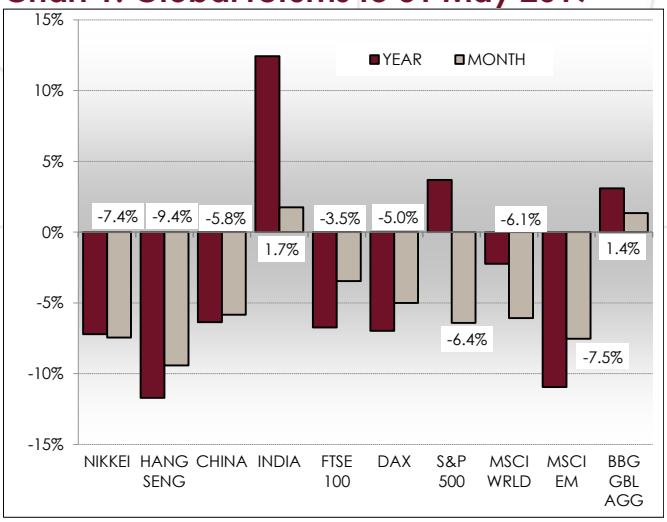
May in perspective – global markets

Last month we began our letter by talking about the "pain trade", referring to how painful it must have been for those sitting on the sidelines of equity markets to see the latter rise so strongly so far this year. Well, this month the pain trade was on the other foot, as global equity markets dropped in brutal fashion.

The single largest catalyst was Donald Trump's tweet on 5 May that the US would proceed to impose tariffs on certain Chinese imports, despite only days before having led investors to believe that "all was well" with regard to the US China trade discussions and that an agreement was imminent. The actions and verbiage directed against Chinese network equipment company Huawei, and later against Mexico in the form of a threat of tariffs on all Mexican imports into the US, only served to exacerbate the nervousness and uncertainty.

Chart 1: Global returns to 31 May 2019



Global investment markets thus experienced a terrible month – the worst in many years – but we must also remember how robustly they began the year, following the sell-off in December. Notwithstanding the precipitous declines in May, most markets are still showing respectable returns for the year to date. Developed and Emerging markets declined 6.1% and 7.5% respectively (for year-to-date respective returns of 8.6% and 3.4%). The NASDAQ index fell 7.9%, Japan 7.5%, Hong Kong 9.4% and the US equity market 6.4%.

Moonrise

Instagram handle: @veziphoto

The dollar was marginally firmer, but commodity prices tumbled as investor concern grew about the slowing global economy. The copper price fell 9.3% and the oil price 12.3%. The global bond market was firm, as investors changed their view that most central banks, including the US Federal Reserve, would be pressurized into cutting interest rates rather than hiking them. The Bloomberg Global Aggregate Bond index rose 1.4%, bringing its year-to-date return to 3.3%.

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

Cello player

Instagram handle: @annan.jasko

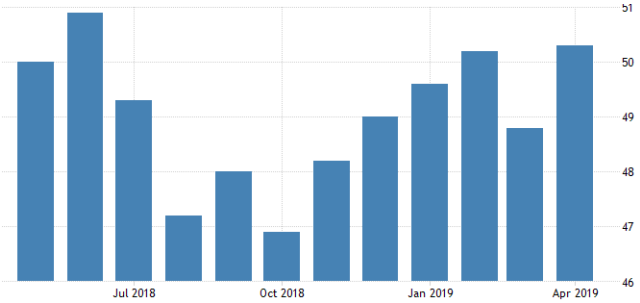
What's on our radar screen?

Here are a few items we are keeping an eye on:

- *The SA economy:* The SA Production Managers Index (PMI) rose back into expansionary mode – but only just. Where any index level above 50 represents growth, and below 50 contraction, the index rose to a level of 50.3 in April – refer to Chart 2. A lot of this had to do with the expectation that economic momentum would pick up after the election (the PMI reading was released two days prior to Election Day). The South African Chamber of Commerce and Industry (SACCI) business confidence index rose to 93.7 in April, up from the 7-month low of 91.8 in March (this reading was also released before the election).

As if we needed any reminding, the unemployment rate in South Africa remains sky-high: it rose from 27.1% during the December quarter to 27.6% during the March 2019 quarter (Q1). In reality all South Africans understand it is a lot higher than the official rate. The jobs data provided a window into the spectacular though highly undesirable implosion of the construction is apparent; that sector shed 144 000 jobs during the quarter. Even traditionally strong sectors are shedding jobs: the financial service sector shed 94 000 jobs. While most economists agree SA needs a sustainable rate of economic growth in excess of 5% to reduce unemployment, the economy hasn't grown by more than 2% since 2013; unemployment has now been above 20% since 2000. And yes, the government that presides over this economic tragedy has just been elected for another 5-year term. It would be naïve to expect things to get any better.

Chart 2: South African PMI



Source: Tradingeconomics.com

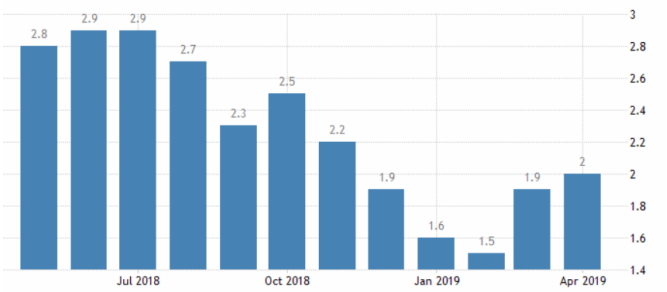
Moving on … retail sales during March declined 0.7% from February's level. February's monthly increase was 0.6% and January's 1.6%, highlighting the material slowdown evident. Retail sales have now risen only 0.2% during the past year, from an annual rate of 1.1% the month before. On the South African front, April's annual

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

headline inflation rate reading was 4.4%, down from March's 4.5% - the monthly increases were 0.8% in March and 0.6% in April. The inflation rate continues to surprize many, given how steeply the fuel price has increased over the past year. It also points to just how weak local consumer demand must be and how little pricing power the SA corporate sector now has. The core annual inflation rate, where the effects of volatile food and energy prices are excluded, is now 4.1%. As if to confirm all the negativity above, the SA economy declined by an annualized rate of 3.2% during the first quarter. The "growth" rate was expected to decline 1.7%, from the Q4 rate of 1.4%. The dramatic decline in Q1 brought the annual rate of growth to 0.0%, down from an annual growth rate of 1.1% last year.

- *The US economy*: Inflation remained relatively subdued; consumer prices rose 2.0% in April, up marginally from March's 1.9%, driven largely by higher energy prices. The core inflation rate, which excludes volatile food and energy prices, rose to 2.1%, from March's 2.0%. Moving one month forward, inflation eased a bit in May. Headline inflation declined from 2.0% to 1.8% in May, while core inflation fell from 2.1% to 2.0%.

Chart 3: US annual headline inflation rate (%)



Source: Tradingeconomics.com

US industrial production declined 0.5% in April, from March's levels, which in turn were increased to a monthly gain of 0.2%. April retail sales declined 0.2% month-on-month, versus the expectation of a rise of 0.2%. However, the monthly increase for March was increased from 1.6% to 1.7%. Excluding car (auto) sales, April retail sales rose 0.1% following an upwardly revised increase of 1.3% in March. The initial Q1 economic growth rate of 3.2% was revised down to 3.1%.

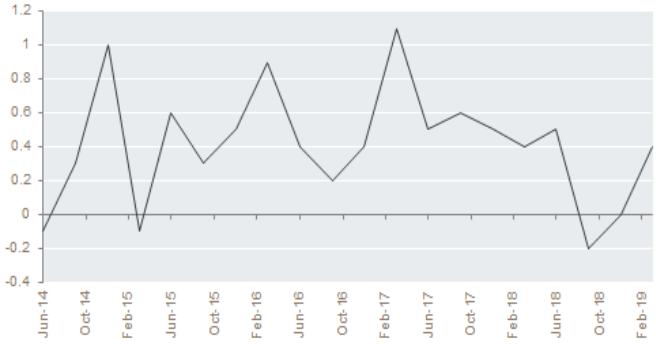
Cello player

Instagram handle: @annan.jasko

- *Developed economies*: economic growth in the United Kingdom (UK) during the first quarter of 2019 (Q1) occurred at a quarter-on-quarter rate of 0.5%, following a growth rate of 0.2% in Q4 of 2018. This brought the annual growth rate in Q1 to 1.8%, up from 1.4% in Q4. On the face of it that might look

impressive, but the growth was largely a function of a build-up in inventories and stockpiling – not surprizing when you consider the uncertainty surrounding Brexit, particularly as the original deadline was 29 March. It is consequently very likely that growth will slow during Q2 as the effects of stockpiling wear off. The German economy grew at a quarter-on-quarter rate of 0.4% during Q1, up from the 0.0% during Q4 last year and better than Q3's -0.2% - refer to Chart 4 in this regard. Q1 growth was driven by strong machinery and construction investment, as well as private consumption. Forecasts are for the German economy to grow by 0.8% during 2019. The growth in Germany helped lift the economic growth rate over the same period in the Eurozone bloc to 0.4% quarter-on-quarter, bringing the annual growth rate to 1.2%. The April reading of annual headline inflation in the Eurozone came in at 1.7%, driven by increases in energy, services and food, and alcohol and tobacco prices. May's inflation reading was lower, at only 1.2%. April core inflation came in at 1.3%, up from 0.8% in March. However, the Eurozone annual rate of core inflation in May returned to only 0.8%.

Chart 4: German economic growth
Quarter-on-quarter (%)



Source: EFG

Images from the Ilulissat Icefjord, Greenland

Instagram handle: @natgeo

The Japanese economy grew at a preliminary annualized rate of 2.1% during Q1, quarter on quarter, much higher than expectations of a decline of 0.2%. The Q4 growth rate was revised down to 1.6% from 1.9% initially. The biggest driver of growth came from net exports, as imports declined faster than exports. However, declining imports are indicative of weak underlying demand in the economy, so the growth is less impressive than it seems and left many economists scratching their heads. The Swiss economy grew 0.6% during Q1, bringing its annual rate of growth to 1.7%, up from 1.5% in Q4. Q1 growth was higher than expected, and was fuelled by consumer demand and investment, as well as the partial recovery in services, particularly financial services. As we speculated last month, the Reserve Bank of Australia reduced interest rates there by 0.25% to a record low of 1.25%. Although growth is slowing "Down Under" it is worth recording that Australia has not had a recession for 28 years.

- *Emerging economies*: The Indonesian economy grew at an annualized rate of 5.1% during Q1, down from Q4's 5.2%. The economy actually declined 0.5% quarter-on-quarter during Q1, but this was an improvement from Q3's contraction of 1.7%. The reduction was fuelled by a slowdown in the rate of infrastructure spending; gross fixed capital spending slowed to an annual rate of 5.0%, its lowest rate in two years. The government is targeting a 2019 growth rate of 5.3%. The 10-year government bond currently yields 7.3% and annual inflation is 2.8%. The Malaysian central bank cut the official interest rate by 0.25% to 3.0% amidst slowing growth and subdued inflation. The annual inflation is currently 0.2%, with prices having risen for the first time in March, since December last year. The government's official 2019 growth forecast is 4.9% although most other forecasts are lower, around 4.3% to 4.5%. Turning to New Zealand, the central bank there also cut interest rates, to a new record low of 1.5%. The annual inflation in New Zealand declined from a 1.9% increase during the December quarter to 1.5% during the March quarter. Expectations are that interest rates will be lowered again in August. The annual economic growth rate has declined consistently from 3.2% in the June 2018 quarter, to 2.6% in the September quarter and 2.3% in the final quarter of last year. Brazil's economy contracted for the first time in nine quarters, fuelling fears it may tip into recession. The economy registered a decline of 0.2% on a quarterly basis during Q1, although it grew 0.5% year-on-year. Gross fixed capital formation (investment) fell 1.7% as businesses awaited the outcome of government efforts to reduce spending. Industrial production also declined, partly due to the decommissioning of some dams by iron ore giant Vale following the deadly dam collapse earlier in the year.

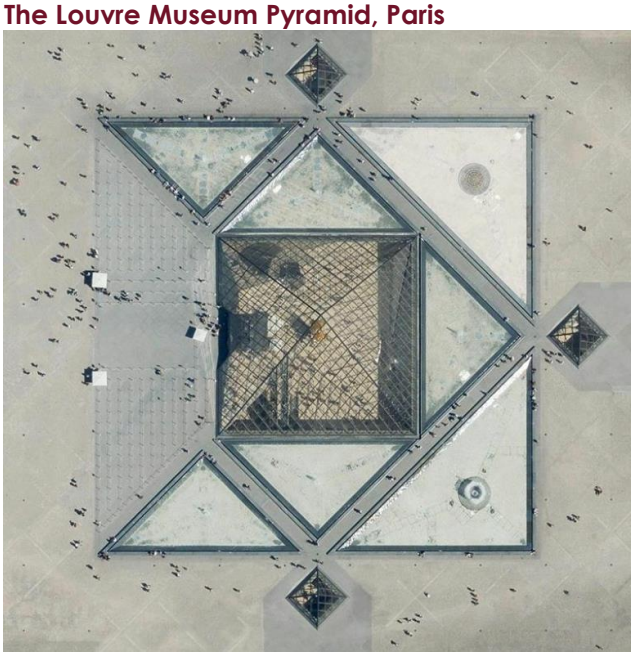
Ski turn tracks after a snowfall

Instagram handle: @natgeo

The usual raft of monthly data from China was disappointing: industrial production rose at an annual rate of 5.4%, below the 6.5% expected rate, retail sales rose 7.2% versus the 8.6% expected and March's rate of 8.7%, and fixed asset investment rose 6.1% versus expectations of a 6.4% rate of increase. Inflation rose to a 15-month high on the back of higher pork prices as a result of the outbreak of African swine flu. Inflation rose at an annual rate of 2.7% in May, up from 2.5% the month before. Pork prices posted an annual increase of 18.0% after more than 1m pigs were slaughtered.

Stripping out the 7.7% increase in food prices, core inflation rate i.e. excluding food and energy prices, actually declined from 1.7% in April to 1.6%. Thailand's economy grew 2.8% during Q1, a four-year low and a sharp decline from 3.6% in Q4. The slowdown was broad-based as private consumption and fixed investment stumbled in the face of political uncertainty. A decline in net exports also contributed to the slowdown despite increased government spending ahead of the election. The Turkish economy grew by 1.3% during Q1, but that was brought about largely by pre-election government spending in order to soften the blow from the currency crisis last year. An indication on how bad things are in Turkey can be gleaned from the annual rate of growth – in the year to end-March the Turkish economy contracted by 2.6%. And as if Donald Trump's surprize tweet imposing tariffs on Mexico wasn't enough, we learnt that the Mexican economy shrank by 0.2% in Q1, dragged down by a weak service sector. So with Latin America's two largest economies, Brazil and Mexico, both shrinking during the first quarter, and the chaos happening in Venezuela and Argentina, the prospects for that continent are suddenly getting very dark. Finally, the Reserve Bank of India (RBI) lowered interest rates by 0.25% to 5.75%, its third consecutive rate reduction. The Bank said concerns about slowing growth (the RBI lowered its growth rate for the economy from 7.2% to 7.0%) and inflation running below its medium-term target of 4%, were behind their decision to cut rates.

The Louvre Museum Pyramid, Paris



Instagram handle: @dailyoverview

Obituary: IM Pei, Niki Lauda. Doris Day?

Sadly, this month we have a number of candidates to write about. I found it hard to make a choice, but highlight three people who you may have heard of. Doris Day is probably well-known to our older readers, while IM Pei is less well-known. Born in Guangzhou, China, 102 years ago, Ieoh Ming Pei was regarded as the last great American Modernist. He is probably best known for the iconic glass pyramid entrance to the Louvre Museum in Paris. When Pei first proposed building a glass pyramid in the courtyard of the Louvre, there was outrage: "how could this American interloper defile the world's greatest museum?" Yet by the time it was completed in 1989 – on the 200th anniversary of the French revolution – it was greeted as a masterpiece. Even now, 30 years later, the pyramid and its triangular fountains are a daring solution to one of the world's most sensitive sites.

But as a lover of sport and follower of the Formula one circus, it was the passing of Niki Lauda that struck the saddest chord in me. Who will ever forget the terrible crash during the 1976 German grand Prix, in which Lauda sat in the midst of an inferno that was his car, while frantic marshals and fellow-drivers tried to pull him free? Pulled from the wreckage, he suffered severe burns and damage to his lungs. Sadly, it was while he was recovering from a lung transplant operation a few months ago, brought about by the damage to his lungs caused by that very accident, that eventually resulted in his death.

Boy in crowd

Instagram handle: @people_infinity_

Despite doubts he would survive or indeed ever race again, Lauda's determination to do so was extraordinary and just six weeks later he returned for the Italian Grand Prix, still bandaged and in pain after extensive surgery.

Sir Jackie Stewart, a three-time world champion who raced alongside Lauda in the early 1970s, described him as one of the bravest drivers in the history of the sport. "Niki had a degree of bravery that I had never seen the like of before," Stewart, 79, said. "I remember seeing Niki put his helmet on, and his wounds were still absolutely obvious. To be brave enough to put on the helmet was amazing, but then he went out and qualified fifth. He will not go down as one of the best drivers of all time, but one of the most courageous, too. Niki Lauda will be remembered forever."

Overall, Lauda competed in 171 races and won 25. He also actively pursued business interests including his own airline and went on to have senior roles in F1 management, most recently as non-executive chairman at the hugely successful Mercedes team since 2012.

Toto Wolff, the team principal at Mercedes, said: "Niki will always remain one of the greatest legends of our sport – he combined heroism, humanity and honesty inside and outside the cockpit. His passing leaves a void in Formula One. We haven't just lost a hero who staged the most remarkable comeback ever seen, but also a man who brought precious clarity and candour. Our Mercedes team has also lost a guiding light. Niki, you are quite simply irreplaceable, there will never be another like you. It was our honour to call you our chairman – and my privilege to call you my friend."

Nico Rosberg, F1's 2016 world champion with Mercedes, tweeted: "Dear Niki. Thank you for everything that you did for me. I learned so much from you. Your passion, your fighting spirit ... myself and all of your fans around the world are thinking of you and your family and wish that you Rest in Peace."

Lauda was born in 1949 and pursued a career in racing against the wishes of his family, taking out a personal bank loan to ensure he could enter the sport. He made his debut in 1971 and impressed Enzo Ferrari sufficiently to offer him a drive in 1974. Ferrari were rewarded with a podium on his first race and a win three meetings later in Spain.

The next year he took his first title for the team, their first for over a decade. In 1976, he was in another strong position for the title when he crashed at the Nürburgring. Having made his astonishing return at Monza, Lauda could still have taken the title in Japan but opted to retire from the race, convinced the torrential rain made it unsafe. James Hunt, with whom he enjoyed both respect and friendship, took the championship. The story of the rivalry between the two drivers was turned into the 2013 film, Rush.

Lauda went on to take the title a second time in the year following his crash but, after two further seasons with Brabham, retired in 1979. He made a comeback for McLaren in 1982 and went on to win the championship in 1984 after a competitive fight with teammate Alain Prost. The Austrian took the title in the final race by just half a point. He retired from F1 for a second and final time in 1985.

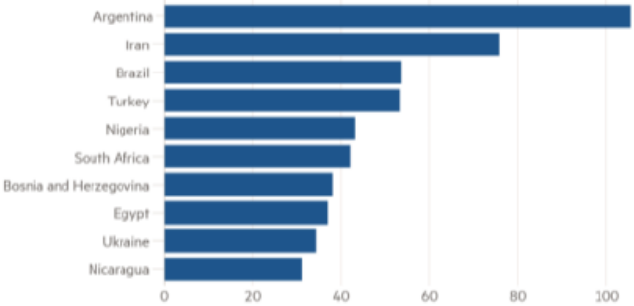
Chart of the month

The company you keep

This edition of *Intermezzo* is getting a bit long, so I will keep some of the charts I wanted to share for next month, but here are just a few random charts that I thought were of interest or amusing.

The first one shows the latest Misery index, published by Steve Hanke of the John Hopkins University, which is compiled using inflation, unemployment, and interest rates. Of interest of course is to see South Africa's position. I wonder if government have seen this chart and how they would rate the success of their economic policies after 25 years in government. I should mention that Venezuela tops the list, but is not included in the chart, because the value of its index is, wait for it, 1 746 439. The chart's scale only extends to 100, so it is fair to say that Venezuela would quite literally be "off the charts".

Chart 5: The Misery index



Source: FT.com

What is your password?

Then from the sublime (well, in a manner of speaking) to the ridiculous, I came across an embarrassing list of the most popular passwords. I am relieved to say none of them are mine, but it did strike me that mine are not much better. How do you fare?

The most popular online passwords

1. Password1
2. Welcome1
3. P@ssword
4. Summer1
5. password
6. Fa$hion1
7. Hello123
8. Welcome123
9. 123456q@
10. P@ssword1

Source: FT.com

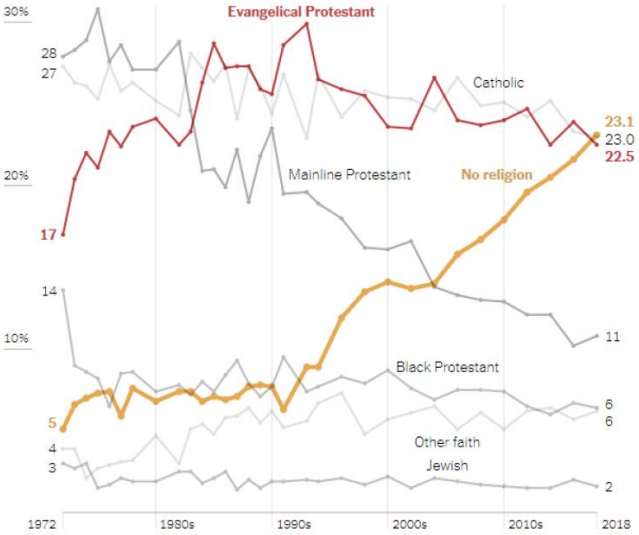
"I swear by …" Well, who do you swear by?

Whilst reading about the US and the 2020 election, I came across the chart below, which I found fascinating. It shows that Americans with no religious affiliation now constitute the largest "religious" group, having recently passed Evangelical Americans and Catholics. All very interesting food for thought, and discussion around the camp fire.

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

Chart 6: The rise of "No religion"

Percentage of Americans by religious affiliation



Source: General Social Survey by Ryan P. Burge, Eastern Illinois University

Another "bad day in the office"

I am sure it will come as a relief to our clients, to know that within the Maestro office we are all rather "sensitive" to losses, in particular realized losses, where assets are sold at levels lower than at which they were bought. As I write this section of *Intermezzo* (mid-May) US equity markets are experiencing their worst day of 2019, with red across the screens and losses the order of the day. Because equity markets re-price so promptly, almost immediately, to account for any external or internal influence, equity markets are characterized by gains, but of course, also losses. The liquidity of shares or equities, meaning investors' ability to buy or sell any security instantly, mean that losses are unavoidable and part and parcel of the activity of long-term investment.

I suspect there are many investors who don't associated losses so readily with other types of assets (asset classes), such as bonds, private equity, or properties. Perhaps it is because of this asymmetrical bias against equities that makes us "equity junkies" so sensitive to investment losses. For that reason, I have always had a fascination about investment losses in other asset classes, particularly property. Newspapers are full of headlines about mega property (or other corporate) deals, but are more reticent about losses on these deals when they occur.

The Chrysler building, New York

Instagram handle: @ newyork_world

With that by way of background, as the global investment environment becomes increasingly harsh, we should not be surprised to read of losses in asset classes other than equities. So it is that I came across two such instances, which I thought worth sharing with you as proof, if proof were indeed needed, that losses do not only occur in the life of equity investors.

The Chrysler building, New York

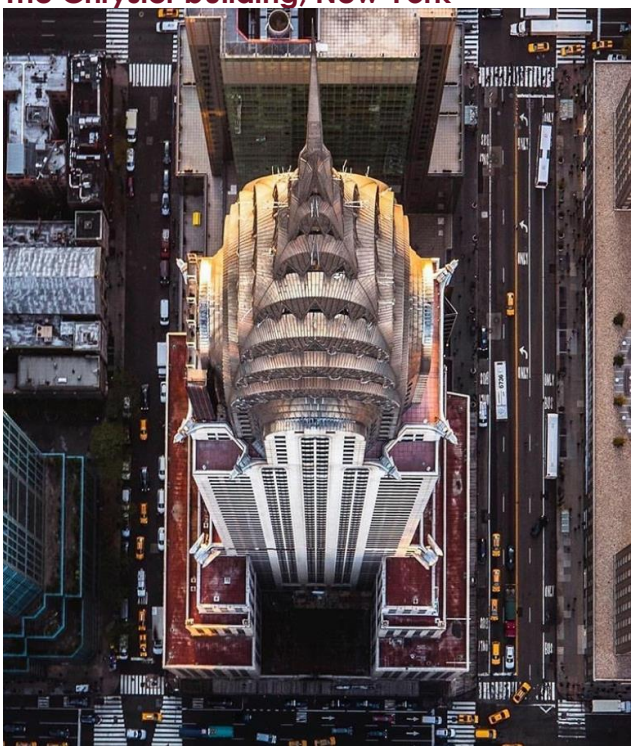
Instagram handle: @ newyork_world

New York property tycoon Aby Rosen was in the news recently as the buyer of the iconic and beautiful Chrysler building in New York. What interested me was that he bought it, via his RFR Holdings, for $151m, but the seller was the Abu Dhabi Investment Fund (ADIF), who purchased 90% of the building in 2008 for $800m (thus valuing the building at around $890m). So it took all of 11 years for ADIF to lose $664m. As I would've said to my children, "that constitutes a really bad day in the office!"

I also read that the iconic British toy retailer Hamleys has been sold to Indian billionaire Mukesh Ambani, for the princely sum of $87m (£68m). But that wasn't as princely as the amount that Hong Kong-listed shoe retailer C Banner paid for it in 2015 – all of $128m (£100m). So that's a loss of $41m in about 4 years. Eina! Another bad day in the office.

Of course there are reasons behind Ambani's purchase of the store, which has a litany of losses associated with previous corporate action, such as the fact that Ambani already has the Hamleys franchise in India – Ambani's Reliance business runs 71 of Hamleys 128 franchised stores. Finally, lest you think Ambani is "taking a walk on the wild side" with his Hamleys deal, let's remind ourselves that it constitutes less than 0.2% of his total worth. Let's put it this way: even if he incurs a substantial loss on the deal in future (Hamleys is under enormous financial pressure), it is fair to assume it is hardly going to keep him awake at night.

The Chrysler building, New York



Instagram handle: @ newyork_world

Quotes to chew on

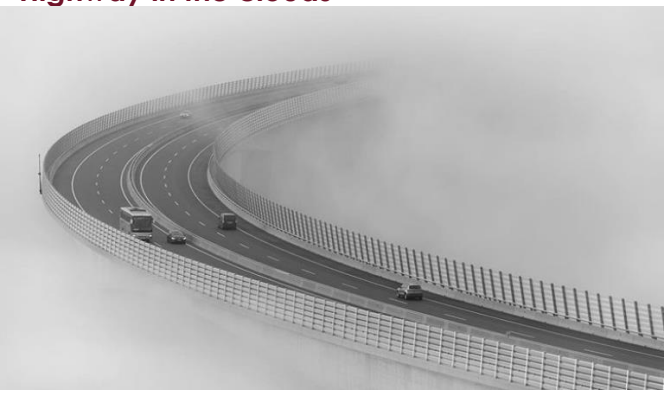
Growth scarcity pushes growth stocks higher

On 16 May I read the following excerpt from *Julius Baer's Daily Wire*, and was struck by its poignancy: "Yesterday, German government bond yields fell below the levels (of government

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

bond yields) in Japan. Investors are now in the position to lend money to Germany for 10 years and lose 0.11% per annum. Thus, it is no wonder that investors are bidding up growth stocks."

Highway in the clouds



Instagram handle: @natgeoyourshot

Will someone please stop that man?!

It is not every day that one can pin weak global markets on one person on this planet. While some may take issue with this view, a lot of investors would agree with me that most of the weakness and trauma on global equity markets during May can be laid at the door of one Donald Trump, following his tweet on 5 May. I am too blunt and honest to ever be a politician, so here is the same message from a seasoned politician, also one of the world's richest men and ex-mayor of New York, Michael Bloomberg, the founder and chairman of Bloomberg. He wrote an article following Trump's unexpected implementation of tariffs on Mexico in order to pressurize them to stop the immigrants entering the US. You can read the full article here.

Bloomberg writes: "President Donald Trump's approach to trade policy had set new benchmarks of incoherence and irresponsibility even before his threat to impose escalating tariffs on imports from Mexico – but this latest manoeuvre takes the cake. The administration plans to harm businesses north and south of the border, and to impose additional new taxes on US consumers, not to remedy a real or imagined trade grievance but to force Mexico to curb migration to the US. This is a radical and disturbing development."

He ends his article as follows: "But more is at stake here than control of the border. From the start, Trump's failure to understand that trade is a matter of mutual advantage, combined with his contempt for international rules and norms, has threatened the global economic order that the US designed and built. This latest decision suggests that Trump's willingness to gamble with the country's prosperity, and that of one-time friends and allies, is greater than previously supposed.

"The prospects for global trade and output were already uncertain. Now, Trump is risking not just a slow and steady reduction in investment thanks to heightened anxiety over trade, but a sudden collapse in confidence that could roil financial markets and bring on an outright recession. It's increasingly urgent that Congress curb this president's ability to conduct a potentially ruinous trade policy."

Painting umbrellas in the sun

The global standing of Chinese AI companies

I know many of you are, like us, keen followers and admirers of the Cederberg Greater China Equity Fund, which continues to post spectacular returns on the most simple yet profound approach and principles. In the May letter Fund CEO and CIO Dawid Kruger offered the following comments on why Chinese companies are likely to remain world leaders when it comes to artificial Intelligence. Following a visit to Sensetime, a Chinese company and leader in facial recognition, image searching, and intelligent monitoring, Dawid wrote "Sensetime provides a case study for why several Chinese companies are likely to become AI world-leaders: it benefits from strong government support, excellent data and hardware, as well as a talented team consisting of 1 600 researchers – which include 150 PhDs and 40 university professors. As a country, China has prioritised AI, with good reason: according to PwC, it could contribute an additional $7trn to the Chinese economy by 2030, compared with $3.7trn and $2.5trn for North America and Europe respectively. For those interested in learning more, we would recommend Kai-Fu Lee's book AI Superpowers."

Lady in crowd

Instagram handle: @tehranstreetphotofestival

Tough survivor

Instagram handle: @natgeoyourshot

For the record

Table 1 lists the latest returns of the mutual and retirement funds under Maestro's care. Returns include income and are presented *after* fees have been charged. Fund Summaries for each respective fund listed in the table, as well as all the historic returns, are available on our website.

Table 1: The returns of funds in Maestro's care

	Period ended	Month	Year to date	Year
Maestro Equity Prescient Fund	**May**	**-4.6%**	**5.2%**	**-2.4%**
JSE All Share Index	*May*	*-4.8%*	*7.1%*	*2.4%*
Maestro Growth Fund	**May**	**-4.7%**	**6.8%**	**1.6%**
Fund Benchmark	*May*	*-2.7%*	*6.7%*	*5.7%*
Maestro Balanced Fund	**May**	**-3.5%**	**4.0%**	**-1.6%**
Fund Benchmark	*May*	*-2.2%*	*6.3%*	*6.2%*
Maestro Cautious Fund	**May**	**1.1%**	**2.6%**	**8.5%**
Fund Benchmark	*May*	*-1.0%*	*5.0%*	*6.2%*
Central Park Global Balanced Fund ($)	**Apr**	**4.5%**	**21.0%**	**0.3%**
*Benchmark**	*Apr*	*1.9%*	*10.0%*	*3.3%*
*Sector average **	*Apr*	*1.7%*	*9.0%*	*1.4%*
Maestro Global Balanced Fund	**May**	**-7.1%**	**15.4%**	**-0.2%**
Benchmark	*May*	*-1.6%*	*8.0%*	*15.2%*
*Sector average****	*May*	*-2.0%*	*9.3%*	*13.3%*

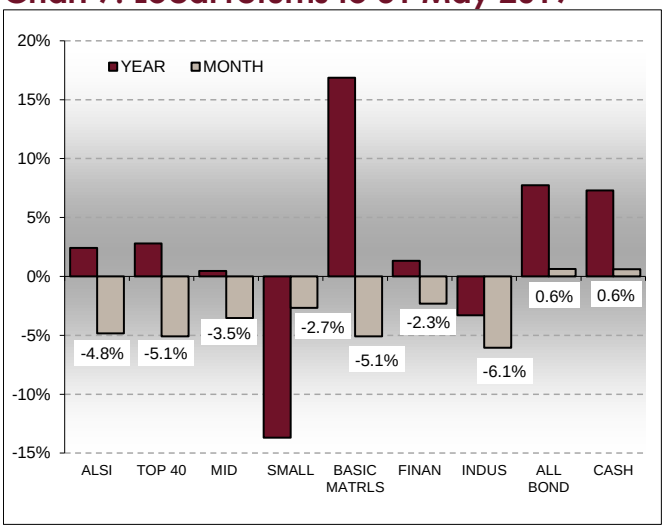
* 60% MSCI World Index and 40% Bloomberg Global Aggregate Bond Index
** Morningstar USD Moderate Allocation ($)
*** Morningstar ASISA Global Multi Asset Flexible Category

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

May in perspective – local markets

While much of the focus in South Africa was on the election, local markets were not immune to the global winds of change. The All Bond index rose 0.6%, but the All Share index fell 4.8% and the rand declined 1.7%. The Basic Material, Financials, and Industrials indices fell 5.1%, 2.3% and 6.1% respectively, leaving their respective year-to-date returns at 9.7%, 3.6% and 7.7%. Ironically, small and mid cap shares held up better than large caps, with respective declines of 2.7%, 3.5% and 5.1%, in contrast to the US, where small and mid caps bore the brunt of the selling. The respective US small, mid, and large cap returns were -8.9%, -8.1%, and -6.4%.

Chart 7: Local returns to 31 May 2019



Another take on 5G

In last month's *Intermezzo* we shed light on 5G, the new cellular network being rolled out in certain areas of the world. To follow on from that information, Table 2 summarizes the attributes of progressive networks that have been rolled out since the inception of early cellular technology in 1979. It is clear from the table that we are on the verge of a total revolution in terms of how we experience digital technology and its transfer.

Table 2: The 5G mobile network evolution

Year	Generation	Maximum data speed**	Data transfer per second**	Time to download full HD movie***
1979	1G	none (voice only)	n/a	n/a
1991	2G	14.4 Kbps	1.8K	Over a month
2000	2.5G	53.6 Kbps	6.7K	Over a week
2001	3G	384 Kbps	48K	Over a day
2010	4G	100 Mbps	12.5MB	7 minutes
2020	5G	1 Gbps	125MB	40 seconds

** 1 exabyte = 1 billion gigabytes* *** Theoretically possible* **** 5GB file size*

Source: South China Morning Post

File 13 – Information almost worth knowing

The Chinese electric vehicle (EV) market

Did you know that as at the end of March, there were 486 registered electric vehicle (EV) manufacturers in China? This number has tripled over the past two years, leading many commentators to compare it to the dotcom bubble of 2000 – certainly a development worth keeping an eye on.

White hat, Porto, Portugal

Instagram handle: @hotographizemag

"To achieve great things, two things are needed; a plan, and not quite enough time."
- Leonard Bernstein

"Monet, monet, monet"…

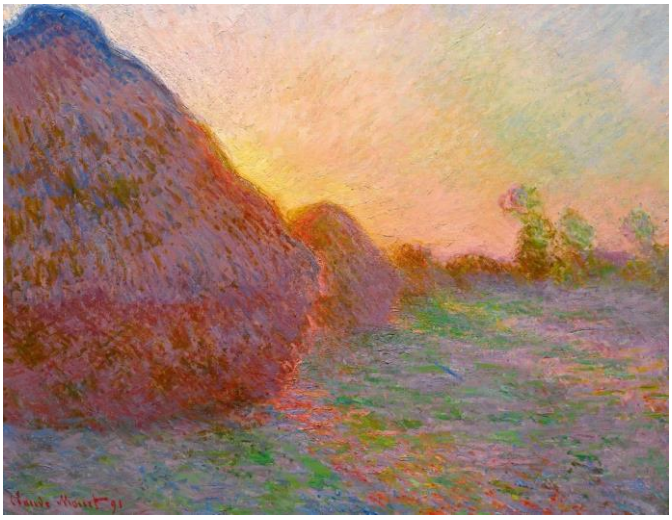
Some of you might have seen that the Impressionist Painter Claude Monet's 1890 work of art *Meules (Haystacks)* sold for a record amount of $110.7m (R1.6bn) at a Sotheby's auction on 14 May in New York. The amount represented the highest ever paid for any Impressionist artwork, and the highest price paid for any Monet work. It also represented the 9th highest price paid for an artwork in history, the highest price being $450m (R6.5bn) paid for Leonardo da Vinci's Salvator Mundi by an ally to Crown Prince Mohammed bin Salman of Saudi Arabia in 2017.

Meules was one of 25 works painted by Monet was one of 25 paintings in a series depicting stacks of harvested wheat belonging to Monet's neighbour in Giverny, France. The series is of particular art historical importance, being the first time Monet systematically evoked the same subject in differing atmospheric conditions. This particular work, capturing two stacks at sunset, is particularly vivid in its colouring, and has not been seen on the market since 1986. It is one of only eight left in private hands; the rest are in museums, including the Metropolitan Museum of Art in New York, the Musée d'Orsay in Paris and the Art Institute of Chicago. A similar painting from the series sold at auction in 2016 for $81.4 m.

Sotheby's said the painting was acquired by wealthy Chicago socialites directly from Monet's dealer in the 1890s and remained in the family until it was bought at auction in 1986 by the present sellers for $2.5m.

Claude Monet: Meules

1890. Oil on canvas. 60cm x 100cm.



Source: www.telegraph.co.uk.

Is it or isn't it a da Vinci?

A couple of months ago we drew your attention to the world record price paid for Da Vinci's *Salvatore Mundi* painting, being the $450m paid by, it now turns out (though no one should be surprised), the Saudi Arabian Crown Prince Mohammed bin Salman. I am sure you won't object to me sharing the latest twist in the life of this remarkable work of art, whose authenticity has been questioned for centuries.

Of course, what drove the price up for this art work at the time it emerged again onto the open market, was the fact that it was painted by Leonardo da Vince. After all, there are only 20 other paintings on this planet that can stake that claim! But tell that to the Louvre Museum, home of Da Vinci's most famous painting, the *Mona Lisa*.

The *Salvator Mundi* arrived at the Louvre in May in time for the museum's celebration of the 500the anniversary of Da Vinci's death, but the Louvre curators have decided not to accept it as a work by the artist, deciding rather to label it

"from the workshop of Leonardo". This is not good news for the painting's owners as it would render their very expensive and public purchase pretty much worthless.

According to art historian and author of a book on the painting, Ben Lewis, "it is very unlikely it will be shown because the owner of this picture cannot possibly lend it to the Louvre Paris and see it exhibited as 'Leonardo workshop' – its value will go down to somewhere north of $1.5m". In an interview with the Telegraph, Lewis has suggested that part of the reason for the high price paid for the painting was that the Saudis believed they were bidding against a rival royal family – escalating the bidding from $370m to $400m during the auction.

Cross face

Instagram handle: @s.zlatarev

However, it has since been revealed that the rival bidder was billionaire Chinese art enthusiast Liu Yiquan. He will certainly be smiling if it turns out that the Saudis are about to lose more than $400m on their painting. The Saudis have not given any comment on the potential scandal and it may indeed mean that the fabled painting, after having been out of sight for so long, will once again not see the light of day.

The painting's authenticity has remained a subject of debate among art critics and historians, some of whom believe that at best it should be attributed to a pupil of Da Vinci's — pointing out that the background is too flat to be his work, although others have claimed that the flat background is deliberate, forcing viewers to fix their gaze on the image of Christ. For now the painting looks set to remain at its storage facility in Switzerland.

My final word on this topic is to refer you to a short but remarkable video, which you can view here, on the *Salvatore Mundi* and the work undertaken to restore it. It is a humbling experience watching the video, and I would urge you to spend 8 minutes on it. It will help you appreciate why people pay so much for such rare works of art.

So what's with the pics?

In recent months I have received favourable comment on the Instagram-sourced pictures included in *Intermezzo* - so much so that I wonder if anyone is reading the remaining content. Be that is may, I have again included photographs sourced off Instagram and provided their respective handles, should you be interested in following their creators. If there is any theme in this month's photos, it is a loose one of black and white photographs, shown with some license. I hope you enjoy them.

2019 Family

Instagram handle: rafaborges