ERIKSENSGLOBAL

Actuaries & Investment Strategists

MARKET PERFORMANCE AND COMMENTARY - APRIL 2022

MARKET PERFORMANCE

Index	Index	1 Month	3 Month	1 Year
	Level/Price	%	%	%
Global Equities				
MSCI World NR	6,599.88	-6.9	-6.5	-0.1
MSCI World NR (NZD)	13,071.86	-1.7	-7.1	6.7
MSCI Emerging Markets	673.06	-3.5	-7.8	-14.4
S&P 500 (US)	4,131.93	-8.8	-8.5	-1.2
Nikkei 225 (Japan)	26,847.90	-3.5	-0.6	-6.8
FTSE 100 (UK)	7,544.55	0.4	1.1	8.2
DAX (Germany)	14,097.88	-2.2	-8.9	-6.9
CAC 40 (France)	6,533.77	-1.9	-6.6	4.2
Trans-Tasman Equities				
S&P/NZX 50	11,884.30	-1.9	0.0	-6.7
S&P/ASX 300	86,742.66	-0.8	8.2	10.2
Bonds				
S&P/NZX NZ Govt Stock	1,694.22	-2.4	-5.6	-10.0
S&P/NZX A Grade Corporate	5,451.98	-1.6	-3.9	-7.2
Barclays Global Agg (Hedged to NZD)	393.77	-2.8	-6.0	-6.6
FTSE WGBI (Hedged to NZD)	3,397.50	-2.9	-6.0	-6.5
Oil				
West Texas Intermediate Crude	104.69	4.4	18.8	64.7
Brent Crude	106.58	0.0	17.2	60.2
NZD Foreign Exchange				
AUD	0.9133	-1.4	-2.0	-1.7
EUR	0.6152	-1.6	5.0	3.2
GBP	0.5170	-2.1	5.6	-0.2
JPY	84.0909	-0.4	11.1	7.2
CNY	4.3108	-2.4	2.9	-7.1
USD	0.6491	-6.7	-1.2	-9.5

Source: Nikko AM, indices are in the local currency of the asset unless otherwise indicated.

Executive summary:

- · Geopolitical risks are still high
- China's lockdown is affecting supply chains and disruptions have worsened
- Oil prices stabilised around \$100 per barrel
- Inflation is at record high levels in major economies
- New Zealand dollar depreciated against main currencies

ECONOMIC COMMENTARY

GLOBAL SNAPSHOT

Geopolitical and financial instabilities appear to have no sign of abating. The war in Ukraine continues at a high humanitarian cost and with signs of escalation. China's battles with COVID-19 continue. These factors are adding to growth fears. When investors can focus on something other than these concerns, attention shifts to inflation and a Federal Reserve-induced recession.

Inflation is certainly high: US headline CPI hit 8.5% year-over-year in March - the fastest pace since 1981. There are signs that price increases are broadening. There are some worrying trends - including accelerating service sector inflation, uncertainty over the direction of oil prices, and a near-record level of job vacancies in an already tight labour market.

The Fed raised interest rates by 0.5% on May 5, and the market rallied when Fed Chair Jerome Powell also said they were not "actively considering" a 0.75% hike next month. Most analysts still believe the Fed will raise rates by 0.50% again at its next two meetings in June and July. The Reserve Bank of Australia Board lifted the cash rate by 0.25%, further than most analysts' forecast of 0.15%. That surprise emphasises that the Board believes it has a daunting task to bring underlying inflation back from its forecast 4.75% to the top of the 2-3% band by mid-2024. Accordingly, experts have lifted the forecast for the next move in June from 25 basis points to 40 basis points.

The eurozone economy expanded 0.2% sequentially in the first quarter, as surging commodity prices and disruptions related to Russia's invasion of Ukraine weighed on the pace of growth. This preliminary estimate was less than the 0.3% forecast by the European Commission just before the war started. Germany's GDP grew 0.2% in the first quarter, while France's economy stagnated. Italy's GDP contracted 0.2%. Inflation in the euro area accelerated to 7.5% in April, reaching the highest level since the euro was launched.

The EU's new sanctions package included a ban on Russian oil purchases within six months. Hungary is opposing the oil ban, splitting the European front.

LOCAL SNAPSHOT

Statistics NZ released the March 2022 quarter consumer price index data indicating it had increased 6.9% compared with the March 2021 quarter, the most significant movement since a 7.6% annual increase in the June 1990 quarter. In three decades, consumer prices rose at the fastest pace, underlining the need for the central bank to stay on its hawkish course to contain price pressures without tipping the economy into recession.

The New Zealand dollar slipped after the data showed inflation was not quite as hot as feared though, slightly softening expectations the central bank would again hike rates by 50 basis points in May. The RBNZ raised interest rates by 50 basis points to 1.50% at their 13 April meeting. It is the fourth increase in a row as signalled by the Bank at the end of last year. The RBNZ has confirmed that further hikes will be needed to curb inflation.



Inflation pressures were broad-based with domestic price pressures continuing to intensify. Statistics NZ data showed rising food, petrol, construction, and housing prices.

Q1 data confirmed that the NZ labour market is highly stretched. The Q1 unemployment rate held at a 3.2% record low for the post-1985 quarterly history of the Household Labour Force Survey. There were signs that the Omicron outbreak disrupted the labour market. Wage growth accelerated to its highest annual rate since the GFC, and there is the risk that increases will become more broad-based over 2022. The phased relaxation of border restrictions could tighten the labour market further as Kiwis head offshore on a belated overseas experience and to take advantage of the higher wages on offer before a turnaround in net immigration alleviates labour shortages.

New Zealand businesses remain downbeat about the economic environment. The latest ANZBO survey showed that 42% of companies expect overall economic conditions to weaken over the coming year. That's unchanged from last month's very low level.

New Zealand businesses are still grappling with several challenges, including shortages of materials and staff. But the biggest worry for businesses currently is the rise in inflation. Operating costs, including wages, have been rising rapidly, and companies don't expect much relief over the coming months. Additionally, many businesses will also be feeling the pinch from the rise in borrowing costs.

WORLD FINANCIAL MARKETS

Equities

Equity markets saw further falls in April. Global shares were hit by the ongoing war in Ukraine, lockdowns in China, continued supply chain disruptions, and expectations that US interest rates could rise swiftly. US shares were sharply lower after disappointing updates from some previously fast-growing companies. Bond yields continued to rise as markets anticipated significant interest rate hikes.

In the US, the S&P 500 fell by 8.8% in April. The major indices endured a fourth consecutive week of losses as growth fears were compounded by some disappointing earnings results from Amazon which has a heavy weighting in many major indices. The S&P 500 moved further into correction territory, down roughly 14% from its most recent peak. At the same time, the technology-heavy Nasdaq Composite and small-cap Russell 2000 fell further into bear markets, down approximately 24% from their highs. Energy stocks outperformed within the S&P 500 after Russia announced cutting off natural gas exports to Poland and Bulgaria.

In Europe, the Euro Stoxx 50 pulled back -2.0% in April on concerns about slowing economic growth, high inflation and tightening monetary policy. Encouraging quarterly earnings reports may have helped to moderate these losses. France's CAC 40 slid -1.9%, Germany's DAX gave up -2.2%. In the UK, the FTSE 100 advanced 0.4%.

March's respite from stock market declines ended with both the S&P/ASX 200 and S&P/NZX 50 Portfolio declining 1% in April. On the positive side, New Zealand's micro-caps gained 1% this month whilst Australian large-cap equities managed to hold on to their positive year-to-date return of 1%. Most S&P/ASX sectors



finished the month higher; declines in the heavyweight materials segment dragged down the benchmark. Utilities led the charge rising 9%, followed by industrials and consumer staples with 3% apiece. In line with the global trend of "big tech" underperformance this month, information technology sunk 10%.

Fixed Interest

In April, bond yields continued to rise, resulting in further negative returns amid continued high inflation and expectations of significant interest rate hikes. Investors continued to weigh up the uncertainty of the war in Ukraine and the resulting disruption to supply chains. Concerns over the global growth outlook have begun to mount, too, with China maintaining stringent lockdowns to tackle Covid-19. After decreasing early in the last week of the month, the 10-year US Treasury yield ended near where it began, seemingly pushed higher on 29 April, in part, by the favourable consumer spending data. It ended the month at 2.94%, increasing four basis points from 2.90%.

Core Eurozone bond yields fell as mounting concerns about inflationary pressures and weakening economic growth increased demand for high-quality government bonds. Over the week, the German 10-year bund yield decreased three basis points to 0.94%, down from 0.97%. UK government bond yields broadly tracked core markets. The 10-year gilt yield ended the week six basis points lower, down from 1.96% to 1.90%.

The US investment-grade corporate bond market traded lower as geopolitics, a drop in consumer confidence, and mixed corporate earnings results weighed on sentiment. New issuance was subdued and fell short of expectations. Recent new issues and liquid bonds outperformed older bonds later in the week. High yield bonds also moved lower, with higher-rated bonds faring better than lower-quality issues, while increases in commodity prices bolstered the performance of the energy segment. A few new deals were announced in the early part of the week.

TECHNOLOGIES

Drones can now plant trees and navigate dense forests in small swarms. Military applications still dominate the global drone market that's projected to grow to \$63.6 billion by 2025 (Figure 1). But their use in logistics, public safety, and other civilian endeavours has begun to pick up steam.

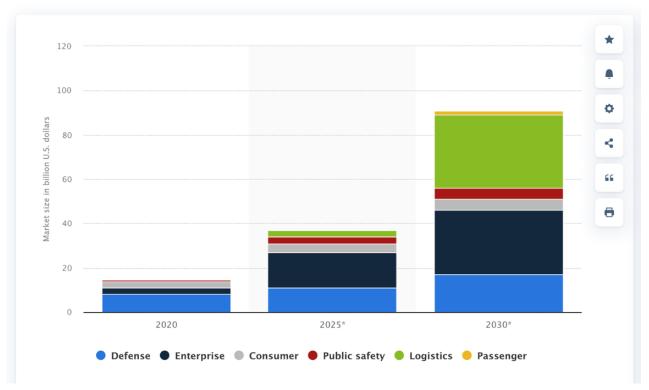
Australian start-up AirSeed Technologies combines artificial intelligence that can map out severely deforested areas with unmanned "octocopters." These octocopters can individually plant 40,000 seed pods per day. The company's aim is to plant 100 million trees by 2025, which it says can be done 25x faster and 80% cheaper than humans.



Figure 1

Drone market size worldwide from 2020 to 2030, by segment

(in billion U.S. dollars)



Source: Statista

In China, researchers from Zhejiang University created a group of 10 drones, each small enough to fit in the palm of the hand. These drones work together in a swarm to navigate dense forest areas without any human guidance. The swarm shares information amongst itself to help each individual drone navigate around obstacles.

So far, drones have played a central role in the West's military endeavours. Drones most recently made headlines for their use on the battlefield, where they helped both Russia and Ukraine launch attacks during weather events that grounded planes and helicopters. But new capabilities and uses for drones can potentially make life safer for people all over the world. Developers have also created drones that can land on a vertical wall like an insect, pick up trash from waterways, or even carry passengers. They can also help to rehabilitate areas that have been ravaged by ecological disasters. As the market for drones continues to grow steadily, so too will their ability to both enable and mitigate destruction.

India's new super app Tata Neu (a personalised shopping experience) received over 2.2 million downloads in its first week. But it now faces privacy concerns over pre-loaded personal data that was acquired without user consent.

Japan has approved production of a long-distance hydrogen carrier vessel from Kawasaki Heavy. The ship has 100x the hydrogen carrying capacity of previous models. Its new engine could soon make liquid hydrogen the fuel of choice for long-distance maritime travel.

Hong Kong will trial a robotic marine trash collector that clears plastic waste from harbours, lakes, and canals. The autonomous device from Clearbot scoops up floating debris and has a 200kg carrying capacity.

Researchers have created plant-wearable devices that will help farmers and gardeners monitor plant health. The wearable sensors detect plant water loss and drought stress before visual signs start.

GEOPOLITICS

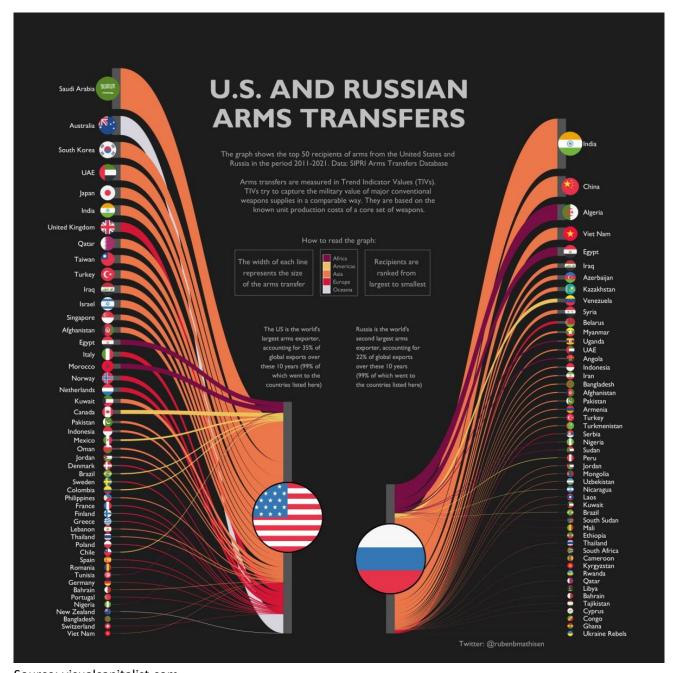
All eyes have been on the Russian-Ukrainian conflict since late February. Russia is slowly advancing deep into central regions from the east and south. Azovsteel plant, the last stand of defence in Mariupol, is experiencing daily bombing. However, Red Cross and other humanitarian organizations managed to help evacuate 300 people from the shelter in the Azovsteel plant.

Still, Russia has not declared war on Ukraine. Experts were expecting that Russia would declare it on 9 May, Victory Day (end of World War II) and announce mobilization to support the invasion in Ukraine.

Each side of the conflict is working on building a relationship with allies. Russia's supporters are generally buyers of commodities (grain and energy resources) or armaments. The below chart (Figure 2) shows the main trade partners of the US and Russia in armament supplies. Interestingly, India is purchasing weapons from the US and Russia; however, more tilting towards the latter and buying heavily discounted oil. Another reason is that Russia also transfers technology to the Indian army to develop its own weapons while the US sells the armament without technology.



Figure 2



Source: visualcapitalist.com

China is strengthening its position in the Asia-Pacific region. The recent treaty with the Solomon Islands increased the tensions in the region, and Australia and New Zealand raised their concerns about the growing military presence of China. Apart from the Solomon Islands, China is upgrading its naval base in the Cambodian Ream. Is it preparation for the next conflict?

GLOBAL SUPPLY CHAIN

Since the onset of the global pandemic, China has mandated a strict "zero COVID" policy, which has led to tight lockdowns across the country whenever cases have started to spike.

Recently, lockdown restrictions have been enacted in major cities like Shenzhen and Shanghai as China deals with one of its worst outbreaks since Wuhan in December 2019. These cautionary measures have had farreaching impacts on China's economy, especially its supply chain and logistics operations. Shanghai's port system, which handles about one-fifth of China's export containers, is currently experiencing significant delays due to the recent government lockdown.

Shipping volumes have dipped drastically since early March this year, right after partial lockdowns began in Shanghai. As restrictions continued to tighten up by the end of March, shipping activity dipped nearly 30% compared to pre-lockdown levels (Figure 3). And while activity has recently picked up, it's still far below average shipment volumes before the recent lockdown.

Port of Shanghai, 14 day average maritime shipment volume (% change from Mar 12, 2022) 0% 0% Full lockdown -10% -10% begins in Partial Shanghai lockdowns begin in -20% -20% Shanghai -30% -30% Mar Mar Mar Mar Apr Apr Apr 15 20 25 30 10 15 Source: FourKites

Figure 3

Source: visualcpaitalist.com

While the port is still technically operating, shipping delays will likely cause hiccups in the global supply chain. That's because the Shanghai port is a major hub for international trade and one of the world's largest and busiest container ports.

BAN OR NOT TO BAN?

The EU members couldn't reach a consensus over a complete ban on Russian crude and refined fuels imports. The ongoing difficulties reflect that the measures lined up will be harrowing for some countries to absorb. Shutting down the EU market for Russian fossil fuels is seen as a critical strategy for denying Putin the revenue that is helping finance his war in Ukraine.

By April 27, the bloc had imported about €44 billion of fossil fuels from Russia by shipments and pipelines since the invasion began, according to the Centre for Research on Energy and Clean Air. Hungary and Slovakia, both heavily reliant on Russian oil, led the objections and, along with the Czech Republic, won concessions to have more time to comply with the ban. The Hungarian government again held up a deal and



warned that the plan to phase-out Russian oil would devastate Hungary's economy, likening the impact to a "nuclear bomb."

The European Commission proposes phasing out Russian crude oil within six months and refined oil by the end of the year. The most recent plans envisage giving Hungary and Slovakia until the end of 2024 and the Czech Republic until the end of June before the oil embargo kicks in. But one EU diplomat said the compromise did not go far enough for Hungary, saying Budapest is pushing to be exempted entirely from the oil ban. Hungary indicated they need five years at a minimum, pointing to their landlocked position and therefore more dependent on Russian oil than other countries that can receive the resource through their ports.

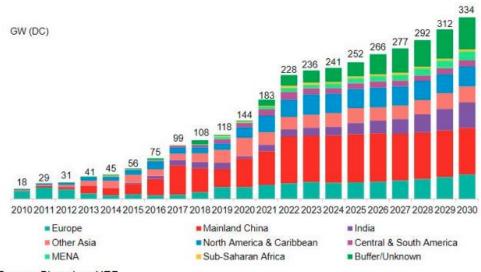
Bulgaria is also unhappy with the text and asked to get a more extended phase-out period too.

RENEWABLE ENERGY

As the solar industry booms, new commercial opportunities in panel recycling will emerge. The global volume of solar-panel waste is expected to rise to nearly one million tons per year. Although the waste currently generated is not enough to sustain large profits, the International Renewable Energy Agency (IRENA) estimates the recyclable panel elements could be worth \$450 million by 2030 (Figure 4).

Figure 4

Figure 1: Global PV installation estimate and forecast, as of January 2022



Source: BloombergNEF

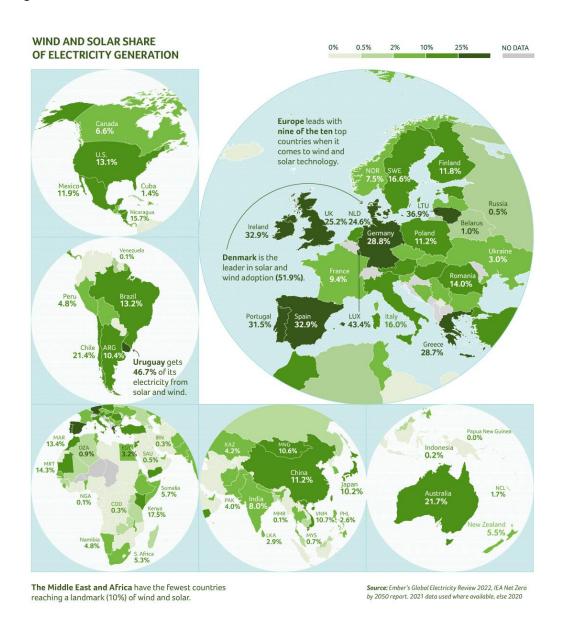
Solar panels are made to last up to 30 years. Currently, only 10% of panels are recycled in the US because the expense to recover and repurpose their materials outweighs the cost to dump them. Although 95% of the silicon and cadmium telluride in a solar PV module is recyclable, it costs up to \$45 to recycle each individual module compared to a few dollars at the landfill. One of the world's largest providers of solar panels is the Spanish utility Iberdrola SA. It projects the tipping point, when recycled photovoltaic (PV) panel materials become profitable, will take place in 2027.



Waste management is often overlooked in the race to decarbonize. As India and China ramp up their own solar power installation, these regions lack waste disposal networks, recycling infrastructure, and proper regulations. The EU currently requires 85% collection and 80% recycling of the materials used in PV panels. To meet these regulations, French start-up Rosi Solar has developed a novel solution to extract and reuse raw materials from solar panels. German researchers also recently produced solar cells from 100% recycled silicon. In total, the market for recyclable materials from solar panels is poised to hit \$15 billion by 2050. End-of-life panel recycling could provide a new revenue stream and make solar energy a truly sustainable resource.

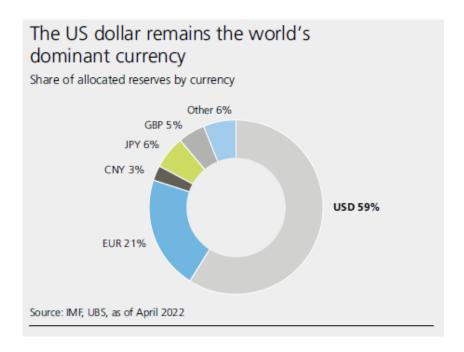
The development of renewable energy sources could minimize the dependence on fossil fuels and the carbon emissions. The leaders in wind and solar energy are European countries, while the lowest levels are in Africa and Asia (Figure 5).

Figure 5



END OF US DOLLAR DOMINATION

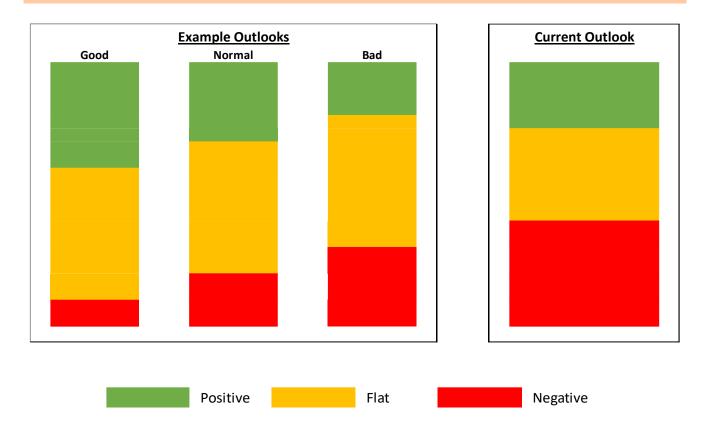
US financial sanctions on Russia have "weaponized" the greenback. These measures have reignited the debate about the dollar's reserve currency status, with some voicing concerns that sanctions will undermine trust in the currency. Others suggest that China's growing economic strength will lead to greater renminbi adoption as a reserve currency. Proponents of cryptos argue that traditional fiat currencies will be replaced by digital currencies including a renminbi version. Should investors be concerned about a decline in the dollar's dominance and even a loss of its reserve status? It is unlikely in the short term, however, tectonic movement towards reducing the weight of the US dollar is increasing in speed.



The Chinese and Russian central banks are discussing the use and promotion of their respective national payment systems (Mir and UnionPay) in both countries according to Beijing's envoy to Moscow. Chinese banks also started discussions how to minimize the dependence on SWIFT considering sanctions against Russian banks.

India and Iran are in discussion of paying in rupees for the oil similar to Indo-Russian arrangements.

MARKET OUTLOOK



The current market is less likely to have a good return (green) as an average return (amber) over the next two to three years. It is more likely to have a bad return (red).