



- Equities:
 Overweighting even closer to neutral
- Government bonds:
 Short positioning increased further
- Risk environment:
 Risk indicator picks up for all market segments
- Current topic:
 Al strategy currently focused on risk parity

Breath of fresh air in the White House, effective vaccine in sight

The fundamental economic market environment is stabilizing markedly at the start of December. Joe Biden's electoral victory in the US eliminates a major source of uncertainty that had been lingering. Positive news about the development of a COVID-19 vaccine is also shoring up investors' risk appetite.

The world's focus was trained on the US presidential elections in November, with the two candidates' neckand-neck race for the White House initially boosting equity markets. Even the dogged impasse after election day until the winner was definitively announced, which was dominated by accusations of electoral fraud, failed to put a damper on risk-on sentiment on equity markets. On November 9, reports that the COVID-19 vaccine developed by Biontech and Pfizer is highly effective and will undergo an expedited approval process in the very near future also massively buoyed demand for risk-bearing investments. European equity markets particularly benefited from this development.

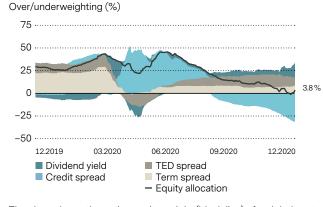
All the while, governments were again forced to impose severe restrictions on public life as the pandemic picked up again around the world. The economic damage done by these measures was partly reflected in the eurozone economy, which saw a considerable downturn in November. Faced with this, the vaccine development breakthrough generated even greater optimism on markets. The emergency approval being sought by two manufacturers gave market players reason for optimism despite uncertainty about time frames, distribution and logistics.

Moving towards the end of the year, investors' are likely to focus their attention on four main areas: First, Christmas business is imminent, which is highly important to retail. Then, Joe Biden's inauguration and the expected refocusing of US politics are being keenly awaited, both domestically and abroad. The COVID-19 pandemic remains a decisive factor in growth prospects globally. Finally, the United Kingdom's exit from the EU is also likely to become a hot topic again.

At the beginning of December, the equity overweighting in the global GLOCAP sample portfolio (50% equities, 50% cash) was 3.8%, and thus even closer to neutral than in November. The contributions of the TED spread and the credit spread comfortably offset the higher contributions of the term spread and the dividend yield. The lower equity ratio was thus due chiefly to the negative contribution by the credit spread.

The equity ratio, declining once again, reflects the visible decrease in equities' risk premiums. With the US presidential election over and the breakthrough in research

Chart 1: Equity overweighting virtually neutral



The chart shows the active equity weight (black line) of a global portfolio in euros with a neutral allocation of 50% equities and 50% cash. Foreign currencies are hedged. It also shows the contributions of the individual driving forces (term spread, TED spread, credit spread, and dividend yield), which combine to give the active equity allocation. Information as of December 2, 2020

Source: Vescore

into a COVID-19 vaccine, uncertainty on capital markets subsided considerably. This benefited equity markets in November, which enjoyed a sharp upturn. The equity risk premium fell as a result and so the model now signals only a moderate long position. The lower risk premium is indicated by the contribution of the credit spread, which has a negative impact on companies despite low financing costs. These low financing costs prop up barely profitable business models, which could result in disincentives that would have a fundamental detrimental effect on the economy.

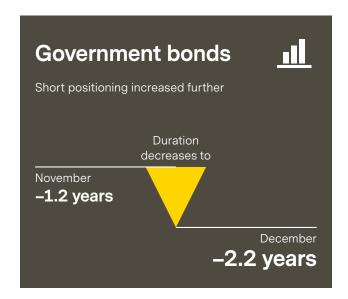
Chart 2: Credit spread component dominates



The chart shows the credit spread that measures market participants' prevailing trust in the financial stability of corporations. It is given by the spread of BBB-rated European and U.S. corporate bonds versus first-rate securities. The chart shows a weighted average of the credit spreads (blue line) and the average of this instrumental variable (black line). Information as of December 2, 2020 Source: Vescore

	DECEMBER 2	NOVEMBER 2
Equity overweighting	3.8%	5.8%
Contribution of the term spread	8.9%	7.0%
Contribution of the TED spread	7.3%	13.6%
Contribution of the credit spread	-29.8%	-19.0%
Contribution of dividend yield	17.4%	4.2%

The table shows the contributions of the instrumental variables to the equity overweighting at the beginning of the month.



The allocation ratio of a global bond portfolio is down as against the previous month at -26% at the start of December, corresponding to a duration of -2.2 years. The position in global government bonds in the portfolio comprises the contributions of the three sub-models carry, mean reversion, and momentum. These were lower, with carry down 1 percentage point, mean reversion down 3 and momentum down 8 percentage points. As well as the mean reversion contribution, which is a considerable determining factor in the short position at -28%, the momentum contribution is now also negative at -8%. Only the carry contribution continues to provide a slight counterweight at +10%.

Global bonds were a mixed bag at the end of November: In the eurozone, increased risk appetite among investors meant that 10-year German government bonds saw the greatest loss, falling by 0.5%, whereas Italian government bonds picked up by 1.0%. Following the US presidential election, 10-year US Treasuries gained 0.2%. Market participants grew increasingly optimistic after vaccine manufacturers Moderna, Pfizer and Biontech announced that their COVID-19 vaccinations are highly effective and can probably be approved as early as December. Although large-scale lockdowns in Europe failed to curb high case numbers, worsening the economic blow, risk appetite on financial markets rallied in November. Risk aversion

priced in during the run up to election day in the US disappeared following Joe Biden's victory, which incumbent Donald Trump eventually reluctantly accepted. Markets were also pleased with the outcome of the election when it became clear that the Democrats would not win a majority in the US Senate. The two sides will have to agree on compromises over key tax and budgetary issues in the years ahead.

Chart 3: Model retains short position

Bond allocation (%)

50

-26%

-50

-100

-150

12.2019 03.2020 06.2020 09.2020 12.2020

Carry Mean reversion

Momentum — Bond allocation ratio

The chart shows the bond allocation of a global portfolio in euros. The model allocation is calculated on the basis of the short-term forecast models carry, mean reversion, and momentum. Information as of December 2, 2020 Source: Vescore

BOND ALLOCATION	TOTAL	CARRY CONTRIBUTION	MEAN REVERSION CONTRIBUTION	MOMENTUM CONTRIBUTION
Global	-26.2%	10.1%	-27.8%	-8.5%
Germany	-1.2%	0.6%	-2.0%	0.2%
France	-2.8%	0.7%	-4.2%	0.7%
Italy	2.0%	1.1%	-1.3%	2.1%
Great Britain	-8.6%	1.3%	-7.0%	-2.9%
Switzerland	-5.6%	1.5%	-2.7%	-4.4%
US	-3.7%	2.1%	-3.7%	-2.1%
Canada	-7.7%	1.7%	-6.8%	-2.6%
Japan	1.3%	1.1%	-0.2%	0.4%

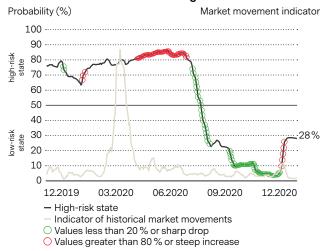
The table shows the bond allocation of a global portfolio in euros (the "total" column) broken down into individual countries. It also lists the contribution of the short-term forecast models carry, mean reversion, and momentum to the total bond allocation. Information as of December 2, 2020 Source: Vescore



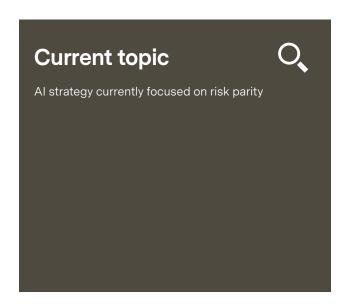
The risk indicator rose last month but remains in the lower third of the scale. Whereas the aggregate probability of a future high-risk state in developed markets was just 4% in November, this figure now comes to 28%. The risk indicator analyses the current environment and shows whether the future risk is high or low. It does this by comparing short-term yields with long-term yields. Developed markets were more volatile in November than in previous months, explaining the increase in the risk indicator. All three asset classes (equities, bonds, and currencies) contributed to this. At present, the probability for a future high-risk state is 25% for equity markets, 31% for bond markets and 29% for currency markets in industrialized countries.

The analysis for emerging markets reveals a similar picture, with the risk indicator rising by 8 percentage points to 20%. At 22%, the contribution by currency markets was down 7 percentage points on the previous month, whereas the equity markets' contribution increased from 3% to 34%. This is because some equity markets, such as Brazil, climbed by over 25%, buoyed by positive news on COVID-19 vaccines. The contribution by bond markets was unchanged at 3%.

Chart 4: Risk indicator remains in green zone



The chart shows the aggregated probability of a future high-risk state in developed markets in the near future (black line). The aggregated probability is given as the average of the three individual probabilities for the market segments of equities, bonds, and currencies. Interesting values are depicted with green and red circles. The color green represents a calm environment and red stands for a turbulent market environment. The probability of 50% represents a uniform expectation for the future market environment (black line). An aggregate indicator of the historical market trends in the three segments is shown in the background (beige line). Information as of December 2, 2020 Source: Vescore

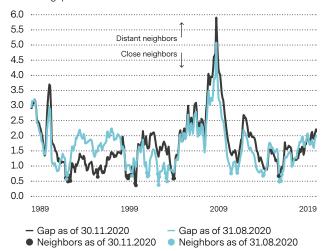


Al forecasting less reliable recently

Vescore uses methods of artificial intelligence (AI) and machine learning, called "artificial market intelligence" (AMI). Periods in the past that had economic conditions as similar as possible to today are systematically identified and these are then used to determine the optimal allocation for the current economic environment. Measurement is based on the four instrumental variables used under GLOCAP (term spread, TED spread, credit spread, and dividend yield), global inflation, and various economic trends. A comparison of the current conditions and those as of end-August 2020 shows that the economic gap has generally widened, while the current line has almost always been well above the line for end-August 2020 over the last 20 years. This is a clear sign that forecasting reliability has decreased in recent months.

Chart 5: Fewer "economic neighbors"

Economic gap as of 30.11.2020 and 31.08.2020



The chart shows how close current economic conditions and those at the end of August 2020 are to those in the past, starting 1988. The points indicate the times at which phases are the most comparable to the situation today. Information as of December 2, 2020 Source: Vescore

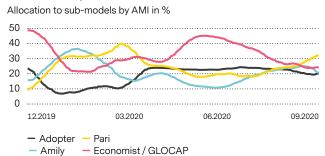
Most important "economic neighbor": 1992/93

What is striking here is that the highest number of "economic neighbors" for August 2020 was in the period from 2001 to 2003 – i.e. during the dotcom crisis. The current situation is no longer comparable to this period. Now, there are four comparable economic periods, three of which were over 15 years ago: August 1992 to March 1993, February 1999 to March 2000 and March to May 2004. In 1992/93, global growth was particularly weak, whereas 1999/00 and 2004 saw the beginning of phases of economic recovery. The fourth comparable period was from May to August 2015. This covers the China crisis.

Model allocation

Based on this analysis, AMI currently overweights the risk parity model (Pari) at the expense of the economic model (Economist/GLOCAP) which is now neutral at just 25%. The Adopter model (Trend) and the Amily model (Artificial intelligence) both remain underweighted at 21%. Overall, AMI thus currently opts for an allocation determined by risk diversification.

Chart 6: Risk parity model dominates



The chart shows the allocation between the various models on the basis of the AMI analysis. Information as of December 2, 2020 Source: Vescore

Glossary

GLOCAP

Global Conditional Asset Pricing (GLOCAP) is Vescore's proprietary equity allocation model. Active divergences from the neutral position (50% cash, 50% equities) are entered into on the basis of an assessment of the economic environment. The long-term economic expectations (term spread), the stability of the financial system, and the liquidity preferences (TED spread), market participants' trust in corporations (credit spread), and the fundamental stock valuation (dividend yield) are evaluated and quantified. The sum of the contributions of these indicators reflects the active equity over- or underweighting. The indicator for long-term business expectations is the difference between long-term and short-term interest rates of the major industrialized countries. The TED spread is the difference between interest rates for USD, JPY, and EUR investments on the euro money market and the associated government bond of the same maturity. The indicator for confidence in corporates is the spread of corporate bonds with low ratings versus toprated securities. The global dividend yield measures the aggregated ratio of dividend to price on the equity markets and reveals the fundamental valuation on the equity market.

FINCA

The Fixed Income Allocator (FINCA) is Vescore's proprietary bond allocation model. The bond allocation is based on the FINCA multi-model approach, which is used as a tool for forecasting changes in the world's most important yield curves of government bonds and swaps. Short-term forecast models (carry, mean reversion, and momentum) are analyzed for each currency. The resulting allocation is then adjusted to economic conditions. Carry models optimally gear the portfolio dynamically to the expected carry in the respective currency. The carry results from the daily shortening of the term of a bond in combination with an interest rate change, assuming a constant or only slightly changing yield curve. Mean reversion models are aligned to the convergence of interest rates toward a long-term equilibrium. This convergence can be rationalized on the basis of the economic cycle or central banks' countercyclical setting of interest rates. Momentum models follow trends and in particular exploit quick changes in interest rates after political decisions or central bank announcements.

Risk indicator

Vescore's proprietary Risk Indicator works in conjunction with our equity and bond allocation models GLOCAP and FINCA, and acts as a "second referee" to recognize quickly whether capital markets are in risk-on or risk-off mode. The Risk Indicator works based on non-predictive information and uses the stability of the co-variance matrices for three asset classes: equities, bonds, and currencies. Up to 20 different developed markets are included for each asset class. Comparing the short- and long-term covariance, the Risk Indicator classifies markets as "low risk" or "high risk" and thereby identifies changes of the market regime. The Risk Indicator responds fast to changes in international financial markets while simultaneously showing high persistence. An uninformed, non-predictive assessment of the future market environment reflects a probability of 50%. When the Risk Indicator anticipates a low-risk, low-volatility environment (value <50%), it increases portfolio exposure to equity and bond strategies, whereas the Risk Indicator reduces such exposure if it anticipates a high-risk, high-volatility environment (>50%). The Risk Indicator's active response should protect investors particularly in periods of market stress by limiting drawdowns.

Vescore takes a quantitative investment approach based on financial market research with the aim of achieving an attractive risk-adjusted performance in the long term.

Disclaimer

This marketing document was produced by one or more companies of the Vontobel Group (collectively "Vontobel") for institutional clients.

This document is for information purposes only and nothing contained in this document should constitute a solicitation, or offer, or recommendation, to buy or sell any investment instruments, to effect any transactions, or to conclude any legal act of any kind whatsoever.

Except as permitted under applicable copyright laws, none of this information may be reproduced, adapted, uploaded to a third party, linked to, framed, performed in public, distributed or transmitted in any form by any process without the specific written consent of Vontobel Asset Management AG ("Vontobel"). To the maximum extent permitted by law, Vontobel will not be liable in any way for any loss or damage suffered by you through use or access to this information, or Vontobel's failure to provide this information. Our liability for negligence, breach of contract or contravention of any law as a result of our failure to provide this information or any part of it, or for any problems with this information, which cannot be lawfully excluded, is limited, at our option and to the maximum extent permitted by law, to resupplying this information or any part of it to you. Neither this document nor any copy of it may be distributed in any jurisdiction where its distribution may be restricted by law. Persons who receive this document should make themselves aware of and adhere to any such restrictions. In particular, this document must not be distributed or handed over to US persons and must not be distributed in the USA.

This document has been prepared by a company of the Vontobel Group ("Vontobel"). Vontobel is represented in Australia by Vontobel Asset Management Australia Pty Limited (ABN 80 167 015 698), which is the holder of Australian Financial Services Licence number 453140 ("Vontobel Australia"). Vontobel and Vontobel Australia are also an Overseas Financial Adviser in the meaning of the Financial Advisers Act 2008 of New Zealand ("FAA") and neither Vontobel nor any of its affiliates or subsidiaries has a presence in New Zealand.

This information is only intended to be provided to persons:

- in Australia if that person is a wholesale client for the purposes of section 761G of the Corporations Act of Australia; and
- in New Zealand if that person is a wholesale client for the purposes of section 5C of the FAA.

This document is not intended to be distributed or passed on, directly or indirectly, to any other class of persons in Australia or New Zealand. This document has not been prepared specifically for Australian or New Zealand investors.

- may contain references to dollar amounts which are not Australian or New Zealand dollars;
- may contain financial information which is not prepared in accordance with Australian or New Zealand law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian or New Zealand tax issues

This document was approved by Vontobel Asset Management SA, Munich Branch, which has its registered office at Leopoldstrasse 8 – 10, 80802 Munich and is authorized by the Commission de Surveillance du Secteur Financier (CSSF) and subject to limited regulation by the Federal Financial Supervisory Authority (BaFin). Details about the extent of regulation are available from Vontobel Asset Management SA, Munich Branch, on request.

Vontobel Asset Management AG Genferstrasse 27 8022 Zurich Switzerland T +41 58 283 71 11

Vontobel Asset Management SA Munich branch Leopoldstrasse 8 – 10 80802 Munich Germany T +49 89 211 133 0

Vontobel Asset Management Australia Pty Ltd. Level 20, Tower 2, 201 Sussex St NSW 2000 Sydney Australia

vescore.com