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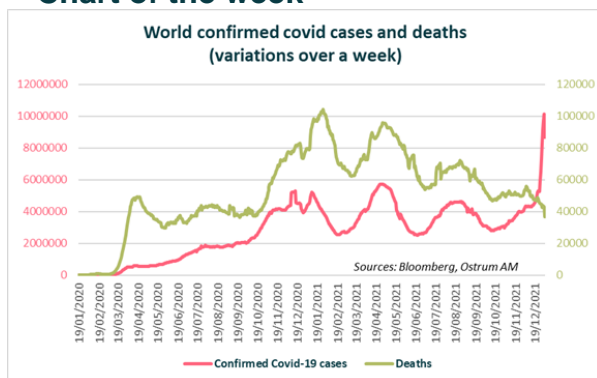
● Topic of the week: What are the risks for 2022?

- We publish a special weekly with four short articles. We presented our views for 2022, here we present four risks, which we will have to keep in mind for the coming year;
- The four risks we describe are: (1) a growth risk on emerging countries (2) a risk on European energy policy, (3) a risk on excessive valuations (4) a risk on European recovery plans;
- Needless to say, a risk does not necessarily materialize; these are alternative scenarios. If we expected these “risks” to materialize, they would have been included in our central scenario.

● Market review: Lessons from 2021

- Covid crisis disrupts supply chains, inflation up sharply
- Tensions on energy and food commodities
- Record levels on equities, emerging markets lag
- Strong dollar, yuan resists Chinese real estate woes
- Higher yields, but credit spreads hold firm.

● Chart of the week



The progression of the pandemic remains one of the major elements for the markets. The number of cases is still growing strongly and does not yet show any signs of slowing down. On the other hand, the number of deaths remains at relatively low levels.

As a result, for the moment, containment measures remain moderate compared to what we have seen previously and the impact on the economy is considerably lower than in previous waves.

Vaccination but also the characteristics of the virus explain this trend.

● Figure of the week

11

Source : Ostrum AM

The number of LNG cargo ships diverted from Asia to provide gas to Europe and alleviate price tensions. Temporary solution, but for now effective.



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● Topic of the week

What are the risks for 2022?

For this new season, we publish a rather special weekly with four short articles. We presented our views for 2022, here we present four risks, which we will have to keep in mind for the coming year.

Each member of the strategy team poses a risk to you:

- A growth risk on emerging markets
- A risk to European energy policy
- A risk on excessive valuations
- A risk on European recovery plans

Needless to say, a risk does not necessarily materialize; these are alternative scenarios. If we expected these “risks” to materialize, they would have been included in our central scenario.

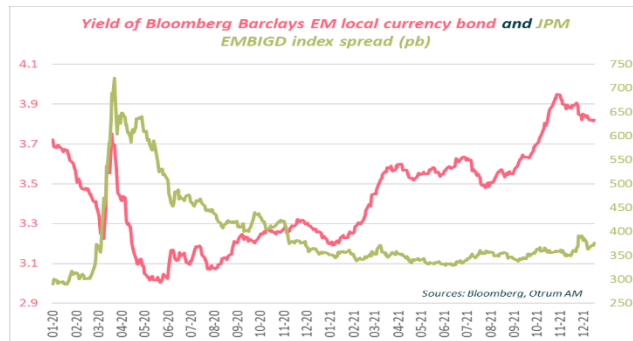
The whole team would like to take this opportunity to wish you and your loved ones a great year 2022.

2022 : a test year for emerging markets

The extremely accommodative monetary policy of the main central banks as well as the significant financial support of the international community explain the resilience of emerging markets in 2021. In 2022, they will have to face many headwinds: the rise in food prices, the resurgence of the pandemic, the Chinese slowdown, but especially the Fed's «tapering». Their resistance will be tested.

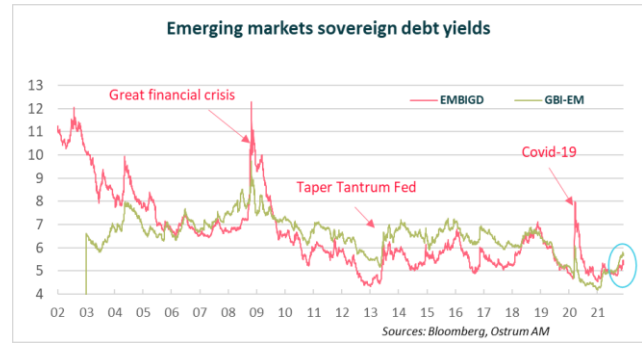
2021: Year of Emerging Markets Resilience

The chart below is the one that best illustrates the behavior of emerging markets in 2021. It represents the risk premium of external sovereign debt (spread of the JPM EMBIGD index) and local interest rates (Bloomberg Barclays local debt index).



In 2021, the credit profile of emerging countries (JPM EMBIGD spread) did not deteriorate in a context of rising US long-term interest rates. Only local interest rates were driven by US interest rates.

However, there was no “tantrum” as in previous episodes of stress on the asset class (chart below). External (JPM EMBIGD) and local (JPM GBI-EM) sovereign yields remained relatively stable in 2021. The ultra-accommodative monetary policies of the main currency markets but, above all, the significant financial support of the international community explain the resilience of the asset class in 2021.



The problem of growth in emerging countries resurfaces

The emergence of a new virus, Omicron, and the prospect of higher US interest rates next year have heightened fears about many emerging countries that may not recover from the pandemic next year. This is particularly the case in many sub-Saharan African countries.¹

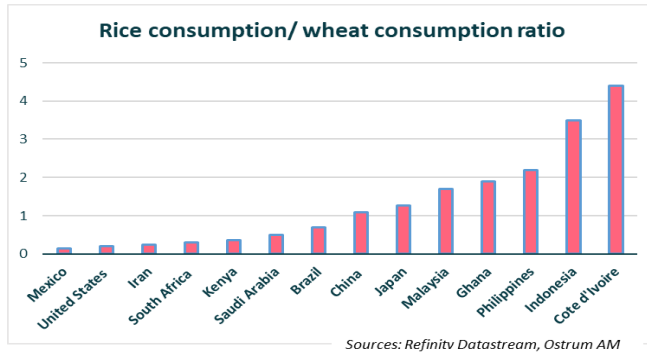
The downward revision of the growth outlook has raised concerns about the fiscal situation in many countries. The budgetary problems had been hidden because international interest rates were low and the health risk seemed to be eliminated². An increase in US interest rates may therefore penalize countries with a high dollar debt, but also those that have financed themselves through their own bond markets, as interest rates increase everywhere. This is the case with Brazil, South Africa and India. Many emerging central banks, including the one in Brazil mentioned above, have raised their key interest rates several times to curb the acceleration of inflation, which also increases their borrowing costs.

Asia is the exception

Asia was hard hit by the resurgence of the epidemic (delta variant) during the summer, which slowed its economic recovery and also explains the low inflation. Moreover, Asia does not have the inflation problem that other emerging countries may experience, because the rise in food prices is mainly linked to wheat. The majority of countries in the region are high rice consumers, as shown in the graph below, which shows the ratio of rice consumption to wheat consumption in a few representative countries.

¹ MyStratweekly : Africa: Covid-19 has awakened its old demons.

² MyStratweekly: EM after Jackson Hole: no tantrum but concerns.



(It is interesting to note that the ratio for China is almost 1, which reflects the high standard of living of the Chinese population who consume more meat and bread.). Monetary policy should remain accommodative in the region and accompany the economic recovery that has resumed following the lifting of mobility restrictions put in place to curb the spread of the epidemic. South Korea, which raised its key interest rate this year, should remain the only exception in the region. On the fiscal front, overall, countries are relatively low in debt and have room for manoeuvre to support activity.

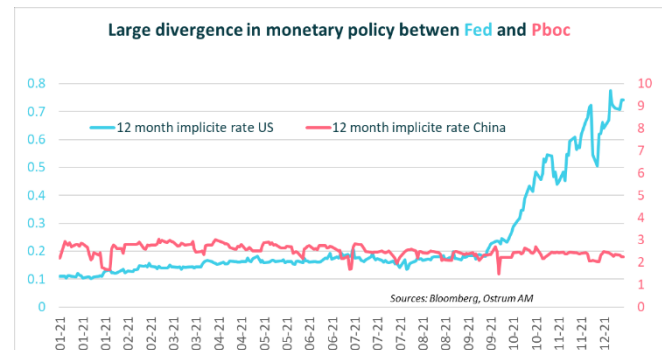
China is in a different position compared to other emerging countries.

China was the first country to emerge from the pandemic in 2020 (and one of the few countries to have recorded positive growth at 2.3%), but this year the recovery has been slower linked to the delta variant and its “zero Covid” strategy that has penalized household consumption. China has also experienced two crises: a real estate crisis related to the tightening of regulation on the sector, and an energy crisis reflecting its energy transition. The Chinese authorities aim to achieve carbon neutrality in 2060 and a peak in pollutant emissions in 2030. Regulation has also been strengthened in a wide range of sectors such as fintech, internet and online gaming. This reflects a reversal in the country’s economic policy, which has new objectives: better quality growth, more inclusive (fighting income inequality), greener growth and financial stability.

This transition to this new political regime could make China’s growth more sustainable in the long term, but it creates significant distortions on short-term growth. The Chinese authorities aim to stabilize growth in 2022, which is expected to slow to 5%. Monetary policy has become less restrictive to support the real estate sector, which considers a risk on Chinese growth, but also for the country’s largest private sector employment pool.

The international financial environment also does not help China. The divergence of monetary policies with the United States is glaring, reflecting two different situations in terms of inflation and the level of the recovery. The chart below

illustrates this perfectly by comparing the implicit interest rates at 1 year (market operators’ expectations on the evolution of key interest rates in the future).



This should result in a widening of the interest rate differential between the two countries that should benefit the dollar. However, the stabilization of growth also requires a stable yuan against the dollar, which explains the recent increase in the rate of reserve requirements in foreign currencies (from 7% to 9%) of Chinese banks, to slow the appreciation of its currency. The strengthening of the dollar is expected to curb global trade volumes through the financial channel and cancel out all competitive advantages of other currencies. The most sensitive to a strong dollar are companies exporting intermediate goods. Foreign trade has been the engine of China’s growth since the beginning of the pandemic. The more the Fed tightens its monetary policy, the more the Chinese central bank will relax to support domestic demand.

Finally, China will inaugurate the Winter Olympics on February 4 and already several countries like the United States, Canada, Australia and Canada have announced a diplomatic boycott. The world will probably be divided in two on February 4 between those that follow the United States or China. A non-cooperative world is harmful to the growth of emerging countries.

Zouhoure Bousbih

Geopolitics of the Energy Transition

A net-zero world economy will require unprecedented and durable global cooperation. Yet the chaotic fall 2021 has shown that tensions over energy resources are not a thing of the past. Aligning everyone's interests will not come without conflicts. Thus, Europe faced staggering electricity prices forcing businesses to shutter and some energy firms to declare bankruptcy, most notably in the United Kingdom. Vladimir Putin took advantage of Europe's struggles to leverage Russia's natural resources. In China, blackouts led authorities to order state-owned energy companies to secure supplies for winter at any cost. Across the Pacific Ocean, the US pressed OPEC to raise output, which only highlights the current limits of US energy independence. Risks from unreliable energy supply may linger into 2022 and beyond, with the potential to disrupt financial markets.

In an ideal world, the transition to clean energy would mitigate confrontation regarding access to natural resources energy in addition to fighting climate change. Instead, new forms of conflict will likely emerge. The global energy supply chain requires reshaping for the world to avoid major upheavals. However, fossil fuel suppliers, chief among them Russia and Saudi Arabia, will have considerable leverage for years to come. Even when (if) the world will achieve net zero emissions (presumably by 2050), it will hardly be the end of fossil fuels. The International Energy Agency estimates that global demand for natural gas in 2050 will still hover about half of today's level. Likewise, the World may still need one quarter as much oil. In this context, divestments from oil companies may raise concerns about capital expenditure in the industry for years to come. Higher volatility in prices and occasional energy shortages appear likely as fossil fuel supply declines faster than demand and in a less predictable manner. OPEC+, which already controls most of world's spare capacity, will gain from a more concentrated global production. To be clear, these short-term perils are not arguments to slow the energy transition, but the unintended consequences of the shift should not be ignored. The pace of the transition may slow if energy supply becomes less reliable since the geopolitics of energy will outlast the foreseen decline in fossil fuel demand. For this reason, the US shale oil industry might endure despite enhanced commitments to net zero from the US government. Natural gas markets are prone to the same dynamic, as countries with strong climate commitments reduce their output. Europe will become ever more dependent on Russian gas. The approval of Nord Stream 2 pipeline from Russia to Germany remains pending (perhaps until March 2022) given the risk of a Russian invasion in Ukraine. The alleged NATO expansion indeed collides with the geopolitics of energy.

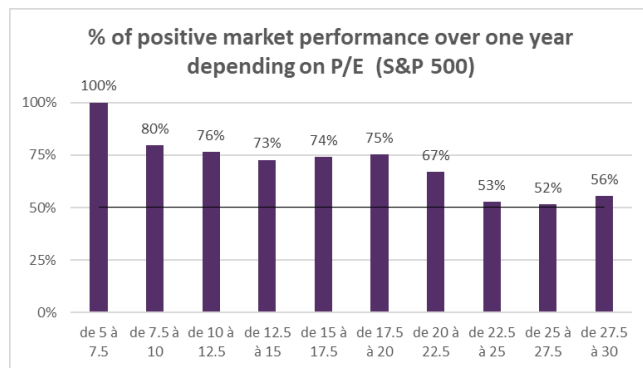
The clean energy revolution may also yield a new superpower, which will be in a position to set infrastructure standards for the international trading of low-carbon fuels like hydrogen and ammonia that are key to net zero world. The leverage resides in the ability to export domestic systems to optimize electric grids or manage consumer demand. It could be critical for nuclear power. On IEA estimates, nuclear energy generation will have to roughly double to meet the net zero target, given that electrification is often the cheapest way to decarbonize sectors (including cars, heating) relying heavily on fossil fuels, provided that electricity generation is indeed carbon-free. Russia is a major exporter of nuclear technology, and so is China. The ability to impose international operational and safety standards will give an edge to domestic producers. In comparison, the US only accounts for 2% of reactors under construction outside Russia's borders. Furthermore, clean energy technologies, including wind turbines and electric vehicles, use minerals such as cobalt, lithium, nickel and rare earths. Demand for these minerals may increase sixfold on average by 2040. Whilst poor countries (RDC for cobalt for instance) may find it hard to exert pressure on supply, it is worth keeping in mind the Chinese embargo on rare earth exports to Japan in 2010 in the context of tensions in East China sea. In addition, China not only controls much of the mining of such minerals, but also has unparalleled capacity to refine and process rare metals. Moreover, the manufacturing of clean energy components (semiconductor wafers used in solar panels for instance) could be critical. Some states with significant renewable energy capacities (including Saudi Arabia given low-cost solar energy) will be well positioned to attract production of green hydrogen. Before green hydrogen becomes dominant, blue hydrogen, derived from natural gas using carbon capture techniques, will prevail, presumably to the benefit of the US and Qatar. With the issue of clean energy output comes the risk of protectionism. The EU's border adjustment tax (BAT) related to greenhouse gas emissions may be used to shelter domestic production from 'dirty' global competition. It is no stretch of imagination that the BAT could be used to target countries based on their carbon emissions.

Axel Botte

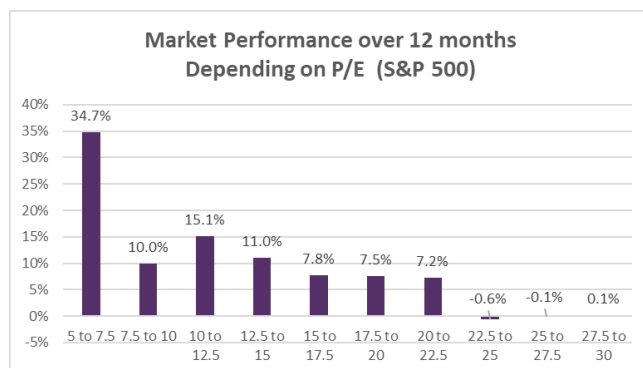
When valuations are really too tight

The observation is indisputable, the valuations of the equity markets are tense, even at the highest historical on some metrics. The idea that these valuations are excessive has been mentioned for a long time even though it has not led to a market correction. If valuations are debated it is also for an implicit hypothesis: an expensive market is a market that risks correcting. So it's a danger signal.

The reality is much more complex however, valuation, perse, are not a sufficiently reliable signal. Below we use the S&P data that allow us to go back to 1954. The chart below shows, depending on the initial level of the market's PE, what has been the probability of a bull market of the following 12 months. When the PE is above 22.5, the historical probability of having a bull market is desperately close to 50%. Valuation have a predictive power equivalent to that of a coin tossing.



One might object that, when valuations are high, corrections can be large while bull markets are much more limited. A very fair point, alas data again are against that intuition. With high PE the historical return of the stock market 12 months hence is basically zero.

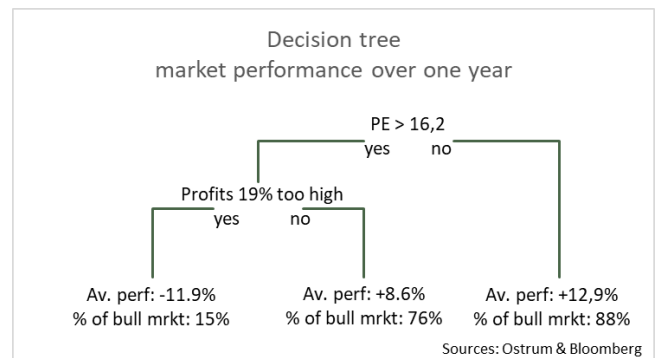


The conclusion is straightforward: **when PE are very low, they send a very reliable signal of future performances.**

In that case the market is quite likely to enter a bull rally. However, **when valuations are very high, the relevance of the signal is simply appalling.**

We mentioned it, reality is more complex, and so we used a more sophisticated approach, using a partition algorithm, with the idea to find the conditions that lead to a market correction.

The conclusion can be found in the decision tree below. And the findings are instructive: the danger zone, from an historical perspective, is when the markets' PE exceeds 16,2. Passed that point, the market return over the following 12 months has been on average 6.0% and the market has been up 76% of the time. But there is a sharp contrast when the level of corporate profits is also elevated: a PE above 16.2 associated with profits 18.6% above their long-term trend form a very nasty cocktail indeed. When it has been in that configuration, the market has lost on average 11.9% the following 12 months and it has been up only 15% of the time. Meanwhile, the same stretched valuation while profits are close or below their long-term average, leads to a far less anxiogenic situation. That configuration has led to positive returns 76% of the time with an average performance of 8.6%.



The current situation undoubtedly places us in a situation of tense valuations, but it also quickly brings us closer to a high level of profits, we were at the end of the year 2021 6.0% above the long-term trend, while we were still slightly below six months earlier. If we are not strictly speaking on the danger zone identified by our model we get closer to it very quickly.

This promises a much more nervous market. Our argument throughout last year was that stressed valuations were not enough to justify a prudent attitude on equities and that part of the adjustment would come from profits, which would therefore validate, ex post, stressed valuations. That argument is no longer valid and we are therefore entering a much more complicated area for the equity market. The year 2022 could be much more turbulent than the previous one.

Stéphane Déo

Risk on the European bond market

Given the shock of unprecedented magnitude linked to the Covid-19 crisis, the 27 adopted in July 2020 a historic agreement: the Next Generation EU recovery plan. For the first time, the European Union can issue massive debt (800 billion euros over 6 years) on behalf of all countries and payments will be made partly in the form of grants (non-refundable) and loans at attractive rates. The countries most affected by the Covid-19 crisis will receive higher amounts as a proportion of their GDP. To benefit from these funds, each country will have to spend at least 37% in energy transition, 20% in digital and adopt a number of reforms in accordance with the recovery and resilience plans presented to the European Commission (EC).

Risk on the progress of investments and reforms to be carried out

In 2021, 18 of the 22 countries whose recovery and resilience plans have been approved by the EC received 13% pre-financing under Next Generation EU. From 2022, the disbursement of funds is conditional on the achievement of the intermediate stages and targets set by each country in agreement with the EC. As Europe faces a strong resurgence of the Covid 19 epidemic, households are suffering purchasing power losses linked to the sharp acceleration in inflation, and elections will be held in some countries, the risk is that some of them will be late in achieving the investments and reforms to be carried out.

To date, Spain is the first economy to benefit from a positive preliminary assessment from the EC for the payment of a first installment under Next Generation EU. It provided proof of the completion of the 52 necessary steps. This assessment has yet to be approved by the executive and finance committee. Its agreement will allow the payment of 10 billion euros in subsidies, after 9 billion received in August, out of a total of 69.5 billion requested. Payment of the other installments (maximum 2 per year) will depend on the achievement of the targets set.

If Spain has achieved most of the 52 necessary milestones by the end of Q2 2021, it will likely be more difficult to adopt the reforms planned thereafter. The government has struggled to adopt the labor market reform and next year is scheduled for the one on pension funding. In addition, the funds of Next Generation EU being disbursed for the most part over the period 2021 to 2023, this represents a large amount of investments to be made in a short time. However, Spain, like many European countries, including Italy, only very partially used the European funds that were at its disposal (Spain used less than 50% of European investment

and structural funds on the period 2014-2020).

In Italy, the short-term risk lies in the presidential election due in January 2022. If Mario Draghi is elected, he will no longer be the head of the current national unity government. This will constitute a risk for the continuation of the reforms and investments to be adopted to benefit from the 191.5 billion euros requested from the European Union (including 68.9 billion in subsidies). If Mario Draghi remains Prime Minister in 2022, tensions could however begin to appear at the end of the year within the government in the perspective of the legislative elections scheduled for 2023, which could be likely to weigh on the dynamics of the reforms to be adopted.

Consequences on the bond markets

If countries fail to make the necessary investments and reforms on time, the disbursement of EU funds will be delayed, which will weigh on their growth prospects and worsen the outlook for deficit and public debt expressed as a% of GDP. This will be likely to generate fears on the part of investors vis-à-vis the countries most weakened by the crisis, which are also the most indebted, since they will run the risk of not benefiting in time from the requested subsidies.

This will result in tensions on the rates of these countries, a widening of the spreads compared to Germany, making the financing conditions of households, companies and governments less accommodating and complicating the task of the ECB in the need to maintain a very accommodative monetary policy for all the countries of the euro area.

Aline Goupil- Raguénès

- **Market review**

Lessons from 2021

A year of contrasts between stock market frenzy, inflationary risks and the health crisis

The year 2021 goes down in history as a very good vintage for stock markets, with total returns between 20% and 30% in developed countries. The acceleration in inflation, the woes of Chinese real estate developers and Xi Jinping's crackdown on tech, however, weighed heavily on emerging markets. The erroneous judgment of 'transitory' inflation made it possible to maintain an expansionary monetary policy for most of last year. The US Central Bank eventually announced a belated change in policy at the end of the year by reducing its purchases and raising its interest rate projections. The dollar has strengthened against all currencies except for the Chinese yuan, which is tightly controlled by the PBoC. Emerging market currencies depreciated, in particular the Turkish lira penalized by a heterodox easing of monetary policy despite an inflationary spiral. Bond yields rallied from low levels in 2020. Rising inflation expectations played a big part in this rally. Quantitative easing and endless budget talks in the US Congress put a ceiling on T-note yields around 1.50% by year-end.

The stock market year got off to a flying start amid a rapid development of the market for SPACs in the United States. The activity of these acquisition vehicles eventually slowed down in the second half, but their available capital still represents \$ 180 billion at the end of the year. In the first quarter, stock market raids by individual investors, possibly deprived of sports betting by the pandemic, on a limited number of small discounted stocks. The hunt for short sellers of the so-called 'meme' stocks hit several hedge funds amid insane volatility due to the massive trading of short-dated options. Speculation has not stopped in the cryptocurrency world. Ethereum and Bitcoin still outperformed the stock market in 2021 despite a December downturn traceable to the hawkish turn in monetary policy. The volatility of cryptocurrencies is 4 to 5 times that of the Nasdaq. These cryptocurrencies appear to have replaced gold as a safe haven asset in the context of rising inflation, as gold stayed stable in 2021 around \$ 1,800 an ounce.

The strong economic recovery and liquidity conditions were a favorable backdrop for equity markets. The S&P gained 27%, with energy taking over from mega-caps during the year. In Europe, the sharp rebound in bank stocks contrasts with poor performance from real estate companies (German) and sectors sensitive to the pandemic like transport stocks. Profit margins held up despite rising costs, but utilities lagged due to higher gas prices amid tensions in Eastern Europe. The CCP's policy of "common prosperity" also

weighed heavily on the tech giants of the Middle Empire. The financial difficulties of real estate developers also explain the underperformance of the Hang Seng (-15%).

The year in bond markets was shaped by inflation risks, stemming from supply logistics problems and shortages of raw materials and components. Early on, the Treasury bond market priced in higher inflation. The T-note yield hit its annual high of 1.74% at the end of March. The inertia of monetary policy justified by supposedly transient inflation eventually reversed the upward pressure on yields. Maintaining QE above net Treasury bond issuance helped bring 10-year yields down to 1.12% by mid-summer. The induced excess liquidity, the counterpart of a shortage of T-bills, then forced banks and money market funds to park more than \$ 1 trillion at the Fed. Powell's change of heart after Jackson Hole nevertheless allowed for a gradual rise to above 1.5%, though real yields (-1% at 10 years) remain deeply out of line with strong economic growth. In the euro area, the Bund (+ 39bp in 2021) followed the T-note initially trending higher before sliding back towards -0.50% in mid-summer. In Italy, the appointment of Mario Draghi as Prime Minister reassured market participants, with the spread on BTPs narrowing to yearly lows of 90bp. However, Draghi's future on hold as President Mattarella's 7-year mandate ends in early 2022 and the slowdown in ECB asset purchases sent Italian spreads back above 130bp at the end of the year. The first disbursements of the European recovery plan (NextGen EU) have nevertheless enabled Spain and Portugal in particular to reduce their borrowing in 2021 significantly.

Credit spreads (+ 3bp in 2021) traded sideways for most of the year despite a more difficult fourth quarter. The favorable environment for risky assets resulted in positive performances of subordinated financial debt. High yield ended the year with a bang with spread tightening by more than 40bp in December. The default rate limited to 1-2% in Europe and rating upgrades allowed for performance of 3 to 5% total returns depending on the market segment. The Chinese high yield market however took a nosedive on the back of financial stress in the real estate sector.

Finally, the US dollar strengthened (+ 5% against the euro). In contrast, the yen regained its status as a funding currency. The PBoC enforced a stable Chinese yuan in the context of the real estate crisis. Emerging currencies depreciated despite monetary tightening. The Turkish lira, under constant political pressure, loses a third of its value, as runaway inflation weighs on local rates. On the other hand, USD-denominated emerging bond markets (+ 14bp) resisted the appreciation in the greenback.

Axel Botte
Global strategist

● Main market indicators

G4 Government Bonds	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
EUR Bunds 2y	-0.6 %	+4	+14	+10
EUR Bunds 10y	-0.15%	+10	+24	+43
EUR Bunds 2s10s	46 bp	+6	+10	+33
USD Treasuries 2y	0.78 %	+9	+20	+66
USD Treasuries 10y	1.59 %	+12	+25	+68
USD Treasuries 2s10s	81 bp	+3	+5	+1
GBP Gilt 10y	0.97 %	+5	+16	+77
JPY JGB 10y	0.07 %	+1	+2	+5
€ Sovereign Spreads (10y)	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
France	36 bp	-1	+1	+13
Italy	132 bp	-4	+2	+21
Spain	72 bp	-4	-2	+10
Inflation Break-evens (10y)	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
EUR 10y Inflation Swap	202 bp	-4	+5	-
USD 10y Inflation Swap	279 bp	+5	+12	+1
GBP 10y Inflation Swap	419 bp	-2	-23	+0
EUR Credit Indices	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
EUR Corporate Credit OAS	95 bp	-1	-13	+3
EUR Agencies OAS	49 bp	-1	-2	+8
EUR Securitized - Covered OAS	46 bp	-2	-3	+13
EUR Pan-European High Yield OAS	318 bp	-5	-37	-40
EUR/USD CDS Indices 5y	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
iTraxx IG	48 bp	0	-10	0
iTraxx Crossover	242 bp	0	-41	0
CDX IG	50 bp	+0	-8	0
CDX High Yield	295 bp	+5	-35	+1
Emerging Markets	03-Jan-22	-1 wk (bp)	-1m (bp)	2021 (bp)
JPM EMBI Global Div. Spread	369 bp	-4	-23	+17
Currencies	03-Jan-22	-1 wk (%)	-1m (%)	2021 (%)
EUR/USD	\$1.130	-0.27	-0.17	-7.6
GBP/USD	\$1.344	-0.02	+1.52	-1.5
USD/JPY	¥115.32	-0.36	-2.19	-11.6
Commodity Futures	03-Jan-22	-1 wk (\$)	-1m (\$)	2021 (%)
Crude Brent	\$78.4	\$0.2	\$8.9	52.4
Gold	\$1 802.5	-\$5.8	\$19.2	-4.9
Equity Market Indices	03-Jan-22	-1 wk (%)	-1m (%)	2021 (%)
S&P 500	4 781	-0.21	5.35	27.3
EuroStoxx 50	4 340	1.22	6.37	22.2
CAC 40	7 232	1.29	6.90	30.3
Nikkei 225	28 792	-0.02	3.49	4.9
Shanghai Composite	3 640	0.60	0.90	4.8
VIX - Implied Volatility Index	17.39	-1.64	-43.30	-23.3

Source: Bloomberg, Ostrum Asset Management

Additional notes

Ostrum Asset Management

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