ECONOMIC AND MARKET UPDATE | OCTOBER 2020

Vanguard economic and market update

Vanguard's key points:

- Recovery levelling off in Europe, with Germany and Italy expected to fare better than Spain and France.
- Targeted virus-suppression efforts and Brexit uncertainties weighing also on UK economic recovery.
- In the US, we foresee annualised growth of around 22% in the third-quarter and around 7% in the fourth-quarter. It could be another two years at least, though, before US economy recovers to its pre-Covid trajectory.
- China economy, in contrast, on course to have fully recovered from the Covid-19 pandemic by year's end.

Economic growth

- The final estimate of GDP in the **United States** for the second quarter was revised up very slightly to show a contraction of 31.4% compared with the first quarter on a seasonally adjusted basis. Vanguard expects the first estimate of third-quarter GDP, which is released on 29 October, to show the recovery is well under way. We foresee annualised third-quarter US growth of around 22% and fourth-quarter growth of about 7%. But our outlook assumes an additional $1 trillion in Covid-related fiscal support. Should no fiscal support be forthcoming, we'd revise down slightly our growth expectations for the fourth quarter and perhaps the first half of 2021. We continue to forecast a full-year GDP contraction of around 4% in 2020 followed by positive growth of around 4% in 2021. Absent a widely accessible and administered Covid-19 vaccine and/or successful treatments, it'll be at least 24 months before we see the US economy reach a pre-Covid trajectory of activity.
- Rising cases of Covid-19 in the **euro area** have led to tactical, localised restrictions on activity – including a 9pm curfew in Paris and several other French cities. We foresee only modest overall fourth-quarter growth, with contraction likely in face-to-face sectors such as leisure, hospitality and tourism and a continued recovery in agriculture, manufacturing and construction. We expect Germany and Italy to fare better than Spain and France, where the virus transmission has been higher of late and where the services sectors make a bigger contribution. Vanguard will closely watch the effect of any tactical halts to activity in the fourth quarter and perhaps into the new year. We continue to foresee a full-year 2020 GDP contraction of minus 8% to minus 10%.
- Vanguard, similarly, sees targeted virus-suppression efforts in the **United Kingdom** limiting fourth-quarter GDP growth to around 1%. Renewed uncertainty about a trade deal between the UK and European Union (*for more on this see the Brexit section below*) is also weighing on sentiment. UK GDP fell by 19.8% in the second quarter compared with the first quarter. Although a slight improvement on the 20.4% drop initially estimated, it is still the largest quarterly contraction since the start of record-keeping in 1955. We continue to expect UK GDP to contract by around 11% for the full year.
- With a still-robust export sector and a quicker-than-expected resumption in domestic activity, Vanguard believes the economy in **China** is on course to have fully recovered from the Covid-19 pandemic by year's end. We've become more optimistic about China's third-quarter GDP growth, which we foresee around 5.5% to 6.0% – higher than the 5.2% consensus of economists surveyed by Bloomberg. Vanguard continues to foresee China's full-year GDP growth in a range

Note: These points represent the house view of the Investment Strategy Group's (ISG's) global economics team and other experts as of 14 October 2020.

of 1% to 3%. We foresee China's goods sector remaining robust, offsetting some lingering weakness in the services sector, which at about 50% of the economy is significantly smaller than those of other major economies. Challenges include an aging population, a fading catch-up effect as the country becomes wealthier and an external environment that may look less kindly on globalisation. Reasons for optimism include the vast domestic market and a growing educated workforce that can take advantage of a wealth of recent research and development.

- Vanguard continues to have an above-consensus view for third-quarter growth in **Japan**, of around 5%, as retail sales rebound to pre-pandemic levels, manufacturing recovers and fiscal and monetary policy improve firms' financial positions. Exports to Asian trading partners have helped offset weakness in trade with the US and Europe. We still expect Japan's full-year GDP to contract by 3% to 5%. Longer-term, we'll be watching new Prime Minister Yoshihide Suga's stated emphasis on increased digital competitiveness and his approach to structural reforms in heavily regulated sectors.
- Within **emerging markets**, Vanguard expects emerging Asia to fare best among the group, with a 2020 contraction of around 1.0%. We continue to see Latin America hardest-hit among the emerging markets, with a full-year contraction around 9.0%, owing largely to effects of the pandemic.

Inflation

- Headline inflation fell further in the **euro area** in September, on an annual basis, after a first slide below zero in four years in August. Headline inflation fell to a negative 0.3%, led lower by energy prices, while core inflation, excluding food and energy, fell to a further all-time low of 0.2%. Vanguard expects that a widening output gap (where supply of goods and services outweighs demand) and recent strengthening of the euro compared with other major currencies will exert disinflationary pressure on both the headline and core rates over the next year.
- Headline inflation in the **United Kingdom** rose by 0.2% in August from a year earlier, compared with a 1.0% rise in July. Over the medium term, we expect demand to recover more slowly than supply and the labour market to weaken, exerting disinflationary pressure on both the core and headline rates of inflation. With the risk of tariff imposition if the UK and EU don't reach a trade agreement before year's end, in addition to significant monetary and fiscal stimulus, we foresee inflation rising toward the Bank of England's 2% target within the next two years.
- The consumer price index (CPI) in the **United States** rose by 0.2% in September compared with August on a seasonally adjusted basis, having risen 0.4% in August. Compared with a year earlier, the CPI rose by 1.4%. Core CPI, which excludes volatile food and energy prices, rose by 1.7%. Vanguard expects some volatility in inflation in the near-to-medium term as a resumption in economic activity across sectors pushes prices higher, perhaps above 2% momentarily in the first half of 2021. We expect such a firming trend to be short-lived and foresee inflation below 2% by the end of 2021, though virus-related supply shocks, fiscal support and/or monetary stimulus, and a willingness by the Federal Reserve to tolerate above-target inflation may serve as potential spurs to higher prices.
- Consumer prices in **Japan** fell by 0.1% compared with July on a seasonally adjusted basis. The Bank of Japan's preferred core CPI measure, removing volatile food and energy prices, was down 0.5% compared with July. Vanguard expects Japan's inflation to continue to ease for the rest of the year amid a second wave of coronavirus infection, subdued labour market conditions, and waning support from fiscal stimulus.
- Similar to our broad view for developed markets, Vanguard doesn't foresee significantly higher inflation in **emerging markets** for the foreseeable future. We see demand returning to economies more slowly than supply, and little evidence of core inflation, which is driven by higher wages, amid unemployment rates that are still far higher than they were before the pandemic.

Employment

- The unemployment rate in the **United States** fell to 7.9% in September – its fifth straight month of decline but also the third straight month showing a slowdown in the pace of job gains. Vanguard expects a continued slowing in the pace of recovery in the medium term. Alongside the slowing job-growth numbers, we're monitoring anecdotal evidence of rising industry layoffs in late September. The potential for increases in virus transmissions and targeted disruptions to economic activity could create volatility in the jobs numbers in the months ahead. We continue to expect the US unemployment rate to range between 7% and 9% by year's end.
- Unemployment in the **euro area** rose to 8.1% in August from a revised 8.0% in July, the fifth consecutive month of rising unemployment. Vanguard believes governments have largely succeeded in protecting jobs but we expect unemployment to rise nonetheless in the coming months as some businesses become less viable in a prolonged pandemic.
- The government in the **United Kingdom** will replace the Job Retention Scheme with the Job Support Scheme from 1 November. The new programme, scheduled to run for

six months, is designed to protect viable jobs in businesses facing lower demand over the winter months due to Covid-19, to help keep their employees attached to the workforce. It's less comprehensive than the one it's replacing, though. Vanguard foresees the UK unemployment rate peaking at around 8% in the first half of 2021. The unemployment rate under the official International Labor Organization measure rose to 4.5% in August from 4.1% in July.

Monetary policy

- The **European Central Bank** (ECB) left its deposit rate unchanged at minus 0.5% at its policy meeting on September 10 and said it would keep its main rates at their current levels or take them lower still until it sees the inflation outlook "robustly converge to a level sufficiently close to, but below, 2%". The ECB's next policy announcement is scheduled for 29 October. Vanguard expects the ECB to expand its Pandemic Emergency Purchase Programme by around €500 billion by the end of the year to support the inflation outlook.

- The **Bank of England** (BOE) maintained its bank rate at 0.1% and left other policy unchanged at its last meeting on 17 September. But the BOE also indicated it was more likely now than previously to implement negative rates in the event of a sustained economic downturn. The bank's next policy announcement is scheduled for 5 November.

- The **US Federal Reserve**'s Federal Open Market Committee (FOMC) voted on September 16 to leave the target range for its federal funds rate unchanged at 0%–0.25%. It was the FOMC's first meeting since it announced it would allow inflation to modestly exceed its 2% target so as to achieve 2% average inflation over time. The Fed said it expects to maintain the current target range until it assesses that inflation "is on track to moderately exceed 2% for some time." FOMC members broadly expect the Fed will keep the current federal funds target rate at today's level through 2023, even as they expect inflation to then finally reach 2%.

- The **Bank of Japan** (BOJ) left its key short-term rate target at minus 0.1%. Vanguard believes the BOJ will not cut interest rates in 2020 but instead continue with measures aimed at improving corporate financing and yen liquidity.

- Given China's better-than-expected recovery to date, the **People's Bank of China** has little reason to add fuel to the economic tank, Vanguard believes. Policymakers here have more of an opportunity to wait and see what might be required next. We expect any further stimulus to be targeted at specific sectors, such as transportation, where recovery has been slower than elsewhere.

Brexit

A crucial two weeks lie ahead for trade negotiations between the UK and EU. In order to strike a deal, the two parties must find enough common ground by 31 October 2020. This month-end date is grounded in the reality that any agreement to take effect at the start of 2021 will require a couple of months for ratification. The key negotiating areas covering state aid rules, fisheries and "level playing field" provisions remain the contentious stumbling blocks they've been for many months. A no-deal end to the post-Brexit transitionary period that expires in the new year would leave UK-EU trade governed by World Trade Organization schedules for tariffs and quotas. That a bare-bones trade deal currently represents the best chance of success illustrates how significantly the outlook has changed from the start of the year, when a full, comprehensive agreement was the goal. But such agreements typically take years to complete and a bare-bones deal could set the stage for talks that continue into 2021. Vanguard believes that, despite UK Prime Minister Boris Johnson's announcement that the UK should start preparing for a no-deal scenario, talks will continue right up until the end-October deadline.

Trade

Leading indices continue to suggest that global trade has swung back to an upward trajectory after steep drops in May and June. Similar to the trajectory of broader economic recovery in many places, the leading indices imply a sharp rebound for global trade through October, followed by a slower recovery to pre-pandemic levels. China remains the standout country, its exports buoyed by products that were in demand during Covid lockdowns, such as protective gear, pharmaceuticals, and office equipment. China has been supported by its position at the centre of global goods production and by lower prices for commodity inputs.

Asset class return outlook

Vanguard's 10-year annualised outlooks for equity and fixed income returns are unchanged since the September 2020 economic and market update. The probabilistic return assumptions depend on market conditions at the time of the running of the Vanguard Capital Markets Model® (VCMM) and, as such, can change with each running over time. ISG updates these numbers quarterly. The projections below are based on the June 30, 2020, running of the VCMM. Projections based on the September 30, 2020, running of the VCMM will be communicated through the November 2020 economic and market update.

Our 10-year annualised nominal return projections are as follows. Please note that the figures are based on a 1-point range around the 50th percentile of the distribution of return outcomes for equities and a 0.5-point range around the 50th percentile for fixed income. Numbers in parentheses reflect median volatility.

	Median projected volatility (%)	Ten-year annualised nominal return projections
UK equities†	19.4	5.9%–7.9%
Global equities ex-UK (unhedged)†	19.2	4.8%–6.8%
UK aggregate bonds†	5.7	0.1%–1.1%
Global bonds ex-UK (hedged)†	2.7	0.2%–1.2%
Euro area equities*	25.2	5.2%–7.2%
Global equities ex-euro area (unhedged)*	19.6	3.7%–5.7%
Euro area aggregate bonds*	1.8	-0.2%–0.8%
Global bonds ex-euro area*	3.2	-0.1%–0.9%

Note: * return projections are calculated for euro investors. † return projections are calculated for British pound investors.
Any projections should be regarded as hypothetical in nature and do not reflect or guarantee future results.

Important information

The projections or other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modelled asset class. Simulations are as of June 30, 2020. Results from the model may vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

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