

A WORLD OF DISTORTION

A position paper on the state of the goods and financial markets in the wake of the coronavirus crisis



—
M1 AG
Museumstrasse 1
9004 St.Gallen
Switzerland
+41 71 242 16 16
info@m1ag.ch

—
www.m1ag.ch

Dr. Konrad Hummler
Nick Huber, B. A. HSG
Chris Prevost, B.A. HSG

Abstract

The outlook for the world economy has taken a considerably gloomier turn in the wake of 2020's coronavirus pandemic, even as the debt burden of states, blocs, companies and individuals has once again skyrocketed. And yet, simultaneously, we have witnessed euphoria on the financial markets.

How can this be explained?

The authors of this position paper have identified a paradox whereby every increase in debt levels heightens expectations that the central banks will extend their ultra-low interest rate policies, thus lending the financial markets wings and pushing risk premia down. Against this backdrop, the authors investigate under what conditions such monetary policy is even possible. The paper describes a "freak exception" in which four real-world circumstances have granted central banks an unusual degree of discretionary leeway, and closes by asking how stable this concatenation of exceptional factors really is – and what might trigger a paradigm shift.

Introduction

Through the exigencies of the hour, we have all now become experts in virology, infectious disease and epidemiology, and, as enthusiastic amateur statisticians, we are old hands at reading the runes of exponential outbreak patterns and computing the R reproduction number for the SARS-CoV-2 pathogen. We take daily readings of key metrics and attempt to calculate whether we can risk a relatively normal Christmas, or if things might at least have settled down by the ski season. While we – at best – see through a glass darkly as far as the nature of this new, semi-zoetic speck is concerned, this has not prevented whole hosts of people from railing – often at the tops of their voices – against those who, equipped with little more than precisely the same dimmed vision, are charged with determining what we are allowed to do, and what not. Erring on the side of safety, they have obviously prescribed the most stringent of all the measures that might have been palatable, figuring that this should shield them from almost all potential opprobrium. Until recently, the notable exception to this rule had been the Swedish government; the notable exception now is Switzerland’s Federal Council, which (presumably on the strength of its far more robust democratic mandate and federalist obligations) has contented itself with much lighter containment measures than any other European administration in the second wave. Coping with uncertainty and providing leadership in the face of the unknown are capacities that have withered on the vine in recent years of predominantly linear development. This is due in large part to a lack of imagination and an inability to accept that events may confound all expectations. COVID has proved a harsh task master in this respect, not least in forcing us to face up to our own mortality. We – society and its exponents – are playing catch-up, and the lessons this teaches us will shape us for some time to come.

COVID has also driven a number of issues from the front pages – not least pressing questions surrounding the **health of the global economy** and the state of its bellwether, the **financial markets**. In the wake of the massive losses of spring 2020 (and the horrific predictions, each more gruesome than the last, proffered by forecasters at the time), a sort of calm has descended – a cosy sense of self-assurance – as if nothing had actually happened and things were going to carry on as they had *ante corona*. Whole sectors, particularly tourism, air travel, large swathes of the hotel industry, luxury goods, events, sports and culture are all on their last legs, but hey – who cares? Share indices have bounced back nicely since their March lows – indeed, some are trading higher than ever – as if it had all been a bad dream. There has been fearmongering of doom, gloom and disaster for this year’s corporate profits (which might well prove justified), but why fret? Valuation multiples are still sky-high. People are clearly happy to console themselves with the medium-term outlook (which appears to have emerged unscathed) and point towards the **rock-bottom interest rates** that lend even the loftiest stock prices a patina of plausibility.



Far be it from your authors to be Cassandras or spoilsports; should the system prove to be as robust and resilient as it appears to have been during the coronavirus crisis, we will certainly rejoice along with other market participants. We nonetheless firmly believe that the foundations of this putative robustness and resilience are overdue a visit from the planning inspectorate, as it were. It is just possible that a constellation of conditions has set in – perhaps by chance – that dissimulate robustness and resilience even as the whole edifice is built upon sand. This position paper is intended to get the debate rolling with a healthy pinch of scepticism.

Back in the good old days?

Let us try to think back to the state of the global economy and the financial markets in the pre-corona “Before Times” – admittedly, a rather difficult undertaking in our post-traumatic condition. Even the Ancient Greeks dreamt of a Golden Age, and we have a similar tendency to mythologise the lightness of being that obtained before the coronavirus crisis struck. We were certainly still able to go wherever we wanted and do whatever we liked, and the thought of short-time working, mass lay-offs or incipient bankruptcies had not crossed our minds; overcrowded intensive care wards were inconceivable in the hospitals of civilised countries.

And yet, not everything in the global garden was rosy at the end of 2019:

- The US-China trade dispute was far from being resolved. There was some hope of developments perhaps – only perhaps – taking a positive turn at the 2020 World Economic Forum in Davos, but the disparity in manufacturing conditions on either side of the Pacific that lay at the heart of the dispute would not have gone away, whatever punitive tariffs or conciliatory gestures might have been bandied about.
- The brouhaha surrounding the acquisition of nuclear weapons by semi-rogue states such as North Korea and Iran was in full swing, and the ranks of once-allied nations were anything but closed. With only half-hearted support from the Europeans, the USA had resorted afresh to sanctions: in the case of North Korea, these were being undermined by China in particular, while in the case of Iran, they were being undermined by Russia, Turkey and – one again – China.
- Military might in Syria, Iraq and Afghanistan had created de facto situations that flew in the face of the rules of civilised global co-existence; the international community had long since learnt to live with Russia’s partial annexation of Ukrainian soil, and of the Crimea in particular, even though sanctions remained in place. There was a similar situation in the South China Sea, where newly constructed artificial islands were acknowledged through gritted teeth by an American president whose inclination to big talk could not mask his



aversion to open conflict. Overall, the longstanding **megatrend** towards **ever-increasing globalisation** was beginning to look **fragile** and the collapse of the world into spheres of interest was becoming ever more apparent; a certain “**re-regionalisation of the world**” seemed to be in the ascendant.

- As a whole, the global economy was enjoying a period of growth. The USA had recorded its lowest unemployment figures for many years, China’s GDP had grown to a healthy 6%, and even Europe and Japan seemed to have shaken off the 2018 wobble. Even back then, there were still a few bubbles under the relatively pristine carpet, however, amongst which we would highlight the automobile sector in Germany and elsewhere. The aftershock of the diesel scandal, combined with spooked customers and strategic ineptitude on executive boards, heralded the perfect storm, which was then compounded by the coronavirus crisis in 2020 – even as the new kid on the automotive block, Elon Musk, was celebrating success after success in the USA as the Pied Piper of cheap capital.
- 2019 had been an ideal year for investors; simply nothing had gone awry. A further easing of monetary policy by the Fed (elicited by a sharply worded intervention on the part of the US president at the close of 2018) had ensured record prices on the bond and stock markets. A standard diversified portfolio was perfectly capable of generating a return of 20% or 25%. This untroubled mood was also reflected in very low volatility – an invitation to hedge positions that was well-nigh impossible to refuse. Then the first tidings of a new kind of virus began to filter through from China to the rest of the world.
- **Monetary policy-induced exuberance** is perhaps the best way to describe both the pre-corona situation and the underlying assumption on the part of market participants that loose monetary policy would likely be pursued in the same vein for an extended period – indeed would have to be, as the central banks could not afford to jeopardise the financing of state coffers and economies by halting their interventions on the capital markets or raising interest rates. Quantitative easing had already become a thing of the past – by purchasing all manner of bonds in their own currencies, the central banks had long since entered the territory of de facto direct financing of states and economies, and indeed they have been casting a purely semantic veil over this situation ever since.
- At the turn of 2020, this resulted in a **paradox** that instilled stability; induced precisely the euphoria mentioned above – namely, that future **monetary policy had to stay loose, due to high levels of debt**. Anyone taking the trouble to re-read financial analysts’ reports and forecasts of the time will quickly conclude that most were pushing precisely the following line of argument by the end: while indebtedness may be much too high (and, as such, is unsustainable), and debt levels are rising too rapidly (not least because of low interest rates), nothing bad is going to happen on the markets precisely because this is the case; the central banks will always have to come to our rescue – “whatever it takes”. There is no alternative.



- And the central banks really can do that. They are incapable of going bust, or so Modern Monetary Theory (MMT) would have us believe. Worrying about rising prices is old hat – the mood music coming from central bank sources suggested that the problem facing our age is **not inflation, but deflation**.

Over the course of 2019 up to the outbreak of the coronavirus crisis, belief in a benevolent *deus ex machina*, whose name shall be called “central bank” and who shall bring salvation unto the world, became a kind of “**new normal**” that only something truly extraordinary would be able to bring to an end.

2020’s twin surprises



As we know, something extraordinary did occur. In January 2020, the highly contagious – but only selectively dangerous – SARS-CoV-2 virus made its way from China through Japan and Italy and out into the world. The lifestyle of our open, globally mingling society proved to be an ideal breeding ground for this new *lusus naturae*. The world, and especially the Western world, was caught off guard in a number of respects. While many places had made preparations for a pandemic and, in some cases, anticipated the progression of such an event in impressive detail, these contingency plans had been sent to gather dust in some drawer or other in a department with completely different priorities. As a result, the key resources – masks, ventilators, trained staff, and the ability to lead in a crisis – were all conspicuous by their absence at the beginning of the pandemic. Faith in a fairly linear perpetuation of the “new normal” outlined above had taken root among precisely the authorities and entities that ought to have been primed for action when the balloon went up.

The realisation that this might be serious only began to percolate through Europe towards the end of February (and later still in the USA), despite the fact that China had long been keeping entire regions and large cities under lockdown. It was undoubtedly the terrifying images from Italy that triggered the ensuing (and occasionally precipitous) responses of European governments. Interestingly, it also took the financial markets a relatively long time to recognise this extraordinary situation for what it was. Calm reigned supreme on the exchanges during the first weeks of February, with the Nasdaq even notching up record highs on the 19th of the month while Shanghai trading floors experienced their first crash. There was still a belief that it would be possible to corral the COVID problem on a regional basis. This optimism was quickly nipped in the bud on 20 February and the world’s stock markets seemed to be in freefall. On 23 March, the MSCI World Index closed down 32%.

Money is rarely made by assiduously watching the news and conscientiously analysing the financial markets; practically every market participant is constantly attempting precisely this, of course, but the aggregating, anticipatory forces on the markets are generally faster than the analytical ability of any individual. This time, the situation was different. The vast majority of investors simply could not bring themselves to believe that the international community and the global economy were confronting a genuinely perilous problem, and could not admit to themselves that the “new normal” might have had it for the time being. The relatively innocuous trajectory of the Chinese stock market was doubtless also seductive; February’s losses had been made up as early as March 2020, and the consensus was that the Chinese must surely know best how dangerous or otherwise COVID might be.

Earning money in the face of a predictable stock market collapse was easy on the pocketbook this time round, due to extremely low volatility that in turn was fuelled by the “new normal” and the associated cheerful insouciance that prevailed at the end of 2019. Hedging options were dirt cheap into February, and investment of just a few percentage points of the previous year’s returns would have sufficed to hedge a whole portfolio out of harm’s way for 2020. And all hindsight is 20/20...

So, what was driving the markets when they finally, but violently, corrected? For a start, the high levels of **uncertainty** about the harmfulness of the new disease, its probable transmission throughout the world, the possibility of containing it or slowing it down, the advent of an effective vaccine, and so on. In other words, virological and epidemiological questions that have yet to be conclusively answered.

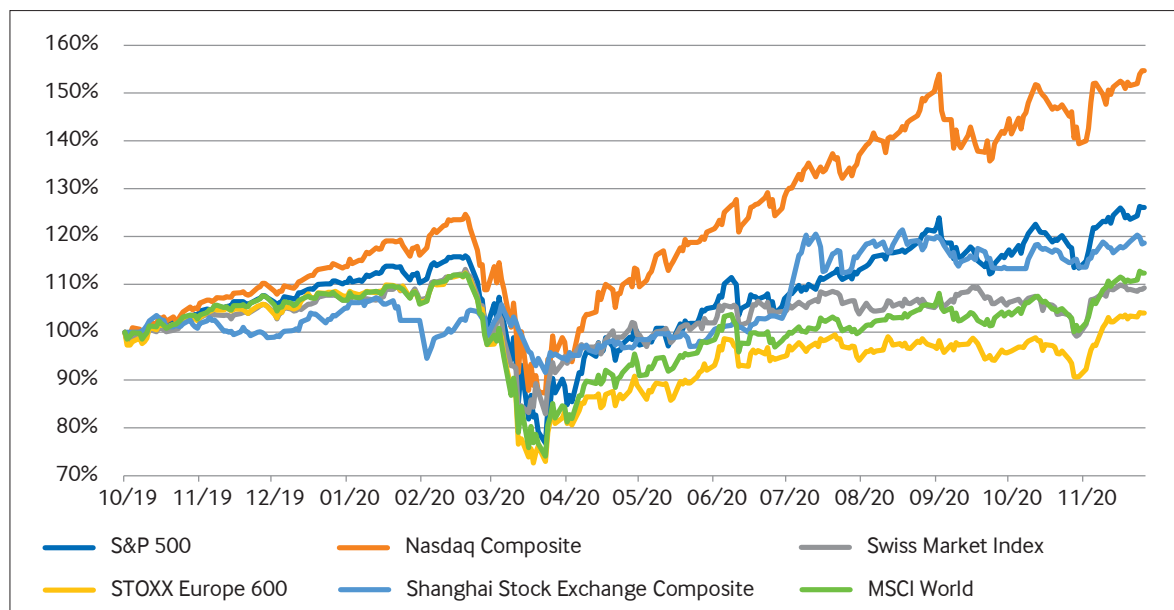
From an economic point of view, the next question preoccupying market participants and governments alike was how the global economy would react to this very specific exogenous shock. Expectations of procurement bottlenecks arose in the wake of China’s rapid lockdown. With today’s value chains relying on highly granular division of labour and intricate networks, how would the repercussions of China’s great manufacturing centres downing tools manifest themselves? How would a negative **supply shock**, against which monetary or even fiscal measures would be more or less powerless, pan out? Would scarcity not cause inflation? The **demand side** was also a cause of **concern**. How would whole societies react to the anticipated curfews and travel restrictions, for instance? How great might the decline in aggregate demand turn out to be? Would this then add further downward pressure to the deflation spiral? And, ultimately: could the combination of a shortage of goods and a slowdown in real consumption cause the global economy to slide towards stagflation, the most chilling of all economic scenarios?



Little could be ruled out entirely, as tumbling share prices indicated in real time. There was movement on the bond market as well, as previously non-existent risk premia – especially on corporate bonds and sovereign debtors with poor credit ratings – rose from the depths. Volatility on the interest rate, stock (and even, to some extent, currency) markets surged, seemingly implying that those who had predicted the coronavirus crisis would be the greatest crisis ever faced by the global economy and financial system might have been right all along.

Who would have thought?

Share price performance in the “year of corona” (in local currency)



Source: Bloomberg; chart by M1 AG

Not by a long shot! The markets started to rebound from 24 March, climbing more quickly than anybody had dared hope. Indeed, it would be fair to say that the **great surprise** of 2020 was not the pandemic, as we saw that coming (or should have seen it coming); it was not even the steep market downturn that began at the end of February. No – it was the **recovery** towards the end of March, and in particular, the protracted duration of this rally. With the benefit of hindsight, the following reasons can be adduced for this:

- The first wave of the infection was ebbing in Europe, as mid-March’s figures had already revealed to those who had eyes to see. The Chinese had already managed to contain the disease, although this assertion was yet to find much credence.
- Chinese businesses restarted their production lines, albeit subject to extensive safety measures. China switched into manufacturing mode, soon running two or three shifts a day; gaps in supply lines were closed back up, and the West was furnished with Chinese masks.



- Through a combination of inordinate **fiscal promises** and market **interventions**, Western states and central banks fanned expectations that the coronavirus crisis would shrink to nothing as an isolated episode, to be followed by an upturn in growth for 2021 and beyond. The US Fed expanded its balance sheet by some 70% (or USD 3 trillion) through asset purchases between February and June 2020, which gives some idea of the scale of the measures taken. All the other major central banks, including Switzerland's, followed suit, although the SNB did not do so using Swiss francs. The EU's almost trillion-euro pandemic recovery fund, whose relationship to the previously announced climate package remains unclear, still awaits incorporation into the annual budget. The EU will find ways to make this happen, however, as the position of debtor countries like Italy is once again on a knife-edge, and once again it is not just Italy on the line – this is a matter of life and death for European (and especially German) banks.
- It was not just empty words – liquidity support really did materialise for those businesses that had taken a battering in the first lockdown; a veritable firehose of cash was directed towards these struggling companies. The promised (loan) support was speedily and efficiently distributed in Switzerland via the existing banking system. This sent a powerful and encouraging signal.
- With the exception of anecdotal evidence of toilet paper shortages and some missed government tricks in respect of masks and medical apparatus, the global supply of goods proved remarkably resilient, despite a massive decline in air traffic. Prices for maritime cargo rose sharply during the spring of 2020, immediately prompting more careful differentiation between items of greater or lesser importance and keeping global logistics elastic – a textbook example for some future primer in micro-economics!



This is all phenomenological window dressing and insufficiently analytical, however, as it addresses only the left-hand column of the balance sheet, the asset side of coronavirus crisis measures. It is certainly true that action was taken, even that the right action was taken, and with relatively little delay. But this does not address the root cause of the colossal and ongoing stock market boom. We must factor in the *financing* side of these coronavirus crisis measures, and here it becomes apparent that **debt levels have once again increased enormously**. It might even be said that future indebtedness has spiralled completely out of control, as we have no idea where the far horizon of the funding requirements occasioned by the pandemic to “save” our economy and culture might lie. Even pre-corona, the total debt-to-GDP ratio of EU member states had passed the 80% mark; post-corona, and counting the newly instituted direct debt purchases, this figure is likely to rise to 90% or even 100%. The Maastricht ceiling was 60%... *Tempi passati*.

And yet, is it really as bad as all that? Is it enough to destabilise? Yes, it is – such mountains of debt threaten to disappear into the twilight zone of unrepayability if growth is anaemic. This

would likely be the case if interest rates were to rise and the anticipated cost of servicing (sovereign) debt were to outpace the real growth rate of a given economy. There are countries in precisely this position – and sooner or later, someone, somewhere is going to have to take the hit in the form of a write-down. Then again, no it is not – illusionary balance sheet positions (in the case of Europe, “target balances”, for example) can be propped up for long periods of time, especially in the world of public accounting, where the rules are very different from those binding hard-working entrepreneurs. Similarly, old debts that fall due are easily refinanced when there is a buyer with infinitely deep pockets in the offing. The ECB has been performing this role for a good while now, and Europe’s banks are diligently playing along – it’s a nice little earner, after all.

So, we find ourselves *post corona* in precisely the same situation as before, indeed in a **compounded paradox**: the greater the debt burden, the less likely the central banks are to revise their respective monetary policies. This, rather than fiscal promises or showers of money, is the true motor of 2020’s stock market boom. We are witnessing a real-world application of MMT because central banks supposedly cannot go bust and inflation is a thing of the past. In other words, money for nothing (or even less than that!), and a creeping sense that this is the “new normal”. Corona has made it abundantly clear just how stable this normality can be. So, what could possibly go wrong?

New normal or freak exception?

A visitor to a Thai beach on the early morning of 26 December 2004 would have been able to walk strangely far out beyond the coast. A low tide of a very particular kind had caused the sea to disappear right out to the horizon. There were some people, tourists, who did not want to miss out on this spectacle and went to explore the seabed that had been exposed by the disappearing waters. They presumably found these new circumstances “normal”, but not frightening. They would otherwise have walked in the other direction – or, rather, run – for what arrived just a few hours later was a dreadful tsunami, a tectonic surge of extraordinary height, that caused horrific devastation and more than 250,000 fatalities.

We cannot but recall this image when we consider the “new normal” on the financial markets and the monetary policy being pursued by practically every central bank. We believe that something is being pent up here that at some stage will be discharged – will have to be, because things simply cannot go on this way, nor should they. States, economies and households have had access to money at low – or zero – interest rates for some years now. On what planet could such financing conditions not result in **recklessness** as regards **taking on more**



debt? Does anyone seriously believe that such an environment would not lead to exceptionally “stupid” projects being pursued – “stupid” in the economic sense, i.e. with highly uncertain future cash flow? That it would not cause state treasuries to run up debt in order to peddle and promote **government consumption** rather than finance sensible infrastructure projects? That politicians, shedding their last few qualms of conscience, would *not* plunge their snouts into the state coffers that belong to the common weal, with a view to acquiring personal advantage or securing re-election? The problem with debts is that the sum owed is fixed, but the return may be worth a great deal, or nothing at all.

This is not to denigrate the many emergency aid packages elicited by the coronavirus, or the relief measures taken, but we find the alacrity with which as yet unearned money has been dished out this summer to be alarming; there is no longer any trace of healthy prudence with the purse-strings. Where are the concerned financial policymakers? The benefits of the “debt brake”, a balanced budget amendment and notable Swiss achievement, are generally propounded only by academics these days, although conditions here still seem relatively reasonable compared to those in the EU or USA. “Helicopter money” is no longer the absurd pipe dream of fringe Neo-Keynesians; it has become a fact – at least indirectly – as the major central banks on both sides of the Atlantic have long since become free ATMs for all and sundry. It does not seem to bother anyone that the quality of their balance sheets is deteriorating with every passing liquidity injection. Apparently they cannot go bust, or at least that is what advocates of MMT would have us believe.

Risk premia are also in an exceptional state. These are usually part and parcel of an interest rate calculation and reflect the likelihood of expected interest payments being made and the principal being repaid. Depending on creditworthiness, risk premia may amount to one, two or even more percentage points, however this will also depend on the maturity, as more can happen over a longer period than over a short one. Risk premia are the most important tool for steering capital allocation; if they are absent, or are generated or mapped incorrectly for some reason, the “wrong” amounts of capital can flow in the “wrong” direction. Risk premia are the **greatest contribution** that a market economy can make to the common good, and their **informational value** exceeds that of any other single input in financial analysis. A risk premium subsumes the aggregated perspectives of supply and demand, underpinned by sale and purchase transactions. In short, risk premia are the manifestation of Adam Smith’s “invisible hand” *per se*.

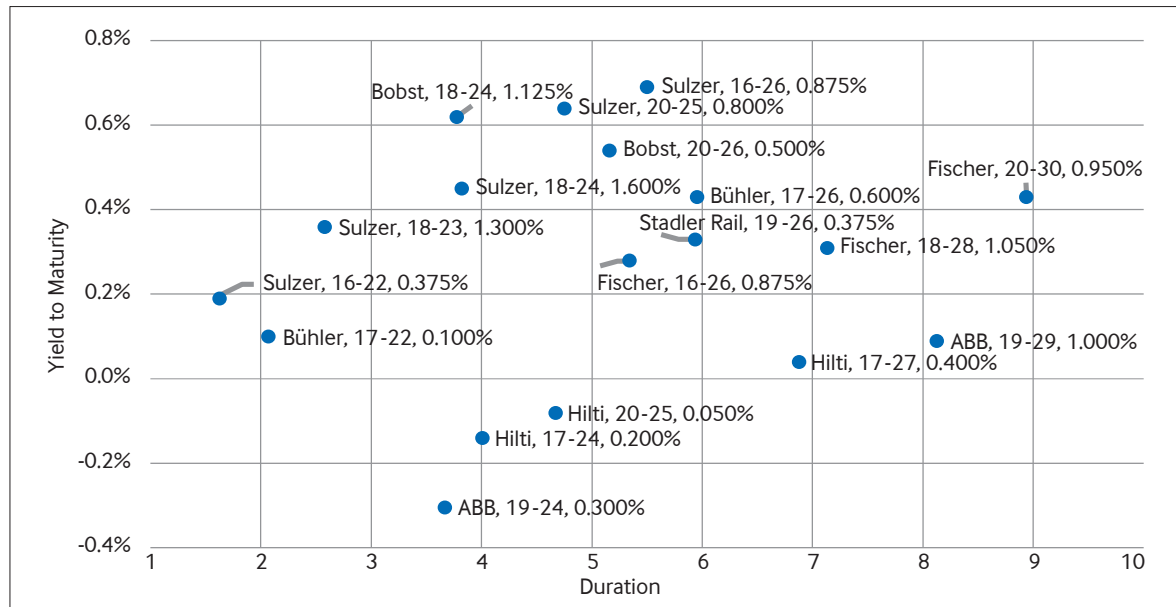
Quantitative easing and the central banks’ subsequent MMT programmes have largely eliminated risk premia from the market. For our own purposes, we recently reviewed several bonds issued by companies that we know well and are well placed to assess. The results were



unequivocal. Some valuation differences may remain, but they are in the micro-range. Essentially, all the enterprises shown below are able to borrow money at no cost.

“Free” capital for companies

A comparison of corporate bonds



Source: SIX; chart by M1 AG

Note: the labelling follows the scheme company/maturity/coupon.

Now, one can quite legitimately maintain that our selection encompasses an especially unproblematic cohort of companies, and that is doubtless the case; we did not choose any tour operators or private airlines. However, even the most conservatively managed and amply capitalised enterprises are not entirely shielded from risk in the period under review. Something can always happen, exogenously, endogenously, through culpability, or through the fault of no one at all. That is the nature of risk and it is the responsibility of a company’s management to deal with it. Our conclusion is simply that the businesses in question are paying too little as recipients of capital for the risk inherent in their operations – and the capital providers (pension funds hunting for investment opportunities, for example) are receiving far too little for the risk they are assuming. Pension funds: that means all of us. For years, we have been receiving inadequate financial compensation; we have been, and continue to be, deprived of the opportunity to benefit from the leverage derived from interest and compound interest. This amounts to a dramatic and **tacit expropriation by stealth** of the younger population in particular, who would still have time to accumulate wealth.



Some debtors are categorised as “systemically important”, which is another way of saying that there is a – more or less – justified assumption that a suitably empowered authority would be ready to come to the debtor’s aid should it find itself in financial distress at some point. Concrete examples of systemic importance emerged during the financial crisis of 2008/09 in the form of banks – individual institutions were bailed out by state entities and the banking system’s regulatory structure was consequently adapted; systemically important banks have since been subject to more rigorous controls. The coronavirus crisis of 2020 has significantly **expanded the roll call for systemic importance**. These days, airlines, hospitals, pharmaceutical companies and logistics outfits are all systemically relevant – as indeed is (to go from the sublime to the ridiculous) the newsagent on the corner – for a population constricted by curfews and travel bans. Corona has spawned the notion of a kind of “total bailout”: kitchen fitters, cabinetmakers and convenience store owners, you name it – all now want their systemic importance to be acknowledged and their chestnuts pulled out of the fire.

Is “everyone saving everyone” even a concept that can be seriously entertained? You would think not, as it is as tautologous as Baron Munchausen pulling himself out of the swamp by his own hair, but the risk premia currently being paid (or indeed not being paid!) on the market tell a different story – the illusion seems to have been accepted as reality. The beleaguered airline group Lufthansa recently issued a convertible bond worth no less than EUR 600 million. With a coupon of 2% and a maturity of 5 years, it was apparently oversubscribed by a factor of four and, in no time at all, the bond was trading at 112% and more above face value, i.e. there was brisk demand. This performance is unlikely to be due to the probability of conversion; instead, there lurks in the background the assumption that Lufthansa will not – indeed cannot – go bust. The silent guest at the table when the bond is purchased in the seller’s own currency is indeed a central bank, with seemingly bottomless pockets and a free hand to act as it wishes without causing inflation through dilution of the money it has issued...

The “new normal” or a freak exception? We cannot quite countenance the notion that the End of (Economic) History will come this way: money from everyone for everyone, everyone saving everyone else, unlimited debts piling up, **the abolition of scarcity** and with it, the abrogation of an **axiom**. This is just too unlikely, whatever the current interest rates, risk premia and inflation expectations might be.



Finding reasons in the real world

Those who suspect that the situation we are facing here is a freak exception, rather than some “new normal” bespeaking a completely different monetary theory that challenges every established tenet of neo-classical economics, monetarism and indeed of Keynesianism itself, will have their work cut out to justify such an assertion in light of factors clearly observable in the real world, including non-existent risk premia and an absence of inflation expectations. We recall appearances by renowned economists of the old school who were practically begging for a sign of inflation at conferences – just the tiniest glimmer of anticipated price rises on the horizon! – to be proved right about the perils of quantitative easing and MMT as applied in practice. The wagging forefinger has long since lost its educative force in the implementation of monetary policy.



If a new reality (with its associated new theoretical doctrine) has not set in; if we are “only” dealing with a specific concatenation of circumstances that makes quantitative easing and MMT even possible – what has brought it about? Solar radiation and cosmic rays? A secret cabal amongst central bankers?

Of course not. The advantage of 2020, the “year of corona”, which confined us all to our home offices, was that we had time to observe the world from outside, or from a bird’s-eye view, as it were, and, through a process of elimination, to tease out certain factors that might have contributed, in whole or in part, to what we have called a “freak” situation. Here are the results of our ruminations, which we shall address in detail in the chapters to follow:

- The lasting **deflationary effects** of the **technological transformation** we are living through have been consistently **underestimated** and the particular characteristics of such a technologically induced “deflation” have not been understood.
- In a way, the **banking system** has become **dysfunctional**. The credit cycle has ground to a halt. Both the money multiplier and the velocity of money in circulation are stuck at very low levels and may even slow further.
- There is an **odd division of labour** in the global economy: goods are produced by the Chinese, financial products by the USA, and this constellation is mirrored in the balance of trade and the flow of capital in the financial account. The Chinese are actually practising vendor financing in respect of US consumers by lending the dollars they get for their products straight back to the USA so they can be re-spent on buying more Chinese products.

- There is **no meaningful currency competition** between the major economic blocs. The USD and the non-appreciating CNY have dragged interest rates for other currencies down. Clearly, no one fancies having a higher-valued currency of their own, with the possible exception of certain emerging economies.

We believe that these four powerful factors explain the strange concatenation of circumstances that is allowing central banks to expand their balance sheets indefinitely, as it were, with no harm either suffered or caused. We shall address these points in order below, linking them together into a “cluster of curiosities”, before asking ourselves what might herald the dissolution of this unique constellation, and how things might ultimately end up looking.

Reduction and concentration

A rail passenger who walks towards the engine on a train travelling at one hundred kilometres an hour will be perceived by an outside observer to be travelling at a speed of about 105 km/h; from within the train, however, he is moving only at human walking speed. Everything is relative – it all depends on your point of view – and the way developments in the technology sector are perceived seems to be very similar. Standing within the “train”, we acquire a new smartphone every year as a matter of course; not a week goes by without us installing new apps; we are no longer the slightest bit impressed by digital payment methods or highly efficient auction platforms; and we no longer pack the Ordnance Survey, altimeters or compasses to go hiking – we rely completely on the relevant app for topographical information. In other words, we no longer notice the frantic pace of change to which we are exposed except when we observe the “train” from outside and attempt to recall how our lives used to look just a little while ago. Hand on heart, do you remember sending “short messages” from your Nokia in 2005?

We do not intend to conduct an exhaustive survey of the last thirty or forty years of technological development; we will limit ourselves to naming the two elements that are critically important to our analysis here: the exponential evolution of data-processing power and virtually infinite capacity for data storage. Computing and storage have got consistently cheaper over this period by orders of magnitude, and this has made it possible to use data-processing to integrate and automate ever more processes, particularly in the micro-sphere of the individual. Economists gnomically refer to this (and the associated efficiency gains) as “lowering transaction costs”, but the illustration below might give some idea of what it actually means in practice.



One from all and more from one



Source: illustration by M1 AG

Replacing a stack of objects and instruments by **integrating** data and processes within a single tool, **miniaturising**, **boosting performance**, **creating synergies**, **networking** anything that was previously off-grid – such are the ways the lowering of transaction costs inherent in technological advances are expressed in practice in our day-to-day lives. You could call it a process of “reduction and concentration”. What is true for our smartphone applies on a far greater scale for industrial procedures, for scientific research and for the financial sector: here too, we have witnessed miniaturisation, performance power-ups, networking of stand-alone devices and synergy creation. But what exactly is happening here in economic terms? Are more phone handsets required, and thus being manufactured? Are more diaries being printed? More torches sold? More atlases and street maps purchased? Or perhaps one should ask: does an “Industry 4.0”-style facility require more or fewer services? How many parts are there in a vehicle with an internal combustion engine compared to an electric car?

These days, technological progress has little to do with traditional production, and thus with the GDP we know so well. In many respects, things are positively **shrinking**. Reduction and concentration indeed. Less is required, but that little is getting better and better. Increased prosperity, with not a soot-spewing factory in sight. Whole hotel chains like Airbnb have been able to establish themselves around the globe, causing capital-intensive competitors like Hilton and Sheraton to quake in their boots, without having to erect a slew of new buildings. Scarcely a single new car has been manufactured for the taxi firm Uber, which now has a



worldwide presence. In both cases, a more efficient use was simply found for existing capital (under-used houses/homes/cars). **More intensive exploitation** of existing capital, jettisoning unnecessary apparatus and instruments, more efficient deployment of human capital through better personal equipment and communication options, e.g. in a home office – the technological transformation that is taking place has made us all noticeably better off, even in an environment of sluggish GDP growth. You get much, much more for your franc, dollar or euro today than you did ten or twenty years ago.

This is indeed a deflationary process. But should it have been countered with such drastic measures as quantitative easing on the part of the central banks? People were getting richer, not poorer, thanks to the paradigm shift in efficiency, after all, so they would not have drifted off into an economically depressive funk. Is there really any point in setting inflation targets of one or two percent during a tech-driven transformation? We are merely posing the question here, but one thing is certain as far as our argument is concerned: in such conditions of technological change, **any kind of monetary policy is possible**, with no immediate risk of a spike in inflation or of negative consequences for the economy. Or to put it another way: sustained, secular technological change has massively increased the leeway for discretionary monetary policy.

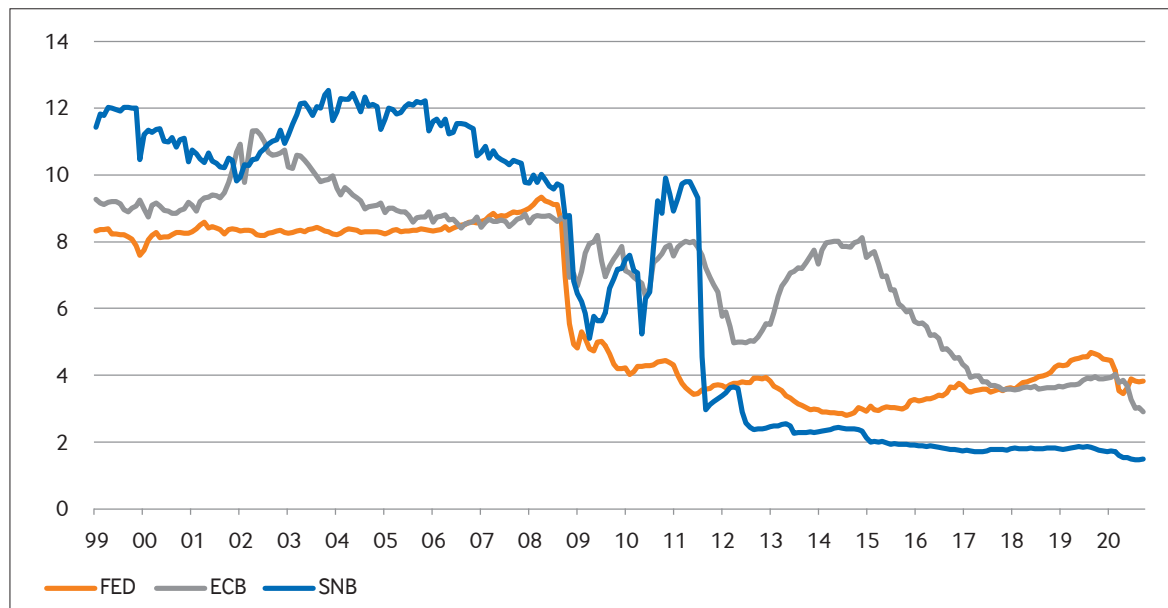


What do banks do, exactly?

According to classical economic theory, the banking sector ensures that money and capital can be easily and securely transmitted from Player 1 to Player 2 (“transfer function”) and that as many players as possible can participate in the cycle of saving and investing. To achieve this, the banks have to be in a position to manage credit risk by granting and denominating loans as well as carrying out maturity transformation. These services are collectively known as “transformation functions”, i.e. risk, maturity and lot-size transformation. Commercial banks are permitted access to a certain volume of central bank money in order to carry out these transformation functions, and are additionally the only economic agents authorised to create money by accepting current account and savings deposits and making these available to the economy in the form of loans. The relationship between central bank money and commercial loans (deposits or book money) is known as the “multiplier”; this factor has typically been somewhere between 8 and 10 and has remained fairly constant over time. The higher the multiplier, the more robust bank lending and the greater the appetite for risk.

Paralysed banking sector?

The M2 multiplier – Fed, ECB and SNB



Source: Fed, ECB and SNB; chart by M1 AG

Since the end of the financial crisis, i.e. from about 2012 (and as early as 2009 in the USA), there has been a dramatic **decline** in this **multiplier**, mirroring the funnelling of central bank money into the financial system via quantitative easing as the central banks hoovered up bonds from the market. But what was cause, what was effect? Which is the chicken, which the egg? We believe we have established

- that banks worldwide were massively undercapitalised as they stumbled into the financial crisis of 2008/09, and hence posed a classic solvency problem;
- that despite this solvency problem, crisis management under the aegis of former Fed chair Bernanke was focused on liquidity support rather than recapitalisation;
- that while the capital architecture of US banks was later shored up with a range of restructuring measures, European banks failed to follow suit with anything of a similar nature (cf. edition 33 of our publication *bergsicht* from October 2018 on this topic);
- that European banks' earnings performance has been dismal as a result – while the ten largest European banks managed to generate profits of USD 60 billion in 2007, with their American counterparts managing only USD 40 billion, the tables had been turned completely a decade later, with the ten largest American banks chalking up profits in excess of USD 110 billion and the Europeans able to clear no more than USD 24 billion!
- that due to the new Basel III regulatory framework, loans to “risk-free” or “low-risk” debtors are viewed preferentially when capital adequacy is assessed, and conversely,



- there is relatively little incentive for banks to engage in commercial lending, which may be more profitable but is also far more laborious and capital-intensive;
- that European bank shares have been performing catastrophically across the board for years and that no major bank has managed to really stand out from the crowd.

In other words, we seem to be dealing with an unholy amalgam of structural deficits, counter-productive regulation, challenging new forms of money/capital flows (and the associated erosion of margins) and a clear absence of risk appetite in the banking sector. It is not for nothing that you hear the term “**zombie banks**” being mentioned a lot at the moment. These are banking structures that exist only because they are on life support, thanks to a steady stream of cheap central bank money, for example, or by virtue of being allowed to earn risk-free carry income from risk-free or low-risk investments.

Here too, it is beyond our remit to analyse the problems affecting the ailing banking sector in every last detail; we can merely assert that this anaemia is a fact and seems to be of an enduring nature. The conclusion is clear, however: the spectre of inflation as a result of increased money multiplication is unlikely to be summoned any time soon by banks structured and conducting their business in such a way.

Also a kind of division of labour...

Countries, blocs and regions are all subject to widely differing conditions – from their climate through the availability of natural resources, access to a coastline or land reserves, to the make-up of their population. In addition, autonomously enacted or externally imposed legal/regulatory frameworks determine the degree of energy that is expended on improving the common weal. Historical factors that shape people’s mentalities will also play an important role.

In economic research, much thought and debate has been devoted to the wealth of nations over the last few centuries (starting at the latest with Adam Smith’s eponymous publication of 1776). It gradually became clear that a genuinely free exchange of goods and services was the model that would ultimately achieve the greatest prosperity for all. David Ricardo (1772–1823) pioneered the concept of free trade; it is to him we owe the notion of **comparative advantage** and its aim to achieve optimisation rather than maximisation (the mantra of cameralism and mercantilism). A Ricardian free trade economy seeks equilibrium and, because of marginal cost effects, sometimes leaves production capacity in locations where it would not initially seem logical to do so purely on the basis of absolute cost comparisons. Such an



economic model would hardly result in what we know as “de-industrialisation” or “industrial decline”.

This preamble is of importance in the following to explain what **went wrong** when **China joined** the global economy. After the seismic power shift in Beijing in favour of Deng Xiaoping in 1978, China executed an abrupt *volte-face* in foreign policy and opened up to the industrialised nations of the West. These were in turn only too delighted to be able to drive a wedge into the previously impervious Eastern bloc in this fashion, and soon allowed the Chinese to participate in world trade organisations working towards globalisation, including observer status with the General Agreement on Tariffs and Trade (GATT) and, later, the World Trade Organisation (WTO); China was formally admitted to the WTO in 2001.

Over the course of these years, China has transformed itself from a backward developing nation into an emerging economy and can now look the industrialised nations of the West and Japan in the eye. An almost **unimaginable ascent!** In the space of 40 years, a superpower (indeed, a world power) that demands to be taken seriously economically, politically and (to an ever-greater degree) militarily has been created out of thin air. In the first ten to fifteen years or so, China’s major comparative advantage lay in the **cheap labour** it had to offer, and Western consumers of the time were prepared to accept certain qualitative deficits as a trade-off for low prices. Manufacturing conditions have improved over time, however, and considerations of quality are no longer any reason to turn your nose up at goods labelled “Made in China” – on the contrary. From a pricing point of view, the Chinese were more than able to offset the cost of rising wages via enormous **productivity gains**.

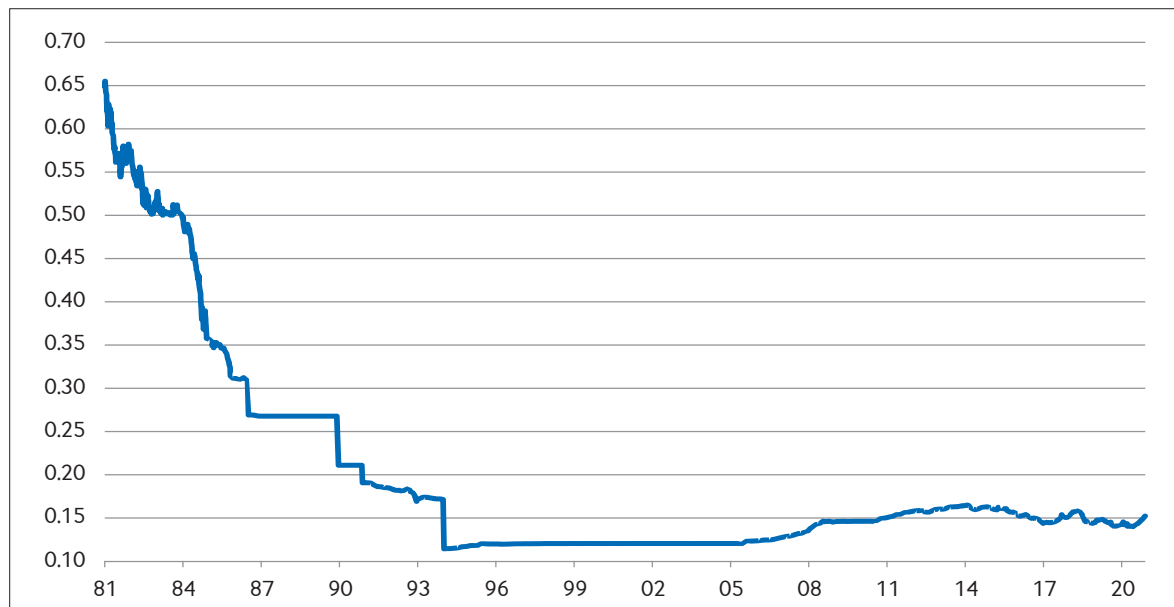
The fact that production capacity should, under conditions of free trade, relocate from the highly developed nations to China is a textbook example of a Ricardian adaptation process. In such circumstances, it was impossible to halt the decline of labour-intensive enterprise in the West, but Ricardo unfortunately accounts for only half of these developments. The other half was of mercantilistic origin, in that the Chinese were allowed a free hand to **manipulate** their **currency**. As a country’s productivity increases, the external value of its currency would normally also rise in tandem, as the economy behind the currency becomes more valuable on the back of increased future cash flows. In a Ricardian adaptation process, such currency adjustments would ensure that one side would not suddenly be left stranded with no production capacity of its own – new equilibria would be created.



The chart below plots the external value of the CNY for the period 1980–2020. After a sharp depreciation at the very beginning, the CNY has been stagnating at around the same level for years, which seems entirely absurd given the country’s economic performance.

The shape of free float? Hardly!

The external value of the CNY (against the US dollar)



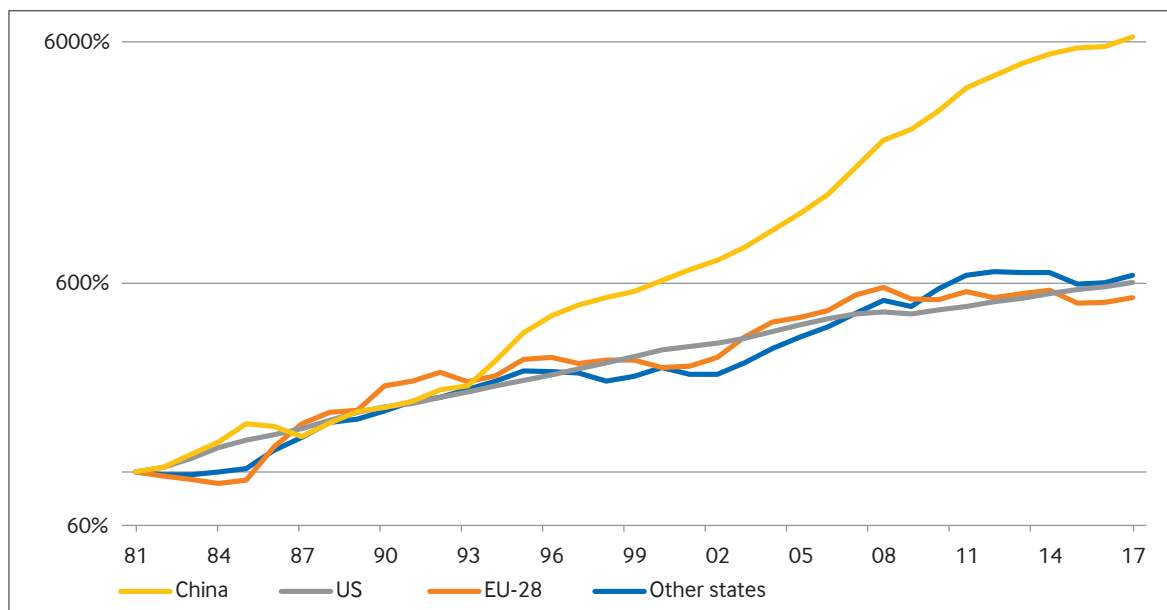
Source: Bloomberg; chart by M1 AG

The international community allowed this currency manipulation to persist, however, constantly claiming that Chinese banks were not yet ready to let their currency float freely. As if it were impossible to bring order to a banking system in the space of five or ten years in the context of sustained economic growth north of 6%! No, the reasons for this *laissez-faire* attitude to the Chinese must be sought elsewhere. We think it was the Americans in particular who were in no hurry to see their “unique selling proposition” of the **USD as a global currency** imperilled; nothing seems to spook them more than the prospect of the CNY taking its place among the global currencies at some juncture. China’s share of global GDP has risen inexorably over the last few years and is now estimated to be well over 20%. The stake required to back a claim to be a reserve currency is certainly in evidence, but this has not yet come to pass. The chart below illustrates the momentum with which China has come to the fore in the global economy over the last forty years; its manipulated currency policy makes for a particularly stark contrast.



The stupendous rise of China

A GDP comparison starting in 1981 (logarithmic)



Source: World Bank; chart by M1 AG

So, what is behind the Americans' calculations? Well, a very simple economic consideration, for starters. Anyone in a position to issue a currency for more or less the entire world will pocket a healthy monopoly rent in the form of seigniorage, and this applies equally to the Fed's central bank money and the book money held by the (American) banks involved. But this is not enough to explain the situation on its own. The quasi-monopolistic position of the USD on the financial markets is also a factor; the USP of being able to produce and globally market debt in the form of securities denominated in your own currency on a massive scale.

But why have the Chinese not wished to allow their currency to appreciate and become genuinely convertible? The short (and commonly quoted) answer is: in order to guarantee sales of Chinese goods at dumping prices, even if wage levels rise. The following argument seems more nuanced, and possibly also closer to the mark: a country organised along state-capitalist lines has the freedom to pass on the added value it acquires through foreign trade to its stakeholders, in this case the workforce and the "owners" of domestic companies – or not. While granted pay rises and appropriate dividends, these stakeholders have been denied the gains that would result from an appreciating CNY. Western terminology would classify this as paternalism, expropriation; in China, it is probably referred to as **social control** and collectivisation of growth profits for a population a billion strong. That the country's foreign exchange reserves have steadily been piling up as a result of the Bank of China's reluctance to allow its own currency to appreciate (despite vigorous efforts to bring the total down, there are currently still around three trillion USD, or around one-twentieth of America's total debt,



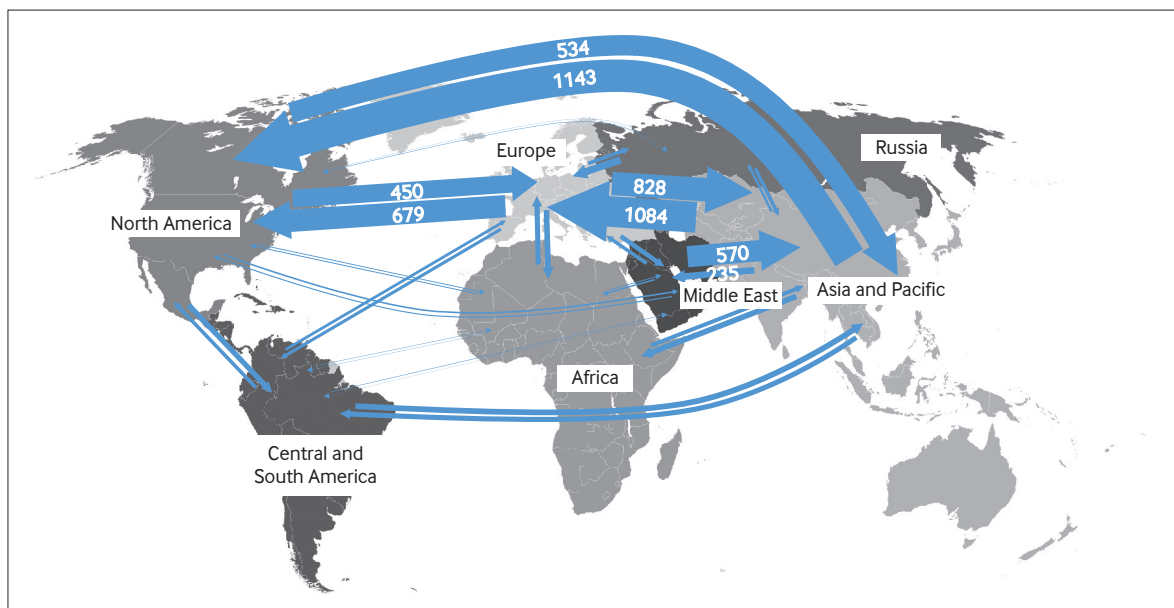
in the coffers) did not seem to worry government officials for the longest time – their first priority was to take care of domestic security. Chinese attempts to convert their USD holdings into other assets began only a couple of years ago, with the **Belt and Road Initiative** offering ample opportunity for direct investment in countries and regions of interest.

After what has now been some thirty years of Chinese resurgence, the global economy has achieved a strange, non-Ricardian, equilibrium that might more accurately be described as a “dead end” from which there is little hope of escape: China works and produces while the West – America, in particular – consumes. For many goods, there is now insufficient production capacity left in the USA (and, to a lesser degree, in Europe as well), which means we will have to “buy Chinese” whether we like it or not. US President Trump was thus cutting off his own nose to spite his face with punitive tariffs against China: the American consumer was always going to be on the hook to pay for them, as other jurisdictions are rarely able to supply the relevant goods in sufficient quantities.



Can this be sustainable?

Global trade flows (in USD billions)



Source: United Nations Conference on Trade and Development; chart by M1 AG

However you slice it, the upshot of any reduction in the trade deficit with China would be that Americans would have to save(!) and invest more. Root-and-branch restructuring of the global monetary system would probably be required for that to happen, however. There would need to be a move away from the monopoly of the USD as the global currency towards a system in which multiple reserve currencies from a range of destinations were allowed to float.

An absence of currency competition

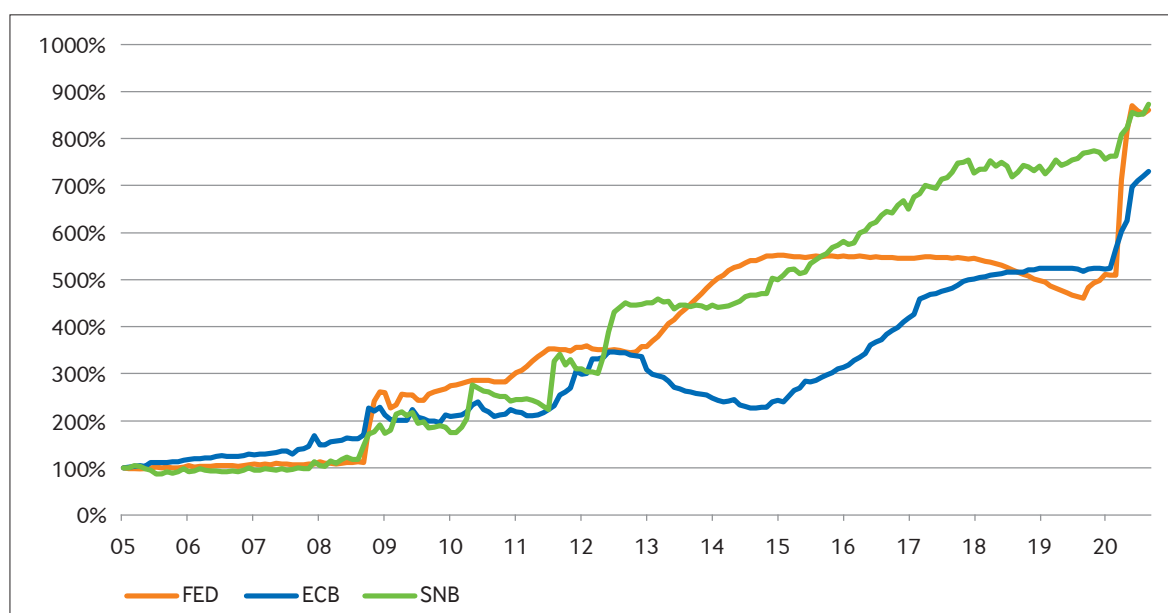
This brings us to the last topic in our “cluster of curiosities”: there is no meaningful competition between currencies. And why? Because the only currency that would have to appreciate against the established currencies (USD, EUR, GBP, JPY, CHF) would be the CNY, but this is not happening for the reasons stated above. The Chinese have no desire for this to materialise in the foreseeable future and the Americans, masters of their bloated financial account, are similarly disinclined to change the situation. The Europeans and Japanese are keen not to have to increase the external value of their currencies versus the USD as the competitiveness of their export industry is measured in dollar terms; the Swiss, on the other hand, are principally concerned with their exchange rate against the EUR and hence undertake massive interventions against their own currency.



Given this situation, it is no surprise that, spearheaded by the US Fed, interest rates have been taken to rock-bottom levels. The use of interest rate changes as a mechanism for steering the external value of a currency has shrunk in importance; interventions now come in the form of buy/sell transactions on the markets. The central banks' balance sheets have ballooned as a result.

Is such an increase risk-free?

The balance sheet of selected central banks (indexed to 2005)



Source: Fed, ECB, SNB; chart by M1 AG

Is this a problem? For us, absolutely. For proponents of MMT? Not so much. We have already outlined the negative consequences on the capital market (the lowering or total absence of risk premia), but of far greater significance is the fact that this state of affairs is **not risk-free**. One side of a central bank's balance sheet is created by issuing currency (the ne plus ultra of nominal value) while risky shares and debt instruments pile up on the other. What happens when these, for whatever reasons, get into difficulties, become illiquid, or are subject to a haircut? Does the quality of a central bank's balance sheet matter?

Modern Monetary Theory would say it does not – the central bank of a sovereign state cannot go bust, it can always issue money. We are more sceptical and maintain that this is the case only in the absence of currency competition. We believe that these ill-considered interest rate cuts, rounds of quantitative easing and recent endeavours to implement MMT by the back door are all hanging by a single **slender thread**, namely **the absence of any meaningful currency competition** over the last thirty years. This kind of monetary policy has only been compounded by the secular megatrends of deflationary technological transformation and a non-multiplying banking system described above.

And suspended from this self-same thread we see all the ultra-high bond valuations, the absence of risk premia for sovereign debtors *à l'italienne*, all the share prices that have rallied this year despite gloomy forecasts, the extreme multiples when it comes to acquisitions of companies that may consist of little more than hot air and wild promises, and the aggregate debt of states, companies and households. The “new normal”? We think the situation is a freak exception, and more fragile than people imagine.

So what?

Distortions have never lasted for ever in the history of the global economy. The Bretton Woods system was abruptly swept away in 1973, although the foreshocks had been discernible for some time. A rise in the gold price has often been an indicator of incipient change; cryptocurrencies may now perform a similar seismographic function.

We think this fragile situation – on which so much depends – is crying out for reasoned analysis. The first task is to identify inflation expectations at an early stage. These may manifest themselves in the real-world, “goods” side of the economy, but there are also relevant key indicators on the financial markets. We have been monitoring the valuation of **inflation-protected bonds** known as TIPS (Treasury Inflation-Protected Securities) for many years. Working from the prices paid on the market for inflation protection, it should be possible to very



rapidly detect when even the slightest hint of inflation expectation begins to emerge in the system, certainly long before a central bank might react to it with interest rate hikes. And yet – would the central banks even react as speedily as all that to rising inflation expectations? “Inflating away” the mountain of debt might suit them down to the ground. It would be less to the taste of investors, however..

The next task on the list is to watch the banking system like a hawk, in order to be ready if money multiplication sputters back to life, which would inevitably have repercussions on the inflation front. We do expect there to be occasional disruption of the serried ranks of the banks as their anaemic condition is an open invitation to genuine competition in the form of a better business model for financial institutions. This may already be in motion in the field of para-banking. We are also keeping an eye on **regulatory developments**. After an almost secular trend of tightening over the last few years, the pendulum ought to swing back at some point – re-regulation is likely to be followed by “de-re-regulation”, in other words. Might, as once under Margaret Thatcher, London end up leading the deregulation charge in an effort to stand out from the EU and remain competitive? It would make sense, and London is well aware of what can be achieved with a “Big Bang”.

As for **China** and its foreign trade and/or **monetary policy**, we anticipate some reverse thrust over the next five to ten years. President of the Republic and Party General Secretary Xi Jinping is now 67 years old and would presumably like to keep a firm hand on the tiller during this delicate phase of China’s development. What would be logical? The slow but inevitable dismantling of China’s “Animal Farm” (currently populated by worker ants) and a more liberal percolation of its accumulated wealth down to the population at large. This would to some degree betoken a shift **in favour of the domestic market** and greater consumption, and a higher external value for the Chinese currency would be a fundamental prerequisite here. This, in turn, would require China to square up to the USD so the CNY could compete. The USA would then only be able to defend its currency and/or retain control of the situation by raising interest rates for the first time in a very long time.

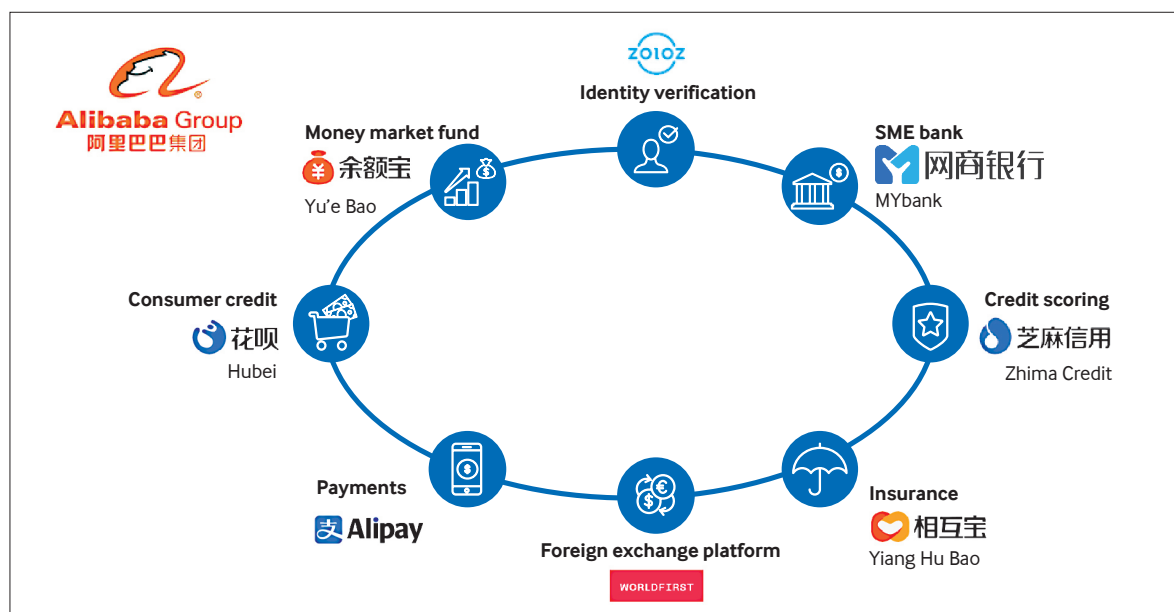
The external value of the CNY would take on similarly greater significance if the discord between the old superpower (the USA) and the newcomer (China) were to acquire a **military dimension**. Warring parties need foreign exchange. We have no desire to even imagine a market launch of this kind for a new global currency, as it would undoubtedly have devastating consequences – not least on the West’s debt markets, especially given that inflation would make its presence felt as the West became painfully aware of the sudden absence of Chinese goods...



But let's return to the controlled and cooperative *modus operandi*. We venture to suggest that China will take an entirely different and **unprecedented approach** to finding its place in the global currency system. There is one thing the Chinese regime wishes above all others: to retain control of its citizens, even – indeed especially – when these take their (appreciated) CNY abroad to go shopping. They have already done much of the spadework to this end with their cashless payment systems and networks such as the Ant Group, as the illustration below clearly demonstrates.

Planned Economy 2.0?

The fully integrated ecosystem of the Ant Group



Source: illustration by M1 AG.

Note: the illustration depicts the Ant Group, which is indirectly controlled by the Alibaba Group.

We may just be staring down the barrel of a **Planned Economy 2.0** in which artificial intelligence is used to fine-tune supply and demand with nudges and pokes, rewards and punishments, prescriptions and proscriptions, as the cheery Chinese demonstrate to us just how cumbersome and difficult to predict and/or control the processes and structures of our market economy really are. The first intimations of this are clearly visible, in our opinion – not least in the “age of corona”, as the Chinese have proved they are past masters in the control of social processes even as we grapple with the second and third wave of the plague from Wuhan...



This Planned Economy 2.0 from China would come up against a Western Capitalism 1.0 that had hollowed itself out endogenously, from within, as the **sweet poison** of “everyone-bails-out-everyone-else-with-bigger-and-bigger-debts-that-future-generations-will-never-be-able-to-repay” has been allowed to penetrate far too deeply and for far too long under the constellation of exceptional circumstances we have described as a “cluster of curiosities”. States, economies, societies and cultures have been corrupted by a paucity of scarcity. Everyone has become dependent on everyone else, degraded, awaiting the next round of salvation by the collective.

Maybe this is what the changing of the guard will look like, with the Far East replacing the West. Maybe new forces will awaken, ready to take on the challenge of genuine competition between systems.

