Vontobel

Investors' Outlook

How we can help to alleviate food scarcity



October 2022



Editorial

4 **Investment strategy**

Upgrading equities to overweight a view from active gardeners

Market highlights

A gas-deprived winter of discontent ahead?

Viewpoint

More mouths to feed: Investing in food chains reveals succulent opportunities

12 Asset classes in focus

16 **Forecasts**

Publishing by Bank Vontobel AG

Gotthardstrasse 43 8022 Zurich

Editor

Martin Gelnar

Authors*

Stefan Eppenberger

Head of Multi Asset Strategy, Vontobel

Joanna Frontczak

Senior Analyst, Vontobel

Frank Häusler

Chief Investment Strategist, Vontobel

Michaela Huber

Investment Strategist.

Vontobel

Mario Montagnani

Senior Investment Strategist, Vontobel

Sven Schubert, PhD

Senior Investment Strategist, Head of Strategy Currencies,

Vontobel **Dan Scott**

Head of Vontobel Multi Asset, Vontobel

Elena Tedesco

Senior Portfolio Manager, Vontobel

Frequency

Ten times per year (next issue November 2022)

Concept

MetaDesign AG

Creation & Realization

Vontobel

Images

Gettyimages, Vontobel

Input deadline for this edition

September 30, 2022

Remarks

see page 17 "Legal information": analyst confirmation

How we can help to alleviate food scarcity



Dan Scott
Head of Vontobel Multi Asset,

Dear readers,

"Finish your plate!" is a line still often heard around dinner tables. In the past few decades, even the most obedient among us have found this order increasingly hard to follow for the sheer size of our generous helpings. But could it be that suddenly, there may not be enough food to go around? And if this should be the case, is there something—anything—we as asset managers can do? Yes, there is, but in our case, it's not by way of financing grain shipments, for example. Ours is an investor's view, which nevertheless should also have an overall positive real-world impact—but in a roundabout way.

Rising food prices only part of the problem

If we haven't yet realized an inconvenient post-pandemic truth, this year has made it abundantly clear that relying on a single provider comes with huge risks for the global economy. This holds true for manufactured goods from China, gas deliveries from Russia, and grain shipments from Ukraine.

We in the West feel the pinch mainly through rising prices, and we're still getting off the hook relatively lightly. In some parts of the world, there is an immediate threat of starvation. At the same time, the global population continues to grow and could surpass the 10-billion mark in 2100, despite falling fertility rates, according to the United Nations.¹

So how do we go about trying to address global food shortages whilst—truth be told—also hoping to see our efforts produce some return? We as active investors aim to identify publicly traded companies with promising products and services in areas such as crop yield increase, food waste reuse, and biodiversity protection.

As with any other investments, we start with an analysis of a company's corporate strategy, product pipeline, revenue drivers, and management execution, to determine whether taking a stake in the company could make sense. One precondition is that the investment, i.e. the company's activities, should be in line with one or more of the Sustainable Development Goals set down by the United Nations. Moreover, as so-called impact investors, we also assess whether the company's products or services make a measurable contribution to the environmental or social improvements we have in mind. Defining and collecting this data can be a real challenge. Relying on investment managers with externally audited processes is key here.

Putting our money where our mouth is

You could call this approach "putting our money where our mouth is". To the critical beholder, our contribution to a more sustainable world by engaging in traditional equities and bonds may seem limited, but capital markets are like democracies—every vote counts, whether it's at the ballot box or a company's annual general meeting.

→ Webcast

To view our webcast on recent market developments, click **here**



Frank Häusler Chief Investment Strategist, Vontobel

Mario Montagnani Senior Investment Strategist, Vontobel

Upgrading equities to overweight—a view from active gardeners

Autumn is here and our tables are brimming with nature's gifts, at least in most of the Northern Hemisphere. For obvious reasons, we may no longer be climbing up the tree to get that juicy fruit, but there's plenty of delicious nuts in the grass or massive pumpkins in the patch if you go through the trouble of gathering them. In other words, you must get active to be successful, and that's also what we as investors are trying to do. This sometimes requires action at a time when the stars seem anything but aligned.

Translated into the language of financial markets, this can mean seizing opportunities in equities before real economies reach the trough. And that's what we are doing, taking advantage of the recent market downturn as well as the very pessimistic sentiment in stock

markets, often regarded as a good contrarian indicator. We have upgraded equities to a very modest overweight position from a previous neutral by deploying a small portion of our cash. Nevertheless, we remain on the defensive side by sticking to our convictions on Swiss and US equities, both kept overweight.

As for the other asset classes, nothing changes. In bonds, we retain an overall neutral stance whilst overweighting government paper. By contrast, we remain neutral on investment-grade corporate issues, and we underweight the high-yield sub-segment. Our overweight in gold also remains in place. Details of our positioning can be found on the overview page 5 or the asset class-focused items on pages 12 to 15.

	UNDERWEIGHT significantly slightly	NEUTRAL	OVERWEIGHT slightly significantly	
1 Liquidity	7			As we consider the current environment a good entry opportunity for long-term investors, we redeploy some of our accumulated cash holdings back into equities. Cash is now on a slight underweight.
2 Bonds		\rightarrow		We feel comfortable with a neutral view on the fixed-income segment and reiterate all previously voiced convictions. A degree of duration, i.e. a certain amount of bonds with longer maturities, seems advisable, which suggests an overweight in government bonds. Investment-grade corporate bonds remain on neutral and high-yield paper on underweight. Yields in the emerging market hard-currency space appear relatively attractive.
3 Equities				Considering our investment horizon of more than nine months for tactical allocation, we have moved equities to a modest overweight from neutral, taking advantage of the recent downturn and the pessimistic sentiment in stock markets. The likelihood of lower inflation readings and a less restrictive US Federal Reserve could soon move the needle in favor of equities, we reckon. However, we hedge our bets somewhat by reiterating our overweight in US as well as Swiss stocks. Our negative view on European equities changes to neutral given that market prices already reflect a lot of unfavorable news, even a scenario of earnings estimates being adjusted for a likely recession. The challenges tied to inflation, monetary policy and energy supply in the wake of Russia's war on Ukraine haven't gone away, but we believe the European market offers solid prospects for "bottom-up" stock pickers with a longer-term horizon. Interestingly, European companies generate more than half of their revenues outside of Europe, also offering exposure not available in other regions (e.g. to luxury goods or the energy transition). We finance our upgrade of Europe by moving emerging markets to underweight. We believe that Chinese stocks, though mostly attractively valued, still look vulnerable. This is due to disappointing consumption and investment data, continued real-estate woes, the unclear Covid-19 situation, and half-measures to restart the economy. For Japan, we have neutralized our underweight on the back of economic growth prospects, among the best in major developed economies thanks to a post-Covid rebound. The inflation dynamic also looks benign and the energy outlook has improved. Moreover, the weak yen benefits Japanese exporters, a development likely to boost the corporate sector's robustness in the event of an economic slowdown.
4 Gold			\rightarrow	We keep our overweight in gold despite the headwinds that buffeted it earlier this year. The precious metal is a welcome portfolio diversifier and hedging instrument. The expected weaking of the US dollar should also support gold as the pair often displays an inverse relationship.
5 Commodities		\rightarrow		Our neutral rating on commodities remains in place for the time being. The asset class remains attractive, but to get more sanguine, we would need to see stronger purchasing managers' indices or powerful stimulus measures in China.
	···· :		<u> </u>	We retain our neutral view on alternative investments

A gas-deprived winter of discontent ahead?



Michaela Huber Investment Strategist, Vontobel



Stefan Eppenberger Head of Multi Asset Strategy, Vontobel



Mario Montagnani
Senior Investment Strategist,
Vontobel

This summer, Finnish citizens living close to the country's southern border with Russia witnessed an unusual kind of *aurora borealis*. A few kilometers away, a blazing fireball loomed above the treetops as Moscow-controlled energy giant Gazprom was burning off vast amounts of natural gas it could no longer sell. European gas prices have shot up, but we believe that shipments of the liquefied variety, and efforts to save energy as well as diversify supply, should get Europe through the winter.

Russia's flaring of a prime export product at the Portovaya plant, part of the infrastructure surrounding the Nord Stream gas pipelines to Europe, is an apt metaphor for what went wrong since Russian President Vladimir Putin started the invasion of Ukraine. While gas prices have come down significantly from their August all-time high of 330 euros per megawatt-hour, they are still about six times higher than normal for this time of the year.

With Europe waking up to the reality of spiking energy prices (see chart 1), a frantic search is on for alternatives. However, nuclear energy heavyweight France is currently overhauling many reactors, and coal doesn't look particularly cheap with prices having gone up threefold this year due to, among other things, rising costs to compensate for its negative environmental impact.

Liquefied gas—a blessing with a caveat

Some progress has been made in the area of liquefied natural gas (LNG) imports. With Europe scrounging around for whatever gas supplies it can get, often producing a fat wallet to outbid Asian shoppers, it saw its

gas storage levels surpass 80 percent well before a European Union November 1 deadline. Even so, as the possibility of further LNG imports is limited due to capacity constraints, affluent Europe will need to tighten its belt. The countries most at risk in terms of reliance on Russian gas and lack of alternatives are Germany, Austria, Czechia, Slovakia, and Hungary, according to the Economist Intelligence Unit. By contrast, western or southern EU member states are in a better position to source energy elsewhere.

Europeans can hibernate, companies cannot

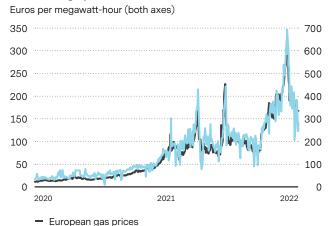
Well-heeled Europeans may be able to spend the cold months on sunny shores, an option few companies have. The different sectors are exposed in varying degrees (see chart 2), but rising energy bills hit most of them on two levels. Firstly, such outlays immediately affect up to 30 percent of total production costs. The higher the intensity or the volume of production, and the higher the energy price, the greater the impact on total expenditure. Obviously, this simplification discounts mitigating factors, such as substitution effects (use of alternative sources

of energy), or process changes (increased production of items that require less energy). Moreover, large and flexible corporations can shift industrial production to countries less affected by energy crises. Secondly, a more indirect and often delayed effect of energy-linked spending can impact an additional 30 percent of production costs. With higher energy prices being built into production processes, a company supplying grain to a food group, for example, may suddenly face much higher bills for necessary machinery such as tractors.

Four gas storage scenarios until the end of 2023, one of them already shaky

The undersea explosions in the Nord Stream system on September 27, apparently caused by sabotage, have made it clear how precarious Russia's gas deliveries to Europe are. This also bears on our four energy scenarios until the end of next year. With any reopening of the two pipelines now ruled out in the short term, our scenario number one looks very unlikely. It is based on the assumption that Russia would continue gas deliveries at the reduced pace seen around August 2022. This would coincide with a 15-percent demand destruction envisaged by the European Union, which should diminish European gas inventories by around 420 terawatt-hours (TWh) until next spring, i.e. to 2019 levels. In our second scenario, a complete stop of Russian gas deliveries causes a 15-percent demand destruction and a drop in European gas storage of 540 TWh until next spring, i.e. to 2021 levels. If Russian gas stops flowing while no demand destruction takes place—our third scenario gas stocks will fall by around 740 TWh until next spring, i.e. to 2018 levels. In our fourth and worst-case scenario, the negative effect of zero Russian gas is compounded by adverse weather—and this seems to be getting more likely amid signs we may be in for the third consecutive "La Niña" year (see chart 3), which typically brings cold weather to the Northern Hemisphere. In such a case, demand for gas would rise by 10 percent, we reckon, with the ensuing 930 TWh reduction in gas stocks almost entirely depleting Europe's gas inventories.

Chart 1: European gas market turmoil fueled rise in other energy prices last summer



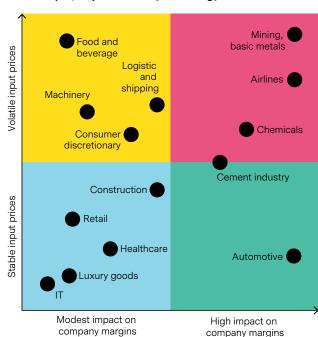
European power prices (right-hand scale)

Source: Refinitiv Datastream, Vontobel (data as of September 23)

In conclusion, we believe that Europe should be able to get through this winter—even if push comes to shove, i.e. the fourth scenario materializes.

That said, while LNG imports have alleviated immediate supply concerns, even inventories filled to the brim will hardly be enough to prevent some rationing in the winter months. This makes the continent ill-prepared for more energy trouble to come.

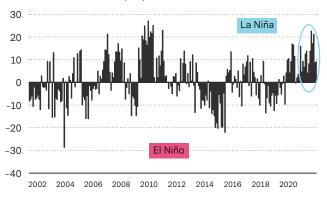
Chart 2: Prospects of European carmakers and airlines, for example, depend heavily on energy costs*



* Selected sectors, illustration is not exhaustive Source: Vontobel

Chart 3: A La Niña-induced cold winter in Europe would drive gas demand higher

Southern Oscillation Index (SOI) *



* The SOI, an atmospheric indicator, is currently pointing towards a pattern suggesting a "La Niña" event this winter

Source: Australian Bureau of Meteorology, Vontobel





Elena Tedesco Senior Portfolio Manager, Vontobel



Joanna Frontczak Senior Analyst, Vontobel

A pandemic and a war were enough to do away with decades of progress in the fight against global hunger. Do investment strategies matter in this critical situation? We believe they do. As impact investors, we have the ambition to contribute to environmental as well as social improvement via insightful capital allocation and engagement. We believe our holdings' solutions can have a significant effect.

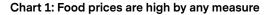
In 2020, over 2.3 billion people, or roughly a third of the global population, lacked access to adequate food.¹ Over the coming decades, there will be about 2 billion more mouths to feed, mainly in food-insecure regions. The past pandemic and Russia's invasion of Ukraine, one of the major global grain producers, have not only exposed the vulnerability of our energy system, but also of our agricultural supply chains. When grain shipments are blocked and silos attacked, people in the Middle East or the Horn of Africa could die of hunger. This is a dimension we in the West, often preoccupied with food prices, sometimes fail to recognize. This summer's heatwaves and wildfires have made matters worse.

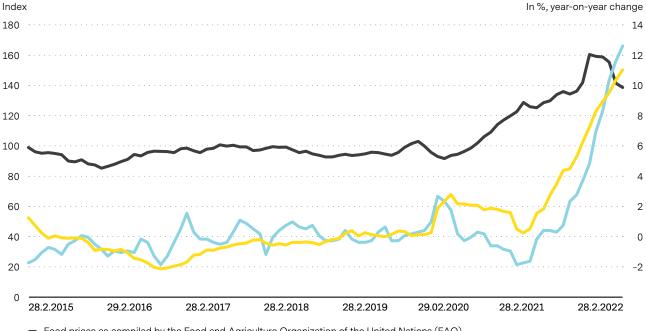
After Russia's aggression, food prices reached historical highs. The acceleration of the Food and Agriculture Organization of the United Nations (FAO) food price index² (see chart 1) started to moderate following the creation of a corridor for grain and fertiliser exports through the Black Sea in July. However, food inflation remains in the double digits in many countries, with worrying implications for the worsening cost-of-living crisis.

Prevalence of moderate or severe food insecurity, The World Health Organisation, July 2021.

The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014–2016.

10 Viewpoint





- Food prices as compiled by the Food and Agriculture Organization of the United Nations (FAO)
- Euro area food prices (right-hand scale)
- US food prices (right-hand scale)

Sources: UN FAO, Bloomberg, Vontobel

Capital is needed to address the challenges

There is no quick fix. Even so, asset managers, though not the typical problem solvers, can assist in taking on the challenge. Their help comes in the form of capital allocation to companies that sell products to improve the long-term resilience of the food chain. It is what Vontobel's global impact equities strategy, for example, has been aiming to do since its launch. What we are mainly interested in—in the so-called "sustainable food & agriculture" pillar in Vontobel's global impact equity offering—are ways to increase land yields, manage food waste, improve food safety as well as security, support smallholders, cut emissions, and/or protect and restore biodiversity.

Food quantity, rather than quality, edging into view

Producing more food without using poisonous chemicals and damaging the planet is tough. The food emergency has triggered a temporary setback³ in the European Union's fight in favor of organically farmed land—a cornerstone of the EU's 2030 Farm to Fork (F2F) strategy

announced in May 2020—as cutting the amount of chemical fertilizers and pesticides could lower productivity at a time when higher quantity is a must.

By the same token, crop-based ("first generation") biofuels are now under scrutiny despite an initial endorsement by the EU as part of its Fit for 55 initiative.4 There are concerns that corn, sugar cane, or palm oil could be increasingly used for first-generation biofuels rather than food production. So-called second-generation biofuels, made with food waste, algae, or non-food biomass, could be an answer to the ethical question this raises. Indeed, the US is looking to advance biotechnologies and use science to produce biofuels (alongside drugs, biofertilizers and bioplastics, to name a few).5 Given that the global food and agriculture system accounts for over a quarter of the world's greenhouse gas (GHG) emissions,6 progress in this field is important despite the complexity of the subject matter.

From tractors and recyclers to algae-based feed

A few examples of companies we find interesting illustrate our way of thinking. When it comes to increasing agricultural efficiency, we see farmers investing in better machines, equipped with modern technology including cameras to distinguish a crop from a weed and only provide nutrients to the former. Equally, tractors equipped with satellite navigation guide farmers to the right plot areas, without compressing the same soil multiple times as this would damage biodiversity and impoverish the soil. For example, one of the world's largest agricultural machinery companies sells sophisticated tractors and sprayers that improve farming efficiency.

Food waste usage is an investable area too. We have a stake in the largest global collector of used cooking oil (UCO) from restaurants. The company harvests UCO as well as food waste from animal processing, turning the raw material into food ingredients (e.g. gelatines, collagen), animal feedstock, and second-generation biofuel, so called renewable diesel.

To be present in the area of plant-based diets, we hold shares in a company that sells key ingredients for vegan burgers offered by a leading restaurant chain. Furthermore, we have a position in the company that owns brands such as Linda McCartney, which is very popular among, for instance, British fans of vegetarian sausages.

On the point of protecting biodiversity, we believe that the algae-based feedstock produced by a Netherlands-based company is a good example for innovation. It allows aquafarm companies to feed salmon (rich in omega3 fatty acids believed to have health benefits) without sacrificing small wild fish in the ocean. Furthermore, the company helps to reduce animal food waste: its feedstock preservative cuts the risk of fungi and yeasts in animal food, and hence the risk of digestive disorder, salmonella and E. coli bacteria for animals.

Another holding is one of the leading providers of environmental clean-up services in the US. The group operates incinerators, provides management services for hazardous waste, and recycles used motor oil to produce lubricants. One of its divisions helps to restore biodiversity: for example, after the disastrous BP oil spill in the Gulf of Mexico in 2010, this group was one of the companies hired to clean up the ocean and the shores. It was involved in many aspects of the spill response including containment, removal, and the ultimate treatment and disposal/recycling of the recovered product. It provided equipment, mobilised thousands of workers and assisted

in the capture of a portion of the oil spilled, allowing the flora and fauna to recover faster.9

We currently see attractive investment opportunities along the whole food value chain encompassing greener agriculture, food safety and security, plant-based diet, recycling and food waste management, clean water, and biodiversity. Holdings representing a noticeable part of the Vontobel global impact equities strategy¹⁰ contribute to the relevant Sustainable Development Goals (SDGs) by the United Nations, such as SDG 2 "Zero hunger", SDG 6 "Clean water and sanitation", SDG 14 "Life below water", and SDG 15 "Life on land". And the possibilities for investors remain vast amid continued innovation and changes in consumers preferences. By the same token, access to seeds and equipment to small farmers is an important "enabler" for positive social transformation. All in all, trying to aim for environmental and social improvements is something that makes us want to come to work every day.

- ³ Brussels braces for 'acrimonious' fight over reducing pesticides, Politico, 8 Aug 2022 (https://www.politico.eu/article/brussels-brace-acrimonious-fight-reducing-pesticide/); FT, EU reviews sustainable food plans as Ukraine war disrupts imports, 20 March 2022 (https://www.ft.com/content/f99d784c-0448-4552-ab8b-e77ed68ea173).
- ⁴ Safeguarding food security and reinforcing the resilience of food systems, European Commission, 23 March 2022 https://ec.europa. eu/info/sites/default/files/food-farming-fisheries/key_policies/ documents/safeguarding-food-security-reinforcing-resilience-food-systems.pdf
- The United States Announces New Investments and Resources to Advance President Biden's National Biotechnology and Biomanufacturing Initiative, The White House FACT SHEET, 12 Sept 2022 (https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/14/fact-sheet-the-united-states-announces-new-investments-and-resources-to-advance-president-bidens-national-biotechnology-and-biomanufacturing-initiative/).
- Our World in Data, 2019 (https://ourworldindata.org/food-ghg-emissions#:~:text=Food%20is%20responsible%20for%20approximately,for%2031%25%20of%20food%20emissions)
- In the US, where most of the waste piles up in landfills, the company has by far the largest incineration capacity in the industry, and it is active in recycling. Its services represent a comprehensive solution and help cut the amount of waste going to landfills.
- * 1,300 miles of shorelines were affected, 82,000 birds and almost 26,000 marine animals died, according to the Center for biological diversity (https://www.biologicaldiversity.org/programs/public_lands/energy/dirty_energy_development/oil_and_gas/gulf_oil_spill/a_deadly_toll.html#:~:text=We%20 found%20that%20the%20spill,crabs%2C%20corals%20and%20other%20creatures).
- Scientists report that many species are still struggling as their population is still lower than before the spill. By contrast, other species have shown a robust recovery, e.g. the brown pelican, Louisiana's state bird. Source: The National Geographic, 17 April 2020. https://www.nationalgeographic.com/animals/article/how-is-wildlife-doing-now--ten-years-after-the-deepwater-horizon
- 10 As of 31.8.2022

Keeping government bonds in stock during turbulent times



Frank Häusler
Chief Investment Strategist,
Vontobel

These are turbulent times for fixed-income investors. As if the upward drive in central banks' key rates wasn't enough, UK Chancellor Kwasi Kwarteng's plans for a fiscal overhaul has thrown another spanner in the works. Our neutral stance on the asset class remains in place, as does our preference for government bonds.

In late September, bond investors started offloading pound-denominated paper on fears that plans for a radical tax cut in the UK would undermine trust in the country's ability to repay its debts. Pound sterling took a hit alongside bond prices, which moved the yield on UK government bonds, or Gilts, to fresh highs.

The toxic mix of surging inflation, central bank tightening, recession fears and country-specific upheaval has caused some of the worst drawdowns in recent memory. Even US Treasuries, the biggest global bond segment, saw yields climb to highs last seen a decade ago (see chart 1).

When will central banks change tack?

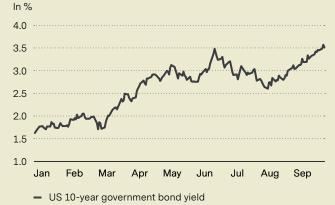
How long can this go on? There is some light at the end of the tunnel. Much will depend on when the US Federal Reserve, the standard-bearer for a tighter monetary policy, will change tack. We reckon this will be the case next year, when inflation will become less of a worry whilst the US economy will start experiencing problems. If history is any guide, the Fed will loosen its monetary reins once job market data worsen and unemployment rates start to rise.

Inverted US yield curve is a warning sign

Another indicator of economic trouble brewing is the current inversion of the US yield curve. As a rule, this is a sign that the US will face a recession within a few months or quarters (also see chart 1 in the currencies chapter). However, this isn't cast in stone and the world's biggest economy may yet regain strength.

What does it mean for our bond strategy? We retain our overall neutral stance as well as an overweight in government bonds on a sub-segment level. We believe that in times like these, it is important to designate a portion of the portfolio to sovereigns to hedge against risks. Our favorable view on emerging-market paper in hard currencies remains in place due to pockets of attractive yields. We remain wary of corporate bonds as the possibility of a recession is yet to be priced in (see chart 2).

Chart 1: Higher inflation and interest rate expectations push up yields on the ten-year US benchmark



Source: Refinitiv Datastream, Vontobel

Chart 2: Corporate bonds are yet to price in a recession—their spreads are likely to widen



 Spread (difference in yield between US corporate bonds with investment grade rating and government paper)

Source: Refinitiv Datastream, Vontobel

When the mood is bad, it's time to be bold



Stefan Eppenberger Head of Multi Asset Strategy, Vontobel

In times of money outflows, it can be smart to swim against the tide. We for our part are taking an overweight position in equities despite the recent market downturn and a somber sentiment. We are doing this mainly because we expect inflation to come down, but also because we think a year-end market rally could follow once US elections are through.

The mood on the stock markets is exceptionally bad, which is often a good contrarian indicator for equities. This has prompted us to take out our ten-point list we drew up in the summer months (see September issue of the Investors' Outlook), which summarizes the possible reasons to get sanguine about equities again. Two out of ten lights have now begun to flicker green—not a lot, admittedly, but enough for us to give it a go and return to an equity overweight, albeit a small one.

Do US election years have a lesson for us?

Hard facts and economic forecasts aside, it's also worth keeping an eye on the mid-term elections in the US in November. In the past, equity markets tended to benefit once the uncertainty in the run-up to those elections had passed (see chart 1).

However, the main reason for our slight overweight is our view that US inflation is likely to have peaked in July. The weakening economy and the slow unclogging of global supply chain bottlenecks will ensure that inflation readings come down significantly towards the end of the year, we reckon. If this comes to pass and the US labor market cools down at the same time, the period of massive US rate hikes could end. As a result, real interest rates should stop rising, which would have a stabilizing effect on equity valuations (see chart 2).

Keeping some of our powder dry

Our equity upgrade notwithstanding, we are keeping some of our powder dry. The gloomy outlook for the economy means that companies will probably lower their profit guidance somewhat. However, such adjustments in times of high inflation, like in the 1970s, were more moderate than during "normal" recessions. As soon as the negative economic developments become more evident, governments and central banks are likely to change their policies, setting their sights on stimulus measures. This will be the time, at the latest, when bulls will start champing at the bit. The ensuing equity market rally could be more sustainable than last summer's rebound that turned out to be little more than a blip.

Chart 1: Equities poised for late rallies in years with mid-term elections in the US



in mid-term election years (data since 1964)

Average 12-month performance of the S&P 500 index

Chart 2: Once real yields stop rising, equity markets should stabilize



US 10-year real yields (right-hand side, inverted)

Source: Refinitiv Datastream, Vontobel

Source: Refinitiv Datastream, Vontobe

Black gold loses luster amid darkening economic prospects



Stefan Eppenberger Head of Multi Asset Strategy, Vontobel

Recession fears have diminished the allure of crude oil in the past few months. This is unlikely to change unless we see signs of an economic rebound. It will be interesting to watch the price reaction once tougher sanctions against Russia take effect.

The oil price has fallen by an impressive 30 US dollars per barrel since the beginning of June. This wrong-footed many observers betting on elevated prices due to the ongoing war in Ukraine. Today, crude trades at approximately 90 US dollars, lower than when the war broke out. This is indeed remarkable considering the upcoming embargoes against Russian oil and oil products.

In August, Russia exported over 3 million barrels per day of oil and oil products to the European Union—down 600,000 barrels per day on the year-ago period, but still a huge amount. The country has so far compensated for the shortfall by supplying more crude to China, Turkey and especially India, but probably won't be able to repeat this feat amid mounting logistical as well as political problems, and the imminent full entry into force of the EU embargo. Russian production has probably already fallen by up to 2 million barrels per day.

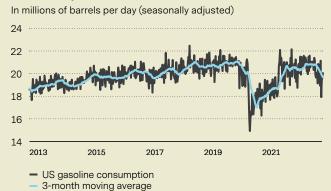
This hasn't really registered in financial markets with most investors now dismissing a renewed upward trend in prices. One reason is the significant supply increases by the Organization of the Petroleum Exporting Countries (OPEC) in recent months. More importantly, high oil prices, and particularly the global economic slowdown, have dampened oil demand. Gone are the days when US drivers filled their tanks with gusto after overcoming their pandemic-induced anemia (see chart 1).

We believe demand will remain weak in the coming months given that we may have already entered a recession, made worse by the stuttering of the Covid-hit Chinese economic engine. Only a brightening of economic prospects would improve the outlook for oil prices, we believe.

Price downside limited due to supply issues

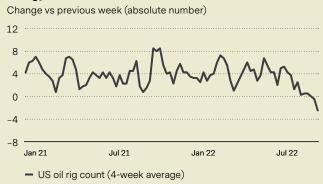
Meanwhile, the problems on the supply side remain unresolved. In addition to falling Russian supply, OPEC can hardly pump more crude, and in the US, drilling activity in the shale oil sector has recently gone down slightly (see chart 2), which is hard to believe given Europe's energy crisis. The production constraints remind us of the lack of investment incentives in the "dirty" energy sector. This is due not only to shortages of personnel and materials, but also increased scrutiny of fossil fuel-related projects. Given the supply problems, we expect the fall in oil prices to remain contained compared to those seen during previous economic downturns.

Chart 1: In the US, the post-pandemic recovery in oil consumption is over



Source: U.S. Energy Information Administration, Refinitiv Datastream, Vontobel

Chart 2: Less US drilling activity despite this year's energy crisis



Source: Baker Hughes, Refinitiv Datastream, Vontobel

US monetary policy is casting a shadow over the euro



Sven Schubert, PhD Senior Investment Strategist, Head of Strategy Currencies, Vontobel

One currency's gain is another currency's pain. The US Federal Reserve's resolve to move key rates higher helps the US dollar and puts downward pressure on the euro. Another winner is the Swiss franc.

The tightening of US monetary policy to stave off inflation was long in the making, but the US Federal Reserve's continued commitment to do so has surprised market watchers. Jerome Powell's recent statements have raised fears that the US economy could face a recession. Even so, the Fed's tightening bias is accelerating the US dollar's upward drive at the expense of other currencies, such as the euro or pound sterling.

When the curve inverts, the outlook blurs

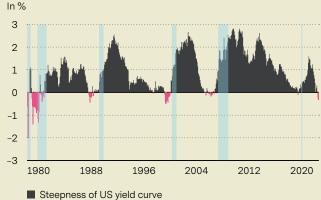
How to gauge the state of the US economy? Indicators like the steepness of the so-called yield curve have been reliable measures of economic fortunes. As a rule, the steeper the US curve, the brighter the outlook for the world's biggest economy. Conversely, when the yield curve inverts, i.e. when short-term interest rates exceed longer-term ones, the outlook sours. This has been the case of late (see chart 1), and this points to economic trouble next year, we believe.

The combination of a restrictive monetary policy in the US and a darkening economic outlook points to a volatile environment for financial markets, which suggests the US dollar will continue to benefit from its status as a safe haven. This holds especially true relative to the euro, which remains on the back foot due to the war in Ukraine and its side effects on the European economy. It's true that energy prices have come off their peaks, but fresh trouble for the euro area may be brewing in the shape of rising yields on bonds issued by heavily indebted southern European member states. If this persists, the European Central Bank may be forced to pull out all the stops, i.e. buy large amounts of "peripheral" debt, raising questions about the legality of such a move.

Low Swiss inflation offsets franc strength's drawback

Like the US dollar, the Swiss franc currently seems unstoppable, mostly due to the country's increased competitiveness over the past two years. Swiss inflation has remained moderate relative to that of the US and the euro zone, more than offsetting the negative effects from the franc's strength on the country's exporting industry. A closer look at the various sectors of Switzerland's economy reveals different degrees of robustness. Chart 2, for instance, shows that the chemical industry could even digest a Swiss franc level of 0.80 to the euro without losing competitiveness in relative terms.

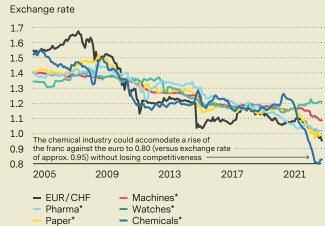
Chart 1: US yield curve suggests economic trouble, but US dollar benefits regardless



(10-year vs 2-year government bond yield)
US recession (as defined by the National
Bureau of Economic Research)

Source: Refinitiv Datastream, Vontobel

Chart 2: Swiss industry takes franc's rise in stride, chemical sector is most robust



^{*} Sector-specific purchasing power parities (PPP) Source: Refinitiv Datastream, Vontobel

Economy and financial markets 2020 - 2023

The following list shows the actual values, exchange rates and prices from 2020 to 2021 and consensus forecasts for 2022 and 2023 for gross domestic product (GDP), inflation/inflationary expectations, key central bank interest rates, ten-year government bonds, exchange rates and commodities.

2022

2023

GDP (IN %)	2020	2021	CURRENT ¹	2022 CONSENSUS	2023 CONSENSUS
Global (G20)	-2.6	5.2	1.7	2.4	2.3
Eurozone	-6.3	5.3	0.8	2.9	0.3
USA	-3.4	5.7	1.7	1.6	0.9
Japan	-4.7	1.8	1.6	1.6	1.5
UK	-9.3	7.2	-0.1	3.5	-0.1
Switzerland	-2.5	3.8	2.8	2.4	1.0
Australia	-2.1	4.9	0.9	3.9	2.2
China	2.2	8.1	-2.6	3.4	5.1
	•••••••••••••••••••••••••••••••••••••••	······································	•••••••••••••••••••••••••••••••••••••••		•
INFLATION	2020	2021	CURRENT ²	2022 CONSENSUS	2023 CONSENSUS
Global (G20)	1.7	3.3	7.3	7.1	4.4
Eurozone	0.3	2.6	9.1	8.2	5.0
USA	1.2	4.7	8.3	8.0	3.8
Japan	0.0	-0.3	3.0	2.1	1.3
UK	0.9	2.6	9.9	9.1	6.8
Switzerland	-0.7	0.6	3.5	2.9	2.0
Australia	0.9	2.9	6.1	6.3	4.4
China	2.5	0.9	2.5	2.3	2.3
VEV INTEREST DATES (IN S/)	0000	0001	OUDDENT	CONSENSUS	CONSENSUS
KEY INTEREST RATES (IN %)	2020 -0.50	2021	CURRENT	IN 3 MONTHS	IN 12 MONTHS
EUR USD	-0.50 1.75	-0.50 0.25	0.75 3.25	2.04 4.05	1.97
•••••••••••••••••••••••••••••••••••••••	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······ · ·		3.95
JPY	-0.10	-0.10	-0.10	-0.10	-0.10
GBP	0.75	0.25	2.25	2.90	2.95
CHF AUD	-0.69 0.75	-0.76 0.10	0.50 2.35	0.77 3.35	0.96 3.20
CNY	4.35	4.35	4.35	4.30	4.30
GOVERNMENT BOND VIELDS 10 VEARS (IN %)	2020	2021	CUPPENT	CONSENSUS	CONSENSUS
GOVERNMENT BOND YIELDS, 10 YEARS (IN %) FUR (Germany)	2020	2021	CURRENT 1 93	IN 3 MONTHS	IN 12 MONTHS
EUR (Germany)	-0.6	-0.2	1.93	1.67	IN 12 MONTHS 1.58
EUR (Germany) USD	-0.6 0.9	-0.2 1.5	1.93 3.68	1.67 3.17	1.58 3.09
EUR (Germany) USD JPY	-0.6 0.9 0.0	-0.2 1.5 0.1	1.93 3.68 0.24	1.67 3.17 0.23	1.58 3.09 0.23
EUR (Germany) USD JPY GBP	-0.6 0.9 0.0 0.2	-0.2 1.5 0.1 1.0	1.93 3.68 0.24 3.47	1.67 3.17 0.23 2.73	1.58 3.09 0.23 2.41
EUR (Germany) USD JPY	-0.6 0.9 0.0	-0.2 1.5 0.1	1.93 3.68 0.24	1.67 3.17 0.23	1.58 3.09 0.23
EUR (Germany) USD JPY GBP CHF AUD	-0.6 0.9 0.0 0.2 -0.5 1.0	-0.2 1.5 0.1 1.0 -0.1 1.7	1.93 3.68 0.24 3.47 1.28 3.91	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES	-0.6 0.9 0.0 0.2 -0.5 1.0	-0.2 1.5 0.1 1.0 -0.1 1.7	1.93 3.68 0.24 3.47 1.28 3.91	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR	-0.6 0.9 0.0 0.2 -0.5 1.0 2020	-0.2 1.5 0.1 1.0 -0.1 1.7 2021	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69	1.67 1.67 2.17 2.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18 1.07
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 1.15	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 0.95 0.75 1.18 1.07 127
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142 0.66	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02 1.33 0.70	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 0.95 0.75 1.18 1.07 127 0.73
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD GBP per EUR	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77 0.90	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73 0.84	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02 1.33 0.70 0.86	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 0.95 0.75 1.18 1.07 1.27 0.73 0.87
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142 0.66 0.87	1.67 1.67 2.73 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02 1.33 0.70 0.86 6.90	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18 1.07 127 0.73 0.87 6.76
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD GBP per EUR	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77 0.90	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73 0.84 6.37	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142 0.66 0.87	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02 1.33 0.70 0.86 6.90 CONSENSUS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18 1.07 1.27 0.73 0.87 6.76 CONSENSUS
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD GBP per EUR CNY per USD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77 0.90 6.51	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73 0.84 6.37	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142 0.66 0.87 7.11	N 3 MONTHS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18 1.07 1.27 0.73 0.87 6.76 CONSENSUS IN 12 MONTHS
EUR (Germany) USD JPY GBP CHF AUD FOREIGN EXCHANGE RATES CHF per EUR CHF per USD CHF per 100 JPY CHF per GBP USD per EUR JPY per USD USD per AUD GBP per EUR CNY per USD	-0.6 0.9 0.0 0.2 -0.5 1.0 2020 1.08 0.88 0.86 1.21 1.22 103 0.77 0.90 6.51	-0.2 1.5 0.1 1.0 -0.1 1.7 2021 1.04 0.91 0.79 1.23 1.14 115 0.73 0.84 6.37	1.93 3.68 0.24 3.47 1.28 3.91 CURRENT 0.96 0.98 0.69 1.10 0.98 142 0.66 0.87 7.11	1.67 3.17 0.23 2.73 1.16 3.70 CONSENSUS IN 3 MONTHS 0.97 0.97 0.73 1.13 1.02 1.33 0.70 0.86 6.90 CONSENSUS	1.58 3.09 0.23 2.41 1.20 3.47 CONSENSUS END OF 2023 1.00 0.95 0.75 1.18 1.07 1.27 0.73 0.87 6.76 CONSENSUS

Source: Vontobel, respective statistical offices and central banks; as of 23.09.2022

Latest available quarter
 Latest available month, G20 data only quarterly

Disclosure notice and disclaimer

1. Analyst confirmation

The financial analysis contained in this Vontobel Report was prepared by the organisational unit responsible for financial analysis (Group Investment Strategy, Global Equity Research and Global Trend Research, Buy-Side Analysis divisions) of Bank Vontobel AG, Gotthardstrasse 43, CH-8022 Zurich, Tel +41 (0)58 283 71 11 (www.vontobel.com), or Vontobel Asset Management AG, Genferstrasse 27, CH-8022 Zürich, Tel +41 (0)58 283 71 50 (www.vontobel.com/am). Bank Vontobel AG is subject to supervision by the Swiss Financial Market Supervisory Authority FINMA, Einsteinstrasse 2, 3003 Bern (www.finma.ch/e/). The authors listed on page 1 of the study confirm that this study gives a complete and accurate reflection of their opinion of the financial instruments and issuers analysed, and that they have neither directly nor indirectly received any compensation for the specific assessments or opinions held by them in this financial analysis. The compensation of the authors of this financial analysis is not directly related to the investment-banking business-volume generated between Vontobel and the issuers analysed. The authors of this financial analysis do not own any equity securities in the companies analysed. The financial analysis was not made available to the analysed issuers prior to distribution or publication. Individual separate contributions contain no direct or indirect reference to specific financial instruments or issuers, and do not represent a financial analysis. Such contributions may therefore also have been compiled by authors outside the areas responsible for financial analysis. The latter are not subject to the restrictions applicable to financial analysis and are thus not covered by the above confirmation either, and are accordingly not mentioned in the list of financial analysts on page 2 of this document.

Investors' Outlook also regularly contains information on in-house Vontobel fund products. The Bank takes into account any risk of conflict of interest arising due to existing economic interests by having the AM/GIS MACI/Funds Research and Investments unit make the selections of the respective in-house products based on the best-in-class principle. This unit is organisationally and informationally independent of the Bank's sales units and is monitored by the Bank's Compliance department.

The prices used in this financial analysis are the last available closing prices on the indicated cut-off date. Any deviations from this rule will be disclosed. The underlying figures and calculations of any company valuation are based on the latest financial information, in particular the profit and loss statement, cash-flow statement and balance sheet, published by the analysed issuers. As the information comes from external sources, reliance on the information is subject to risks for which Bank Vontobel AG accepts no liability. The calculations and assessments made for the analysis may change at any time and without notice when other valuation methods are used and/or they are based on other differing models, assumptions, interpretations and/or estimates. The use of valuation methods does not rule out the risk of fair values not being achieved within the anticipated forecast period. A vast number of factors influence price performance. Unforeseen changes may arise, for example, due to the emergence of competitive pressure, a change in demand for the products of an issuer, technological developments, macroeconomic activity, exchange rate fluctuations or even a shift in the moral concepts of society. Changes in regulatory or tax laws may likewise have unforeseen and serious consequences. This discussion of valuation methods and risk factors does not claim to be complete. For more remarks/information on the methodological approaches used in our financial analysis and the rating system, see www.vontobel.com/CH/EN/Companies-institutions-research-equity-research.

Basis of valuation and valuation methods

The Vontobel financial analysts use a variety of valuation methods (e.g. the DCF and EVA model, sum of the parts valuation, breakup and event-related analysis, key figure comparisons of peer groups and market) to prepare their own financial forecasts for the companies covered by them.

2. Disclaimer and sources

Although the producer believes that the information in this document is based on reliable sources, it cannot accept any responsibility for the quality, accuracy, timeliness or completeness of any of the information contained in this document. This research report is for information purposes only and does not constitute either an offer or a solicitation to buy, sell or subscribe, nor does it constitute investment advice or any advice with respect to tax consequences. The research report was written without regard to the financial circumstances of individual recipients. The producer reserves the right to change and/or retract any opinion expressed in this research report at any time. The producer further points out that the statements contained in this research report are under no circumstances to be construed as advice on tax, accounting, legal or investment matters. The producer neither guarantees that the financial instruments discussed in this research report are accessible to the recipients nor that they are suitable for the recipients. It is recommended that recipients of this report seek advice from an asset manager, investment advisor or other relevant advisor with respect to compatibility with the recipient's own circumstances and with respect to the legal, regulatory, tax and other consequences prior to making any investment decision. The producer does not regard any recipients of this report as clients if there are no other business or contractual relations. Any use of this report, in particular its reproduction in whole or in part, or its distribution to third parties, is only permitted with prior written consent from Bank Vontobel AG and full acknowledgement of sources. Bank Vontobel AG has taken internal organisational measures to prevent any potential conflicts of interest and, if there are any such potential conflicts of interest and they are unavoidable, to disclose them. For more details on handling conflicts of interest and maintaining the independence of the financial analysis department as well as disclosures relative to the financial recommendations of Bank Vontobel AG, see www.vontobel.com/CH/EN/MiFID-Switzerland. Details on how we handle your data can be found in our current data protection policy (www.vontobel.com/privacy-policy) and on our data protection website (www.vontobel.com/gdpr). This publication is deemed to be marketing material within the meaning of Article 68 of the Swiss Financial Services Act and is provided for informational purposes only. If you do not wish to receive any further Investors' Outlook from us, please contact us at wealthmanagement@vontobel.com.

3. Country-specific guidelines and information

The distribution and publication of this document and the investments described in it may be subject to restrictions in some jurisdictions due to local laws and regulations. This document and the information contained in it may only be distributed in countries in which the producer or the distributor holds the applicable licences. If there is no mention to the contrary in this document, it may not be assumed that the producer or distributor holds the applicable licences in any specific country. Please note the following country-specific information must be strictly observed. With the exception of the following distribution-channels, this research report shall be deemed to be distributed by the company indicated on its cover page.

18 Legal information

Additional information for US institutional clients

In the United States of America, this publication is being distributed solely to persons that qualify as major US institutional investors under SEC Rule 15a-6. Vontobel Securities, Inc. accepts responsibility for the content of reports prepared by its non-US affiliate when distributed to US institutional investors. US investors who wish to effect any transaction in securities mentioned in this report should do so with Vontobel Securities, Inc. at the address hereafter and not with Bank Vontobel AG: Vontobel Securities, Inc., 1540 Broadway, 38th Floor, New York, NY 10036, Tel 1 212 792 5820, Fax 1 212 792 5832, e-mail: vonsec@vusa.com. Vontobel Securities Inc. New York, with headquarters at Vontobel Securities AG, Gotthardstrasse 43, CH-8022 Zurich, Tel +41 58 283 76 17, Fax +41 58 283 76 49, is a broker-dealer registered with the Securities and Exchange Commission and a member of the National Association of Securities Dealers. Bank Vontobel Zurich is a foreign broker dealer which is not delivering services into the USA except for those allowed under the exemption of SEC Rule 15a-6.

Additional information for UK clients

Bank Vontobel AG is a company limited by shares with a Swiss Banking license which has no permanent place of business in the UK and which is not regulated under the Financial Services and Markets Act 2000. The protections provided by the UK regulatory system will not be applicable to the recipients of any information or documentation provided by Bank Vontobel AG and compensation under the Financial Services Compensation Scheme will not be available. Past performance is not indicative of future performance. The price of securities may go down as well as up and as a result investors may not get back the amount originally invested. Changes in the exchange rates may cause the value of investments to go down or up. Any literature, documentation or information provided is directed solely at persons we reasonably believe to be investment professionals. All such communications and the activity to which they relate are available only to such investment professionals; any activity arising from such communications will only be engaged in with investment professionals. Persons who do not have professional experience in matters relating to investments should not rely upon such communications. Any contact with analysts, brokers or other employees of Bank Vontobel AG must be conducted with Bank Vontobel AG directly and not through offices or employees of Vontobel affiliates in London/UK.

Information for Italian investors

This research document prepared by Bank Vontobel AG is distributed according to EU rule 2016/958 by Vontobel Wealth Management SIM S.p.A, Milano authorized and regulated by Consob, via G.B. Martini, 3 – Roma.

