

Contents

- John Woods on diversification using asset allocation *Graham Hand*
- Don't believe the SMSF statistics on investment allocation *Philip La Greca*
- Highlights of reader tips for young investors *Leisa Bell*
- Four climate themes offer investors the next big thing *James Tsinidis*
- Inflation remains transitory due to strong long-term trends *Roger Montgomery*
- Infrastructure and the five roads to recovery *John Julian*
- The three prices that everyone should worry about *Canobi, Rout, Siniakov*
- Why green hydrogen is central to achieving net zero *Michael Collins*
- Maximising your property tax depreciation and claims *Tuan Duong*
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Editorial

Two recent discussions with retirees demonstrated to me why policy change is difficult, and why meaningful action demands a politician who can tell a convincing story when faced with the inevitable opposition. It's not enough that a policy is good for the nation if voters cannot be persuaded, and these days there are unlimited public platforms for vested interests.

In the first instance, the organisers of a large group of retirees who gather each month with a guest speaker asked me to present on [my proposal](#) that the family home be included in the age pension assets test, subject to a threshold. I expected a hostile response but one question in particular illustrated the difficulties explaining the nuances. The question went something like:

"I strongly disagree with you. My mother has never had any money, she bought her house for \$100,000 over 50 years ago and still lives there. She's not wealthy and you're suggesting her age pension should be taken away from her."

To which I responded: *"How much is the house worth now and does she still have a loan?"*

He replied, perhaps too pleased by how well his mother has done given the context of the point I was making. *"About \$4 million, no loan,"* he said.

Here's where the 'agree to disagree' kicked in. I responded:

"So I think someone with an asset worth \$4 million and no debt is wealthy and welfare should be reserved for poor people. The amount she is paid in a pension should be claimed against the value of her estate when she dies. Instead of you inheriting \$4 million, you will inherit only \$3.8 million. I don't think anyone will feel sorry for you."

Which did not go down well, and that's how policy stalls. The debt would not be repaid by his mother, it would effectively be repaid by him (and other heirs). This policy has no chance of adoption for a long time.

In the second instance, a retiree was telling me about the amazing values of houses in her street. Her home was now worth over \$3 million but it was too big and the garden was a pain to maintain. She wanted to move to a nearby \$2 million townhouse which suited her circumstances while staying in her community. Then the party pooper (me) stepped in.

"Do you realise that if you're on an age pension and you sell your house for \$3 million and spend \$2 million on a new home and put \$1 million in the bank, you will lose all your pension and the related entitlements?"

She looked shocked. She said she and her husband were on the full age pension and why should they lose it just because they moved to a house that better suited them? Then she said she would just give the cash to her children as the pension was plenty to live on. She was even more surprised when I explained the gifting rules and money she gives away (above \$10,000 a year or \$30,000 in any five-year period) would still be counted in the assets test ... not that I'm a financial adviser.

And so this large house which should be released for a next generation family will be held by the elderly couple who will struggle up and down the stairs, slip on the leaves covering their long driveway and ponder their empty rooms. That's two families living in inappropriate accommodation because no politician will touch this sacred cow.

Central banks, interest rates and housing

This week threw several spanners in the works for investors who watch markets closely, and not only due to the unknowns of Omicron. US Federal Reserve Chair, **Jay Powell**, moved more to the dark side by suggesting inflation will not be transitory, implying less monetary policy accommodation. Given his new term in office, he will not want to see inflation run ahead of his actions for too long.

The Fed watches inflation using the Personal Consumption Expenditure Core Price Index closely, and as shown below, Powell is right to be refocussing.



It's a complex picture with a new virus on the scene, the very factor which led to immense central bank support in 2020. The RBA's **Philip Lowe** is steadfast in his resolve, saying on [2 November 2021](#):

"In our central scenario, underlying inflation reaches the midpoint of the 2 to 3% range only in late 2023. Having underlying inflation reach the midpoint of the target range for the first time in seven years does not, by itself, warrant an increase in the cash rate."

So while the housing market has seen a rapid increase in supply as sellers look for the top before the end of 2021, there is still plenty of demand, with auction clearance rates holding up.

This week's [White Paper](#) from **Shane Oliver** of **AMP Capital** supports his view that house prices are expected to slow to 5% growth in 2022 then fall 5-10% in 2023, mirroring Lowe's cash rate changes.

Gareth Aird of **CBA** expects cash rate changes earlier, and he says:

"Our expectation for the RBA to commence normalising the cash rate in November 2022 means that we expect national dwelling prices to peak in late 2022 around 7% higher than end 2021 levels. We expect an orderly correction in home prices of around 10% in 2023 as the RBA takes the cash rate to 1.25% by Q3 2023."

Australian dwelling prices and CBA forecasts



Prudential regulators allowed the market to run too strongly over late 2020 and this year with 2021 house prices up around 26% in Sydney, Brisbane and Canberra. Financial stability should not be a boom and bust which pushes thousands out of the housing market while making others even wealthier, and encouraging those who enter the market to take on vast amounts of debt and struggle to withstand rate rises.

In this week's packed edition ...

While many investors spend their time picking stocks, asset allocation in their overall portfolio makes a far larger contribution to total returns than a few stock winners. In this interview, **John Woods** explains how he has [tilted multi-asset portfolios to alternatives](#) in the face of low interest rates, and why ethical investing is not simply about screening out of few bad apples.

Phil La Greca continues this theme by showing why the ATO asset allocations for SMSFs often quoted by the media and fund managers are nonsense, not only out-of-date, but wrong on major items such as cash and global equities. Don't take the ATO data as a guide to [what SMSFs are doing](#). FWIW, balances reported for SMSFs at the end of the September quarter were \$861 billion, a rise of a whopping \$162 billion in a year. No signs of SMSFs slowing.

In the second report from our recent Reader Survey on advice for younger people, **Leisa Bell** selects a dozen highlights, but these do not do justice to the many other [excellent ideas from our smart readers](#). So we also attach a PDF with all the responses.

Fund managers cannot be experts in everything, and **James Tsinidis** says they [select 'Areas of Interest'](#) where they expect the future payoffs according to their [S-curve approach](#). Having backed technology plays such as smartphones and cloud computing, they are now putting more money into climate change, and he describes their four main themes in looking for the next big thing.

With Omicron adding to the market jitters already caused by macro factors and central bank dithering, **Roger Montgomery** puts the inflation cat back in the bag saying that even if it is high for much of 2021 and into 2022, the long-term trends pushing prices down are still in play and Fear, Uncertainty and Doubt (FUD) will [create opportunities later](#).

John Julian then explains why [infrastructure assets are not all alike](#), and there are many roads to recovery for these long-term assets to play a role in most portfolios.

There is so much data in financial markets every day that it's easy for investors to become distracted by the noise. **Andrew Canobi** and his colleagues pick out [three prices worth following](#), if not daily or weekly but to at least understand where they are going over time.

Green hydrogen is all over the news, backed strongly by PM **Scott Morrison** and high-profile businessmen such as **Andrew Forrest**. But what is it, and why are they excited? **Michael Collins** finds the energy source may have a strong future but [the technology is not simple to adopt](#).

And for the thousands of you who own investment properties, **Tuan Duong** explains tax deductions and depreciation allowances under Divisions 40 and 43, reminding us that the returns from investment properties rely heavily on [making the right tax claims](#).

Finally, this morning was the last time **Fran Kelly** will host the Breakfast programme on **ABC's Radio National**. I have woken up to Fran for most of the last 17 years, when she often asked the questions I had in my head. I can only imagine the strain of rising in the middle of the night to prepare a programme and be at the top of her game by 6 am. Well done, great effort. Here's the last word from Fran:

"My alarm goes off at 3.30am, so I would be lying if I did not say that I am looking forward to some sleep-ins. I am going to take a couple of months off and then reappear, energised and ready for some new projects."

John Woods on diversification using asset allocation

Graham Hand

John Woods CFA is Head of Asset Allocation at Australian Ethical, which manages over \$6 billion based on principles in its ethical charter. The multi-asset funds are Balanced, High Growth and Diversified Shares.

GH: John, let's start with a personal question on how you started in funds management.

JW: It was a circuitous path. I started my career as a software engineer, working in industrial automation and business intelligence. I found the best data was in the finance industry, so I started to research companies, initially in the telecommunications sector, which was aligned with my background. As I broadened into other sectors, I became an Asian strategist with a focus on emerging markets. I moved more into macroeconomic research and then multi-asset roles. At Australian Ethical, I put it all together based not just on the financial impact but an ethical lens as well.

GH: And if you could speak to your 25-year-old self who might be starting on that journey, what is one lesson you would give yourself?

JW: There are many but maybe the most important is to keep an open mind. Predicting the future is really difficult. As an example, if you recognised the potential of say 3D printing at an early stage, there were many companies involved, but you would have been better investing with the big, established technology companies. It wasn't that you couldn't see a trend happening but the hard question is how to take advantage of that trend.

GH: So even if you identify a theme, you then need to work out how it translates into financial performance?

JW: Yes, and economies are at a transformative moment in time, where the world is pivoting towards more sustainable, climate-related outcomes. That's fantastic for the planet and potential investments but you need an open mind on how you implement. It may not be as obvious as just buying the newest idea.

GH: In your asset allocation role, what changes have you made recently and in particular, how are you handling the defensive allocations with interest rates so low?

JW: The major change is we're increasing the level of alternative assets. Defensive assets have lost some of their diversification benefits but we don't lose sight of the primary role of fixed income assets is to protect capital. The income component comes second. It was great when defensive assets paid you to hold them but we haven't been in that environment for some time. Fixed income will still protect portfolios during severe equity sell offs.

But we also need to protect against rises in real interest rates which permeate across multiple asset classes. We're handling the need for diversification by bringing in new things, such as alternative assets. They come with different equity risks than the rest of the portfolio, such as global businesses with a reasonable equity risk premium.

GH: What are specific examples of alternatives and why do they have the right defensive characteristics?

JW: Alternatives for us are areas like private equity, infrastructure and venture capital. We're specific about the way we implement them to justify bringing illiquidity into the portfolio. The institutions who bring us these investments must find assets that we can't find in listed markets, particularly in the venture capital space. A lot of emerging technologies, such as dealing with climate change or providing food, are in that venture capital space with different drivers than the broader equity market. They've still got an equity risk premium but we have to work out if the entrepreneurs are able to take the company from a startup to the next phase.

GH: Do you gain exposure to infrastructure through managers who specialise in the asset class?

JW: Yes, and aligning with our values, such as agricultural infrastructure or medical infrastructure.

GH: Other than the trends that Australian Ethical is known for, such as climate change and ethical investing, are there any other market trends that you're particularly backing at the moment?

JW: Well, more a subject that we're trying to solve for in a high-growth portfolio is managing inflation over long periods. A traditional response might be to invest in energy but a sector like oil may not have much of a future. So we're focused on other ways to capture exposure to inflation, such as through the carbon price. If carbon becomes a cost of energy production, we take protection through owning assets in the natural capital space.

GH: What do you mean by 'natural capital'?

JW: Assets such as water, forests and clean air. Natural capital is a way of thinking about nature as a stock that provides benefits to people and the economy. In researching a company, we check their use of water, greenhouse gas emissions and other factors that may harm to the natural environment. We look at reporting which deals with all the 'six capitals': not just financial and manufactured, but also intellectual, human, social and environmental capital.

GH: Is there a part of your equity portfolio which differs materially from the index?

JW: The market overlooks a lot of opportunities, especially as many asset managers as heavily benchmark aware. We try to look where others don't. For example, our portfolio doesn't include just the top four banks, as we have an overweighting to BOQ and Auswide. In telecommunications, we have Macquarie Telecom and Telecom New Zealand rather than just Telstra.

GH: One of your VC exposures is to CSIRO's venture capital business, Main Sequence. What attracted you to that and how does it fit in a multi-asset portfolio?

JW: When many people think about venture capital, it sounds high risk. Now, each individual investment that venture capitalists back might be high risk, but when you build up a portfolio, those idiosyncratic risks are diversified away. What attracted us to Main Sequence was the high level of alignment. The types of problems they're trying to solve are the problems we're trying to solve.

But every venture capital investment I've ever looked at sounds fantastic and exciting, but finding a group of people that can actually sift through that excitement with real knowledge is difficult. And that's where the link into CSIRO is unique. They have some of Australia's best scientists who can answer some of those really difficult questions. In a world awash with liquidity, we need this discipline to ensure we are not overpaying for assets. Main Sequence is setting up companies to solve problems from the ground up, paying the capital expense of a startup rather than a high valuation multiple. That's a powerful differentiator.

GH: These days, every fund manager talks about ESG and sustainable principles. How does Australian Ethical differentiate itself from what is now common practice among fund managers?

JW: It's good to see other fund managers taking ESG into account, it's a positive trend for society. But inevitably there will be more greenwash, so we encourage investors to engage with the impact they want from their investments. Serious ethical investing creates portfolios different to mainstream funds with different risks. We've been doing this for more than 30 years, with ethics and frameworks embedded in our investment philosophy.

GH: So how do your diversified funds differ from others?

JW: Our high-growth fund is built for investors with a much longer time frame in mind. We recommend a minimum investment period of 10+ years. We want to take advantage of early impact investments and more illiquid investments in the private equity and venture capital space. So it is 100% growth asset fund and the way we manage risk is by building diversification within those asset classes. It's still multi-asset, like a balance fund, but it has a more singular focus on growing capital over a very long time.

GH: Let's finish with what keeps you up at night.

JW: Inflation worries me at the moment but I also think about risk management knowing that with every risk there is an opportunity. For example, being invested in the world's largest equity market, the US, has produced great returns, but will we see that cycle repeated in the same stocks? I doubt it. We are experiencing a proliferation of new technologies coming to market and we have the opportunity to sift through them to deliver good returns, missing those opportunities keeps me awake to.

Graham Hand is Managing Editor of Firstlinks. John Woods is Head of Asset Allocation at [Australian Ethical Investment](#), a sponsor of Firstlinks. This information is of a general nature and is not intended to provide you with financial advice or take into account your personal objectives, financial situation or needs.

For more articles and papers from Australian Ethical, please [click here](#).

Media Release, 29 November 2021 - Australian Ethical doubles down on climate & tech solutions with inaugural [2021 Visionary Grants](#), via the [Australian Ethical Foundation](#).

Don't believe the SMSF statistics on investment allocation

Philip La Greca

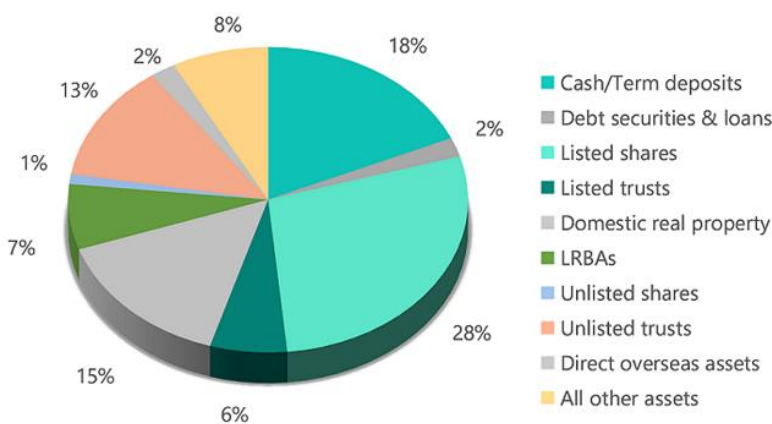
Every quarter, the ATO releases an SMSF statistical report. It is usually followed by an influx of commentators, usually non-SMSF specialists, deriding the SMSF sector for asset class concentration and lack of diversification, particularly in relation to international exposure.

These claims are usually based on false assumptions that are not from the ATO but by the commentators.

The key mistakes made by some analysts are that:

1. the data is as at the quarterly publication date
2. the ATO is reporting actual asset allocation
3. all superannuation asset allocations have been reported in the same way.

Here is the latest ATO data published in September 2021, supposedly effective for 30 June 2021.



Source: ATO SMSF statistical report 30 June 2021

So why should these assumptions be looked at more closely and why is care needed when using the data for determining how SMSFs invest?

We need to examine where the data comes from and what is its real use.

What date applies to the data?

The ATO's source of SMSF investment data is Section H the SMSF regulatory return that is lodged each year. The timing of the actual lodgement will depend on the SMSF which may mean its return may not be lodged until May the following year.

As a consequence, the primary source of data now is still the FY2020 returns, not the 2021 returns. We also know that the ATO does take some time to analyse each year's regulatory return data as they publish an annual statistical summary and the latest was published in March 2021 based on the 2018-19 data, which suggest there is still a wait before the 2020 data will be ready.

This means the statistical report published in September 2021 is at best an extrapolation of the 30 June 2020 data. At its worst it is extrapolation of FY2019 data only which means some data is 27 months out of date by September 2021.

SMSF cash holdings overstated

The time delay in reporting means any actual investment decisions made by all SMSF trustees since 1 July 2020 are not directly reflected in the September 2021 publication. This is most obviously reflected in the cash holdings for SMSFs.

Most contributions received by the SMSF sector are **NOT** employer contributions, particularly Superannuation Guarantee (only 20% of all super contributions received by SMSFs) as is the case for APRA funds (80% of all contributions made to these funds) which are required to be paid quarterly throughout the year (APRA funds are the large institutional funds).

Most SMSF member contributions are made in the June quarter each financial year and often not invested by 30 June each year (but may well be invested after 30 June) resulting in an overstatement of the level of cash in SMSFs.

In addition, 45% of SMSFs are partially or fully in pension phase compared with about 15% of the amount in APRA funds. SMSFs have negative cashflow from contributions versus benefit payments compared with APRA funds and thus hold a higher amount in cash to meet their pension obligations.

The combination of accumulation funds having year-end contribution receipts and pension-paying funds holding cash to make payments results in a higher than average cash level on the 30 June reporting date.

The classifications are not even asset classes

The categories in the SMSF regulatory return are not asset classes but structures. That is, how does the SMSF hold its assets and where are the structures based.

The major classifications are Australian managed investments, Australian direct investments and overseas direct investments. While some of the direct investment classifications align with asset classes (such as real property) this is not the case for others.

For example, in the case are listed and unlisted trusts (of which managed investment schemes such as managed funds are the most common), the classification does not reflect the type of assets in the trust. Allocating these funds to a specific asset class is speculation. Managed funds can invest in a range of different asset classes from diversified funds (balanced or growth funds), sector or even sub sector specific (international equities, small caps, mortgage) or even specific purpose funds (income funds, absolute return etc).

Listed trusts are vehicles investing in real property, ASX-listed shares, international shares, private equity and specialist assets or business sectors. The listed share category includes Listed Investment Companies (LICs) and ETFs in this category.

This results in commentary, particularly about underexposure to international markets, based on the tiny percentage of directly-held international assets. The reality is that most international assets are held through vehicles such as managed funds and more recently, ETFs.

The ATO data is also significantly different from the categories APRA uses to collect investment data about those funds, which is not sourced from those funds' tax returns.

What is the ATO really reporting?

So, this begs the question why does the ATO classify the investments this way?

The rationale for this classification is about data matching of fund income. As anyone who has seen e-tax, the ATO can pre-populate a significant range of income sources for a taxpayer and that potentially includes an SMSF, even if the ATO does not provide this.

This is achieved as investment providers are required to collect the Tax File Number of the investor. These bodies then provide information to the ATO about the income they earn and pay to each investor.

So, if you earn interest from an investment then the bank, note or debenture issuer will advise the ATO the amount of interest you were paid along with your name and TFN. For listed securities, the registry provides the dividend details (cash dividend and franking amount) as well as your details.

If you invest in a managed fund, a wrap platform or managed account, the product provider has a similar obligation to provide an Annual Investment Income Report to the ATO. It outlines the underlying taxable transaction that gave rise to a taxable income for the investor. This includes interest, dividends (including franking credits) and realised capital gains.

Even small entities have reporting obligations that allow this data matching, and trusts must provide trustee beneficiary statements attached to the trust tax return.

It's little use for asset allocation

All this data does is enable the ATO to verify both where the SMSF holds its investments and the taxable income it declares in its tax return against information already provided to the ATO.

So next time an analyst or commentator uses this asset allocation data, think again about what it really is.

Philip La Greca is Executive Manager of SMSF Technical and Strategic Solutions at [SuperConcepts](#), a leading provider of SMSF services.

Highlights of reader tips for young investors

Leisa Bell

From the hundreds of responses to Firstlinks' recent survey question, "*What investment advice would you give to a 25-year-old starting an investing journey?*", we published an initial selection last week.

This week, we have chosen a dozen highlights that represent the main themes, plus we attach a PDF of all the suggestions.

Some comments last week suggested we should pick a top five or 10, not simply publish all the comments. But reading through the contributions, there are so many good ideas that publishing a few denies access to a range of alternatives. None of us knows what will work for the future and there are many paths to investing success.

So we attach a [full list of all the responses](#), and we recommend scanning through them. But in our attempt to make everyone happy, here are a dozen goodies ... but we could easily have included many more in this list.

Some highlights from hundreds of great comments

- Do your research thoroughly and for an extended period of time. Make sure your personal aspirations closely align with the companies. Only invest with management teams you are totally happy about. Only buy genuine top quality when good value can be had. See the dips as a great opportunity to buy. Be prepared to keep adding to your position over time. Invest for the long term. Have fun and enjoy it! I would love to be 25 again!
- Try to regularly save. If you are a couple, live on one wage and save the other. get your house paid off as fast as you can so you always have a roof over your head. Try to buy a house in a good area that you can extend and improve later if needed, rather than having to move as Stamp Duty is expensive. when your house is fully paid off then invest in the stock market, either directly (if you have the time and interest) or via a few low cost EFT's if you are happy to outsource it. consider setting up a low cost SMSF when you have sufficient assets. don't be "over frugal". Remember to travel and follow your interests. The money you save is to help you be secure and enjoy life - it is not an end in itself. don't fall victim to fashion. consider those less fortunate than yourself and be grateful for what you have rather than envious of those who appears to have more. More often than not the grass isn't really greener. try to leave the world a better place than you found it.
- Avoid fads. Invest, don't speculate. Be patient, but not indecisive. Find a trusted mentor or adviser. Don't buy at excessive prices, no matter how strong the trend. Be contrarian. Self educate. Remember a stock is a share of the business - if you don't understand the business, don't buy the stock. Invest for the long term so you can benefit from the magic of compound interest.
- Similar to physical health, your financial health will be determined by your actual behaviour rather than your knowledge level. As a payroll accountant, I can attest that one of the most powerful forces in the universe is the automatic payroll deduction. I will back the 25 year who commences automated savings plan over an active investor every day of the week.
- Before you start get educated in finance & inv markets - plenty of courses out there to bring you up to speed. If investing in individual ASX shares don't be afraid of the small cap space but thoroughly research each company & particularly management beforehand. Find a qualified adviser you can trust - fee for service only - & review financial position twice a year. Also invest using the best tax vehicle - IMHO that's a SMSF. Research & engage an SMSF administrative service to handle the compliance paperwork (\$1K-1.5K pa) so you can concentrate on the investing. Back your own judgement & stay away from the financial fog.
- Boring advice: The importance of diversification; the magic of compound interest; don't try and pick stocks unless it is your job; don't think you can time the markets; leveraging can work if you are patient.
- After learning everything you can, patience comes as the next biggest virtue. Houses and shares might be grossly overpriced at the moment, but opportunities will inevitably come even if you have to wait years for an entry point.
- Save little and often. Start as early as you can. If you are interested in the business world, find companies you admire and develop a deep understanding of how they make money, buy shares in them and don't ever

sell them unless your reason for liking a company in the first place is no longer valid. If this sounds like too much work, invest in low cost index tracking ETFs.

- Everyone knows how to buy. But remember, selling is to investing what braking is to driving. It is part of the process and you have to do it in order to achieve success. Trees don't grow to the sky. Every stock will eventually come off their highs. Try and buy when others are selling and sell when others are greedily buying.
- Start today. Any amount is good. Time is your best friend right now and it will love you more than you think is possible. Believe me, you will be 50 very quickly. But you can still be cool and have lots of fun but only if you have capital reserves to draw on.
- First write down your goals. To be financially secure? To be financially independent? To be filthy rich? Decide how much income you are prepared to commit to savings/investment and accept the limitations on consumption that imposes. Find an individual full service broker with a personal investment strategy, not just a "house broker". Commit 100% of funds to stocks. Direct all dividends to trading account. Only withdraw CGT liabilities from account for first 15 years. Treat investment account same as super... untouchable. Review portfolio with broker monthly and buy/sell on performance and to rebalance. A 15 year plan is long enough.
- Start early, invest when you have available cash can in equities, avoid bonds, have 3-6 months liquidity in cash. When you can, get into the property market and use your home as a platform for building wealth (releasing built up equity to reinvest in shares and/or additional property. Avoid margin lending (or use very sparingly). Stick to your long term game plan, run your own race and get wealthy slowly.

A word cloud summary

This word cloud generated from the survey responses is also a neat way to illustrate the main ideas:

stick active know people super may try home portfolio dividend timing market Put way
 Invest regularly growth risk money something Start early one ETFs need
 dollar cost averaging tax equities don t learn returns index funds
 first understand prices funds higher long term income
 diversified future companies important start build time
 Also good financial will Invest long term investment
 compound interest invest even buy compounding market
 research keep Avoid Save changes shares property stocks
 add hold interested use come years young Look start investing patient
 now go low pay spend value world much cash well low cost sell Make asset regularly
 experience indexes quality always Educate away earnings plan business investor Take
 work

And thanks to all respondents

The full list of all the responses can be [accessed here](#).

Leisa Bell is an Editorial Associate at Firstlinks. The investment tips provided by our survey respondents are general in nature and are not tailored to your individual financial circumstances or goals.

Four climate themes offer investors the next big thing

James Tsinidis

The ability to find the 'next big thing' - that is, the next big long-term structural growth trend, before anybody else does - is a key component of investing, especially in global markets.

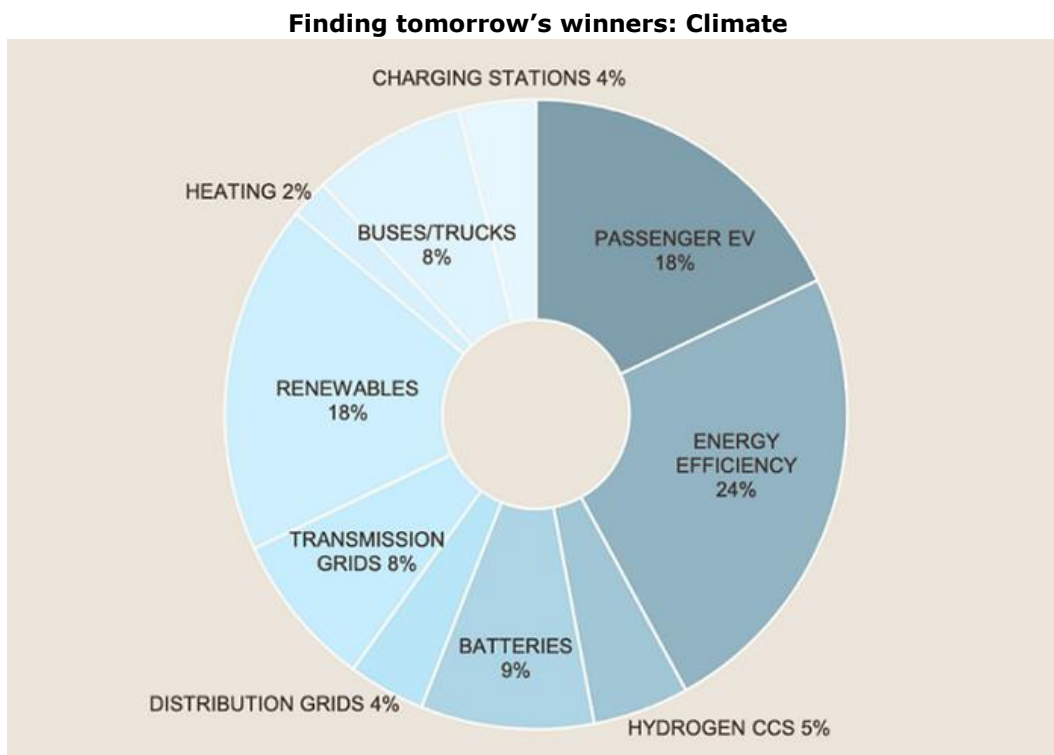
Identifying and understanding these big technological and structural changes in society are an integral part of our investing process. We call these trends 'Areas of Interest'.

It should come as no surprise, particularly in the wake of COP26, that climate is a major Area of Interest. While many governments continue to drag their feet on de-carbonising their economies, private enterprises see the potential and are acting quickly to develop the technology that consumers are increasingly demanding.

Money is backing into the climate theme

In 2020, global investment in the transition to low-carbon energy exceeded \$US500 billion for the first time ever. Given the ambitious carbon goals now being announced around the world, we forecast the transition to decarbonisation will require an investment of over \$US30 trillion between now and 2050.

The below chart shows where we believe the investment opportunities will lie in this transition.



Source: Goldman Sachs, Munro Partners Estimates (31st December 2020)

In climate, there are four structural categories that will be outliers in the decarbonisation of the planet.

1. Clean energy

Companies at the forefront of renewable energy generation know clean energy is not just good for the planet, but it is now cheap enough to compete with fossil fuels and is less reliant on government subsidies to succeed.

A focus for us in renewable energy is wind generation. Onshore wind production may receive a lot of media attention, but offshore wind is the faster growing segment in this industry. To highlight the potential in this space, the amount of offshore wind capacity auctioned in 2020 equalled the amount that has been built in the entirety of its existence.

Denmark-listed [Orsted](#) commissioned the first offshore windfarm back in 1991. This extensive experience and head start is part of what makes Orsted attractive and what will see it continue to develop as an 'offshore major' as the industry matures and despite oil companies entering.

2. Clean transport

Electric vehicles will be an integral part of any future transport strategy, something governments are slowly realising. Currently, less than 1% of Australian cars on the road are electric vehicles but this will grow rapidly as infrastructure, affordability and range are improved.

The problem for investors is identifying which companies are looking outside the box in the move towards clean transport. Battery technology is a critical, but often overlooked, component of this transition.

Korean-listed Samsung SDI is a leader in large energy storage batteries and electric vehicle battery manufacture. Although barely profitable today, with more governments around the world making announcements similar to Australia's designed to boost electric vehicle uptake, we expect companies producing energy storage batteries to grow and prosper.

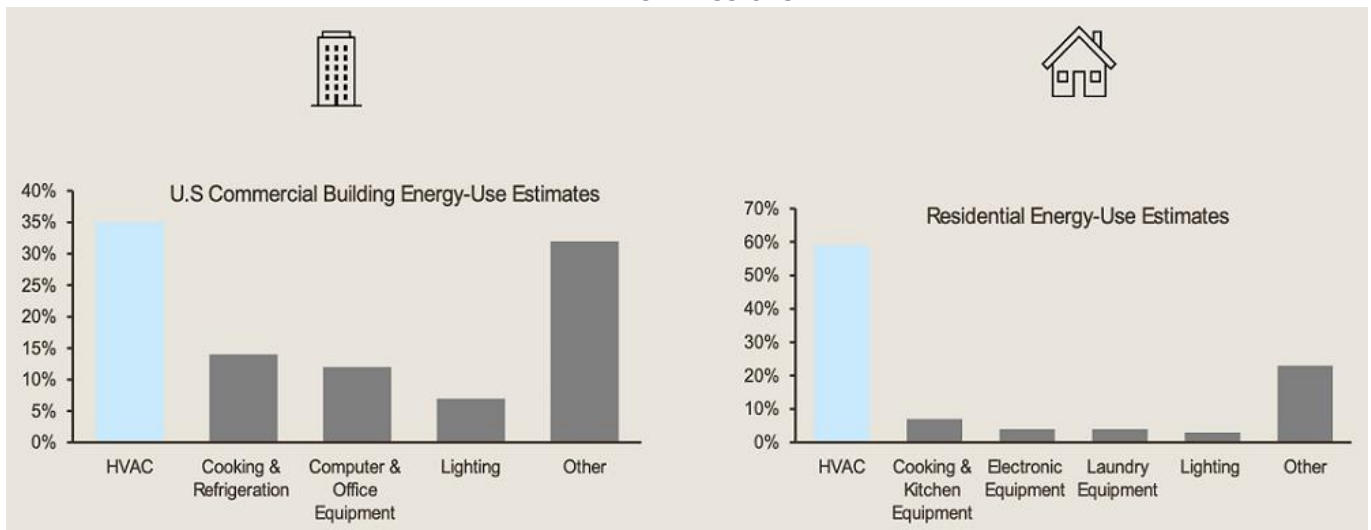
3. Energy efficiency

A more efficient energy future includes the best use that energy, for example, through more efficient insulation or metering.

We forecast this category of energy efficiency to account for a quarter of all global decarbonisation spending. Companies in heating, ventilation, and air-conditioning (HVAC), insulation products, electrical switches, lighting and metering technology will offer the best prospects in this category as offices, commercial buildings and households increase focus on their energy ratings. HVAC retrofitting represents a potential \$US350 billion investment market.

Another potential tailwind is the role of air quality in reducing the risk of COVID-19 transmission. More companies and buildings are retrofitting existing systems, or installing new ones, that are able to monitor air quality instantaneously.

HVAC Emissions



Source: Bloomberg Finance L.P as at 15 April 2021

Governments are also expected to introduce stricter air quality rules that will mandate the use of these newer technologies in new builds.

US-listed [Trane Technologies](#) is a HVAC business that targets sustainability benefits through the increased energy efficiency of their systems. They have spent a decade repositioning their brand to be more sustainable and have pledged to reduce their customer carbon footprint by one gigaton by 2030.

4. Circular economy

Consumers are increasingly aware of the waste their consumption can produce, with supermarkets, for example, reducing their plastic packaging over recent years in response to consumer demand. Councils are labelling general rubbish bins as 'landfill' to make their constituents more aware of where their waste ends up, and primary schools are encouraging an awareness of recycling and the global effects of too much waste production from a very young age.

Unfortunately, just 14% of plastic is currently recycled, compared to 60% of paper and up to 90% of steel. We expect this to increase as consumers continue to become more aware of the true cost of the 'convenience' of plastics. The 'true' cost of the oil and gas required to produce plastics is also expected to rise, and become more understood, which will further increase the demand for plastics recycling.

Norwegian listed [Tomra Systems](#) started off manufacturing reverse vending machines for used beverage containers in 1972 and today provides advanced collection and sorting technology that enables the circular economy and helps minimise waste. They estimate this underpenetrated addressable market to be between \$US50 and \$US80 billion.

The bottom line

Climate-related companies in the four categories outlined above will experience exponential growth over the years and decades to come. This will be driven by increased consumer demand for more climate conscious solutions and by governments, corporations and investors setting ambitious climate reduction targets.

By identifying and investing in these companies at the beginning of a very long S-curves, we can profit from their prescience and deliver those benefits to investors. We have established the Munro Climate Change Leaders Fund to capture this opportunity.

James Tsinidis is a Portfolio Manager and Co-Lead of the Munro Climate Change Leaders Fund. [Munro Partners](#) is a specialist investment manager partner of GSFM Funds Management, a sponsor of Firstlinks. Munro Partners may have holdings in the companies mentioned in this article. This information is general in nature and has been prepared without taking account of the objectives, financial situation or needs of individuals.

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Inflation remains transitory due to strong long-term trends

Roger Montgomery

At the beginning of 2021, when Inflation Scare 1.0 hit market sentiment, we focussed more on technological innovation, automation, the materially lower level of unionised labour and the economy's reduced reliance on oil as continuing to drive the inflation declines that were evident prior to COVID-19.

Now the market is in a FUD, or Fear, Uncertainty and Doubt. FUD relating to inflation is the concern du jour, but I believe investors have little to worry about.

Inflation orbits a number of factors

First is the possibility that central banks are not only behind the curve, but asleep at the wheel. US inflation reached 6.2% year-on-year in October 2021, much higher than the market anticipated and even higher than the US Federal Reserve's own forecasts of 2.1% in March and its more recent 4.2% forecast, in September. The high absolute level of inflation and its rate of acceleration have triggered sincere fears of an imminent and unsettling rise in interest rates.

Second, and despite apparent surging inflation, central banks continue their various forms of quantitative easing (QE). Some commentators suggest this activity is entirely inappropriate and will lead to hyperinflation. Keeping in mind such predictions serve to sell newspaper subscriptions more readily than they serve investors, hyperinflation is rapid, excessive, and out-of-control price increases of more than 50% per month. Not likely.

And it's worth considering Japan's QE program, which in proportion to its economy, is many times larger than the US package. Yet, despite its very aggressive programme, Japan continues to skirt with deflation not inflation.

Finally, many investors point to the fall in employment participation rates (referred to the Great Resignation in the US), and a surge in wages in some pockets of the economy, as a sure sign inflation will continue to accelerate and force central banks to inevitably raise rates.

Investors are right to be concerned about the consequences of higher rates. Large large, accumulated levels of global debt along with continued money printing - even as inflation surges - have even reputable investors fearing Armageddon.

It is important to distinguish fears from realities, but it is equally important to accept that either can trigger a market rout.

Use a longer-term lens

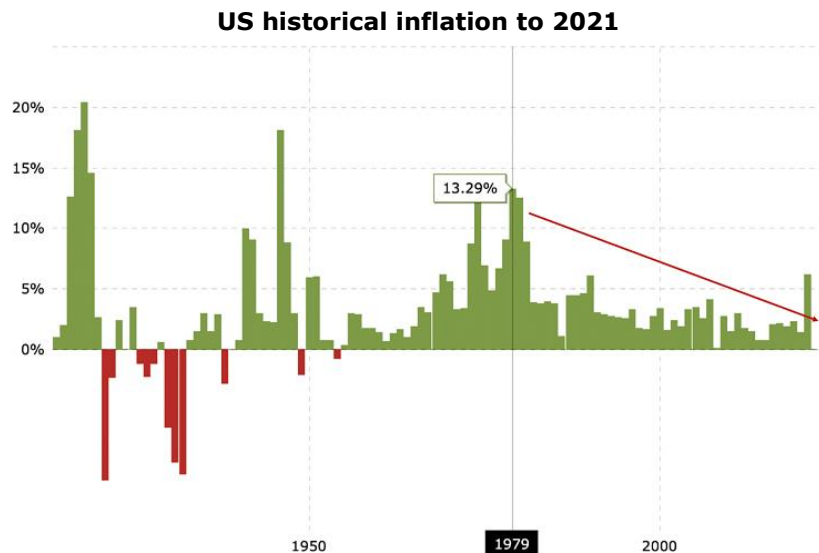
A longer-term lens better serves investors because it's arguably easier to predict. Ask me whether ARB, Reece, Macquarie Telecom or CSL will be more valuable in a decade's time and the answer is an unequivocal yes.

However, ask me whether their share prices will be higher next month or next year and I couldn't say. It's a far riskier proposition to predict the short term, even for the highest quality companies.

With that in mind, we believe low inflation is structural. Take a look at inflation in the US since the 1980s and one can see clear evidence of a shift lower for rates of inflation.

Expect structural decline of inflation to continue

Since 1979, when the US record year-over-year headline inflation of 13.3%, inflation has been in structural decline. This can be attributed to a number of factors that are unlikely to change.



Source: www.macrotrends.net

First, the level of unionised labour is significantly lower than it was even 30 years ago. Large, coordinated and regular claims for wage increases are a thing of the past. The oft-reported thuggish and militant behavior of some unions has done them no favours in terms of their prospects for attracting a new generation of members. Their influence and therefore the prospects for rising wage pressure from this source remains in decline.

Second, and perhaps more important, investment in technology has accelerated. And technology itself is deflationary. Automation, AI, big data, digitization, information technology ... all are deflationary. Their advance is exponential, and they democratise access, which encourages competition. Technology lowers the cost of manufacturing, delivery and servicing, raising margins without the need to raise prices.

And one particular form of technology - automation - is directly responsible for displacing labour, keeping a lid on wages growth.

These are the structural forces promoting disinflation, and they have not disappeared. It remains valid to call inflation fears 'transitory'.

There are short-term factors

In the short term, we acknowledge the impact of a lack of immigration on wages in pockets of the economy. Competition amongst employers has seen wages rise in retail, digital, resources and construction. A reopening of the borders however will reverse these pressures and Australia and the US should revert to the trends in place prior to the pandemic.

History is replete with bouts of inflation coincident with an economic recovery from recession. While the cause of each recession differs, the response is usually the same - monetary and fiscal stimulation to support the economy. As the rate of economic growth eases and normalises, so too will inflation pressures.

Perhaps more obviously, the 'base effect' will work in reverse. Current high rates of inflation exist simply because we are comparing prices today to those recorded during the depths of the pandemic lockdowns last year.

This time next year however, a lower rate of price acceleration will be compared to the new higher base recorded this year. The result should be disinflation. At that time, we believe the market will take a sigh of

relief, FUD could morph into FOMO (fear of missing out) and investors could return to the business of investing in high-quality businesses, especially those with structural tailwinds for growth.

Roger Montgomery is Chairman and Chief Investment Officer at [Montgomery Investment Management](#). This article is for general information only and does not consider the circumstances of any individual.

Infrastructure and the five roads to recovery

John Julian

It has been a remarkable 18 months for infrastructure but it should come as no surprise that the pandemic's impact on infrastructure assets has been varied. In a sector that consists of a range of industries and assets, which are often subject to differing underlying drivers, asset performances can fluctuate.

Assets like airports and toll roads have suffered from reduced travel, many regulated and social assets were resilient, while communications and technology infrastructure enjoyed an environment of increased demand.

So given the varied performances, what might the road to recovery for infrastructure look like? And what role could infrastructure play in a portfolio?

Our recent webinar [Infrastructure and the road to recovery](#) examined each of the different categories of infrastructure and how we believe they may perform as the world learns to live with COVID. (needs link)

Infrastructure consists of a broad array of assets which can be categorised in a number of ways, but a common approach is to look at them by sector. Different sectors – and indeed different individual assets – can have varying characteristics that affect their performance depending on what is going on in the broader global economy.

1. Social infrastructure

The first category is social infrastructure, which is often structured as public private partnerships (PPPs). PPPs are a common way of delivering infrastructure through a partnership between private investors and the public sector. Social infrastructure includes assets like schools, hospitals and justice facilities.

Importantly, for investors, these generally have an availability-based revenue model. This model means the owner of these assets gets paid for making the asset available, regardless of how many people use the asset. The payments are often fixed and usually from a government counterparty, which provides high security of revenues for the investors.

Because these types of assets are not impacted by volume or by usage, they tend to be largely immune to what is going on in the broader economy and so were not greatly affected by COVID-19.¹ A key feature of social infrastructure is the stability of revenues driven by factors such as the availability-based revenue model, and the fact they are often coming from a highly rated government counterparty.

2. Regulated infrastructure

The second category consists of regulated assets, which is typically characterised by inelastic demand because these assets provide essential services that we use every day like water and electricity.

These assets have regulated pricing models, meaning pricing is determined by a regulator under a regulatory framework that applies over an extended period. In many jurisdictions, this period can be five years, although for some assets it can be longer.

Due to the inelastic demand and regulated pricing, we saw many regulated assets perform quite resiliently during the pandemic, though we did observe some assets being impacted by heightened risks, including higher counterparty risk (as they depend on customers paying their bills), as well as increased regulatory risk in some jurisdictions.

3. Volume-based (or patronage-based) infrastructure

The third category — and, in our view, the most impacted by COVID-19 — is volume-based infrastructure or patronage-based infrastructure. These are assets like airports, toll roads and seaports that have revenues reliant on the level of usage.

Still, even within this sector, we saw different assets perform differently. Toll roads were impacted by lockdowns as traffic movements were lower, but as lockdowns lifted movement quickly picked up.

It is clear that the airports sector has been greatly impacted due to ongoing travel bans. For example, passenger numbers at Australia's airports fell dramatically relative to pre-pandemic levels due to the restrictions.

4. Communications infrastructure

The fourth category is communications infrastructure, which includes assets like telecommunications towers, data centres and fibre networks.

The high demand for data due to increasing usage of things like streaming services and video conferencing meant this sector was already performing strongly pre-COVID.

The pandemic saw demand for data increase further as people moved work online and this, in our view, will mean communications assets will continue to do well.

So, what is the role of infrastructure in a portfolio?

People have different perceptions around this question, but we believe a well-diversified infrastructure holding in a broader portfolio can play a number of roles.

First, it can provide consistent returns. Infrastructure tends to be relatively resilient through market cycles. While it is not immune from the wider economic cycle, many infrastructure assets provide essential services that people use on a daily basis, which can provide resilience. Services like water and electricity enjoy relatively consistent levels of demand and are generally less influenced by economic factors and market cycles than other types of businesses.

Second, infrastructure can provide a portfolio with diversification. Typically, infrastructure has a low correlation to many other asset classes, which can help to lower overall portfolio risk.

Third, infrastructure has the potential to provide lower volatility and some level of drawdown protection when markets are falling due to the essential services nature of the assets. Though the flip side of this is that when equity markets are booming, infrastructure is unlikely to demonstrate the same type of returns.

Fourth, infrastructure can offer a level of inflation protection as many infrastructure assets have revenues that are linked in some way to inflation.

And finally, infrastructure can offer stable income to a portfolio as the revenues that many infrastructure assets generate are often set by regulation or under long term contractual arrangements.

So where to next for infrastructure?

As demonstrated by their performance during COVID-19, we believe each sector will likely perform differently as the world recovers from the pandemic.

While passenger movements at airports have been affected by the pandemic, in our view, there is a high level of pent up demand for travel, and we are likely to see passenger numbers bounce back relatively quickly as restrictions are eased. That said, we believe it will probably take several years for traffic to return to pre-pandemic levels.

Social infrastructure and regulated assets are likely to be fairly resilient in our view. Meanwhile, we believe communications infrastructure will likely continue to thrive as the demand for data continues to proliferate.

That means overall, we view the outlook for infrastructure as quite resilient.

We believe the essential services nature of these assets will likely continue to be attractive to investors due to their relatively stable cash flows, and, in our experience, as governments look to infrastructure as a means of driving economic growth, it is likely there will be further opportunities for investors.

John Julian is Fund Manager of AMP Capital Core Infrastructure Fund and Managing Director at [AMP Capital](#), a sponsor of Firstlinks. This article has been prepared for the purpose of providing general information, without taking account of any particular investor's objectives, financial situation or needs. For a list of sources and important disclaimer information, see the [here](#).

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The three prices that everyone should worry about

Andrew Canobi, Joshua Rout, Chris Siniakov

"... is my math basically correct that if there were 100 basis point increase in interest rates, 1% increase in interest rates when we're looking at a \$27 trillion debt, you're looking at more than a \$200 billion a year additional mandatory interest payment ... and if you extrapolate that on a 10 year basis ... that'd be close to an additional \$2 trillion over 10 years of mandatory spending? Is there, Madam Secretary, anything faulty with that analogy or my math?" - Senator Mark Warner September 2021

"I don't believe there's anything at all faulty about the math." - US Treasury Secretary Janet Yellen September 2021

A wise analyst once pointed out that there are three prices that ultimately matter for the world. One is the price of oil. Two is the value of the US dollar. And three is the US 10-year treasury yield. These represent:

- the price of energy which everyone relies on
- the price of the world's reserve currency, and
- the price of borrowing money.

When these prices rise it acts as a constraint on global growth. When they fall conditions improve. The bad news is that energy prices have been rising. Bond yields have been moving higher but are still relatively well behaved. The US dollar has been trending sideways but is well below its pre-pandemic levels.

It's not hard to reflect on why these can act as headwinds or tailwinds for growth.

1. Oil

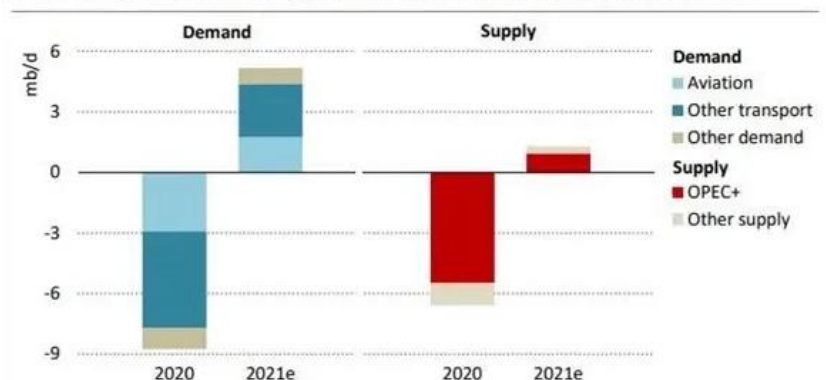
In a world that is furiously trying to decarbonise and shift its energy sources away from fossil fuels, the fact remains that the world is still massively dependent on carbon-based energy sources.

One doesn't need to be a seasoned commodity analyst to recognise that oil, in particular, is still the lifeblood flowing through the veins of global production. The graph below taken from the International Energy Agency clearly paints a picture of a strong recovery in energy demand since 2020 and a much more limited response in supply in 2021.

Rising energy prices represent a meaningful cost impost on business and consumers and whilst end prices and wages can eventually adjust, these take time. In short, the move acts as a tax on growth at least initially. We recently saw a study highlighting that the lowest 30% of US Income earners spend approximately 15% of after-tax income on energy (gasoline and heating costs).

Brent crude is up more than 20% in 2 months and at the highest level in 7 years.

Figure 2.9 ▶ Annual change in oil demand and supply, 2020 and 2021



Oil demand is rebounding in 2021, but remains well below 2019 levels. OPEC+ countries absorbed most of the supply shock in 2020 and are now gradually unwinding these cuts

Natural gas prices are up more than 80% this year and, granted are off their recent highs, are suggesting a perfect storm for gas dependent regions such as Europe going into winter where low storage levels and dwindling swing supply sources are exacerbating the problem.

Energy prices are flashing red at the moment. They're not a positive sign of strong demand so much as a function of insufficient supply as the post-COVID opening progresses. Indeed, activity leading indicators continue to soften led by China, reminding us that this is not your garden variety recovery.

2. The big dollar

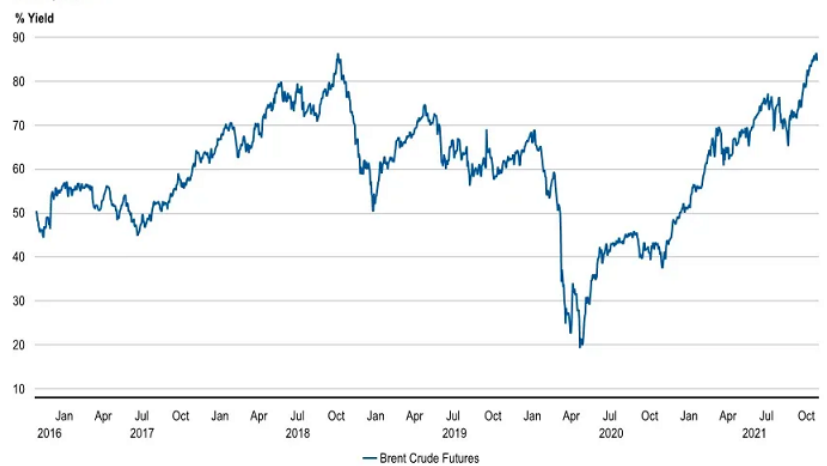
The value of the US dollar matters because the world is short the currency that it requires to do business. Indeed oil, like other commodities, is transacted in US dollars. In addition, the global stock of debt denominated in USD is gargantuan, continues to grow and so any increase in the USD acts to tighten financial conditions. Emerging markets with current account deficits are particularly vulnerable to a stronger USD but in general the world doesn't work well with the big dollar surging.

The good news is the US dollar has risen but is still well off the highs of levels in 2018/19. Were the US dollar to start to appreciate, alongside higher commodity prices we would worry even more than we currently do. In fact, the Bloomberg US Dollar Index which measures the US dollars against key currencies is well below its pre-pandemic levels.

3. US 10-year yields

The third price that matters is the yield on the US 10-year treasury bond. It matters because no other interest rate forms the basis of present value discounting models of the world's assets. No other rate is more significant in setting the benchmark for term funding for the world. The higher it goes, the more vulnerable asset prices become. Moreover, in a world drowning in debt, the higher nominal yields rise, the more nominal income has to rise just to preserve debt serviceability. And of course, the USD is not only the world's most used currency but the world's most borrowed-in currency. Just ask central

Brent Crude Futures
Last 5 years



Source: Franklin Templeton, Bloomberg, Macrobond.

Bloomberg US Dollar Index



Source: Franklin Templeton, Bloomberg, Macrobond.

US Fed Funds Rate and US 10yr Treasury Yield



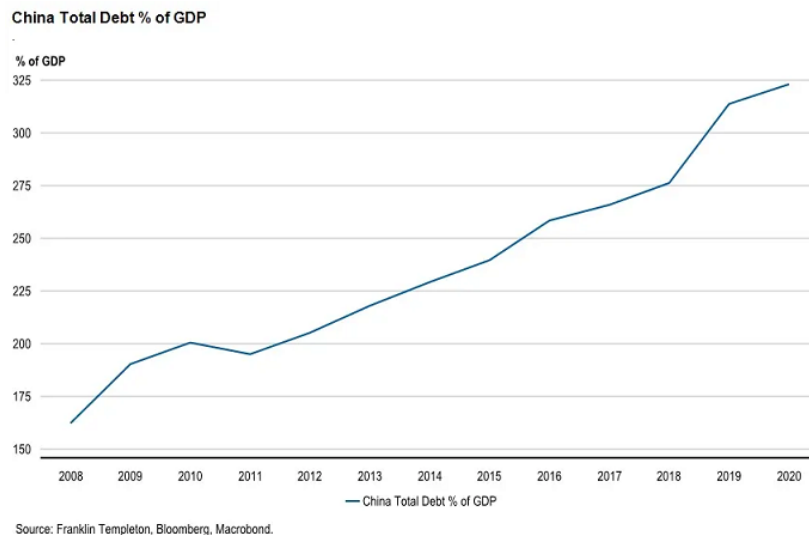
Source: Franklin Templeton, Bloomberg, Macrobond.

bankers across the emerging world how they feel about a rising USD.

Although yields have adjusted higher, they of course are so far somewhat contained and just below highs seen in Q1 2021. In a longer-term context, they remain low. Where we expect they stay.

The post COVID world is limping out of the pandemic with record levels of debt. Consider the following:

- BIS data shows that in 2007 Debt/GDP in all Emerging Economies was 124%. In 1Q 2021 it was 236%.
- Advanced economy debt/GDP has gone from 242% to 309% over this period.
- In case you wonder why Europe's negative interest rates are probably here as long as the European Union remains in existence, France's debt/GDP has increased from 223% to 371%!
- Perhaps most worryingly of all, China's total debt-to-GDP ratio has doubled from ~160% of GDP in 2008 to 322% of GDP by 1Q 2021. The most rapidly growing, reliable source of global growth post GFC did so on a credit binge that is now of course being rapidly reined in.



With interest rates still relatively low, the US 10 year is signaling that all is well for the moment. Your writer found it utterly astonishing recently that the current US Secretary of the Treasury, Janet Yellen, when asked about the surging level of US government debt as part of a testimony to the US Senate responded that it wasn't a concern given the low level of interest rates.

That sounds remarkably like a sales pitch to a sub-prime mortgage borrower that a short term artificially low teaser rate is a good measure of long-term home loan affordability. If only the US Treasury adopted APRA's approach of requiring Australian lenders to stress would-be home loan borrowers by adding 3% to the proposed interest rate.

At the moment, markets aren't buying into the media-driven inflation hyperbole which continues to be dominated by click-bait around shortages here and there which look to be easing slowly. If they were to, we would see expectations for higher interest rates surge which could drive 10-year yields higher and certainly strengthen the US dollar as the likelihood of the Federal Reserve lifting rates aggressively was priced.

A stronger USD driving borrowing costs higher at a time when the world is once again short oil and energy products would be disastrous for the uneven, unconvincing highly indebted post-COVID recovery.

For now, one out of three is manageable.

Andrew Canobi is a Director, Fixed Income; Joshua Rout, CFA, is a Portfolio Manager and Research Analyst, Fixed Income; and Chris Siniakov is Managing Director, Fixed Income at [Franklin Templeton](#), a sponsor of Firstlinks. This article is for information purposes only and does not constitute investment or financial product advice. It does not consider the individual circumstances, objectives, financial situation, or needs of any individual.

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Why green hydrogen is central to achieving net zero

Michael Collins

The US has launched a 'hydrogen shot' known as '111' for one dollar for one kilo in one decade. The UK intends to be the 'Qatar of hydrogen'. Japan wants to be a 'hydrogen society'. China, with 53 projects underway, is a 'potential hydrogen giant'. Australia's government is investing \$1.2 billion to fulfil a national hydrogen strategy. Similar promises gush from other countries to total at least 50 worldwide.

Will green hydrogen save us?

More than 350 hydrogen projects are proceeding and US\$500 billion is invested by 2030. Fortescue Future Industries says it will spend possibly more than \$1 billion to build in Queensland the world's largest electrolyser facility that through the process known as electrolysis would double global green hydrogen production capacity. "Green hydrogen can save us," Fortescue proclaims.

Green hydrogen is central in the drive to net zero emissions because electrolysers that split water into its two elements of hydrogen and oxygen produce energy that is emissions-free. As well as being a clean fuel that burns to high temperatures, green hydrogen is an energy carrier and an input for synthetic fuels. The combustible element is light, energy dense by weight and can be stored and transported. Like fossil fuels, hydrogen can be combusted for industrial and household use, in stationary and mobile applications.

The potential 'missing link'

Hydrogen might be the most plentiful element in the solar system, but it is only found in nature as a compound in gas, liquid or solid form. The element must be extracted, that is, manufactured. 'Green', 'renewable' or 'clean' hydrogen means the element was extracted from compounds using renewable power. The 'green' distinguishes these clean molecules from cleanish 'blue' hydrogen and dirty 'brown' hydrogen.

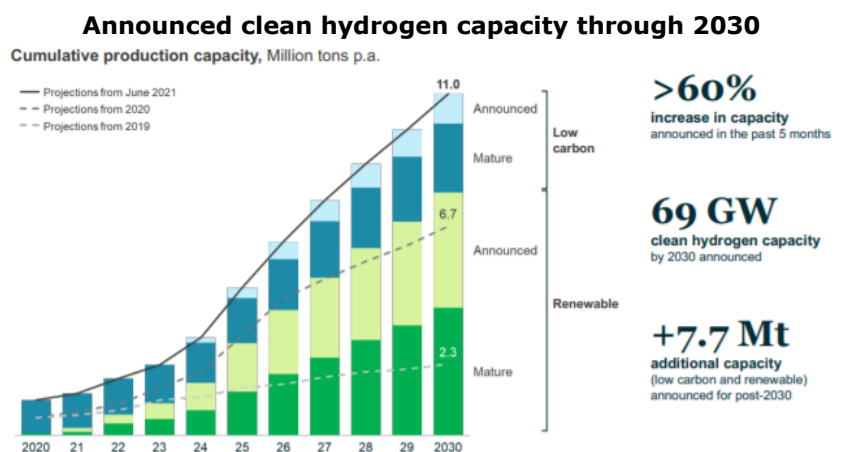
Brown hydrogen is derived when CO₂-polluting fossil fuels react with steam during a simpler and cheaper extraction process called steam methane reformation. Almost all the hydrogen produced today is dirty hydrogen, which has been used for decades in oil refining and to produce ammonia for explosives and fertiliser. Blue hydrogen is obtained using fossil fuels where the carbon produced is captured and stored.

According to the global industry body, the Hydrogen Council, announced clean hydrogen production capacity currently stands at 11 million tons of hydrogen by 2030. If achieved, that would be an increase of 450% on 2019 levels and compares with (almost all dirty) hydrogen production today of about 70 million tons. About 70% of the flagged production by 2030 would be green hydrogen, while the other 30% would be blue.

Hydrogen, first used to propel the earliest internal combustion engines 200 years ago, is poised to help the world fight climate change for two main reasons.

First is that clean hydrogen helps to overcome the unreliability of solar and wind power. Hydrogen can make renewable grids reliable because it is easily stored as an energy source and dispatched when needed.

The **second** advantage of hydrogen is that it can replace fossil fuels used in manufacturing where furnaces need to reach 1,500 degrees Celsius. That hydrogen can replace the fossil fuels blamed for 20% of global carbon dioxide emissions means the element is the 'missing link' in decarbonising the 'hard-to-abate' areas of manufacturing, where electricity is not suited to generating the heat required.



Source: [Hydrogen Council Insights Report, July 2021](#)

What's not to like about hydrogen?

The element's big drawback is that it is more costly than dirty alternatives because it is expensive to manufacture.

As a general rule, renewable hydrogen is about two to three times more costly to produce than fossil-fuel-based hydrogen. In the Australian context, the cost of green hydrogen needs to plunge from an estimated \$8.75 a kilo now to below \$2 a kilo to be as cheap as fossil fuels. For the US to achieve its '111 shot', the cost of clean hydrogen must plunge by 80% from US\$5 a kilo.

Hydrogen will become cost competitive if:

1. Electrolysers become cheaper due to technological advances and economies of scale
2. Renewable power becomes more affordable, and
3. Producers can achieve economies of scale.

Governments, for their part, need to offer subsidies that encourage demand and supply. Another option is they could make clean energies more price competitive by legislating a tax on carbon.

As governments are providing the catalyst to engender the required economies of scale, Bloomberg New Energy Forum forecasts green hydrogen's cost could drop to US\$2 a kilo by 2030 and US\$1 a kilo by 2050 by when the element could supply up to 24% of the world's energy needs. A world looms where clean hydrogen might play a defining role in helping the drive to net-zero emissions. The split between green and blue will depend on reducing the cost of green.

Major technical challenges, but we've only just started

To be sure, doubts surrounding carbon capture and storage undermine blue hydrogen's environmental credentials. Hydrogen, the lightest gas in the universe, is not dense by volume. This means it must be pressurised to pipe or liquified to ship, which adds to costs. Hydrogen is volatile and can explode. Solutions other than hydrogen could overcome the intermittent handicap of renewable power. Beware too that two decades ago, hydrogen was touted as an energy solution. Yet today the green hydrogen industry still barely exists.

But that's a reason for optimism.

The push to derive the economies of scale needed to lower the price of hydrogen have barely started. Yet electrolyser costs have dived by around 60% over the past 10 years, and the coming economies of scale are expected to lead to a further halving by 2030, according to the financial-sector-backed Sustainable Markets Initiative, which expects green hydrogen to be price competitive against fossil-fuel-based hydrogen by 2030.

If so, the countries hyping the element are likely to fulfil their hopes for an element that today shapes as a key technological pathway to net zero emissions.

Michael Collins is an Investment Specialist at [Magellan Asset Management](https://www.magellangroup.com.au/insights/), a sponsor of Firstlinks. This article is for general information purposes only, not investment advice. For the full version of this article and to view sources, go to: <https://www.magellangroup.com.au/insights/>.

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Maximising your property tax depreciation and claims

Tuan Duong

Property investors are always looking for ways to reduce their tax liability. One way of reducing the taxable income from your investment property is by claiming depreciation deductions on items such as carpets, appliances and fixtures.

There are some important rules imposed by the Australian Tax Office (ATO) that apply when it comes to claiming depreciation.

What is property tax depreciation?

Before delving into the details relating to Division 40 and Division 43 assets, it is important to have a foundational understanding of what property tax depreciation is and how it can benefit you.

As your building ages, it becomes subject to general wear and tear. Each year, the value of the building and its attached assets decrease, and this is known as depreciation. Depreciation applies to two different types of assets:

- Capital works (Division 43 assets)
- Plant and equipment (Division 40 assets).

But depreciation isn't necessarily a bad thing for property investors. The ATO allows investors to claim this loss in value as a tax deduction provided they are generating an income from their investment.

Claiming depreciation on Division 43 assets

Division 43 or capital works refers to the depreciation of the structure of the building. You can also claim capital works deductions on the cost of:

- structural improvements
- construction and extensions, and
- earthworks for environmental protection.

Examples of items where a capital works deduction can be claimed include:

- fencing
- driveways
- garages
- roofing
- paint
- tiling

The structure of residential and commercial buildings generally has an effective life span of 40 years. It's possible to continue claiming capital works deductions for 40 years from the date of construction provided income is generated from the property.

In circumstances where investors do not know the construction costs, a qualified Quantity Surveyor will be responsible for estimating the cost of the building.

Whether a building qualifies for capital allowances is dependent on when it was built and the type of property.

Construction Year	21 Aug 1979	20 July 1982	22 Aug 1984	18 July 1985	16 Sept 1987	27 Feb 1992 to Present
Structural Improvements						2.5%
Residential				4%	2.5%	2.5%
Offices, Warehouses & other Commercial		2.5%	4%	4%	2.5%	2.5%
Manufacturing		2.5%	4%	4%	2.5%	4%
Hotels, Motels & Guest Houses	2.5%	2.5%	4%	4%	2.5%	4%

Key: 2.5% 4%

Source: [Duo Tax](#)

What are Division 40 assets?

The term Division 40 refers to the plant and equipment assets found within the investment property. These assets are generally easily detachable from the property.

Unlike capital works which depreciate over 40 years, plant and equipment fixtures depreciate at a rate according to the [ATO's Asset Effective Life Schedule](#), which gives guidance on how many years an asset is effective before it's worn out. The ATO recognises more than 6,000 different assets that investors can claim tax deductions on.

For example, a carpet, which is subject to wear and tear, has an effective life of eight years. Other examples of Division 40 assets include:

- air conditioning unit
- oven and rangehood
- blinds
- carpet
- light shades
- ventilation fan

Depreciation methods

Investors can use two methods to calculate the depreciation on plant and equipment assets:

- diminishing value method
- prime cost method.

Although the end value is the same, investors typically prefer the diminishing value method to allow for a higher depreciation deduction in the first few years.

For example, according to the ATO, a dishwasher has an effective life of 10 years. If an investor depreciates it using the diminishing value method at a rate of 20%, they can claim a deduction of \$2,000 in the first year. In the following year, reduce the base value (i.e. \$10,000) by your previous claim, so claim 20% on \$8,000. And depreciation will continue until it reaches a value of less than \$1,000.

When the value is below \$1,000, the depreciation rate increases to 37.5% (as per low-value pooling).

A low-value pool is a group of assets that have a value of less than \$1,000. Investors can pool low-cost assets (i.e. assets that cost you less than \$1,000 to purchase) and low-value assets together and depreciate them at a much faster rate.

The ATO allows investors to write off eligible plant and equipment assets that cost less than \$300 as a full deduction in the year the asset was purchased.

Changes to Division 40 claiming laws

After the Federal Budget in 2017, a few new rules were introduced regarding tax depreciation that would impact your claim depending on when you acquired the property:

Before 9 May 2017	After 9 May 2017
A property investor can claim depreciation on plant and equipment that form part of the property they purchased, according to a Quantity Surveyor's assessment of the asset's remaining life and value.	Depreciation only applies for costs on new plant and equipment you paid for and installed or plant and equipment that were included as part of the new property.

This means that investors cannot claim deductions on plant and equipment bought by the property's previous owners.

Closing remarks

To maximise tax deductions on Division 40 and Division 43 assets, investment property owners need a tax depreciation schedule. It is a comprehensive report detailing the claimable deductions on an investment property.

The purpose of a tax depreciation schedule is to outline the value of both the Division 40 and Division 43 assets, as well as how much it has depreciated and will depreciate. This will include a calculation of tax deduction claims.

The tax depreciation schedule document is typically prepared by a professional quantity surveyor, who will inspect your investment property and assign a value to each asset. A single schedule provides 40 years of claimable deductions (or the maximum entitled years). It will help to reduce taxable income and realise a positive cash flow sooner.

Tuan Duong is the Principal and Founder of [Duo Tax Quantity Surveyors](#). He is a professional member of the Australian Institute of Quantity Surveyors and a Registered Tax Agent, authorised to offer advice on matters related to depreciation. This article is general advice and does not consider the circumstances of any person.

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