as containing any financial product advice or financial product recommendations. It does not take into consideration your personal objectives, financial situation or needs.

For more articles and papers from Schroders, [click here]().

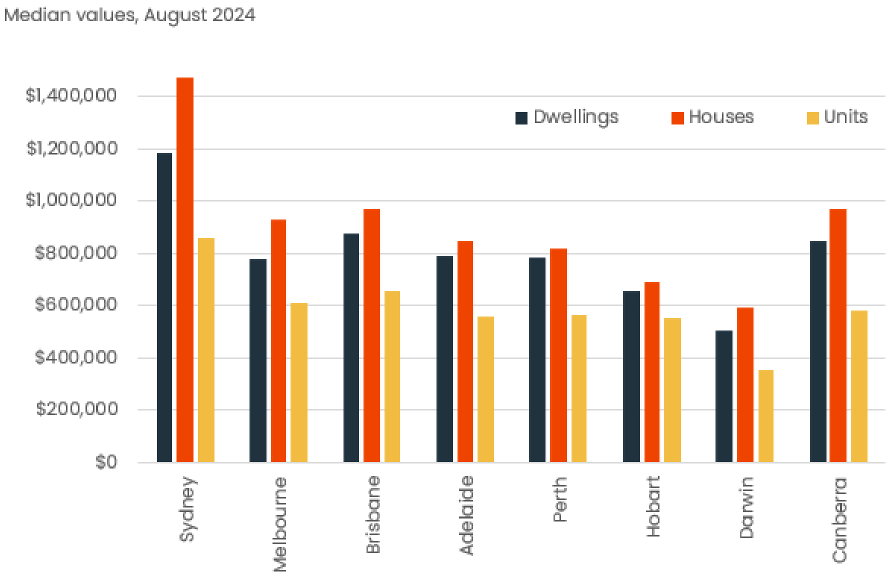
Australia's house price league table

Tim Lawless



The housing value league tables have evolved significantly over recent years. At the onset of COVID in March 2020, Sydney had the highest median dwelling value, followed by Melbourne, the ACT and Brisbane. Perth was ranked 7th in terms of median dwelling value, after Darwin with the lowest median, followed by Adelaide.

Fast forward to August 2024, and Melbourne's median dwelling value, at $776k is ranked sixth lowest across the eight capital cities, after Darwin ($504k) and Hobart ($655k). The difference between Sydney and Melbourne's median dwelling value is now 52.1%, the largest differential between Australia's two largest capitals since June 1999.



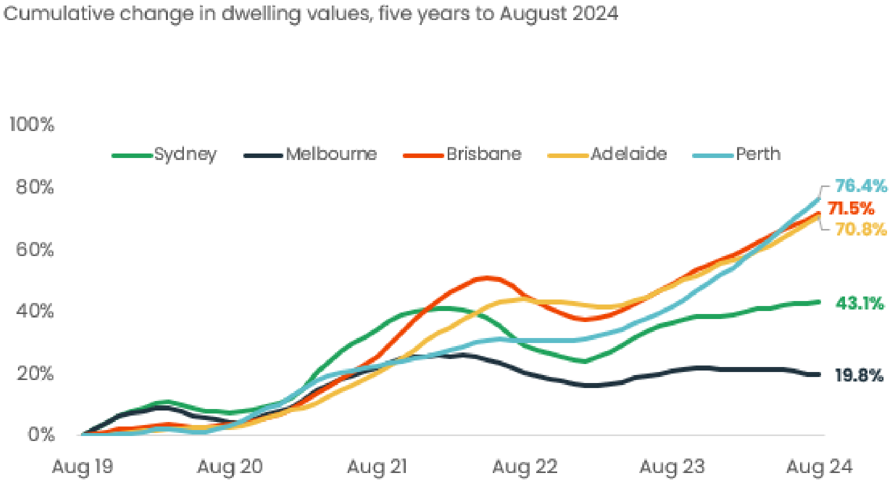
Sydney continues to record the most expensive median dwelling value at $1.18 million, but the gap between Sydney and the mid-sized capitals has narrowed substantially. Sydney's median is 'only' 35% higher than Brisbane's, the narrowest difference since July 2013, the 49% premium over Adelaide's median is the narrowest since May 2013 and the 50.3% premium of Perth's median hasn't been this narrow since June 2015.

The changing hierarchy of housing values across Australia's capital cities is attributable to both the speed of change in home values as well as the composition of housing.

Speed of change

The past five years has seen national dwelling values rise by 47.9%, but with extreme diversity from city to city. Perth has led the pace of gains with a stunning 76.4% rise in values since August 2019, Brisbane values are up 71.5% and Adelaide has surged by 70.8%. At the other end of the spectrum is Melbourne where values are up 'only' 19.8% and Sydney values have risen by 43.1%.

Such a rapid pace of growth in housing values across the mid-sized capitals has been a key factor driving the shift in median dwelling value rankings.



The past 12 months has seen a continuation in this diversity of housing conditions, with the 25.6 percentage point range in annual growth rates across the capital cities now the widest since the height of the mining boom in 2006.

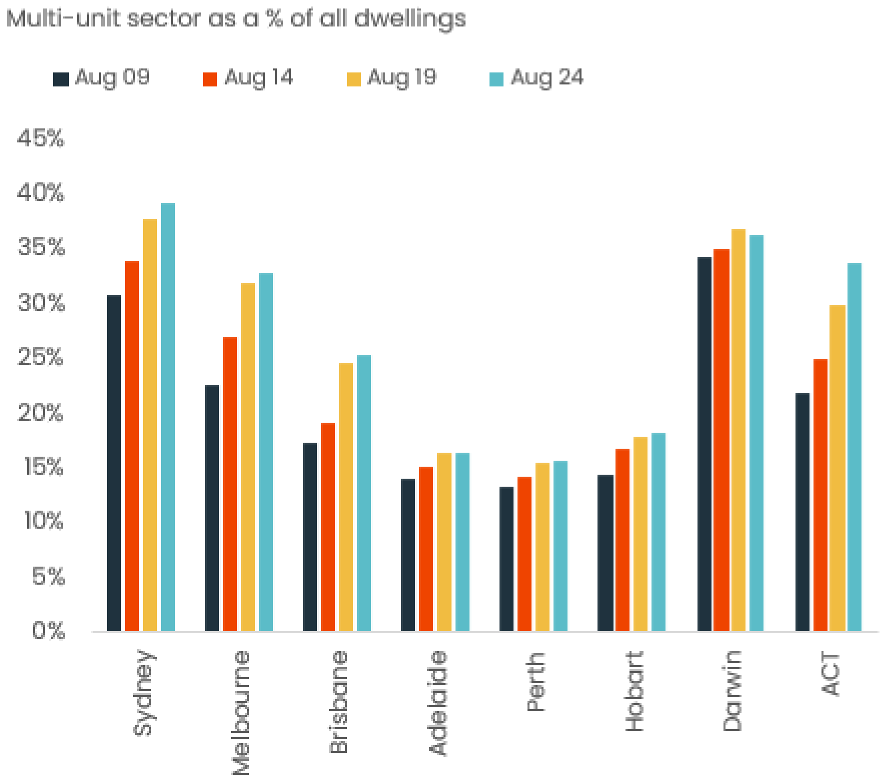
There are a few factors that have contributed to different speeds of change across the capital cities since the start of the pandemic, including;

Demographic patterns: marked differences in net interstate migration trends, where strict, extended social distancing restrictions were a 'push' factor from Melbourne, while Brisbane, Perth and Adelaide likely benefitted from Melbourne departures. SA and WA saw net interstate migration trends move into positive territory through the pandemic for the first time in many years. The latest internal migration data to the end of 2023 showed net interstate migration to Victoria was still in negative territory, albeit mildly, while NSW, TAS, NT and ACT were all fairly negative.

New housing supply is another aspect driving divergence in the growth trend, with Victoria seeing far more dwelling completions than any other state or territory in the past decade, and ACT seeing an ongoing trend of elevated unit completions.

Housing affordability was far less stretched across the mid-sized capitals leading into the pandemic due to a prolonged period where values didn't rise any where near as much as Sydney and Melbourne over the previous growth cycle.

Composition of housing. A key factor in the median dwelling value of Perth and Adelaide overtaking Melbourne is the underlying mix of housing types. The median *dwelling* value measures the 50th percentile valuation estimate of all houses <u>and</u> units combined.



Importantly, when we measure the median house and unit value separately, Melbourne is still showing a higher median across both housing types than Perth and Adelaide.

The difference comes back to the composition of dwellings and the fact that Melbourne has densified more substantially and rapidly than the mid-sized capitals. In August, CoreLogic estimates a third (33%) of housing stock in Melbourne falls within the multi-unit sector, compared with 25% in Brisbane and 16% of housing stock in Adelaide and Perth.

Considering unit values are generally much lower than house values, the higher portion of multi-unit dwellings in Melbourne tends to weigh the median dwelling value down relative to cities with a skew towards lower density styles of housing.

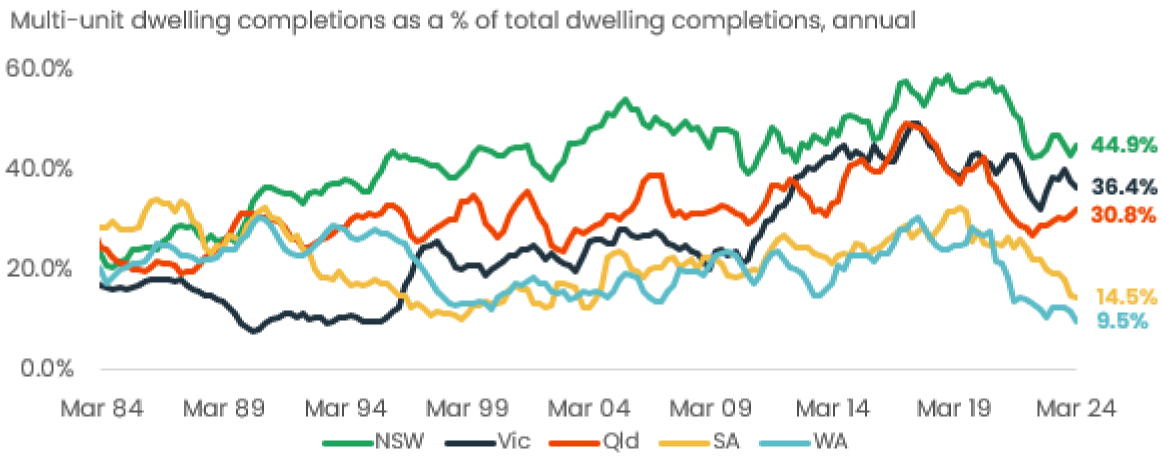
There hasn't been much progress in densification across Perth or Adelaide. Over the past fifteen years, the composition of Perth dwellings moved from 13% within the multi-unit sector to 16%. Similarly, Adelaide moved from 14% to 16%. Over the same time frame, Melbourne's multi-unit sector has increased from 23% of all housing to 33% and Sydney has increased from 31% to 39%.

Hobart, where 18% of dwellings fall within the multi-unit sector, and Darwin (36% multi-unit) have a larger portion of medium to high density dwellings than Perth and Adelaide.

The compositional difference in housing types between the capitals is a clear factor influencing the median dwelling value as well as measures of housing affordability.

Annual dwelling completions data shows this trend perpetuating, with the multi-unit sector across WA and SA comprising just 9.5% and 14.5% of all dwelling completions over the 12 months to March 2024, less than half the national average of 33.8% and well below the portion of multi-unit sector completions across every other capital city.

As affordability becomes more stretched and state governments shy away from the expense associated with sprawling infrastructure commitments required to maintain a geographically distributed population, we are likely to see some renewed focus on establishing higher densities in Perth and Adelaide.



Tim Lawless is Executive, Research Director Asia Pacific at [CoreLogic](). This article is general information and does not consider the circumstances of any investor.

Key themes from reporting season, and what's next

Hugh Dive

In this piece we'll look at the key themes from the recently finished reporting season, along with the best and worst results.

Consumer still opening up their wallets

Before reporting season, one thing that was not fully understood was how consumer spending would be affected by interest rate increases. However, we saw that consumers continue to spend but expect more value for the dollars spent. This was evident in the ***Endeavour Group*** results, which saw customers transition to buying six and 10-pack 'ready-to-drink' (RTD) beverages in seeking out more value than the customary four-packs.

"Let's just issue last year's annual report and see if anyone notices."

Similar themes were seen in ***Wesfarmers*** Kmart division, with shoppers gravitating to their in-house developed Anko apparel brand and away from specialty retailers, seeking out more value. This saw Kmart's profits rise 25%, a very good outcome in a weaker economic environment. ***JB HI-FI*** saw solid sales growth, albeit at a small cost to their profit margin, with the company's lower-cost offering resonating with consumers and taking market share off rival ***Harvey Norman***.

The big supermarket providers ***Coles*** and ***Woolworths*** showed that consumers continue to spend more for groceries, with each booking revenue increase of 6% and 4%, respectively. However, it is not good news for retailers, with consumers pulling back spending on discount pizzas (Dominos Pizza) as well as gambling (Star Entertainment and Tabcorp).

Very pleasingly, the trading outlooks for the first six weeks of the 2025 financial year showed that the July stage three federal income tax cuts have energised retail sales. Many retailers, including ***Universal Stores*** (+12%), ***Super Retail*** (+3%), ***Baby Bunting*** (+3.5%) and ***JB Hi-Fi*** (+5.2%), have all posted strong sales growth post-June 30.

Steady as she goes for the banks

Consistent with the previous reporting seasons, there was minimal evidence of the dreaded 'fixed-interest rate cliff' from 2022 on bank bad debts or net interest margins.

As we saw from the ***Commonwealth Bank*** result, the banks have largely kept interest margins and profits at highs and bad debts at record low levels of 0.09% of loans. This theme of low bad debts and strong margins was consistent across the other Big Four banks in their quarterly reports and Judo Capital, which saw their loan book increase to over $10 billion.

The winners and losers of higher interest rates

For a long time, debt servicing costs were not much of an issue during reporting season as company debt costs were very low. Indeed, sell-side analysts exhorted management teams to gear up "lazy" balance sheets to juice up shareholder returns and buy back stock! However, since late 2022, the Australian cash rate has increased 13 times from 0.1% to 4.35%, along with the cost of corporate debt, which has been felt differently across different companies and industries and was a feature in the August reporting season.

Higher interest costs can change what would typically be a solid result into something that is not nearly as strong, as we saw with the ***Endeavour Group.*** The underlying business was performing well, with both the retail (Dan Murphys) and hotel businesses' earnings growing at 4.7% and 1.8%, respectively. However, this growth in the underlying businesses was completely offset by a 22% increase in interest costs, leading to reported net profits being down -3.2% on last year.

Big acquisitions that were announced in lower interest rate environments have started to weigh on earnings, with ***APA Group, Eagers Automobiles*** and ***Aurizon*** all announcing an increase in interest costs following large acquisitions over the last two years. Both ***Harvey Norman*** and ***Kelsian*** have seen large increases in financing costs, 21% and 155%, respectively, due to having to take on more debt to fund capital expenditures.

Conversely, the insurers all reported strong earnings, with many having record profits following health insurance profits and large investment earnings from their 'investment float'. In addition to profits made via underwriting insurance, insurance companies receive premiums upfront, with claims to be paid later. This mismatch in the timing of cash inflows and outflows gives insurance companies a cost-free pool of money that can generate investment profits for the benefit of shareholders. Since interest rates began to rise in 2022, these billion-dollar investment floats have returned to being a source of profit for insurance companies, with ***QBE Insurance*** earning US$733 million on its $31 billion float in the first half of 2023, compared to US$382 million in all of 2021. Similarly, ***Suncorp*** earned $1 billion from its investment income compared to $608 million last year.

Chinese malaise

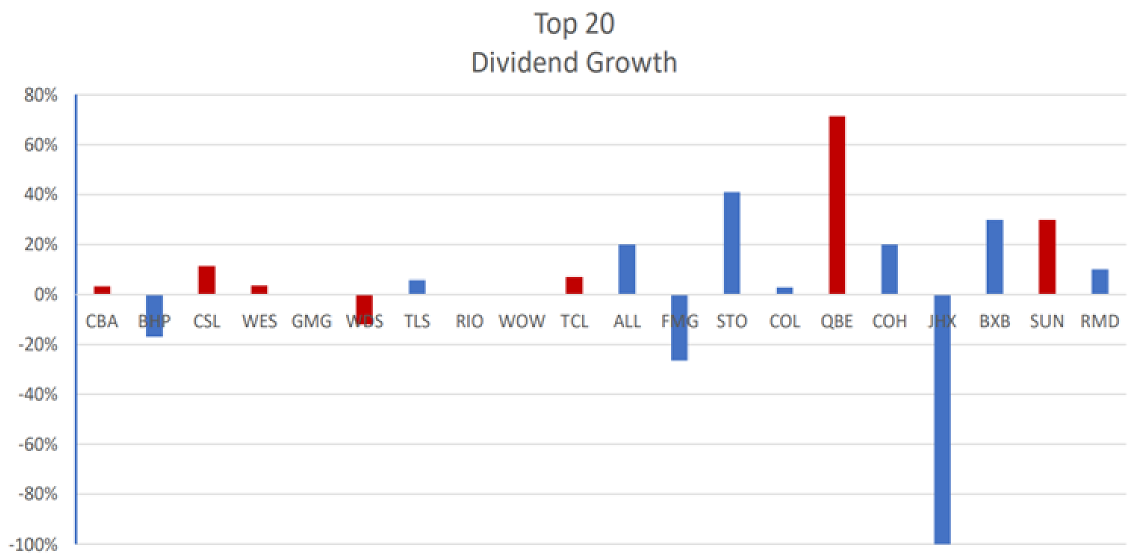
Being Australia's largest trading partner, the health of the Chinese economy has a big influence on the profits of many Australian companies. In 2024, the slowdown in Chinese real estate and construction has seen a reduction in the demand for Chinese steel domestically. This excess steel flowed into overseas markets such as Australia, depressing global steel prices, which saw ***Bluescope Steel's*** profits fall by 20%. For Chinese blast furnaces, it is more economical in the short term to take the pain and keep the steel mills flowing with unprofitable steel than to turn off the furnaces and restart them once prices come back within profitability. Weaker Chinese demand was apparent in the mining sector, with falling commodity prices impacting the profits of all miners in August.

Additionally, a weaker Chinese market has impacted the *golden stocks of milk producers from 2018 to 2020*. The fall in the Chinese birth rate has shrunk the addressable market for infant formula group A2 Milk. During the year, A2 Milk increased its market share and became a top 5 brand within China, but it expects the addressable market to shrink again as the birth rates continue to fall.

Show me the money

A large focus for the August 2024 reporting season was how companies allocated capital management and how best to utilize it within the company and return earnings back to shareholders. Companies that earned franking credits saw most of them distributed back to shareholders in dividends, with only a few major on-market share buybacks announced over the reporting season.

Across the ASX Top 20 stocks (that reported – the major banks minus CBA have a different financial year-end), the weighted average increase in dividend was 2.5%. On the positive side of the ledger, ***QBE Insurance, Santos, Suncorp and Brambles*** offset cuts in ***BHP*** and ***Woodside.*** Due to these companies having high cashflows even in a moderately down year, they can still maintain their dividends, which was seen across ***Goodman Group, Rio Tinto*** and ***Woolworths.*** Across the wider ASX200, corporate dividends declined by -4%, though August 2024 was the 3rd highest dividend period ever, and it was ahead of 2019!



Best and worst performers

Over the month, ***ZIP Co, Wisetech Global Limited, Judo Capital, Brambles*** and ***JB HI-FI*** delivered the best results. Despite the uncertain economic environment, especially around higher interest rates, these companies were able to grow the businesses (Wisetech, JB HI-FI, Judo Capital), return to profitability (ZIP Co) and improve efficiencies and productivity through the business (Brambles).

Looking at the negative side of the ledger, ***Audinate Group, Tabcorp Holdings, Kelsian Group, Mineral Resources*** and ***Star Entertainment Group*** reported poorly received results by the market. The common themes for this group are cancellation of dividends (Audinate Group and Mineral Resources), increased capital expenditure and costs (Kelsian and Tabcorp), or lack of providing a financial result (Star Entertainment).

Result of the season

When looking for the result of the season, it was hard to look past what Wisetech was able to achieve in the last year. In signing the large Japanese global freight forwarder Nippon Express and continuing to grow its market share in the top 25 largest freight companies to over 50%. Wisetech's flagship product, CargoWise, achieved revenue growth of 33% whilst maintaining a disciplined approach to costs, leading to profit margins of close to 50%. Additionally, management provided upbeat guidance for 2025, which will see profits increase by 33-41%, driven by a revenue increase in CargoWise of 31-37%.

How did we go?

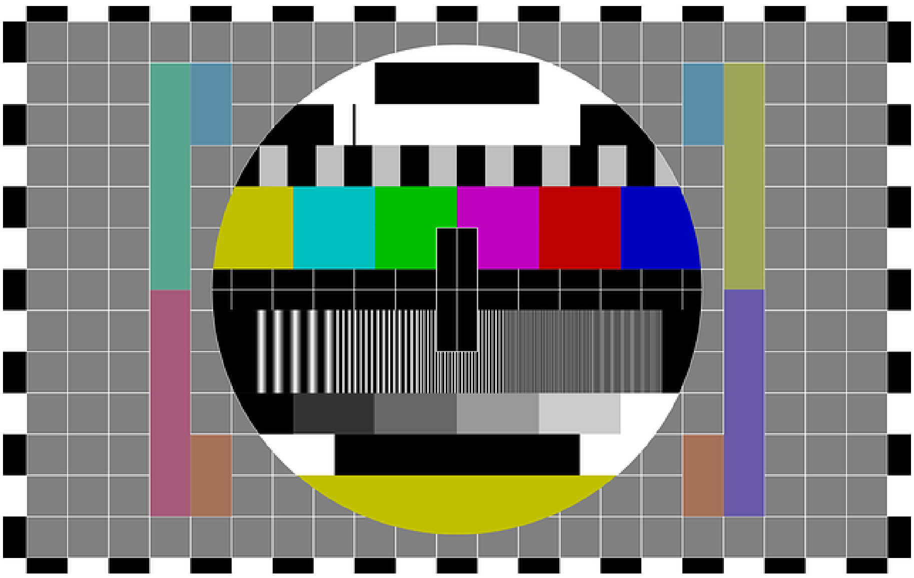
Overall, we are reasonably pleased with the results from the reporting season, with most of our portfolio companies able to increase earnings and dividends with some reporting record dividends in a more challenging economic environment. Though we saw two portfolio companies cut their dividends in response to significant expansions or a major acquisition, it was a prudent move for long-term investors.

When a company reports a result, one of the first things we look at is the dividend paid, as this is the best indication of the actual health of a company. A company's board is unlikely to raise dividends if business conditions worsen or their bankers hammer at the door demanding debt repayments. Earnings per share can be restated later due to "accounting opinions" or financial shenanigans from the CFO, and bullish outlook statements from the CEO can be retracted. However, once dividends are paid into investors' bank accounts, they can never be clawed back.

Hugh Dive is Chief Investment Officer of [Atlas Funds Management](). This article is for general information only and does not consider the circumstances of any investor.

An important Foxtel announcement...

Harry Morrow, Tom Keir



Earlier in the month, News Corp (owner of Australia's Foxtel) CEO Robert Thomson made the surprise announcement that "potential buyers had emerged for the Foxtel business during a review of the company's assets." What is most stunning about this is not that the company is attempting to sell off a cable business in structural decline, but that it also includes the company's streaming offerings Kayo, Binge and even Hubbl.

Murdoch and his associates have made prudent decisions in the past, splitting News Corp's media and entertainment assets early last decade and then selling the majority of its (21st Century Fox) entertainment assets to Disney for US$71 billion a few years later, all but exiting the 'streaming wars' in the US. Murdoch knew what Disney didn't: his entertainment assets were not strong enough to compete with **Netflix** or even **Amazon**.

But what does the potential sale of growing assets like Kayo, Binge and Hubbl say about the current competitive dynamic in the TV market? We can look to the US to glean some insights.

Houston, we have a problem…

For example, Warner Bros. Discovery reported earnings this month, and despite owning some of the highest quality TV assets in the world (Game of Thrones), it wasn't pretty. The company's revenue growth stalled as its cable and broadcast businesses go backwards, only partially offset by growth in the company's streaming service Max (formerly HBO Max). The company's cost cutting helped just a little, with the company making a US$9.1 billion write-down in the value of its traditional TV networks business. Meanwhile, Paramount (owner of Channel 10 here in Australia) booked a similar charge, but for a smaller sum of US$6.0 billion, with attendant reductions to its US workforce of 15% (2,000 employees).

So collectively, Warner Bros. Discovery and Paramount erased US$15 billion in value from the traditional TV business in a week. It is the much faster decline in cable television in the US that is forcing these once-were-giants to double down on their global streaming aspirations. This is existential.

Unfortunately for News Corp and Foxtel, HBO, the provider of the most attractive content on Murdoch's Binge streaming platform (House of the Dragon, The White Lotus, Succession) is entering the Australian market as early as 2025. It is unlikely that Binge will hold on to HBO's premium programs for much longer.

Sport: same-sized audience, higher costs

Cord-cutting (cable subscribers cancelling in favour of streamers like Netflix) is not a new phenomenon. However, sports content has been cable's marquee asset. Sticky (in the sense that they don't move once their team-based bundle is set) sport-viewers have been willing to pay cable subscription prices that grow fast enough to offset the revenue lost to those who ditch the cable bundle and stream instead. This precarious arrangement persisted until last year, when the cable operators (who bundle entertainment content) pushed back (more detail in the insight from September last year: Disney Blinks in the TV streaming wars).

While it has become harder to raise the prices on cable, the cost of cable's keystone sport content is climbing – squeezing the legacy players on both sides. Sports leagues across the world know that their content is an incredible drawcard. In Australia, this has led to a A$4.5 billion seven-year deal for the AFL (up from A$2.5 billion in 2015) and a A$2 billion five-year deal for the NRL (up from $1.8 billion in 2015). In the US, it's the same problem, but supersized – US$110 billion for an eleven-year deal for the football (up from a US$28 billion nine-year deal) and US$76 billion for the NBA (up from a US$24 billion 9-year deal).

The movement of sports away from cable and onto streaming is still in its early days. However, the writing is on the wall. Foxtel is moving from a world in which it can charge $90/month for a bundle of what is effectively just news and sports to charging between $25 and $35/month for those very same (increasingly expensive) sports.

Foxtel's answer to these problems…

is far from obvious – it has launched a set-top box for the streaming world: Hubbl. But this is a decade late, with the market now dominated by the likes of Amazon Fire TV and **Google** TV in Australia (and **Roku** in the US). Sam Buckingham-Jones of the AFR puts it succinctly:

"In the face of this, Foxtel has spent $77 million launching Hubbl, a confusing answer to a question no-one was really asking. The numbers circulating of how many Hubbl units have been selling at major retailers are, to put it mildly, rough."

And so it is that every single part of Foxtel's streaming strategy is challenged. Fun fact: just like it was in the HBO program Succession!

Is it all ugly and bad? What about the good?

We have long maintained that the companies best positioned within the streaming theme were those that weren't cannibalising themselves (pure plays) and which are not saddled with extraordinary amounts of debt.

Netflix continues to lead the pack in general entertainment, growing subscribers on its long, long runway, raising prices as engagement grows and now with a fast-growing advertising business (the company points to a >150% increase in ad sales during negotiations this year compared with 2023). It's also dipping its toe in the water in a smart way in sport – from a position of strength, with NFL Christmas Day specials (no billion-dollar price tag) and a ten-year global deal for wrestling (WWE's flagship Monday Night Raw).

Meanwhile, Roku as the TV platform for almost half of American broadband households seems well-positioned to benefit from the ongoing shift in viewing to streaming and the likely step-change that occurs as a result of the proliferation of sports streaming.

Industry commentators have been talking about the demise of cable (and linear TV) for decades. Now, with unprecedented TV asset write-downs, surprise business exits from legacy players and sports finally moving to streaming in the US, winter might have finally come. We are positioning investors accordingly.

Harry Morrow is a Senior Investment Analyst, and Tom Keir is an Investment Analyst at [Loftus Peak](). This article is for general information only and does not consider the circumstances of any individual. Loftus Peak Global Disruption Fund ([ASX:LPGD]()) is available to investors on the ASX as an active Exchange Traded Managed Fund.

How a fund manager is using AI to get an edge

Harry Moore, Martin Luk, Matthew Hertz

Key takeaways

- Electricity is one of the most powerful inventions in human history. It transformed every aspect of society, from communication and transportation to industry and entertainment. It also enabled the creation of new technologies that revolutionised the world of finance, such as telegraphs, stock tickers, calculators, and computers
- Today, we are witnessing a similar transformation with the advent of artificial intelligence (AI), especially generative AI, which can create new features that were previously unimaginable
- Generative AI is making an impact at Man AHL, from data augmentation and feature engineering to data extraction and portfolio construction

Introduction

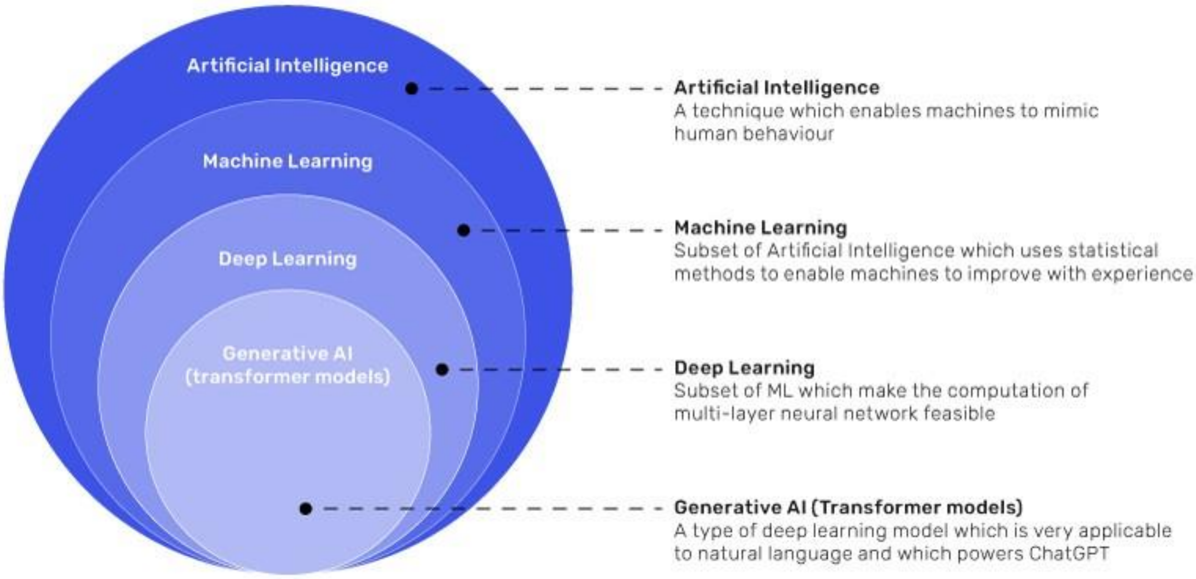
Today, it is difficult to imagine a world without power at the flick of a switch. Yet 20 years after the electric light bulb was invented by Thomas Edison in 1879, just 3% of US households had electricity. It took another two decades for mass adoption. This point is well made by Agrawal and his colleagues in 'Power and Prediction'[1] where they argue we are at a similar juncture in AI. We find ourselves in 'The Between Times', where there is plenty of enthusiasm while we await a truly game-changing application.

At Man AHL, we observe somewhat similar trends. Generative AI has certainly not yet replaced researchers or portfolio managers, or generated a whole new system for delivering market beating performance. What it has done, however, is boost productivity, allowing quantitative analysts ('quants') to spend more time focused on alpha generation. In this article, we showcase four examples of generative AI making an impact. We also discuss the challenges and opportunities of generative AI for the future of quant research.

Why the sudden uptick in AI hype?

The current focus is predominantly on *generative* AI. This leap allowing users to interact with models using human language and generate new outputs has been a significant driver of the recent excitement. Generative AI is a subset of machine learning, which is a subset of broader AI. (Figure 1).

Figure 1. Subsets of Artificial Intelligence



Schematic illustration. Source: https://www.researchgate.net/figure/A-comparative-view-of-AI-machine-learning-deep-learning-and-generative-AI-source_fig1_373797588

For interested readers, the evolution of generative AI is covered in detail here[2] with a discussion on the history, how it works and forecasted economic impact. Machine learning techniques are already also well documented in asset management, with success enhancing asset predictors, improving risk management and driving down costs of execution.[3] Here at Man AHL, we have been using machine learning techniques[3] for over a decade and are early adopters of generative AI.

Four ways we are using generative AI today:

We have a feeling generative AI will scale more quickly than the lightbulb of 1879. Our CIO recently detailed the adoption rate at Man Group[4] (spoiler, it's more than 70% of employees) while our Group CEO also discussed the efficiency gains here[5]. Below we show four ways generative AI is making us more productive.

#1: Coding with Copilot – interacting with code using natural language

One of the most effective use-cases of generative AI is assisting with coding. Tools like GitHub Copilot can accelerate the development of working prototypes and initial research results by predicting code continuations, reducing development time. It also facilitates knowledge sharing, as developers can ask the AI to explain various parts of code written by others.

The challenge and the opportunity lie in training these tools to understand proprietary internal code. At Man AHL, we have extensive libraries of proprietary code for tasks like market data acquisition, ticker mapping, and running simulations. Off-the-shelf AI models lack knowledge of these specialised repositories.

We are developing chatbots with the capability to comprehend our internal code. For example, one chatbot can identify where to find metadata for a market code and retrieve timeseries prices, specifying the correct libraries and fields, saving time. It is a significant challenge which requires a lot of work to get useful outputs, but this capability enhances our efficiency and leverages our proprietary knowledge (Figure 2).

Figure 2. Copilot plotting a timeseries of S&P 500 E-Mini Future, using our internal libraries

Researcher input: "What does the market code ESPC represent? Explain what this market is"

```
import ahl.marketdata as amd
amd.enable_trading_mode(False)
market_info = amd.describe("ESPC")

# Extract relevant information
market_name = market_info.get("longName", "N/A")
...
print(explanation)
```

The market code ESPC represents the E-MINI_S&P500 futures. Here is a detailed description of this market:

- Name: E-MINI_S&P500
- Instrument Type: FUTURE
- BBG Ticker: ESA Index
- Currency: USD

...

This future contract allows investors to speculate or hedge their positions on the S&P 500 index, which is a market-capitalization-weighted index of 500 leading publicly traded companies in the U.S.

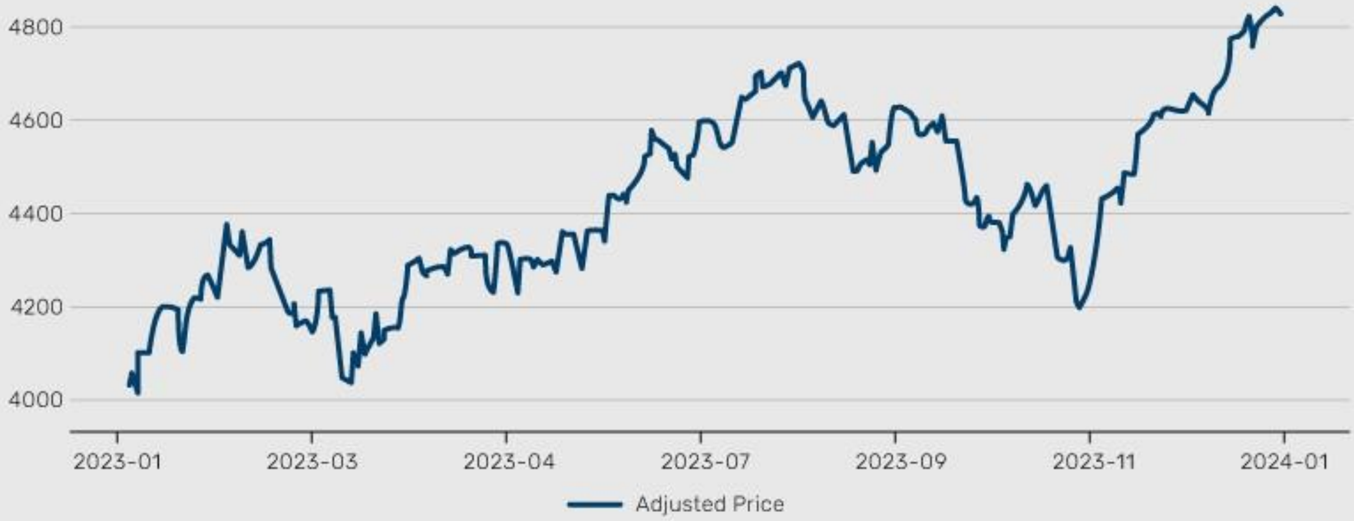
Researcher input: "Get a timeseries of prices for ESPC"

```
# Get a timeseries of prices for ESPC
price_ts = amd.get_pd("ESPC", library="EOD", field="CLOSE", date_range=DateRange("20230101", "20231231"))
print(price_ts)
```

		NEAR	FAR	NEAR_MONTH	FAR_MONTH	NEAR_SYMBOL	FAR_SYMBOL	FX	ADJ
02/01/2023	21:30:00	NaN	NaN	202303	202306	FUT_ESPC_202303	FUT_ESPC_202306	1	NaN
03/01/2023	21:30:00	3846.00	3879.25	202303	202306	FUT_ESPC_202303	FUT_ESPC_202306	1	4026.50
04/01/2023	21:30:00	3874.50	3908.00	202303	202306	FUT_ESPC_202303	FUT_ESPC_202306	1	4055.00
...	...	...	...	...	...	...	...	...	...

Researcher input: "Plot the adjusted price over time"

```
# Plot the adjusted price over time
plt.figure(figsize=(14, 7))
...
plt.show()
```



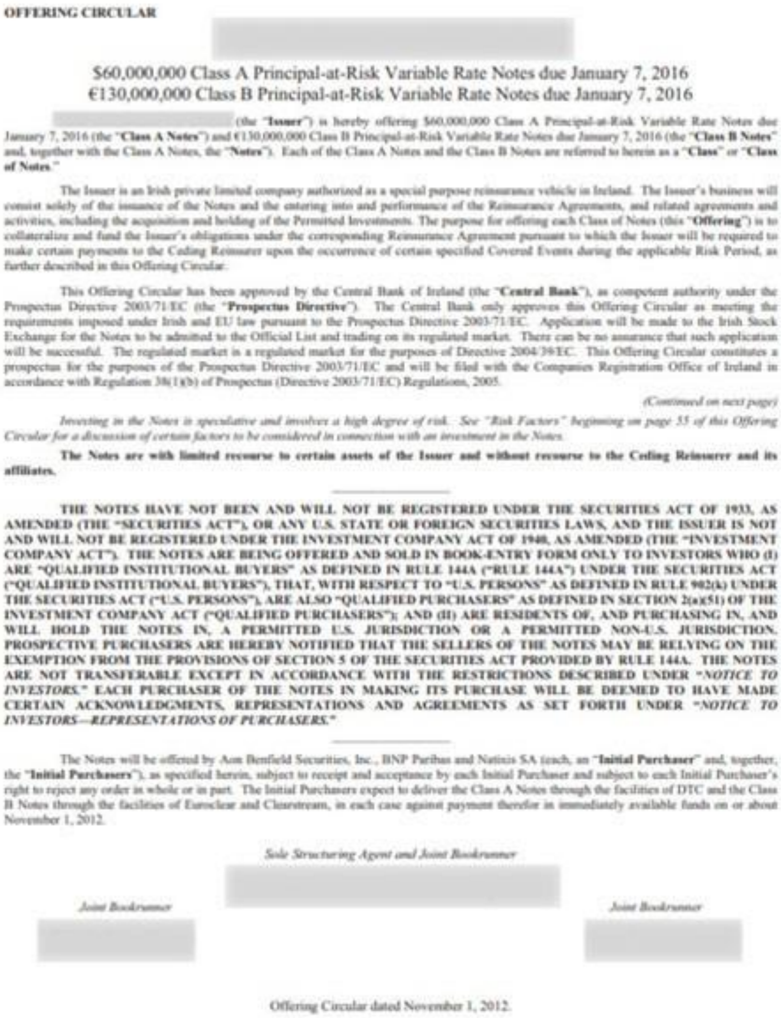
Schematic illustration.

#2: Extracting information for trading catastrophe bonds

Man AHL was founded as a commodity trading advisor (CTA) trading futures contracts. Futures are highly standardised and liquid, making them easy to trade for a systematic investment manager. However, as we've grown and diversified our business, we increasingly trade more novel and exotic instruments.[6]

One example is catastrophe bonds, which are debt instruments designed to pay out when a pre-specified event occurs, typically a natural disaster. Each catastrophe bond has unique features which need to be clearly understood before investment and, unlike interest rate or credit default swaps, do not have standardised terms. This process involves reading the offering circular, which is done by a human analyst, and a second check of the extracted data, again by another human analyst. As these documents run to 200 pages, this can be a considerable amount of time (Figure 3).

Figure 3. The offering circular for a catastrophe bond can run to more than 200 pages



OFFERING CIRCULAR

$60,000,000 Class A Principal-at-Risk Variable Rate Notes due January 7, 2016
€130,000,000 Class B Principal-at-Risk Variable Rate Notes due January 7, 2016

(the "**Issuer**") is hereby offering $60,000,000 Class A Principal-at-Risk Variable Rate Notes due January 7, 2016 (the "**Class A Notes**") and €130,000,000 Class B Principal-at-Risk Variable Rate Notes due January 7, 2016 (the "**Class B Notes**" and, together with the Class A Notes, the "**Notes**"). Each of the Class A Notes and the Class B Notes are referred to herein as a "**Class**" or "**Class of Notes**."

The Issuer is an Irish private limited company authorized as a special purpose reinsurance vehicle in Ireland. The Issuer's business will consist solely of the issuance of the Notes and the entering into and performance of the Reinsurance Agreements, and related agreements and activities, including the acquisition and holding of the Permitted Investments. The purpose for offering each Class of Notes (this "**Offering**") is to collateralize and fund the Issuer's obligations under the corresponding Reinsurance Agreement pursuant to which the Issuer will be required to make certain payments to the Ceding Reinsurer upon the occurrence of certain specified Covered Events during the applicable Risk Period, as further described in this Offering Circular.

This Offering Circular has been approved by the Central Bank of Ireland (the "**Central Bank**"), as competent authority under the Prospectus Directive 2003/71/EC (the "**Prospectus Directive**"). The Central Bank only approves this Offering Circular as meeting the requirements imposed under Irish and EU law pursuant to the Prospectus Directive 2003/71/EC. Application will be made to the Irish Stock Exchange for the Notes to be admitted to the Official List and trading on its regulated market. There can be no assurance that such application will be successful. The regulated market is a regulated market for the purposes of Directive 2004/39/EC. This Offering Circular constitutes a prospectus for the purposes of the Prospectus Directive 2003/71/EC and will be filed with the Companies Registration Office of Ireland in accordance with Regulation 38(1)(b) of Prospectus (Directive 2003/71/EC) Regulations, 2005.

(Continued on next page)

Investing in the Notes is speculative and involves a high degree of risk. See "Risk Factors" beginning on page 55 of this Offering Circular for a discussion of certain factors to be considered in connection with an investment in the Notes.

The Notes are with limited recourse to certain assets of the Issuer and without recourse to the Ceding Reinsurer and its affiliates.

THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY U.S. STATE OR FOREIGN SECURITIES LAWS, AND THE ISSUER IS NOT AND WILL NOT BE REGISTERED UNDER THE INVESTMENT COMPANY ACT OF 1940, AS AMENDED (THE "INVESTMENT COMPANY ACT"). THE NOTES ARE BEING OFFERED AND SOLD IN BOOK-ENTRY FORM ONLY TO INVESTORS WHO (I) ARE "QUALIFIED INSTITUTIONAL BUYERS" AS DEFINED IN RULE 144A ("RULE 144A") UNDER THE SECURITIES ACT ("QUALIFIED INSTITUTIONAL BUYERS"), THAT, WITH RESPECT TO "U.S. PERSONS" AS DEFINED IN RULE 902(k) UNDER THE SECURITIES ACT ("U.S. PERSONS"), ARE ALSO "QUALIFIED PURCHASERS" AS DEFINED IN SECTION 2(a)(51) OF THE INVESTMENT COMPANY ACT ("QUALIFIED PURCHASERS"); AND (II) ARE RESIDENTS OF, AND PURCHASING IN, AND WILL HOLD THE NOTES IN, A PERMITTED U.S. JURISDICTION OR A PERMITTED NON-U.S. JURISDICTION. PROSPECTIVE PURCHASERS ARE HEREBY NOTIFIED THAT THE SELLERS OF THE NOTES MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A. THE NOTES ARE NOT TRANSFERABLE EXCEPT IN ACCORDANCE WITH THE RESTRICTIONS DESCRIBED UNDER "*NOTICE TO INVESTORS*." EACH PURCHASER OF THE NOTES IN MAKING ITS PURCHASE WILL BE DEEMED TO HAVE MADE CERTAIN ACKNOWLEDGMENTS, REPRESENTATIONS AND AGREEMENTS AS SET FORTH UNDER "*NOTICE TO INVESTORS—REPRESENTATIONS OF PURCHASERS*."

The Notes will be offered by Aon Benfield Securities, Inc., BNP Paribas and Natixis SA (each, an "**Initial Purchaser**" and, together, the "**Initial Purchasers**"), as specified herein, subject to receipt and acceptance by each Initial Purchaser and subject to each Initial Purchaser's right to reject any order in whole or in part. The Initial Purchasers expect to deliver the Class A Notes through the facilities of DTC and the Class B Notes through the facilities of Euroclear and Clearstream, in each case against payment therefor in immediately available funds on or about November 1, 2012.

Sole Structuring Agent and Joint Bookrunner

Joint Bookrunner

Joint Bookrunner

Offering Circular dated November 1, 2012.

Pages	200
Words	50,000
Expected human reading time	3 hours

Schematic illustration.

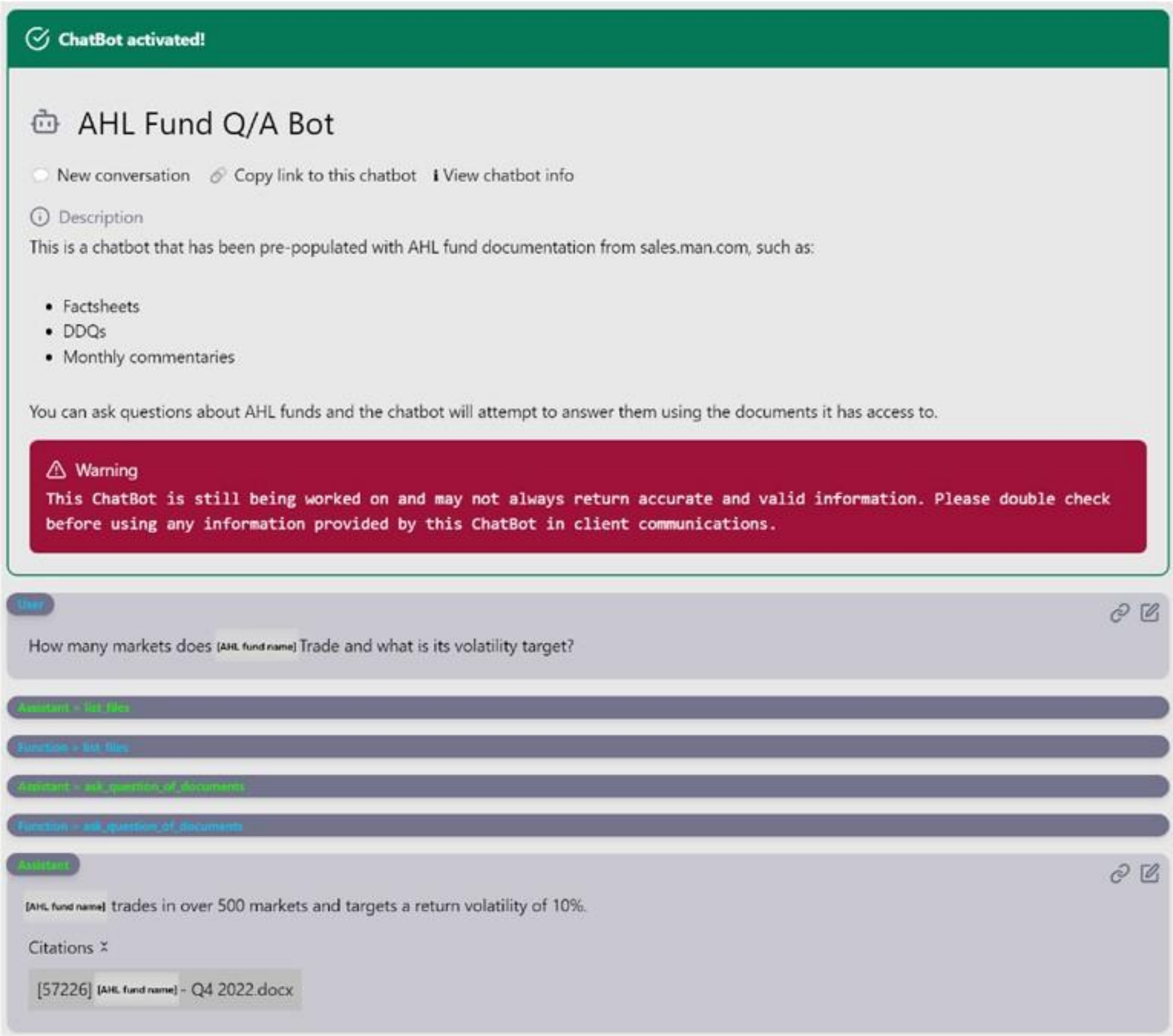
Today, we are testing a process where this data extraction is done by ChatGPT, putting the relevant information in a systematic template for a reviewer to check. This frees up one analyst to focus on new research.

#3: Chatbots assisting with research for investor queries

Man Group's Client Relations team assists with questions from clients on the firm's full suite of investments, including Man AHL's systematic investment strategies. Many questions rely on information from various investment materials, including factsheets, presentations, due diligence questionnaires, and investment commentaries. The team then crafts client-friendly responses. For example, a client might request information on fees, the number of markets traded, or the risk target of an investment strategy

ChatGPT can automate several steps in this process. First, it can extract the required information from the relevant documents. Second, it can draft a response ready for human analyst review. This efficiency frees up time for the team to focus on higher-value tasks. Figure 4 shows a screenshot of the Q&A chatbot querying a document and generating a response ready for checking.

Figure 4. Screenshot of chatbot returning information



Schematic illustration.

Improved efficiencies for data extraction are a general theme – we saw this in the catastrophe bond example – and other teams are reaping benefits too:

- Discretionary investment analysts extracting information from Regulatory News Service (RNS) announcements.
- Data science professionals extracting data update information from vendor emails.
- Design professionals extracting underlying data from unformatted charts to convert to Man Group branding.

#4: Analysing macro data at the level of a junior quant

ChatGPT is useful in quantitative macro research by leveraging its knowledge of fundamental macroeconomic relationships. One use-case is employing it as a hypothesis generator to suggest whether a particular economic timeseries has a fundamentally justifiable relationship with a certain market. These hypotheses can then be tested using statistical back-testing methods.

While ChatGPT won't replace our macro research team in its current state, its understanding can be as good as a graduate researcher. The main difference being that a human researcher needs breaks, while ChatGPT can query thousands of relationships systematically, and potentially suggest signals on those relationships.

ChatGPT also speeds up learning fundamental macro information. Compared to hand-crafted resources like Wikipedia, ChatGPT can be more concise and relevant, helping researchers quickly understand key drivers of macroeconomic phenomena.

Figure 5. Illustration of ChatGPT explaining a simple macroeconomic relationship

Schematic illustration.

What have we learnt so far?

We've focused on the opportunities until now. Below we highlight some of the key lessons from our experience with generative AI.

Hallucinations must be managed

ChatGPT's responses cannot be fully trusted. To help mitigate the impact of hallucinations, we use tools to highlight where information occurs in the original text, aiding human checking. It is a similar story for code, which is only a prototype and requires human verification.

Prompt engineering is crucial

If ChatGPT can't do a task well, it's often due to a mis-specified prompt. Perfecting prompts requires significant resources, trial and error, and specific techniques.

Break tasks into smaller sub-tasks

ChatGPT can't logically break down and execute complex problems in one go. Effective 'AI engineering' involves splitting projects into smaller tasks, each handled by specialist instances of ChatGPT with tailored prompts and tools. The challenge is integrating these agents to solve complex problems.

Education is key for wider adoption

Understanding ChatGPT's capabilities and limitations is crucial. Sceptics should see its strengths, while enthusiasts need to learn its failures. Effective use requires learning how to interact with the model and understanding its training and functioning.

Be ready for the next best thing

Generative AI is already creating efficiencies in asset management, but users must be agile in taking on the next best model to reap the gains of this evolving technology. Progress has so far been swift, with GPT-2 released in 2019 described as 'far from useable'[7] versus GPT-4 which is already gathering multiple use-cases and appears to be scaling faster than historical technologies.

Conclusion

Electricity changed society but took 40 years to do it. AI can do the same,[8] but faster. Our analysts have already seen improvements in data augmentation, feature engineering, model selection and portfolio construction. We believe that in as little as a decade, those asset managers who embrace generative AI can help gain a competitive edge via a faster pace of innovation and superior performance.

Our investment writers are also upskilling in using generative AI tools. As Luis von Ahn, CEO of Duolingo, noted: "your job's not going to be replaced by AI. It's going to be replaced by somebody who knows how to use AI."[9] Check out the 'Key takeaways' again and we can see firsthand the talents of GPT-4 and how our writers are taking this advice to heart.[10]

It was 40 years from Edison's lightbulb until electricity changed the game for the masses. Perhaps AI hits that milestone in ten.

Harry Moore is a Principal, and Martin Luk is a Quant Researcher at Man AHL. Matthew Hertz is Head of Machine Learning Technology at Man Group. Man is a fund manager partner of GSFM, a Firstlinks sponsor. The information included in this article is provided for informational purposes only.

For more articles and papers from GSFM and partners, click here.

References

1 Ajay Agrawal, A., Gans, J. and Goldfarb, A. 'Power and Prediction: The Disruptive Economics of Artificial Intelligence' (2022).
2 Luk, M., 'Generative AI: Overview, Economic Impact, and Applications in Asset Management', 18 September, 2023.
3 Ledford, A. 'An Introduction to Machine Learning', 2019.
4 Korgaonkar, R., 'Diary of a Quant: AI', 2024.
5 Pensions and Investments, 'Man Group CEO sees generative AI boosting efficiency, but not investment decisions', 30 April 2024.
6 Korgaonkar, R., 'Diary of a Quant: Journeying into Exotic Markets', 2024.
7 Radford, A., Wu, J., Child, R., Luan, D., Amodei, D. and Sutskever, I., 'Language models are unsupervised multitask learners', 2019. OpenAI blog, 1(8), p.9.
8 Eloundou, T., Manning, S., Mishkin, P. and Rock, D., 2023. 'Gpts are gpts: An early look at the labor market impact potential of large language models'. arXiv preprint arXiv:2303.10130.
9 Bloomberg, Odd Lots podcast, 'How Humans and Computers learn from each other', 2 May 2024.
10 Key takeaways generated by ChatGPT, using Copilot for Word.