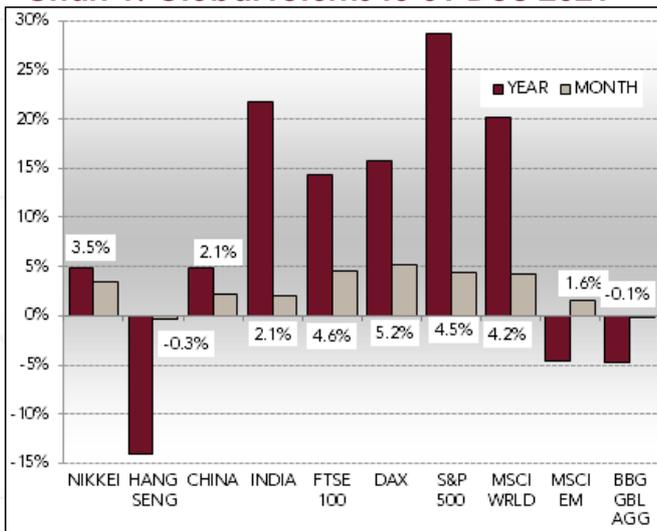


December in perspective – global markets

Throughout December, most global equity markets ground slowly but steadily higher. When all was said and done, and Santa had come and gone, the returns were impressive. The MSCI World index rose 4.2%, led by the US equity market return of 4.5%. Strong US equity markets were largely the investment story of 2021. The German market rose 5.2%, and Switzerland, a traditional defensive market, rose 5.9%. Only the Hong Kong and Russian markets posted monthly declines, losing 0.3% and 3.0% respectively. Growth shares were the laggards on the month, with the NASDAQ rising “only” 0.7%.

Chart 1: Global returns to 31 Dec 2021



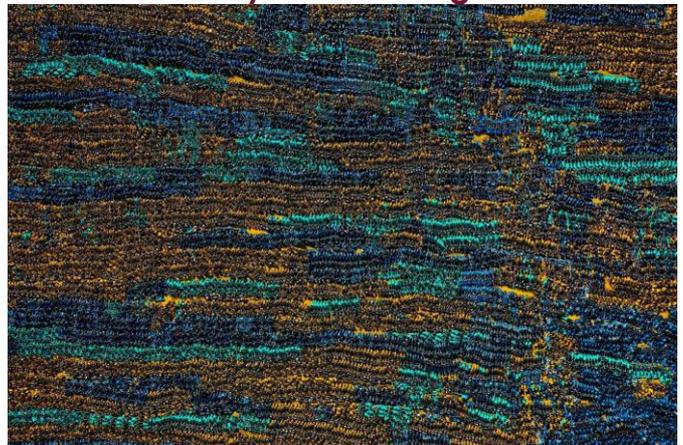
Bond markets fared poorly during December; the Bloomberg Global Aggregated Bond index lost 0.1%. Cash returns remained negligible. The dollar had a volatile month but ended slightly lower, which in turn helped some of the commodity prices higher. The oil price rose 18.1%, for a 64.1% gain during 2021, the price of palladium rose 5.2%, while copper rose 2.2%.

What’s on our radar screen?

Here is a summary of the things we have been keeping an eye on:

- *The SA economy:* The SA headline inflation rate rose to 5.9% in December, from 5.5% in November, close to the upper limit of the SA Reserve Bank’s target range of 3% to 6%. The rise in inflation was driven largely by the rising fuel price. The core inflation rate i.e. inflation excluding food and energy prices, rose to 3.4% from 3.3% in November.

Discarded bicycles in Shanghai



Source: South China Morning Post

- *US economy:* The labour market produced only 199 000 new jobs in December, much less than the 400 000 expected. The unemployment rate declined to 3.9%. It is increasingly clear that the major issue for the US labour market is not the demand for labour, but rather the supply of labour; less people are looking for work and more are retiring early, possibly due to overly generous pandemic support packages. US headline inflation rose to a 40-year high of 7.0% in December, from 6.8% in November – refer to Chart 2. The core inflation rate rose from 4.9% to 5.5% in December, the sixth month out of the last nine that the *monthly* increase in the core inflation rate exceeded 0.5%. On a slightly more positive note producer price inflation slowed from 9.8% in November to 9.7% in December.

“To achieve great things, two things are needed; a plan, and not quite enough time.”

- Leonard Bernstein



Chart 2: US headline inflation (%)



Source: FT.com

- Developed economies:** Annual headline inflation rate in the UK rose to a 30-year record of 5.4% in November, from 5.1% in October. The annual rate of core inflation rose from 4.0% to 4.2%. The primary drivers behind rising inflation were increases in the prices of food and clothing. While energy price increases weren't that much of a factor during November, they are likely to play an important role in the coming months, and the expectations are that UK inflation will continue to rise during the first quarter of 2022. The UK labour market seems to be in good health; the number of jobs now back above pre-Covid 19 crisis levels. In Australia, annual headline inflation rose to 3.5% in December, from November's 3.0%. Housing and fuel price increases provided the most impetus behind December's increase.
- Emerging economies:** The headline inflation rate in Sri Lanka rose to 12.1% in December, from 9.9% in November, led by a 22.2% hike in food prices caused in part by the ongoing foreign exchange (forex) crisis the country is experiencing. The country has repeatedly rejected a bailout from the International Monetary Fund (IMF) but given how rapidly the forex crisis is developing, policy makers now seem more open to engaging the IMF.

Vaccine centre, Nanjing, China



Source: South China Morning Post

Moving on to the Chinese economy, the latter grew at an annual rate of 4.0% during the last quarter of 2021 (Q4), down from a rate of 4.9% during Q3. For 2021 as a whole the economy grew 8.1%, which was a lot faster than the Covid-affected 2020 rate of only 2.2%. Industrial production rose at an annual rate of 4.3% in December (3.8% in November), retail sales rose only 1.7% (3.9% in November), and fixed asset investment rose 2.0% (-2.2%). The unemployment rate rose from 5.0% in November to 5.1% in December.

In response to the slowing economy, China cut two of its key policy interest rates. The one-year loan prime rate (LPR), on which most new and outstanding loans are based, was cut from 3.8% to 3.7%. The five-year LPR, which is a reference rate for mortgages, was cut from 4.65% to 4.6% for the first time since April 2020. The LPR has been considered China's de facto benchmark funding cost since 2019. It had remained unchanged for 20 months until December's cut from 3.85% to 3.8%, having last been adjusted in April 2020 when the one-year LPR was cut from 4.05%. Finally on

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China, producer prices rose at an annual rate of 10.3% to December, down from November's 12.9% rate. The headline (consumer) inflation rate declined from 2.3% in November to just 1.5% in December.

The Bank of Korea (BoK) raised its interest rates by 0.25% to 1.25%, its third hike in the current tightening cycle. Its official policy rate is now back to pre-pandemic levels. The BoK expects the Korean economy to grow 4.0% in 2021, slowing to 3% in 2022, and expects inflation to range between 3% and 4% for a "considerable time". The annual rate of Korean inflation was 3.7% in December, marginally lower than November's 3.8%. Moving back to the "problem child" within the emerging market space – well, at least one of them – the Central Bank of Turkey (CBRT) left interest rates unchanged at 14% at their first meeting this year. This comes in the wake of December's annual headline inflation read of 36.1%, with core inflation at 31.9%. December's producer inflation on the other hand, was a cool 79.9%. With data like that, is it any wonder the CBRT has lost all credibility?

The central bank of Chile raised their interest rates by no less than 1.5% to 5.5%, the largest hike in 20 years. It follows the 1.25% increase in December. An indication of why the hikes were so aggressive is provided when you compare the bank's target inflation range of 2% to 4% to the annual headline inflation rate in December of 7.2%. Core inflation rose 6.4% during the past year.

Dancers at the Communist Party centenary



Source: South China Morning Post

Quotes of the month

Not the obvious answer ...

Christian Gattiker, Julius Bär Head of Research, summed out the remarkable current market narrative recently as follows: "If you could imagine US consumer prices rising by 7.0% year-on-year by January 2022, where do you think the price of gold and Treasury yields would end up? This is one of the questions that leads many investors to scratch their heads when doing an after-the-fact reality check. For many, '\$1824' and '1.73%' would not have been the obvious answers only a few months back, and yet that is how it turned out this week".

Understanding the Big Picture trends

Deutsche Bank's Jim Reid wrote the following on 19 January: "Correlation does not imply causation but unless you are an incredibly strong advocate of a completely new earnings paradigm for the largest technology companies, that coincidentally have tracked unconventional monetary policy, then it is hard to argue against the notion that central bank policies have been a big contributor to an incredible run for the sector over the last six to seven years. Indeed, the

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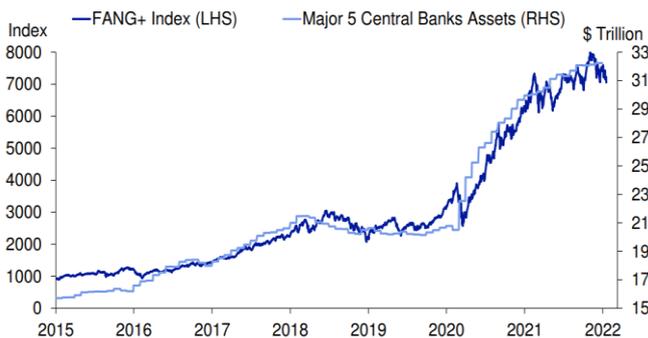


only notable setback has been when global Quantitative Tightening (QT) arrived in 2018.

"2022 has been a perfect negative storm for tech with higher nominal and, more importantly, real yields, and a Fed that seems strongly committed to starting QT later this year. If our economists are correct, the Fed balance sheet will fall by about \$1.5tn by end 2023 and around \$3tn by 2025. The second biggest contributor to the graph, namely the European Central Bank (ECB), will likely see the balance sheet fall by several hundred billion dollars this year due to maturity TLTROs outweighing continued Quantitative Easing (QE). So, even here 2022 will see the local balance sheet peak.

"Clearly, it's impossible that such a correlation will stay as tight as this indefinitely but it's a useful graph to understand the possible big picture trends". In Chart 3, the FANG+ index represents the share prices of Facebook (now Meta), Apple, Amazon, Netflix, and Google (now Alphabet), and Microsoft.

Chart 3: FANG index and Central Bank assets



Source: Deutsche Bank

Charts of the month

The worst possible start to the year

As will be apparent when reviewing January's returns, and those who watch markets closely don't need to be told this, but January has got

off to one of the worst possible starts ever, in terms of investment market returns. Global equity markets are down sharply, as are bond prices. However, the shares that have been the hardest hit are growth shares, which typically are embedded with value that will accrue in many years to come. As interest rates rise, so the value of that "value" declines and the share prices decline. Typically, the money moves quickly into what are loosely called "value shares", which are typically those companies whose growth is a bit slower and less exciting, and which have been poorly rated by the market for a long time. We have on many occasions in the past, shown just how strongly growth shares have outperformed value shares over many years now.

The Evergreen blocking the Suez Channel



Source: South China Morning Post

In the longer term we expect this growth share outperformance to continue, but for now, given the sharp increase in bond interest rates (bond yields are up so prices are down), growth shares have been severely punished by investors i.e. they have been sold down heavily, or as we say in the profession, they have been "de-rated" in favour of value shares, which have outperformed the market sharply so far this year.

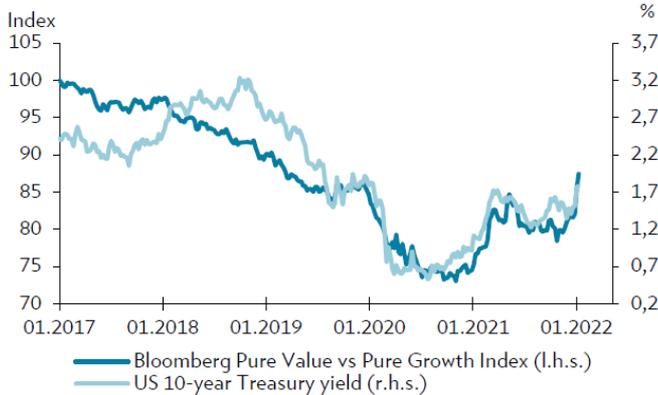
"To achieve great things, two things are needed; a plan, and not quite enough time."

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The relationship, whereby value shares outperform growth shares when yields (interest rates) rise, is shown nicely in Chart 4. Rising yields are depicted in the chart by the yield (interest rate) on the US 10-year bond, which is probably the most watched of all bonds across the world and widely used as a proxy for global bond yields.

Chart 4: Value stocks outperform as yields rise

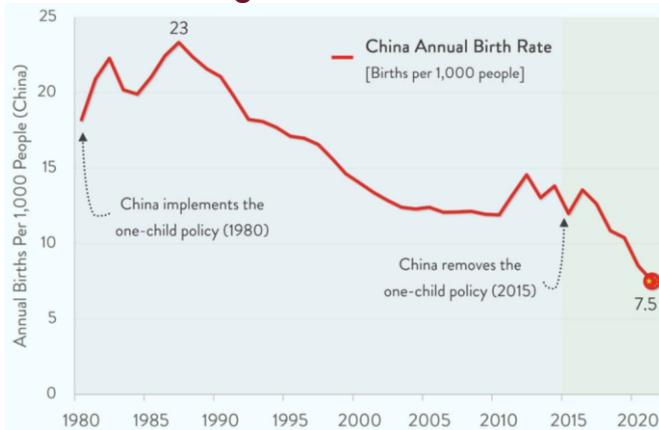


Source: Julius Bär

Slowing birth rate in China

Changing demographics are a large driver of big investment themes, and we watch them very closely. The West, by and large, is ageing rapidly, Japan even more so, but what is not that widely known or appreciated is just how rapidly China's population is ageing.

Chart 5: Slowing birth rate in China



Source: Statista

This is seen in China's declining birth rate, shown in Chart 5. Its birth rate is now at the lowest it has been since the eighties.

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				
Fund	Dec	4.7%	24.6%	24.6%
JSE All Share Index	Dec	4.8%	29.2%	29.2%
Morningstar sector ave	Dec	4.4%	27.3%	27.3%
Maestro Growth Fund				
Fund Benchmark	Dec	3.7%	21.4%	21.4%
Morningstar sector ave	Dec	3.2%	20.3%	20.3%
Maestro Balanced Fund				
Fund Benchmark	Dec	3.2%	18.7%	17.9%
Morningstar sector ave	Dec	2.9%	17.5%	17.5%
Maestro Global Balanced Fund				
Benchmark	Dec	2.2%	19.4%	19.4%
Sector average *	Dec	1.5%	18.4%	18.4%

* Morningstar Global Multi Asset Flexible Category

Notwithstanding the returns listed in Table 1, our longer-term returns for our investment solutions are listed in the table below. All returns are for periods to 31 December, and are taken from Morningstar's monthly unit trust survey. Returns are shown on a net basis i.e. after all fees have been deducted.

Table 2: The Maestro Equity Prescient Fund

Morningstar (ASISA) South Africa Equity General - December 2021						
	3 mths	6 mths	1 year	3 years	5 years	10 years
Maestro Equity Prescient Fund	11.4%	13.6%	24.6%	12.9%	4.5%	8.1%
Maestro Equity Fund benchmark	14.6%	13.2%	26.8%	14.7%	10.7%	13.4%
SA Peer Group Average	9.2%	12.5%	27.3%	12.3%	7.8%	9.8%
Maestro position within Group	30	51	107	66	100	54
Number of participants	167	167	162	144	117	65
Quartile	1st	1st	3rd	2nd	4th	4th

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- Leonard Bernstein



Table 3: The Maestro Growth Fund

Morningstar (ASISA) South Africa Multi-Asset High Equity - December 2021						
	3 mths	6 mths	1 year	3 years	5 years	10 years
Maestro Growth Fund	6.2%	6.5%	10.5%	10.9%	6.5%	8.4%
Maestro Growth Fund benchmark	10.7%	10.9%	21.3%	13.9%	10.9%	11.3%
SA Peer Group Average	7.3%	10.0%	20.4%	11.6%	8.0%	9.2%
Maestro position within Group	164	193	198	120	129	48
Number of participants	205	205	204	183	151	66
Quartile	4th	4th	4th	3rd	4th	3rd

Table 4: The Maestro Balanced Fund

Morningstar (ASISA) South Africa Multi-Asset Medium Equity - December 2021						
	3 mths	6 mths	1 year	3 years	5 years	10 years
Maestro Balanced Fund	6.1%	6.3%	10.0%	9.6%	5.9%	7.9%
Maestro Balanced Fund benchmark	9.3%	9.7%	18.7%	12.9%	10.4%	10.7%
SA Peer Group Average	6.7%	9.0%	17.5%	10.5%	7.7%	8.7%
Maestro position within Group	63	92	96	63	67	28
Number of participants	97	97	97	87	73	38
Quartile	3rd	4th	4th	4th	4th	3rd

Table 5: Maestro Global Balanced Fund

Morningstar (ASISA) Global Multi-Asset Flexible - December 2021						
	3 mths	6 mths	1 Year	3 Years	5 Years	10 years
Maestro Global Balanced Fund	8.0%	3.5%	1.2%	15.8%	N/A*	N/A*
Global Balanced Fund benchmark	10.8%	16.1%	19.4%	17.2%	12.7%	14.2%
SA Peer Group Average	9.0%	13.2%	18.4%	15.6%	11.7%	13.3%
Maestro position within Group	32	44	40	15	N/A	N/A
Number of participants	46	46	42	30	22	12
Quartile	4th	4th	4th	3rd	N/A	N/A

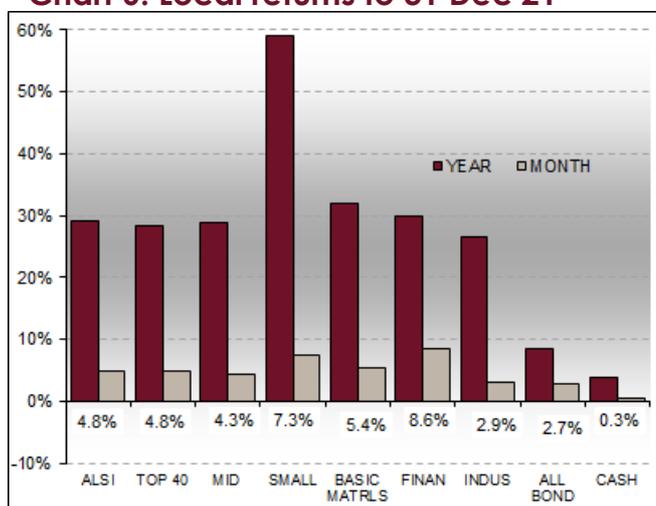
December in perspective – local markets

The South African equity market registered a strong performance in December and a respectable annual return for 2021. The Basic Material index rose 5.4% (its 2021 annual return was 31.9%), the Industrial index rose 2.9% (26.5%) while the Financial index rose 8.6% (29.8%), all of which resulted in the All Share index rising 4.8% (29.2% for all of 2021) on the month. The Large cap index rose 4.8% while the Mid and Small cap indices rose 4.3% and 7.3%, bringing their respective 2021 annual returns to 28.4%, 28.9% and 59.1%. The All Bond index rose 2.7%, and ended the year 8.4% higher than where it started.

Notwithstanding the weak start to the year by all equity markets, and growth shares in particular, we remain positive in our outlook for equity markets. There is no doubt 2022 will be another challenge for the whole planet, from a climate and environmental perspective, to the political circus that characterize just about every

country, and to the economy and socio-political considerations all around us. Perhaps not unrelated, there are profound and once-in-a-generation changes occurring across the globe. It is these that excite us and which we believe will continue to provide attractive opportunities within global investment markets. We continue to dislike bond markets and will stay well clear of those to the extent that we can.

Chart 6: Local returns to 31 Dec 21



Data that dazzles

Any impressive achievement, yet shocking reality
Similar to [last month](#), when we started this section with a shocking and sad story, allow me to make two comments on the recent matric results what were released a few days: one of commendation and another to draw attention to the reality of schooling in SA and hence also the country's future.

As I surveyed the results of the "Class of '21" it struck me that this "Class" was to be commended more than most, for they had progressed through Grade 11 and 12 despite the worst that the pandemic threw at them. Despite the myriad of challenges – and we can well imagine what many of them were – this class



succeeded beyond the odds, having their academic and normal lives completely upended and disrupted, yet made it through the most important two years of their schooling. I think we cannot congratulate them sufficiently, and their supportive teachers, families and friends, for what can only be regarded as a truly remarkable achievement.

But while all the celebrations were taking place, for good reason, we should stop and think about the future of schooling in this country. Each year we have to endure the gushing from the Minister of Higher Education about what an achievement we have witnessed, how much progress had been made, etc. However, we never hear from her how many pupils drop out each year. And here I am not referring to the 341 403 pupils, or 32.7% of those who started Grade 10 but never made it through Grade 12 in 2021. No, I am referring to the 40% of pupils (that's forty percent!!) who started Grade R and never made it to matric. That is a shocking reality, one which seems to get worse each year.

Politicians continue to play party-political factional games and spend their days stressing about an outdated and completely unnecessary State of Emergency, or piling on restrictions and Draconian regulation which does nothing but strangle business and kill entrepreneurship, but they will not focus on the plight of our young people and the manner in which they are failing the country and its future.

How many capsules does the world use a year?
We have long held Lonza in our global equity portfolios. We continue to favour the company, for a number of reasons, not least of which being that during their 2021 financial year, they spent 24% of sales on Research and Development

(R&D). Their earnings before interest, tax, depreciation and amortization (EBITDA) margins were an impressive 30.2% and they have great visibility into their future, given that their business consists of long-term contracts. An interesting piece of information that they highlighted is that they now manufacture 250bn capsules per annum! That is a lot of capsules made by just one company, leaving me wondering how many capsules are manufactured around the world each year and how many capsules does humanity consumer every year!

Army exercises in Xinjiang, China



Source: South China Morning Post

More big numbers

Still on data that dazzles, the world's largest investment manager, Blackrock, announced that their assets under management now exceeded \$10tn. They secured \$306bn of net inflows, which equates to more than \$1bn (R15.5bn) of net new money *each working day* of the year, a truly staggering statistic. \$104bn of the net new money went into Exchange Traded Funds (ETF); Blackrock's operations include the popular iShares range of ETFs.

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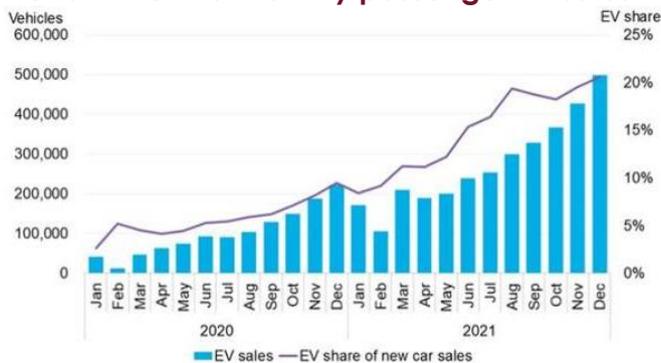


China sales of Electric Vehicles (EV)

What would your answer be if I asked you how many electric vehicles (EVs) were sold in China in 2021? Well, read on to find out.

Passenger electric vehicle (EV) sales in China hit a record 498 000 units in December, bringing the total for 2021 to over 3.3m. This is more than the 3.2m EVs sold globally in 2020. China's EV sales climbed throughout 2021, despite new outbreaks of Covid-19 and supply chain disruptions caused by chip shortage and spike in raw material prices. Rapid fleet electrification, rising demand from multiple-car households and expansion of charging infrastructure are driving EV sales higher.

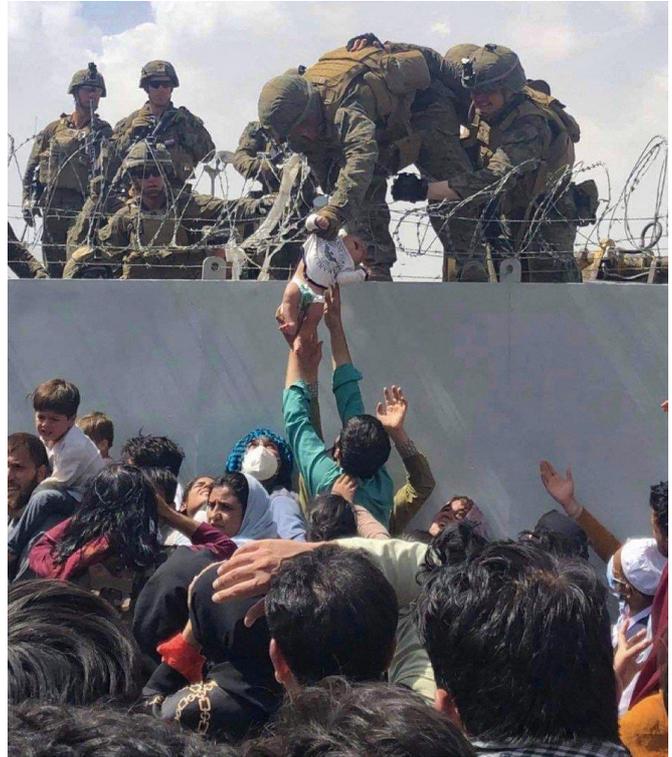
Chart 7: China monthly passenger EV sales



Source: Baader Bank

Automakers are increasing their EV model offerings and ramping up production to meet growing local demand. Tesla, BYD and SAIC-GM-Wuling comprised nearly half of China's EV sales in 2021, while startups like NIO and XPeng delivered triple or quadruple the number of EVs versus a year earlier. The government is aiming for 20% of new vehicle sales to be electric by 2025, as part of its long-term plan for promoting EVs. With 15% of new vehicles sold in 2021 already being electric, China could achieve its EV target ahead of schedule.

Evacuation from Kabul airport, Afghanistan



Source: South China Morning Post

An opportunity to learn more about semis

During the Silly Season I caught up on some, but not nearly sufficient, reading. I would love to share much of it with you, but one article (in two parts) stands out as a prime candidate. It formed part of a blog by a Chinese blogger, Lillian Li, who has a history in the US Private Equity space, but has now relocated to China. The article was not actually by her, but by Jordan Nel, and went into quite some detail about a topic that not only caused major disruptions across the global economy last year and is likely to continue to do so for many years to come, but also forms the foundation of the simmering tech tensions between China and the US. The topic in question is the semiconductor (semi for short) industry, a highly sophisticated and complex industry which forms an uncomfortably large base for just about everything we do in the world today.

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

- Leonard Bernstein



If you think I am exaggerating, I encourage you to read the blogs yourself. You won't be disappointed – they are long and technical, but written for the layman and still fascinating and truly “mind-boggling” in places. I can commend them highly; this topic is going to be around and in the headlines for many years to come. You can find Part 1 by [clicking here](#) and Part 2 by [clicking here](#).

I would like to whet your appetites by sharing a short extract from Part 1, which contains some remarkable statistics. Then again both Parts are full of remarkable information; I hope you find time to read them.

Here then, is an extract from Part 1: “Seagate reckons, by 2025, every connected person in the world (about 75% of the total population at that time) will engage with data over 4 900 times per day, about once every 18 seconds. To quote Westfield Capital Management: ‘90% of the data available in the world today was generated in the last 2 years – and it is expected to grow to 180 zettabytes (that is 21 zeros) by 2025. To put a zettabyte into context, storing just one requires 1 000 data centres, or about 20% of the land area of Manhattan’.

“In a nutshell, the people who design the chips (the fabless manufacturers) which go in your smartphones, cars, and laptops, do so on EDA software. If they can design and fabricate the chips, they're called Integrated Device Manufacturers. Samsung and Intel are the two biggest names here.

“If they can't fabricate the chips themselves (most people can't) then they then send the designs to people who can. These are the foundries, the most important of which is Taiwan

Semi-conductor (TSMC). I recommend this [deep dive](#) into the composition of a foundry for those interested.

Queen Elizabeth at Prince Philip's funeral



Source: South China Morning Post

“Anyone who can fabricate the chips can only do so because they have bought hyper-sophisticated equipment from a handful of suppliers. This equipment is known as semicap, short for Semiconductor Capital Equipment. The foundries combine equipment with specialized materials and process expertise and out pops the chip.

“This chip still has to be assembled, tested, and packaged. As this is a different competency to fabrication, the foundries outsource this part of the process to those specializing in it. This is the OSAT crew. They rely on a different set of suppliers for testing equipment. Once a chip has been designed, fabricated, tested, packaged, and assembled, only then is it ready to be used.

“Because of the – literally atomic – size of many of the nodes, the companies which handle them have developed irreproducible expertise in their domain. In many instances, a couple of atoms out of place render the entire product unusable.

“To achieve great things, two things are needed; a plan, and not quite enough time.”

- Leonard Bernstein



“For instance, the mirrors required for ASML's extreme ultraviolet lithography (EUV) machines are polished to a smoothness of less than one atom's thickness. To put that in perspective, if the mirrors were the size of Germany, the tallest 'mountain' would be just 1mm high. This is the industry China is trying to disrupt.”

Volcano ash after a Canary Island eruption



Source: South China Morning Post

File 13: Info almost worth remembering

It was interesting to hear about the world that exists behind the “Apple machine”. In its recent results Apple, the world's largest company with a market cap (size) of \$2.78tn, said it had paid developers \$60bn in 2021, and a total of \$260bn since the launch of its App Store in 2008. Those are big numbers, and indicate just how strongly Apple sales have been growing in recent years.

So what's with the pics?

I follow the photo blog on South China Morning Post. Early this year they listed photo essays called 2021 in Pictures, each essay emanating from a different global region. You can view the China version [here](#), the Asian version [here](#), and the World version [here](#). I hope you enjoy them.

A Swiss cow relocated after its summer sojourn



Source: South China Morning Post

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