WELLINGTON MANAGEMENT®

CONTENTS

FOR PROFESSIONAL OR INSTITUTIONAL INVESTORS ONLY

2021 Investment Outlook

Seeing a surer path to a safe and effective vaccine, Wellington investors are more confident in an economic recovery in 2021, and many believe this could be the catalyst for a rotation from growth- to value-oriented exposures. Our fixed income team is likewise moderately pro-cyclical, favoring higher-yielding sectors.

Even as we hope to put the pandemic in the rearview mirror in 2021, we believe it has accelerated and reinforced many long-term, seismic shifts in how we live and work, creating secular opportunities across asset classes worthy of closer examination. Our sustainable investment experts believe, for example, that the defining issues of the past year have reinforced the need for market participants to mobilize capital toward generating positive social and environmental outcomes while aiming to deliver strong financial results. Finally, our investors in alternatives space examine the long-term implications of risk assets becoming more illiquid in risk-off environments.

Dig deeper into these ideas and more in the chapters summarized below.

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DRAWING ON OUR MARKETPLACE OF IDEAS

We have no "house view." While designated teams are accountable for the design and implementation of each of our investment strategies, at a firmwide level the views of our investment professionals can vary, sometimes significantly. We believe this diversity of thought strengthens our investment processes by creating a robust "marketplace of ideas."

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2021 Investment Outlook

Nanette Abuhoff Jacobson
Global Investment and Multi-Asset Strategist

Daniel Cook, CFA
Investment Strategy Analyst

Our multi-asset views

Asset class	View	Change
Developed market equities	**Moderately bullish**	—
US	Neutral	↓
Europe	Moderately bullish	↑
Japan	Moderately bullish	↑
Emerging market equities	**Moderately bullish**	↑
10-year rates	**Moderately bearish**	↓
US	Moderately bearish	↓
Europe	Moderately bearish	↓
Japan	Moderately bearish	↓
Credit	Moderately bullish	—
Investment-grade	Neutral	—
High yield	Moderately bullish	—
Bank loans	Neutral	—
Emerging market debt (external)	Neutral	↑
Securitized assets	Moderately bullish	—
Commodities	**Moderately bearish**	—

Change is from previous quarter. Views expressed have a 6 – 12 month horizon and are those of the authors. Views are as of November 2020, are based on available information, and are subject to change without notice. Individual portfolio management teams may hold different views and may make different investment decisions for different clients. This material is not intended to constitute investment advice or an offer to sell, or the solicitation of an offer to purchase shares or other securities.

MULTI-ASSET OUTLOOK

Is the rotation for real?

KEY POINTS

- Encouraging vaccine data, policy support, and gradually reopening economies make us more confident in taking a pro-risk stance over our 12-month time frame.
- Safe, effective vaccines could be the catalyst for a durable rotation from growth- to value-oriented exposures.
- Within equities, we prefer Europe, Japan, EM, and smaller caps, and think cyclical sectors are attractive relative to growth sectors.
- We think rates will drift higher and find some credit spreads attractive relative to government bonds.
- Downside risks include broad lockdowns as a result of a second COVID-19 wave, a spike in rates, and waning policy stimulus. Upside risks include another major dose of stimulus.

Remarkable, painful, unsettling, hopeful… 2020 brought a roller-coaster ride of emotions, not to mention economic and market volatility. As the end of the year approached, the global economy was on its way to climbing out of the deepest hole ever. Markets, meanwhile, had moved forward, mostly on the strength and relative safety of US equities, growth stocks, gold, and fixed income, and then taken a baby step toward cyclical leadership at the end of the year. So, with the US election behind us (though court challenges, recounts, and Senate runoff elections are still to come as of this writing), COVID-19 cases spiking in Europe and the US, fiscal stimulus on hold in the US, and very encouraging vaccine data being announced, what is the investment thesis for 2021?

Over our 12-month horizon, we think vaccine news, reopening economies, and still-strong policy support will predominate and mark a turning point in the market narrative. Seeing a surer path to a safe and effective vaccine, we are more confident in an economic recovery in 2021 from still very depressed levels (**Figure 1**) and think this will be the catalyst for value to outperform growth, as well as for sovereign rates to rise somewhat. We expect a range of value-oriented exposures to outperform, including non-US developed market equities (versus US equities), emerging markets (EM), cyclical sectors such as financials, consumer discretionary, materials, and industrials, and smaller-cap equities. In sync with these views, we see the US dollar weakening too. Given large output gaps and low levels of valuations, sentiment, and positioning in these areas, we think a rotation will be an enduring theme in the coming year.

About the authors

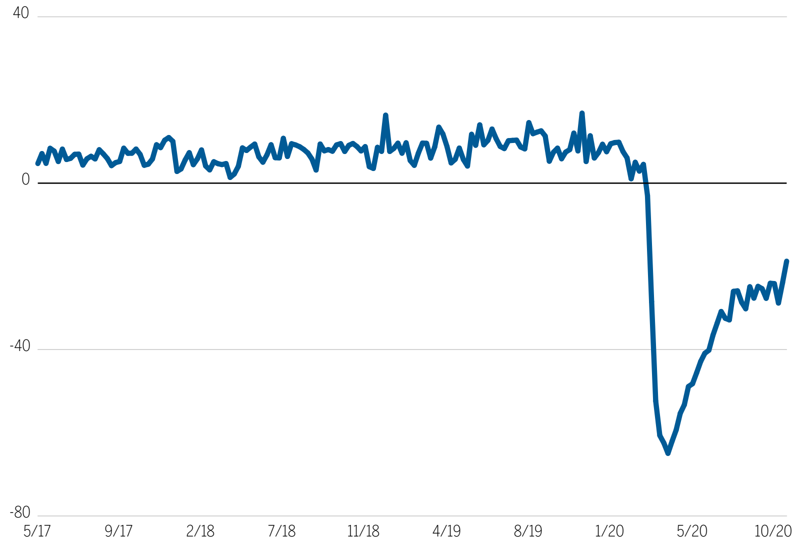
Nanette consults with clients on strategic asset allocation issues and works with investment teams throughout the firm to develop relevant investment solutions across asset classes.

Daniel analyzes and interprets markets and translates this work into investment insights. He researches investment ideas for portfolio managers and consults with clients on tactical and strategic asset allocation.

FIGURE 1

A global rebound is taking wing, but work remains

Total global flights, 7-day moving average, Y/Y percent change



Sources: Flightradar24, Wellington Management | Chart data: 7 May 2017 – 8 November 2020 | Total flights include commercial flights, rest of business jet flights, private flights, gliders, most helicopter flights, government flights, some military flights, and drones. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.**

We remain moderately bullish on credit given the demand for yield, central bank support, and fair spread levels. We are not concerned about inflation over the coming 12 months given the sizable global output gaps, and thus see commodities as a source of funds (though precious metals could be a complement to fixed income for diversification purposes). Our pro-risk stance on emerging markets incorporates our expectation that China's recovery will continue to migrate from the industrial to the consumer side of the economy and that some other emerging markets will potentially benefit from a better developed-market backdrop, a weaker US dollar, and low valuations.

Equities: Leaning toward value

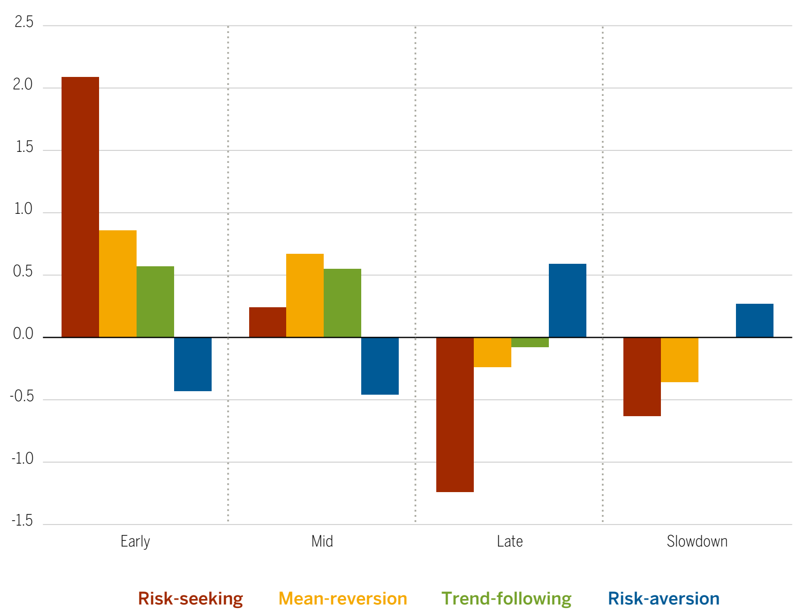
We have tilted our view on equity exposures away from the US and toward Europe and Japan. Japan's domestic economy has benefitted from some fiscal stimulus and a mild experience with COVID-19. That combination has led to healthy balance sheets for both corporates and households. Moreover, we expect Prime Minister Suga to slowly ramp up economic reforms and the Bank of Japan (BOJ) to continue to push for reflation.

In Europe, the manufacturing side of the economy has performed well throughout the COVID-19 crisis but the services side has lagged badly. As Europe endures a second wave of infections, we anticipate further lockdowns in the near term. However, our optimism about a vaccine and the fact that European consumers have the most room to rebound make us bullish on an economic recovery in 2021. Taking these macro views into account, as well as attractive valuations, we think it may be time for investors to reconsider their long-standing underweights in Europe and Japan.

We are now moderately bullish on EM equities on the back of China's relative economic strength shifting from the industrial sectors to the consumer, and a more constructive outlook for some other large EM countries. President Erdogan's pick for the new central bank governor, a former finance minister, is a positive development in Turkey. Brazil's current account surplus has actually improved during the pandemic and inflation is at record-low levels. While EM countries' debt relative to GDP has increased, interest rates are low and some monetary easing is a possibility. Differentiation in EM remains key; for instance, we prefer countries whose economies are tied more to manufacturing than to tourism.

We are lowering our long-standing positive stance on US equities to neutral. US equity markets are dominated by growth and technology, and we think a vaccine will unleash pent-up demand that could make value-oriented plays more attractive, particularly if interest rates rise somewhat, as we believe they will. We think the economy, which has been hit hard by COVID-19, will rebound as it reopens, benefiting more cyclical areas (**Figure 2**). The rebound should be supportive of US equities overall, but given the market's concentration in relatively expensive areas, such as technology, we are left with a neutral stance.

Figure 2
Value (mean-reversion) tends to outperform during the upturn in the cycle
Average monthly alpha of factors in different stages of the economic cycle (%)



Sources: FactSet, MSCI, Citi, Wellington Management | For illustrative purposes only. Not representative of an actual account or strategy. | Investment Strategy team's proprietary factors. Representative factors within each theme: risk-seeking factor = US Beta, mean-reversion factor = US Low P/E, trend-following factor = US Revisions, risk-aversion factor = US Low Volatility. | **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS AND AN INVESTMENT CAN LOSE VALUE.** | Chart data: February 2003 – December 2019

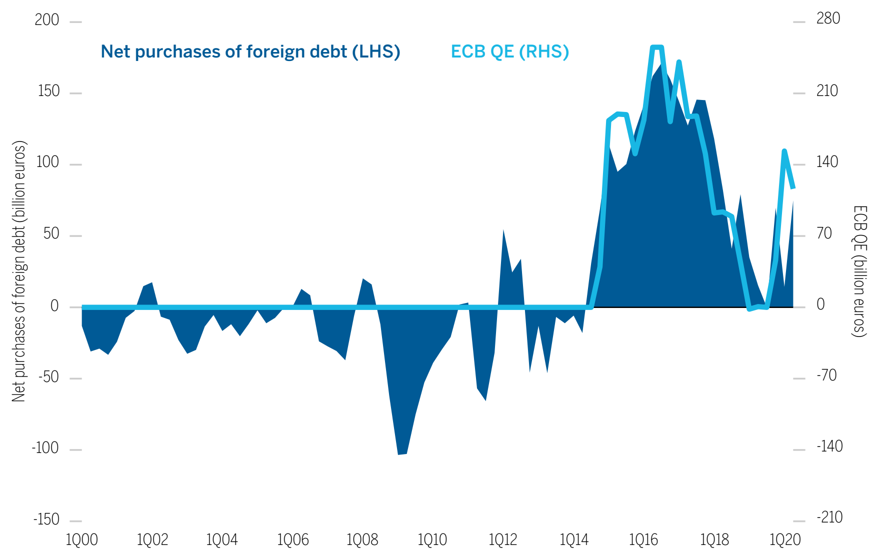
Rates and credit: Higher rates, for the right reason, should be fine for spreads

We believe that a cyclical recovery in 2021 will mean slightly higher yields in longer maturities while central banks will keep short rates pinned. The prospect of higher government bond yields augurs slightly worse for credit relative to the past, from a total return perspective. If higher rates are a result of better real growth, however, and rate moves are mild, then spreads should tighten. Valuations remain at median levels versus history and demand for extra yield remains strong. **Figure 3** shows that with the growth of the ECB's purchases of European government bonds and corporates, European asset allocators are being forced to increase their foreign debt purchases. This appears to be an additional source of US credit demand. Despite its longer duration, the US investment-grade market could benefit from this dynamic, so we seek a neutral posture.

Figure 3

ECB QE has pushed European investors into US credit

Euro area purchases of foreign debt and European Central Bank quantitative easing



Sources: Datastream, Wellington Management | Chart data: 1Q 2000 – 2Q 2020

We remain moderately bullish on high yield and think spreads could potentially tighten 50 – 100 bps more over the coming year. With the Fed's support, US high-yield defaults have been lower than expected — 8.5% as of September 30 — and Moody's has lowered its peak default rate to 11.1% from 14.4% for March 2021. We expect a drawn-out default cycle with slightly elevated defaults relative to the long-term average of 4%. We prefer high yield to bank loans given the prospect of short-term yields staying at zero for several years.

We continue to view securitized assets as a way to express a positive view on residential housing, but remain cautious on commercial property, such as malls and offices, where we see enduring stress. Low mortgage rates, declining unemployment, and millennials' growing demand for housing are potential tailwinds for sectors like workforce housing and credit-risk transfer.

Given our moderately bullish stance, an upside risk is that the global recovery is stronger than we expect

Our view on EM debt has also improved to neutral. As with equities, we see a better developed market backdrop supporting EM. We believe there are attractive opportunities in the higher-yielding local rates and currency markets in Latin America funded by the safer, lower-yielding Asian countries. We also continue to see opportunities in Central and Eastern European local debt.

Risks

We, like the markets, are optimistic that a safe, effective vaccine will be ready for distribution as early as the first quarter of 2021, so a disappointment on this front or broad lockdowns as a result of the surge in cases could derail the global recovery and reverse the rotation from growth to value that we expect.

As of this writing, some US election risk remains given that President Trump has not conceded to President-elect Biden and the Trump campaign has filed lawsuits in several swing states challenging the election results. We don't see much chance of those lawsuits succeeding, but note that any prolonged period of uncertainty could negatively affect markets. Geopolitical risks have gone up as well, as Trump has taken a more aggressive foreign-policy stance recently.

Higher yields also present downside risk and not just for fixed income investments. Extremely low yields and central bank commitments to keep them that way for several years have supported risk assets and justified lofty valuations, including in mega-cap technology names whose high future earnings are considered worth more today in light of lower discount rates. A spike in rates would likely damage markets broadly, particularly if the episode were accompanied by a sudden lack of liquidity.

We are watching closely for signs that the COVID-19 crisis inflicts lingering damage on the global economy. If worries about another surge restrain consumer spending and the savings rate grows, the expansion we expect could disappoint. Additionally, to the extent that changes made to adapt to the pandemic (e.g., remote work and education) become permanent, the impact in areas like office space and business travel could reduce the likelihood of returning to pre-pandemic economic activity levels.

Given our moderately bullish stance, an upside risk is that the global recovery is stronger than we expect. In that case, asset classes even more levered to a recovery, such as natural resources and industrial metals, could be bigger beneficiaries.

Investment implications

Looking beyond the election — The markets have moved past the US election and are now more focused on the path of COVID-19, the vaccine, and the global economy. We think an effective vaccine will be the catalyst for a cyclical recovery in 2021.

Leaning toward value in equities — With a better cycle, we prefer non-US equities and other value-oriented exposures such as cyclicals and smaller-cap equities. We prefer financials over energy given the slow recovery we expect in business travel and the structural headwind of the shift to renewables. We believe there are opportunities in companies with depressed valuations in cyclical sectors that have adapted to the pandemic and seen improvement in medium-term fundamentals. In addition to financials, sectors we find attractive include REITs, materials, health care, aerospace/defense, and transport, which all have value-oriented characteristics.

Seeing some value in credit — Spreads have narrowed but are still around median levels. Given the Fed's unprecedented support for credit, we think spreads will continue to grind tighter. Structured credit is not the target of Fed credit programs, but the market offers exposure to the improving US residential housing market, a dynamic we think will persist through the recovery.

Diversifying with high-quality bonds — We think agency mortgage-backed securities and high-quality government bonds can potentially boost a portfolio's diversification and liquidity if the recession is deeper or longer than we expect. We think taxable investors should consider municipal bonds given attractive valuations.

Enhancing diversification with precious metals — Given rock-bottom fixed income yields, we think precious metals can potentially play a role in boosting portfolio diversification and mitigating the effects of a stagflationary environment and geopolitical tensions.

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Multi-Asset Strategist

About the author

Nick is a strategist and portfolio manager in Wellington's Investment Strategy group. In his role, he develops research on capital market and asset allocation themes, advises clients on investment strategy and portfolio construction, and manages custom investment solutions for clients.

Three broad areas of opportunity

1 Sector and thematic
2 Opportunistic fixed income
3 Alternative investments

MULTI-ASSET

Turn the page: A thematic playbook for 2021

A key starting point for investing is to understand the macroeconomic outlook, as it is from this cyclical perspective that many asset allocation decisions are made. (See my white paper, "The dawn of divergence and the art of subtlety," for some of my latest macroeconomic views.) In addition, there are often powerful secular forces at work that may provide opportunities for enhanced portfolio diversification and return potential.

The challenge for asset allocators is that compelling secular themes and trends can be hard to spot and incorporate, as they typically do not fit neatly into a conventional investing framework. Instead, they require focusing on the "bigger picture" of underlying structural changes that are occurring across the global economy, which in turn need catalysts to propel them.

As we approach 2021, the most obvious catalyst for structural change is the profound impact of COVID-19 on the global landscape. Looking at the crisis through a secular lens, its onset has accelerated and reinforced many long-term, seismic shifts in how we live and work.

Hopefully, 2021 should see the pandemic's grip on the world begin to loosen, enabling the reemergence of many "non-COVID" dynamics in driving asset price action. In addition, as the initial acute shock of COVID starts to fade and give way to a more chronic management of it, its impacts on particular countries, sectors, and companies should begin to differ.

Broadly speaking, I believe COVID, and its multiple ongoing fallouts, has ushered in three types of secular opportunities for discerning investors to pursue increased portfolio diversification — beyond just playing the global cyclical recovery — in 2021.

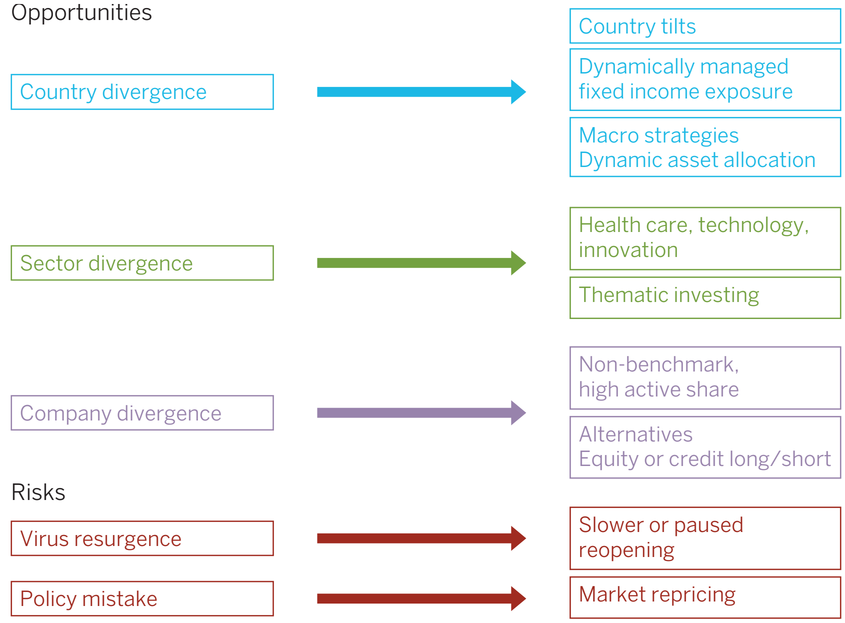
1. Sector and thematic

From an investment standpoint, one useful way to measure COVID's continuing secular impact is through the relative performance of different sectors of the global economy. For example, some of the major lifestyle and workplace changes spawned or accelerated by COVID are likely to turn certain sectors, such as health care and technology (**Figure 1**), into secular "winners," at the expense of others. By contrast, industries such as tourism, for example, may remain challenged and struggle to thrive going forward, even if their activity manages to return to 90% of pre-COVID levels.

While some of these thematic sector-level trends have already become apparent in 2020, I believe they may have further to go as the many structural changes wrought by COVID grow more entrenched. As such, related investments in areas like health care and technology, as well as disruption and innovation more generally, are likely to present attractive long-term opportunities rather than just shorter-term tactical plays. Investors might seek to benefit by positioning their portfolios accordingly in the months to come.

To some degree, 2020's unprecedented global health crisis may have temporarily taken investors' focus off environmental, social, and governance (ESG) issues, but these issues are not going away and, in fact, are likely to loom even larger in the coming months and years.

FIGURE 1
Opportunities and risks to watch in 2021



Source: Wellington Management. For illustrative purposes only.

Finally, I would be remiss if I did not acknowledge the continued importance of sustainability and related investment opportunities. To some degree, 2020's unprecedented global health crisis may have temporarily taken investors' focus off environmental, social, and governance (ESG) issues, but these issues are not going away and, in fact, are likely to loom even larger in the coming months and years. Ironically, if indeed we see redoubled efforts on the ESG front in 2021 and beyond, COVID-19 may be partially responsible. For example, as one industry conference participant put it earlier this year, "COVID-19 has been like watching climate change in fast forward."

2. Opportunistic fixed income

In 2020, at the country level, virtually every nation was impacted to some degree by COVID and, by and large, reacted to the crisis in a similar manner via economic lockdowns and policy stimuli.

In 2021, I believe this commonality of national impacts and responses should begin to break down. While all countries fared about the same with a "blanket-lockdown" approach to COVID, the move to a targeted "test-and-trace" process advantages countries with better public-health infrastructures. Likewise, the continued support required to offset subdued private-sector activity favors countries with stronger public finances. The makeup of a country's economy will also matter, as economies heavily reliant on tourism, for example, will face stiffer headwinds than those more focused on services. At the same time, non-COVID dynamics whose dominance was largely subsumed this year should resurface in 2021, such as long-term structural development in emerging markets (EMs) and political populism.

> **In the case of a long/short equity strategy, being able to "go long" good companies and "short" poor companies allows investors to isolate fundamental factors and dynamics, instead of just avoiding the poor companies altogether.**

At the company level, waning government cash-flow support against a backdrop of challenged consumer spending may worsen the default cycle, with many firms likely being unable to meet their contractual payments given reduced social mobility and economic activity.

It is this gradual fading and evolution of COVID's imprint over time, along with the comeback of other (non-COVID) fundamentals, that leads to my second area of investment opportunity in 2021. Specifically, I expect to see more pronounced country-level divergences in the period ahead, creating opportunities for dynamically run fixed income strategies that can nimbly tilt allocations among various global currencies, interest rates, and credit sectors (e.g., high yield, EM debt, bank loans, and securitized assets, to name a few) — each with potentially distinct return drivers — as market conditions warrant.

3. Alternative investments

Lastly, a similar divergence pattern is also likely to take shape at the individual company level, exposing differences among many corporate business models. While this became apparent to some extent in 2020, I suspect that many of these company-level differences were obscured by markets' broad beta moves (both down and up) and generous government-policy support.

In 2021, I believe this is likely to change amid a return to company-specific fundamentals taking a bigger role in driving price action, such as quality of balance sheets, business models, and firm management. This is the third area of secular investment territory that I believe COVID has opened up, with greater divergences among companies creating numerous opportunities for bottom-up investors. And while these opportunities may also be available to long-only portfolio managers, it is primarily in the alternative investments space (e.g., hedged equity, private equity, multi-asset, and absolute return fixed income strategies, among others) that I think they can best be exploited.

How so, for example? In the case of a long/short equity strategy, being able to "go long" good companies and "short" poor companies allows investors to isolate fundamental factors and dynamics, instead of just avoiding the poor companies altogether (as most long-only strategies would typically do). While likely beneficial to any strategy that seeks to capitalize on fundamentally driven differences across companies, I would highlight the credit markets as offering the greatest opportunity set here in today's environment. This bias reflects the centrality of cash-flow disruption to the current economic downturn and how well masked it was by government policy support in 2020.

Thomas W. Mucha
Geopolitical Strategist

About the author

As a member of the firm's Global Macro Strategy Group, **Thomas** conducts research on the macro and market implications of geopolitical risk. He also focuses on internal and external communication efforts, with a particular emphasis on connecting our macro insights to actionable investment ideas in client portfolios.

GEOPOLITICS

Great-power world

Geopolitics will remain an important feature of markets and macroeconomics in 2021, but barring a "bolt from the blue" surprise, domestic policy matters — particularly COVID-19 management and economic recovery — will dominate political agendas in Washington, DC and globally.

Against this backdrop, here are my expectations for five key areas across the geopolitical landscape.

1. **Biden administration foreign policy — great-power competition in a multipolar world**

- Great-power competition will drive the Biden administration's foreign policy, as it did under the Trump administration. But this will look different, at least in style, as the Biden team will emphasize greater coordination with US allies, particularly in Europe.
- President-elect Joe Biden will also attempt to restore US leadership across a variety of multinational institutions, including the World Health Organization, the World Trade Organization, and NATO.
- But while much of the globe will welcome US reengagement, this strategy will not be easy to achieve, for two important reasons.
  - First, the US State Department saw significant personnel losses over the past four years, among experienced professional diplomats, and regional and subject experts who craft the nuts and bolts of US foreign policy. Rebuilding US diplomatic capacity will take time.
  - Second, the levels of trust that America's allies have in the US are at decades-long lows — a fact that one election is unlikely to correct any time soon.
- US withdrawals from the Paris Agreement on climate and the Trans-Pacific Partnership trade deal, the scrapping of the Joint Comprehensive Plan of Action with Iran, an activist trade tariff agenda, and other fractious aspects of an "America First" foreign policy have strained relations with key allies, while weakening US geopolitical leadership, and ultimately, influence.
- All of this will likely keep the world on a path of increasing multipolarity and deepening great-power competition — a difficult structural backdrop to manage in 2021 and beyond.

2. **US-China relations — better, but not without friction**

- The most important geopolitical dynamic to watch in 2021, of course, will be the US approach to China.
- Here I expect some improvement, as the Biden administration is likely to prioritize professional diplomacy over reciprocal tariffs. Or, put simply, expect more talking and less tweeting.
- This will help pull the US and China out of their current diplomatic tailspin, and from a market perspective, will likely restore greater policy predictability. This easing of bilateral tensions will also reduce geopolitical risk in Asia and elsewhere — another market and macro positive in 2021.
- But the broad outlines of the deteriorating US-China relationship — rooted in national security concerns amid rising competition — will remain firmly in place in 2021 and, indeed, will shape geopolitics for years to come.

> **President-elect Biden will enter the White House facing the most challenging geopolitical backdrop in decades, even as US domestic politics remains deeply divided and dysfunctional.**

- We should therefore expect supply-chain decoupling in industries deemed "strategic" to this ongoing great-power dynamic — leading with technology, but also encompassing health care and biotech in a post-COVID world. We can expect a similar dynamic in capital markets, finance, and other industries that drive national economic and military power.
- Another important difference from the previous four years will be an increased focus on human rights and democracy, which will shape US foreign policy to a much greater extent.
- Working with allies in a US-led "coalition of democracies" will spark additional geopolitical friction with China in 2021, particularly in Xinjiang where Beijing's Uighur policy will be a focus, as well as in Hong Kong given recent developments, and in Taiwan, which is likely to be in the crosshairs of the emerging ideological split between China and the West.

3. **An opportunity on climate — but fragmentation makes this a tall order**

- Climate change — the biggest threat to US national security and geopolitical stability over the long run — will be a significant US policy focus in 2021.
- The Biden administration will immediately return the US to the Paris Agreement, and we should expect a series of executive actions by President-elect Biden to limit fossil-fuel drilling, strengthen environmental protections, and broadly speaking, reregulate the US energy industry.
- At the global level, climate also presents an opportunity for the US and China to find mutual areas of agreement, another potential positive for bilateral relations.
- But, again, great-power competition and a more multipolar world will present challenges for climate cooperation.
- The world's four largest CO2-emitting countries — China, the US, India, and Russia — are also the four countries fueling great-power competition.
- Continuing geopolitical friction among these key countries will make significant international climate coordination difficult, as will the more fragmented global order that results from this ongoing structural shift.
- I therefore expect climate actions in 2021 to remain focused on domestic policies in countries around the world, as global progress on CO2 reduction remains slow and uneven.

4. **Geopolitical risks to watch in 2021 — the usual suspects plus more "shadow wars"**

- President-elect Biden will enter the White House facing the most challenging geopolitical backdrop in decades, even as US domestic politics remains deeply divided and dysfunctional.
- Risks abound, but here are the ones I'm watching most closely in 2021:
  - *Taiwan:* This remains the biggest geopolitical risk as Taiwan's future becomes an even larger focus in Beijing and Washington amid great-power competition; expect continuing diplomatic pressure on Taipei from China, more diplomatic and military support from DC, and an elevated and sustained risk of military escalation.

From my geopolitical perspective, three trends will drive the macro and market backdrops in 2021 and beyond: COVID-19 recovery, deepening great-power competition, and climate change.

- *The South and East China Seas:* This is another key risk, as China continues its military expansion amid territorial disputes and the US works in closer military coordination with regional allies, and in particular, with Japan.
- *North Korea:* Geopolitical tensions on the Korean Peninsula are likely to return in 2021, as Kim Jong Un attempts to shift global attention to stalled nuclear talks when the Biden administration takes office; intercontinental ballistic missile launches and new nuclear weapons testing could be dramatic ways to accomplish this goal.
- *US-Russia relations:* Bilateral relations are likely to worsen under a Biden administration, with an increased US focus on shoring up NATO capabilities, particularly in Eastern Europe; President-elect Biden has also called for US government investigations into Russia's "assault on US democracy" related to the 2016 elections; expect elevated tensions and higher sanctions risk.
- *"Shadow war" conflicts intensify:* As great-power competition deepens, we should expect a more prominent role for national security strategies that fall just short of actual military conflict. These include offensive and defensive cyber operations, bolstered intelligence capabilities, additional covert measures to influence domestic opinion, and the growing use of economic tools, including sanctions, for geostrategic purposes.

5. **2021 investment implications — differentiation and adaptation**

- From my geopolitical perspective, three trends will drive the macro and market backdrops in 2021 and beyond: COVID-19 recovery, deepening great-power competition, and climate change.
- All three will likely divide the world into winners and losers, with an increasing degree of differentiation at country, policy, industry, and asset-class levels based on relative exposures to the macroeconomic impacts of the pandemic, a shifting world order, and the national security impacts of climate change.
- These ongoing structural transitions are likely to be a net positive for actively managed strategies, particularly those that marry bottom-up investment expertise with the right thematic trends around the world.
- Through my geopolitics lens, I believe "adaptation" is the best way to conceptualize the investment opportunities this presents in 2021 and beyond.
- Trillions of dollars of capital are likely to be reallocated in the coming years to help governments, businesses, and individuals adapt to a rapidly changing structural backdrop.
- This theme will be particularly acute as COVID-19, combined with great-power competition, forces a recalibration of supply-chain vulnerabilities across newly "strategic" industries in health care, biotech, and especially national security.
- All of this will likely be supportive of defense spending globally, but in particular, I expect sustained demand for and an increased policy focus on "dual-use" technologies now at the heart of shifting military doctrines — including semiconductors, next-generation communications, a variety of space technologies and applications, and especially artificial intelligence as applied to national security, given its potential to alter future economic and military balances of power.

- The opportunity for climate adaptation may be even greater.
- The best climate science indicates our planet will continue to warm for decades or longer. That fact is already creating demand for new technologies and products that will help humans adapt to this rapidly emerging environmental reality.
- These include a variety of adaptations to help societies cope with higher temperatures, water scarcity issues including droughts, increased wildfires, severe storms and flooding, and other key climate-related variables, including looming social dislocations and new geopolitical frictions.
- As the Biden administration moves climate to the center of the US policy agenda, and as other countries including China do the same, this emerging demand for climate adaptation is likely to grow in 2021, and will be sustained for years to come.

John Butler
Macro Strategist

About the author

As the investment team leader of the firm's Global Macro Strategy effort and a member of the Global Bond Team, **John** leads our macroeconomic strategy efforts and contributes to the management of global portfolios for the firm's clients around the world. He focuses on macro forecasting and analysis and monetary policy for the UK and Europe, as well as the global cycle, translating key macro data into investable ideas and themes.

MACRO — GLOBAL CYCLE

A temporary crisis but a permanent fiscal response?

KEY POINTS

- Given hopes that vaccines will allow a return to economic normality, markets are likely to look through near-term cyclical weakness.
- After a tough start to 2021, global growth should be strong, with low inflation.
- I believe that fiscal policy will determine whether the global cycle takes a different path from the pre-COVID period.
- Fiscal policy options will likely differ by country, creating idiosyncratic investment opportunities in the years ahead.

The global economy remains caught between opposing forces. On the negative side is renewed cyclical weakness; on the positive side are hopes that a COVID-19 vaccine may allow economic activity to return to more normal levels over the coming quarters. Uncertainty about the scale and duration of the COVID-related slowdown has persuaded households and, particularly, firms to postpone spending and run a much higher level of precautionary savings. If an effective and widely distributed vaccine is coming, markets can probably look through a jagged global cycle over the next few quarters with greater confidence that any new rise in private-sector savings will just be deferred spending.

The global cycle is likely to deteriorate over the next three to six months as restrictions are imposed in response to rising COVID case counts, keeping uncertainty hanging over the markets. That deterioration is likely to force another response from the US Federal Reserve (Fed) and the European Central Bank (ECB) at the end of 2020. But I think there is now a greater chance that markets will overlook this near-term uncertainty and focus on future growth.

Strong growth likely in 2021

After a tough start to the new year, global growth is likely to be strong while inflation remains low. In my view, global GDP could expand by 5% in 2021 as confidence in an effective vaccine pushes households and firms to run a lower level of savings. Yet, given the disruption to activity in 2020, most countries are unlikely to see GDP return to pre-COVID levels until late 2021. For some, it could be well into 2022 or even 2023.

While that excess capacity is being absorbed, I expect inflation to remain low despite strong GDP growth. In this environment, monetary policy is likely to remain very supportive. One legacy of this crisis is that central banks have explicitly changed their reaction functions and will need to see, rather than simply expect, higher inflation before taking back the stimulus. So the expansion in central bank balance sheets is likely to be huge in 2021 at around US$3 trillion, second only to 2020's US$6 trillion.

Positive developments on the vaccine front are a game changer for the global economy. Although it is still early days and many hurdles need to be overcome, these developments have allowed us to have greater confidence that this crisis will prove temporary. In that environment, both equities

> **The policy response so far, though large, has been designed to fill a hole, not stimulate growth; to avoid deflation, not generate inflation.**

and bond yields can rise. Equities can rotate to more cyclical leadership. Bond yields can rise, as the timing of when central banks will ultimately hike interest rates is pulled forward modestly. But, with inflation still low and central bank purchases still high, the moves are likely to be gradual rather than abrupt.

All eyes on fiscal policy

The policy response so far, though large, has been designed to fill a hole, not stimulate growth; to avoid deflation, not generate inflation. The measures were intended to soften some of the blow caused by the private sector's forced saving. And central banks' asset purchases have been more effective at driving up equities than convincing households or firms to spend.

After the world has adjusted to the news of a vaccine, I believe the market will turn its focus to fiscal policy: what form will it take and how persistent will it be? This will determine whether the global cycle simply returns to pre-COVID behaviors — with low growth, high debt, low productivity, low inflation, and ongoing central bank-balance sheet expansions — or takes a fundamentally different path.

Countries face three broad fiscal options:

1. **Take back what they gave during the crisis** — This would be like Japan in the 1990s or the euro area in 2011 – 12. I think this is an unlikely option, given excessive debt. Bond yields would remain close to zero, with inflation expectations stuck well below target. The outlook for equities would depend again on the willingness of central banks to keep expanding their balance sheets.
2. **Use fiscal policy to redistribute within society and raise the labour share of income at the expense of profits** — This would mean higher taxes and even higher spending, with an effort to narrow income inequalities through lowering the cost of being out of work. The result would be an environment of stagflation, similar to the late 1960s to 1970s, with much higher bond yields, some credit problems, and declines in equities.
3. **Use fiscal policy to promote a large investment surge** — From 1945 to 1965, a fiscal expansion allowed technologies developed during the Second World War to be rolled out as economies were rebuilt. Could investment in energy and transport be today's equivalent? That could be the path to a golden age. In that case, the market would project stronger growth, productivity and returns, as well as a higher equilibrium interest rate. As a result, bond yields and equities could rise together for an extended period.

The option chosen will vary from country to country, depending on the electorate's political inclinations. At an aggregate global level, fiscal prudence — option 1 — seems unlikely. So, for much of 2021, it will probably feel like the policy shift is permanent. But I'm currently unsure whether fiscal redistribution or investment is more likely. The US election, like recent elections in Europe and the UK, suggests that the electorate has decided against a sharp lurch to the left, with an aggressive policy of redistribution. Equally, though, we have not yet seen many concrete plans for fiscal investment.

Looking further out

I believe positive developments on a COVID-19 vaccine can give us more confidence that this crisis will prove temporary, even though the near-term outlook is deteriorating. For me, the key unknown is whether the change in fiscal policy will prove permanent — and, if so, what form it will take. Each country faces a choice on fiscal policy between prudence, redistribution, and investment.

Over a horizon of five to 10 years, this dominance of fiscal over monetary policy is a key theme for me. During the past 10 years or more — and especially in 2020 — central bank liquidity has been the one factor driving markets globally. But this fiscal era will be really exciting for investors, because it's more about idiosyncratic country stories. Every country's policy will be different.

For example, countries with aging populations and high savings rates have far less incentive to really push for inflation, as Japan has shown in recent decades. But countries like the US and the UK may be more willing to persist with fiscal stimulus until inflation comes through. That implies much more risk premium being priced into markets over the next five to 10 years, with important consequences for bond and equity markets.

John Butler
Macro Strategist

About the author

As the investment team leader of the firm's Global Macro Strategy effort and a member of the Global Bond Team, **John** leads our macroeconomic strategy efforts and contributes to the management of global portfolios for the firm's clients around the world. He focuses on macro forecasting and analysis and monetary policy for the UK and Europe, as well as the global cycle, translating key macro data into investable ideas and themes.

MACRO — BREXIT

Brexit: Prepare for more policy stimulus

KEY POINTS

- The range of possible outcomes for the Brexit negotiations has narrowed, but markets don't seem to be reflecting that.
- While a deal should lead to a rally in UK assets, it will probably fade fairly quickly.
- Whatever the outcome of the Brexit negotiations, I think there will be more monetary and fiscal stimulus than the market is expecting.
- I think 2021 will be a challenging year for UK growth and inflation.

As negotiations between the UK and the EU continue, three key questions remain.

One, will there be a deal? I think that is more likely than not. Two, what is the timing? All negotiations with the EU tend to go to the last moment, which is realistically around the fourth week in November. Three, what will that deal look like? That's where the markets' attention should be.

The range of possible outcomes has narrowed dramatically this year, and I don't think market pricing currently reflects that. Six months ago, a comprehensive trade deal between the UK and the EU was still an option. Now, the chances are close to zero. The two remaining options are a deal like Canada got or a deal on World Trade Organization (WTO) terms. Sterling, in particular, does not seem to have fully priced those risks in.

If there is no deal, UK assets will sell off. If a deal is agreed, we're likely to see a knee-jerk rally: UK equities will outperform for a while and sterling will rise, with rates selling off.

But I think the rally will soon stall, whatever sort of deal we reach. A Canada-like deal would mean very low tariffs on goods, which would be positive. But I've been surprised how little attention has been paid to the services sector, which is very important to the UK's trade with the EU. UK citizens would not be able to travel to the EU to transact services, as the UK's services sector qualifications will not be accepted by the EU.

Such barriers are far more significant trade frictions than tariffs on goods. With a Canada-like deal, I would estimate that the average cost of doing business would be around 9% higher than currently. That's not much better than the roughly 13% for a WTO deal. Being overweight sterling and UK equities ahead of a deal has been one of the most consensus trades, and more money is waiting to come in if a deal is done. But, once the market grasps the scale of the barriers, the rally is likely to fade.

The outlook for fiscal and monetary policy

Whatever the outcome of the Brexit negotiations, I think there will be more monetary and fiscal stimulus than the market is expecting. On the fiscal side, as the economy slows, we are likely to see more extended support measures. I think that could be followed in February or March by a meaningful fiscal response of around 1.5% – 2.0% of GDP.

> **While growth is likely to be positive in 2021, I think the UK will probably underperform other parts of the world.**

On the monetary side, the Bank of England's growth forecast assumed a comprehensive trade agreement. If that doesn't happen, the Bank will have to cut its forecast dramatically even before considering the impact of the latest wave of COVID and the new lockdown. I expect around another £100 billion of asset purchases by the end of the year, with more to follow in the first quarter. Even so, I think the supply of gilts in 2021 will easily outstrip the Bank of England's demand, particularly relative to 2020. In that environment, I would expect gilts to continue selling off.

There has been a lot of talk about the possible introduction of negative rates. I think the Bank of England is worried that it is getting less bang for its buck with asset purchases, particularly at the front end of the curve. As a result, it is likely to keep floating the idea of negative rates to keep yields low and the curve constrained.

The consensus view appears to be that negative rates are more likely in the event of a no deal. I disagree. If there's no deal, sterling will probably fall significantly, putting UK banks under stress. So I think the Bank of England would avoid negative rates, which are a tool to prevent currency appreciation. If there's a deal but the economy continues to weaken, I think that's when negative rates are more likely, even though the hurdles are still high.

I think 2021 is going to be a challenging year for growth and inflation in the UK. The UK economy has been one of the hardest hit by COVID and is experiencing one of the slowest recoveries. It also has a number of issues that will persist beyond Brexit, such as the uncertainty over capital expenditure. So, while growth is likely to be positive in 2021, I think the UK will probably underperform other parts of the world. GDP may not return to pre-pandemic levels until around the second quarter of 2022, which is a long way off, and there may be a worsening trade-off between inflation and growth. In this environment, any big positive moves for sterling will probably fade.

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About the authors

The members of the Fundamental Factor Team manage multi-factor portfolios, conduct market and manager research, and partner with clients on factor-based investment solutions, including strategies to pursue customized risk and alpha objectives.

EQUITY — FACTOR INSIGHTS

Are equity factor extremes signaling risks ahead?

History wasn't much of a guide for anything that happened in 2020, and equity factor performance was no exception. We think the results raise questions about market expectations and valuations and have investment implications for the year ahead.

Tossing out the factor rule book

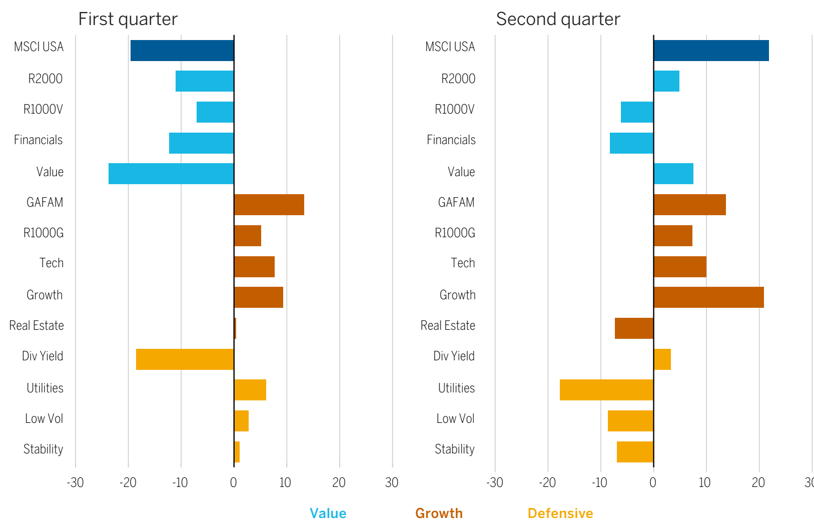
Conventional wisdom tells us that value stocks do best when markets accelerate and optimism takes hold, but that they struggle in risk-off markets. On the other hand, defensive stocks tend to benefit from the demand for stability in risk-off markets but lag when exuberant risk-taking returns. And growth stocks are expected to perform well in positively trending markets, especially when growth is scarce, but to be susceptible when market optimism is overtaken by worries about excessive valuations.

With this conventional wisdom in mind, investors may have expected the underperformance of value factors in the first quarter of 2020 (blue bars, left side of **Figure 1**). But they were likely disappointed by the marginal downside mitigation provided by defensive factors (yellow bars) and positively surprised by the extent to which growth factors outperformed (orange bars).

Figure 1

2020 factor dynamics: First half

US market total return and relative performance of value, growth, and defensive segments (%)



Sources: Wellington Management, FactSet. Sector returns (Real Estate, Utilities, Financials, Tech) are S&P 500 sectors relative to the S&P 500. Russell style indices: Russell 2000 (R2000), Russell 1000 Value (R1000V), and Russell 1000 Growth (R1000G); excess returns are relative to the S&P 500. GAFAM represents Alphabet, Apple, Facebook, Amazon, and Microsoft, and performance is relative to the S&P 500. Value, Growth, Low Vol, and Stability are proprietary factors representing the top decile of names in the MSCI USA Index with respect to each factor and performance is shown relative to the MSCI USA Index. Additional information on this data is available upon request. Securities are included for informational purposes only and are not intended to be an investment recommendation or a reflection of any particular Wellington holding. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS AND AN INVESTMENT CAN LOSE VALUE.** For illustrative purposes only.

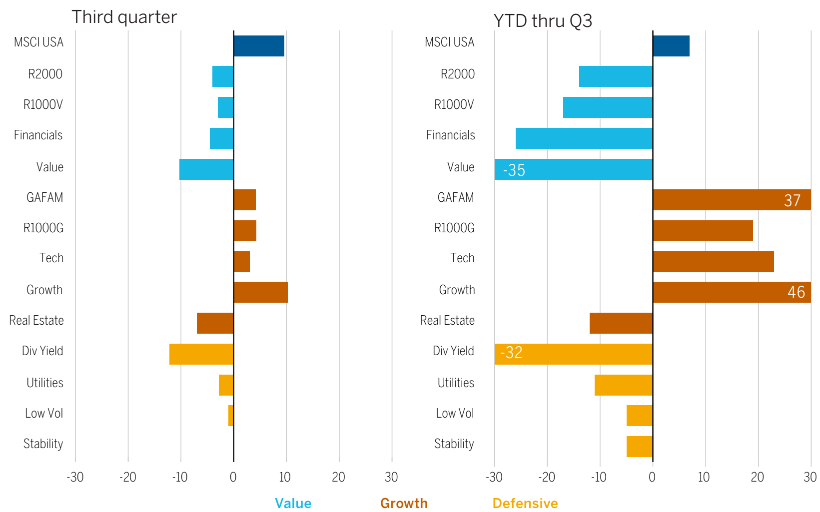
The months since have brought more unexpected results. In particular, why didn't we see a strong reversal in value and cyclical assets after sentiment shifted and markets rebounded in the second and third quarters (right side **Figure 1**, left side **Figure 2**)? Our value factor, based on book yield, did OK in the second quarter (+7%), but it didn't come close to making up for the first-quarter drawdown (-24%). And while we expect defensive factors to lag in a rebound, the magnitude of the lag far outweighed the limited first-quarter benefit (yellow left vs. yellow right in **Figure 1**). Finally, we would expect growth factors to engage in a market rebound, but the extent and consistency of the outperformance were eye opening (even given the unique nature of the sell-off in this pandemic).

By the end of the third quarter, the broad market was up a rather normal 7% for the year, but the performance spreads between segments like value and growth, financials and technology, and small cap and large cap (especially large-cap technology like the GAFAM[1] stocks in the charts) were at extremes. While we acknowledge the fundamental drivers of some of these spreads (e.g., pandemic-friendly business models and low interest rates), we think there's more to the story.

Figure 2

2020 factor dynamics: Q3 and YTD

US market total return and relative performance of value, growth, and defensive segments (%)



Sources: Wellington Management, FactSet. Sector returns (Real Estate, Utilities, Financials, Tech) are S&P 500 sectors relative to the S&P 500. Russell style indices: Russell 2000 (R2000), Russell 1000 Value (R1000V), and Russell 1000 Growth (R1000G); excess returns are relative to the S&P 500. GAFAM represents Alphabet, Apple, Facebook, Amazon, and Microsoft, and performance is relative to the S&P 500. Value, Growth, Low Vol, and Stability are proprietary factors representing the top decile of names in the MSCI USA Index with respect to each factor and performance is shown relative to the MSCI USA Index. Additional information on this data is available upon request. Securities are included for informational purposes only and are not intended to be an investment recommendation or a reflection of any particular Wellington holding. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS AND AN INVESTMENT CAN LOSE VALUE.** For illustrative purposes only.

Unrealistic growth expectations and elevated "execution risk"

Our work with fundamental investors and observations on patterns in market behavior suggest that the market is pulling forward unrealistic expectations about companies' future growth. To evaluate this hypothesis, we sought to understand what current valuations imply about expected growth. We selected a HOLT valuation metric (%Future) that uses a

[1]GAFAM includes Google (Alphabet), Apple, Facebook, Amazon, and Microsoft. Securities are included for informational purposes only and are not intended to be an investment recommendation or a reflection of any particular Wellington holding.

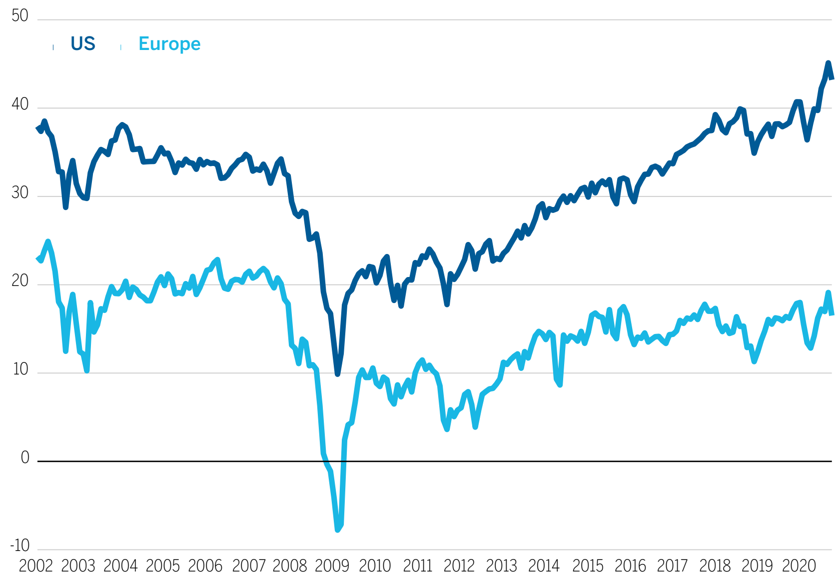
Our work with fundamental investors and observations on patterns in market behavior suggest that the market is pulling forward unrealistic expectations about companies' future growth.

discounted cash flow (DCF) framework to assess the percentage of a company's current market value that is attributable to future cash-flow generation from assets that don't yet exist. We find this metric useful for thinking about the "execution risk" embedded in current valuations, and we can roll it up to a regional level. For example, nearly 50% of the US equity market valuation is based on expectations of future growth — a 20-year high (**Figure 3**, dark-blue line). Moreover, it has increased relative to Europe, which has remained much lower — about 15%, on average (light-blue line). In fact, Europe has seen no noticeable trend over the same period.

Figure 3

Future company growth expectations for US vs Europe

% of equity market valuation based on expectations of future growth, MSCI regional indices



Sources: Wellington, HOLT. Projected or forward-looking characteristics are based on a number of assumptions and the use of alternative assumptions could yield significantly different results. Additional information on this data is available upon request. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS AND AN INVESTMENT CAN LOSE VALUE.** Chart data: January 2002 – 6 October 2020.

One could make the argument that either 1) US companies are better at delivering on future growth expectations, justifying the spread between the two regions, or 2) on a relative-value basis, Europe is potentially interesting, with no change in growth expectations embedded in valuations. However, the key point to us is that on the heels of the strong performance of the higher-growth areas in 2020, execution risk appears to be historically high for the US.

One might assume that large-cap US technology stocks have been driving the US number higher, but the %Future reading for the GAFAM stocks is in the 60% – 70% range, which is downright pedestrian for a growth stock. Instead, we found that the companies that have been the clear-cut "COVID winners" (e.g., web-conferencing companies benefiting from remote work/learning) have been most responsible for driving up the US line in **Figure 3**. Their %Future readings, many of which are in the 90s, suggest that a lot of their value is tied up in growth that hasn't happened yet.

Investment implications

- **Value may include more structural losers than in the past and growth more structural winners —** The pandemic acted as an accelerant for some of the fundamental trends driving the performance of growth and value. In particular, the lack of mean reversion in profitability at the company level that we've written about previously has shown no signs of abating. That said, we still believe there is a value premium driven by market participant behavior and that, despite all the headlines, value investing is not dead. We also believe, as we wrote in a recent paper, that there are flaws in traditional valuation multiples, given the evolving nature of corporate balance sheets, and that using a DCF valuation metric in combination with traditional multiples may provide a more nuanced view of what's "cheap."
- **The execution risk in US markets may be at an all-time high —** Growth stocks (not GAFAM) are driving this dynamic. Despite the supportive fundamentals mentioned above, we don't believe the "heads growth wins/tails value loses" performance is sustainable. We see the case for maintaining growth exposure but would also be wary about adding more because risk models may look at this exposure like a "free lunch" (as they did with low-volatility equities before the pandemic).

EQUITY — ESG

The growing importance of ESG integration

Daniel Pozen
Equity Portfolio Manager

About the author

Dan is a portfolio manager on the Quality Equity Team. As portfolio manager, he manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, equity portfolio managers, and team analysts.

Environmental, social, and governance (ESG) factors have historically been critical inputs into our search for durable businesses that compound value at a higher and more consistent rate than the market over time. We believe ESG integration is increasingly important to three key parts of this pursuit:

1. Being right about the business's value creation potential
2. Paying a reasonable price
3. Being willing to stick with the business during difficult times

Integrated into our process

ESG integration enhances our assessment of the risks, opportunities, influences, and impacts surrounding the businesses we evaluate. Likewise, it enables us to objectively evaluate the likelihood of a management team or board of directors enhancing or detracting from value creation for a given business.

How a company treats its employees, how much carbon is consumed or emitted through its operations or product use, and whether its executive compensation incents optimal decision making are, in our view, just as important to our financial analysis as traditional metrics like pricing power, demand growth, and cost of capital.

All of these pursuits inform our judgment of how fast a company can potentially grow earnings and dividends and, more importantly, the likely duration of its value-creation path and which factors could lead to meaningfully positive or negative deviations. Building confidence in a business's resilience and trust in its management team are also vital to maintaining our conviction during periods of challenging performance.

Evolution and improvement

Wellington has worked to develop robust ESG integration resources, increasing our bench of dedicated ESG specialists, enhancing frameworks for evaluation, integrating ESG scores from our internal analysts as well as external rating agencies, hosting ESG-focused calls with management teams and boards, and offering custom portfolio-level ESG reporting.

Our conversations with companies around these issues have become more informative and productive in recent years. At the same time, our ability to assess and analyze what we learn during these engagements has improved dramatically. The market demands far more transparency and accountability than it did just five years ago. Notably, because we now have some baseline to compare best practices across and within industries, companies also tend to be more receptive when we share our assessment with them.

ESG integration in practice

Like many areas of company analysis and investing, ESG integration is a blend of art and science. While some investors may be frustrated by the frequent lack of standard data, we find the potential for inefficiencies exciting. As active investors, we see these inefficiencies as opportunities to add value. Significantly, many ESG issues are multidimensional and require thoughtful analysis to assess their material effect on the investment opportunity. Below are a few examples of situations where ESG issues have been front and center in our investment debate.

A supplier of communication equipment, infrastructure, software, and services to police departments in the US and around the world — As police forces in the US face intense scrutiny and debate, we're asking ourselves several questions that could affect this company: What role do its products and services play in police actions and their relationships with the communities they serve? Will funding for police departments be impacted short and/or long term by the current environment? Is there an opportunity for its products and services to play a role in mitigating/improving the current state of affairs? These issues raise hard questions with no easy answers.

A large global manufacturer of aluminum beverage cans — Aluminum is a decidedly more environmentally friendly package than plastic. Amid surging global interest in sustainability, demand for this firm's products is stronger than ever, driving its valuation higher. When discussing this company, we ask ourselves the following: Are other low-impact packaging solutions likely to displace aluminum over time? What cost difference will consumers be willing to bear in the switch from plastic? If consumers are ultimately indifferent to packaging material, how does that affect the company's addressable market? What valuation premium are we willing to pay for the firm's ESG advantage?

A large Canadian property and casualty insurer — This company insures its customers against losses from damage of all sorts, including from extreme weather events. We ask ourselves the following: Does climate change pose a structural threat to the insurance industry in Canada by increasing the likelihood of damaging heat, wildfires, or droughts? Can this firm evolve its business models sufficiently to mitigate these threats? How is it preparing for a changing regulatory and ratings environment? How might the long-term economics of the property and casualty (P&C) industry evolve in light of these factors?

Bottom line

For every company we consider investing in, we collaborate with members of our ESG Research Team to evaluate its ESG practices and benchmark them versus competitors and reasonable standards. We then engage with its management teams and boards to hear their perspectives, share our views, and hopefully work toward better outcomes for shareholders and all other stakeholders. We integrate this information into investment decisions that we believe will result in the best long-term outcome for our clients.

The scope of our ESG conversations, resources, and data, along with greater corporate transparency, have all made enormous progress over the last five years, and we expect those trends to continue. As we seek to be right about an issuer's value-creation potential, pay a reasonable price for its equity, and retain our investment conviction, ESG integration will continue to be a critical input into those efforts. ■

The scope of our ESG conversations, resources, and data, along with greater corporate transparency, have all made enormous progress over the last five years, and we expect those trends to continue.

Rich Hoffman
Investment Director

Andrew Corry, CFA
Equity Portfolio Manager

Jim Shakin, CFA
Equity Portfolio Manager

Peter Fisher
Equity Portfolio Manager

EQUITY — VALUE

Perspectives on value

As we look to 2021, value investing is top of mind for many investors amid today's rapidly evolving environment. Here, we share views on value from traditional and contrarian investors, as well as highlight quality as a complement for value.

Rich Hoffman on a shift toward value

Many value investors are seeing growing reasons for optimism as the extreme valuation spreads that persisted for some time are potentially set to wane. We believe this is thanks to a confluence of dynamics that could increase investors' appetite for opportunities beyond the previous leadership groups. In our view, there is a compelling argument for the investment environment to become increasingly supportive of the value category over the course of 2021. In addition, we think this scenario would be more conducive for active managers seeking to outperform value universes.

In the recent low growth, low interest-rate environment, companies delivering higher growth (or offering the promise of outsized future growth) attracted a disproportionate amount of capital. This resulted in extreme valuations relative to companies with average growth. However, when investors begin to envision paths for growth to broaden out across the economy, we expect capital flows should also broaden to capitalize on extreme valuation discounts in segments where growth had previously been moderate but is set to improve. In our view, this dynamic should favor value opportunities.

Underlying economic fundamentals have already started improving ahead of expectations and, with continued progress on vaccines and treatments for COVID-19, we anticipate further economic improvements are highly likely. As vaccines facilitate a return to normal activity, the COVID losers may be the first to benefit, but we believe the benefits ultimately will be much more expansive. Combined with a backdrop of central banks actively striving to stoke inflation higher and the expectation of a potentially US$1.0 trillion stimulative infrastructure program in the US by the new presidential administration, we believe these factors should fuel meaningful tailwinds for broadening growth.

On the flip side, we think pressures that have kept a lid on valuations in several segments likely should resolve in this scenario. For example, the US defense budget is now expected to remain intact or increase, and the once-feared drastic overhauls to government medical-care options are no longer considered likely. Together, these potential tailwinds and diminished headwinds could produce higher and broader growth and, eventually, inflation and higher rates. This could begin the global economy's transition out of the low-growth, low-rate environment, and set the stage for new leadership to emerge from areas that have been overlooked and undervalued in recent years.

Wellington's value-oriented investors have highlighted companies across a wide range of industries and market caps that we believe could benefit in this scenario, including banks, life insurance, health care providers, pharmaceuticals, defense contractors, transportation & logistics, consumer-related travel, and portions of the auto supply chain. Other

About the authors

Rich is an investment director in the Investment Product & Fund Strategies Group. He works closely with equity investors in his coverage to help ensure the integrity of their respective investment approaches.

Andrew is an equity portfolio manager on the International Contrarian Value Team. He manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, equity portfolio managers, and team analysts.

Jim is an equity portfolio manager on the International Contrarian Value Team. He manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, equity portfolio managers, and team analysts.

Peter is a portfolio manager on the Dividend Growth Team. He manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, equity portfolio managers, and team analysts.

segments where we see similarly interesting opportunities include food supply & services, consumer retailers, some REIT subsectors, and large swaths of the industrials and materials sectors. Regionally, many of our value investors are finding increasing opportunities within developed Europe, Japan, emerging Asia, China, the UK, and pockets within the US.

While discounts for value opportunities remain deep, optimism for capturing this value is increasingly high, thanks to several positive trends that may come together in 2021.

Andrew Corry and Jim Shakin on contrarian value opportunities

Today, we are finding opportunities outside the US that are at valuation extremes. Many of these firms are sensitive to the economic cycle and are weighed down by concerns that COVID-19 will persist, unemployment will remain high, interest rates and inflation will stay low, and/or dividends will not be restored in certain sectors. Given how poor sentiment is, positive news on these issues can provide a much-needed reprieve to these stocks. Ultimately, we believe relative price follows relative earnings and, for many of these stocks, prices have dramatically underperformed earnings. We therefore expect a recovery in prices and, in particular, see opportunities in energy, banks, and other cyclicals.

Energy — There has been a significant disconnect between the forward oil price and relative stock performance over the past six months. While puzzling, we continue to watch three things closely — free cash flow, balance sheets, and ESG progress. First, many energy companies have adjusted capital expenditures and continue to generate positive free cash flow yields of 10 – 15%.[1] Second, despite depressed valuations, many balance sheets remain strong with ratings of A- or above and relatively stable Credit Default Spreads. Lastly, we believe the cloud cast by the long-term decline in oil demand from climate change will get smaller as the European energy companies have the resources to adapt. They're already making progress with concrete plans to lower emissions and invest in renewable energy.

Banks — Banks went into the COVID-19 crisis at absolute and relative valuation lows. Since then, we have seen estimates cut due to concerns about "lower-for-longer" interest rates and higher costs from a negative credit cycle. The typical bank has seen a 20% estimate cut in both pre-provision profits and net income, but the average bank stock is down a lot more than that in absolute terms.[2] Meanwhile, the balance sheets of many banks remain intact, and given that valuations are now even more depressed, any improvement in sentiment from signs of higher inflation or interest rates or a resumption in dividends could provide significant upside potential.

Cyclicals — We continue to see opportunities in cyclicals such as truck and auto makers, aerospace and defense, staffing, insurance, and building materials, among others. We focus on understanding each company's post-COVID "new normal" profits, time frame to get to "normal," and future balance sheets. We believe many of these companies can return to a similar pre-COVID level of profitability with limited balance-sheet impact, albeit over a slightly longer time frame. Therefore, we think valuations are too cheap with significant upside potential.

[1]Wellington estimates as of 30 September 2020. These figures are versus the market at ~4% and are looking out to 2021/22, assuming US$45 oil. | [2]Wellington estimates as of 31 October 2020.

> We believe allocations to quality and defensive factors can provide an element of stability and also potentially mitigate biases and help investors maintain more balanced and neutral positioning.

Peter Fisher on quality as a complement for value

Given the extreme recent performance gap between growth stocks and value stocks, many asset owners are considering diversifying their holdings away from growth and into value. At first glance, this seems reasonable as large performance differences and valuation spreads between growth and value have historically tended to mean revert and narrow. The expectation appears to be that when growth trades off, then value could rally.

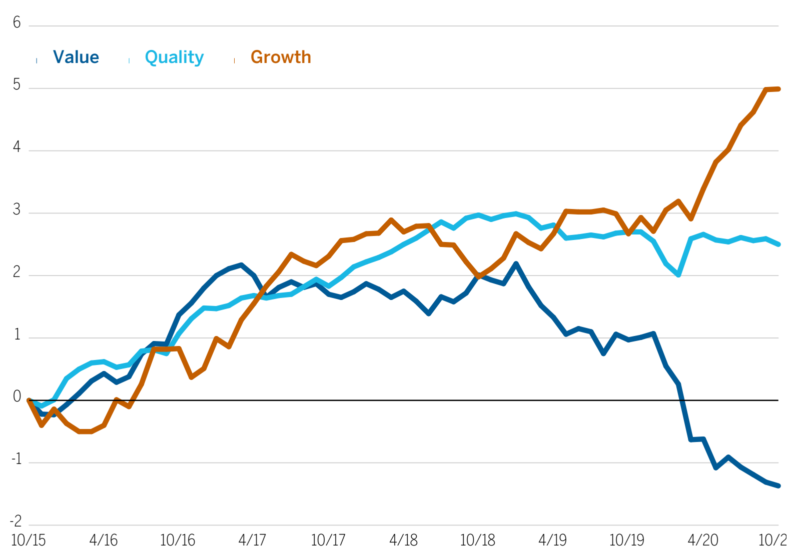
But what may get lost in this "growth versus value" comparison is that there is another alternative for diversification: quality and defensive stocks. These factors have recently outperformed value while lagging growth (Figure 1). Notably, we believe they offer distinct characteristics and can thus add significant diversification potential to allocations that traditionally focus on blending growth and value. In particular, quality and defensive stocks have historically provided stronger downside mitigation on average than either growth or value over the last 20 years, which included six major market drawdowns.[3]

Furthermore, asset owners may find that simply shifting growth holdings into value holdings could have unintended impacts on their expected return. For instance, we think this could add a more pro-cyclical bias than they might desire and can increase particular sector biases. Asset owners who view allocation as a seesaw between growth and value may be surprised in markets where both sides are down. We believe allocations to quality and defensive factors can provide an element of stability and also potentially mitigate biases and help investors maintain more balanced and neutral positioning.

Figure 1

Quality as a complement for value

Factor return profile



Data range from 31 October 2015 to 31 October 2020 | Sources: MSCI World quality, value, and growth indices. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS** | For illustrative purposes only.

[3]As of 31 October 2020. Data sourced from the MSCI World quality, value, and growth indices. Drawdowns include the technology bubble, global financial crisis, European debt crisis, 2016 and 2018 drawdowns, and the coronavirus pandemic.

Liliana Dearth
Equity Portfolio Manager

Dáire Dunne
Equity Portfolio Manager

Bo Meunier
Equity Portfolio Manager

Greg Mattiko
Equity Portfolio Manager

Graham Proud
Investment Director

EQUITY — EMERGING MARKETS

EMs: With great challenges come great opportunities

The developing world was the epicenter of the COVID-19 outbreak earlier this year, so it is ironic in a sense that we now see emerging markets (EMs) as such a rich source of COVID-related investment opportunities. From health and wellness to climate change and more, the unprecedented global health crisis has spawned or accelerated compelling investable themes across a range of EM countries.

Liliana Dearth on health and wellness in China

We are seeing individuals across developing countries being more proactive regarding health and wellness. With greater availability of information, individuals are empowered to search for their own answers, compare various options, and pursue better overall health care. This trend is reshaping traditional approaches and fueling rising demand for higher-quality services.

This resounding desire was evident on our last grassroots research trip to China in late 2019, where we conducted focus groups, in-home interviews, and surveys with consumers to understand their needs and aspirations in this area. The Chinese government is actively supporting this goal by reallocating resources across higher- and lower-tier hospitals. When we translate these insights into investment ideas, we have targeted companies involved in diagnostic testing, including medical equipment manufacturers and independent clinical laboratories, which we think should benefit from increased outsourcing by hospitals.

On a similar note, we've also seen a greater emphasis on premiumization among Chinese consumers, particularly concerning food staples and food safety. Before COVID-19, we saw consumers in lower-tier cities begin to move away from wet markets to modern trade, following a corresponding shift within higher-tier cities over the past decade. As incomes rise, there's an increased awareness of food safety and the risks associated with lower-quality suppliers. This is driving the growth of premium staples and reputable brands and contributing to the consolidation and formalization of restaurant chains. Related investment ideas include a private food-testing company and a leading maker of premium condiments.

We were focused on both of these themes well before the COVID-19 outbreak, with an eye toward identifying multiyear opportunities with a long runway for growth. The pandemic has since accelerated these trends, which we continue to find compelling and show no sign of abating anytime soon.

Dáire Dunne on opportunities tied to climate change

As one industry conference participant recently put it: "COVID-19 is like watching climate change in fast forward." This is particularly relevant to any discussion of EMs these days, because a common refrain among longer-term investors is that many EMs are (or will be) on the front lines of climate change. They are likely to face challenges that could hamper economic development, potentially jeopardizing both human health and capital assets.

It is therefore important to think about the impacts of both physical risks — extreme heat, droughts, supernormal rain events, water scarcity, and poor air quality — and transition risks, such as changing policies and regulations, on different EM countries and sectors.

In addition to these risks, we believe there will also be opportunities for active managers. For example, if living and working conditions get more difficult due to hotter temperatures, air conditioning may become a necessity in many EMs. Given current low penetration rates, we anticipate that household and business demand for cooling systems should increase. White goods and industrial cooling companies that can provide affordable, energy-efficient products may benefit, as might suppliers of installed solar-generated cooling systems, low-emissivity windows, and other building products.

One company in our opportunity set develops community-wide, underground cooling systems called "district cooling." According to the company, around 70% of the energy consumed in the Middle East during the summer goes toward cooling. District cooling has been found to be more energy-efficient and cost-effective, while producing fewer carbon emissions than traditional cooling. With the Middle East very reliant on fossil fuels, lowering the region's energy requirements would likely have a material positive impact. The company estimates that the CO_2 savings from its systems are equivalent to taking 260,000 cars off the road each year.

Bo Meunier on post-COVID China

China's aggressive efforts to control the COVID-19 virus in the early days of the crisis were scrutinized, but the heavy-handed approach paved the way for a largely COVID-free China in the second half of this year.

2020 has been a turbulent year for China equity investing. We began the year on a cautious note, as COVID-related news was sparse, and uncertainty elevated at the time. Naturally, we saw many Chinese stocks as being quite vulnerable to a much weaker travel environment. Within our opportunity set, we sought to assess each company's ability to survive a period of potentially extended lockdown and sluggish economic activity.

By the second quarter, we saw early signs of economic recovery, notably in the areas of domestic travel and consumption. Accordingly, we began to favor companies with high-quality assets and management teams within the consumption space, including automobiles, airports, casinos, hotel chains, and duty-free store operators. Many of these companies (and their stock prices) have since benefited from the resurgence of Chinese consumption and local travel, which we expect to remain resilient going forward.

In addition, we saw many potential winners in the technology sector. For example, due to COVID, the Chinese population became very dependent on mobile devices to work and play. Even before the pandemic, we saw opportunity in music streaming services on the thesis that subscription growth was likely over the long term, but this trend was accelerated as the crisis forced users to stay home.

Chinese demand for work-from-home capabilities also took off as the worsening pandemic led companies to increase investments in remote technology and software tools. As demand rose, so did share prices of enterprise resource planning and cloud-based computing companies. We believe software firms can continue to grow faster than the overall economy.

About the authors

Liliana is a portfolio manager who leverages grassroots research to invest across emerging markets. She manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts.

Dáire leads Wellington Management's multi-asset and thematic investment efforts for the Asia Pacific region. He manages portfolios focused on long-term structural themes influencing capital markets.

Bo is an equity portfolio manager on the Emerging Markets Team. She manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, portfolio managers, and team analysts.

Greg is an equity portfolio manager and leader of the firm's Emerging Markets Opportunities Team. He manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, portfolio managers, and team analysts.

Graham is an investment director in the Investment Products and Fund Strategies Group. He works closely with the equity investment teams to help ensure the integrity of their investment approaches.

We believe travel remains an industry with a powerful structural growth tailwind that will eventually return.

Greg Mattiko on travel and tourism

When the pandemic struck, our first task was to dust off our playbook from the 2008 credit crunch, focusing initially on stress testing firms' balance sheets and cash flows. A few months into COVID-19, we conducted further stress testing, this time emphasizing profit and loss accounts. We slashed assumptions on revenue growth and profit margins for both 2020 and 2021 to ensure companies had enough valuation upside in case COVID's economic impact lasts beyond 2020. Indeed, valuation is our true north.

By applying this approach, we sought to add to opportunities that exhibited the following traits:

- Share price that lagged during the market rebound
- Reasonable valuation level, with promising upside potential
- Sound balance sheet to weather prolonged economic challenges
- Potential to emerge stronger on the other side of the crisis
- High-quality management team

One area where we've identified such opportunities is the travel industry. Virtually every company in this industry — from airports and casinos to travel websites — had been beaten down amid the COVID-induced economic shutdowns and uncertainty around when global travel might resume. We believe this remains an industry with a powerful structural growth tailwind that will eventually return.

In the meantime, we suggest investors apply a long-term time horizon in seeking to capitalize on EM travel stocks that exhibit the above characteristics. For example, we believe airports in Thailand, Mexico, and China are worth considering, especially those likely to benefit from domestic travel in the short term and international travel over the medium to longer term. Similarly, casinos in Macau may be poised to benefit from near-term resumption of domestic travel within China, as well as longer-term growth in Chinese consumer spending.

Mary Pryshlak, CFA
Head of Investment Research

About the author

Mary is the director of Global Industry Research, an investment group comprising fundamentally focused equity and credit analysts as well as the various functions that support bottom-up research, security selection, and investments across global capital markets. In this role, she focuses on ensuring that we attract, retain, and motivate world-class securities analysts and investment talent; provide them with the resources, support, and ongoing feedback needed to excel; and undertake our work with a fiduciary mind-set and a collaborative spirit in order to make informed investment decisions on behalf of our clients.

EQUITY — INNOVATION

Harnessing disruption: Highly investable innovations

The widespread disruption fueled by the coronavirus pandemic is accelerating many of our global industry analysts' most compelling innovation-driven themes, several of which were well underway. Digitization, the shift to the cloud, enhanced work-from-home capabilities, online education, telemedicine, fintech, and ecommerce/delivery are all bolstered by the current environment. With this backdrop, it should come as no surprise that innovation continues to be among the most present themes across our deep industry experts' research. In our analysts' view, there are abundant opportunities to invest in the innovative companies providing these tools and services. We believe many have improved their competitive positioning throughout the crisis and are poised to take a disproportionate amount of market share.

Technology-driven progress

Artificial intelligence (AI), machine learning, the Internet of Things (IoT), and the cloud are among the technologies primed to disrupt every segment of the economy. Innovations like these are already fueling the growth of automation in our homes, automobiles, infrastructure, and myriad business applications from the office to the factory floor. It's clear that faster computation, pervasive technology, and the explosion of data are all improving the business models of the companies that integrate these advancements.

Health care innovation

COVID-19 has highlighted the incredible importance of health care to both the individual and the economy. Beyond the pandemic, we see many exciting long-term opportunities in the sector. Our health care experts continue to identify groundbreaking innovations and are excited about the potential for the persistent development of drugs that will help address some of the world's largest forms of sickness. They are also encouraged by the innovative efforts in new surgical methods and genetics-based diagnostic testing that could drastically improve quality of life and materially reduce health care costs.

2021 and beyond

Over the next several years, we will continue to see large innovation-driven cycles play out, including 5G wireless network infrastructure, AI, IoT, clean energy technologies, and the continued digitization of money. These are among many highly investable themes powered by enduring disruption and progress. Our global industry analysts believe these trends will transform the global economy and continue to offer countless investment opportunities along the way.

Rob Burn, CFA
Fixed Income
Portfolio Manager

Campe Goodman, CFA
Fixed Income
Portfolio Manager

About the authors

As a fixed income portfolio manager, **Rob** develops strategic and tactical investment strategies using both fundamental and quantitative analysis and implements those strategies in portfolios. He also focuses on portfolio construction and risk management, and is a member of the Broad Markets Team.

Campe is a portfolio manager on the Broad Markets Team. His focus is sector rotation — asset allocation across the major fixed income sectors — and he leads the specialist team responsible for the development of the top-down sector rotation strategy that is utilized in many approaches.

FIXED INCOME

More positives than negatives

Mercifully for many market participants, 2020 is drawing to a close. Despite persistent risks and challenges in today's extraordinary environment, Fixed Income Portfolio Managers Rob Burn and Campe Goodman see areas of value and opportunity for fixed income investors heading into 2021.

A moderately pro-cyclical risk posture

As of this writing, broadly speaking, we somewhat favor higher-yielding fixed income sectors. We believe that over the coming year, default risk is likely to fall, potentially helping spreads to tighten in many credit sectors. Despite this generally positive outlook, we have recently suggested that clients modestly reduce credit risk and add portfolio liquidity, because some of the spread tightening we had anticipated has already occurred. We believe it prudent for investors to maintain a larger reserve of high-quality, liquid assets for the purpose of exploiting market dislocations that may occur in the months ahead.

A downside surprise with regard to a COVID-19 vaccine, a delay in additional US fiscal stimulus measures, and uncertainty around the direction of policy under a Biden administration are some catalysts for potential spikes in volatility that we will be watching closely.

Our mosaic of cycle indicators is currently sending more positive than negative signals, with extraordinary monetary and fiscal stimulus, along with reasonable asset valuations, somewhat offset by challenged economic and corporate fundamentals. As we look across the various fixed income sectors, we see a few pockets of attractive value for investors to consider.

We believe bank loans stand out

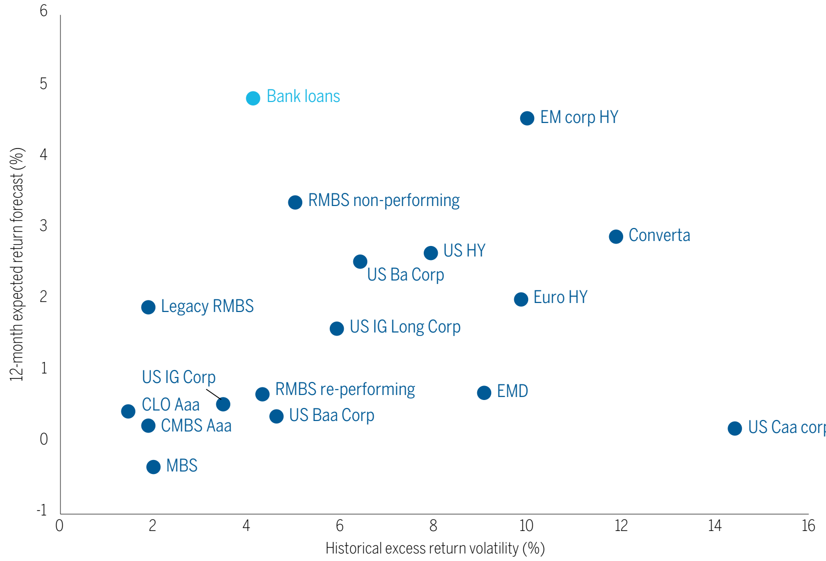
Bank loan spreads were recently in the top quintile versus their history and represent one of our highest-conviction investment ideas for multisector portfolios (Figure 1). The near-zero interest-rate environment this year has pushed down these loans' total yield, causing them to fall out of favor with many investors. Furthermore, as default rates have increased, a handful of high-profile loans have defaulted lately, with expectations of very low recovery rates.

However, we believe these concerns are more than adequately priced into today's attractive loan spreads. On average, loans still tend to experience higher recovery rates than comparable bonds, while also typically offering similar or better credit spreads. Despite recent retail outflows, the technical backdrop remains largely supportive, thanks to strong demand from collateralized loan obligations (CLOs) and limited new issue supply. We currently see the best opportunities in higher-quality, US-focused loan issuers in less cyclical industries.

Our preferred credits have demonstrated resiliency in a difficult environment, with management teams that emphasized debt reduction, moderate capital expenditures, and prudent balance-sheet management even prior to the crisis.

FIGURE 1

Return forecasts for various fixed income sectors



Source: Wellington Management. Chart data as of 31 October 2020

Opportunities in EM corporate credit

We have observed a high degree of dispersion among emerging markets (EM) credits. Spreads for most higher-quality sovereign issuers appear to us to be excessively tight, as their debt trajectories look worrisome. Not only have pandemic-induced recessions led many EM countries to run large fiscal deficits in 2020, but these countries will likely need to add even more debt over the next few years.

We believe EM corporate debt issuers offer more opportunities. Company fundamentals vary by industry and are often not overly linked to the fortunes of their home countries. Our preferred credits have demonstrated resiliency in a difficult environment, with management teams that emphasized debt reduction, moderate capital expenditures, and prudent balance-sheet management even prior to the crisis. As business activity and corporate earnings recover, we expect many issuers to naturally reduce leverage, which they have generally not needed to the same extent that many sovereigns have.

We also see opportunities in some high-yield EM sovereigns and, to a lesser degree, in select frontier markets. Among these riskier countries, we favor those with low repayment needs over the next few years, potentially giving them enough time to address their macro and fiscal challenges (for those that have shown a willingness to do so).

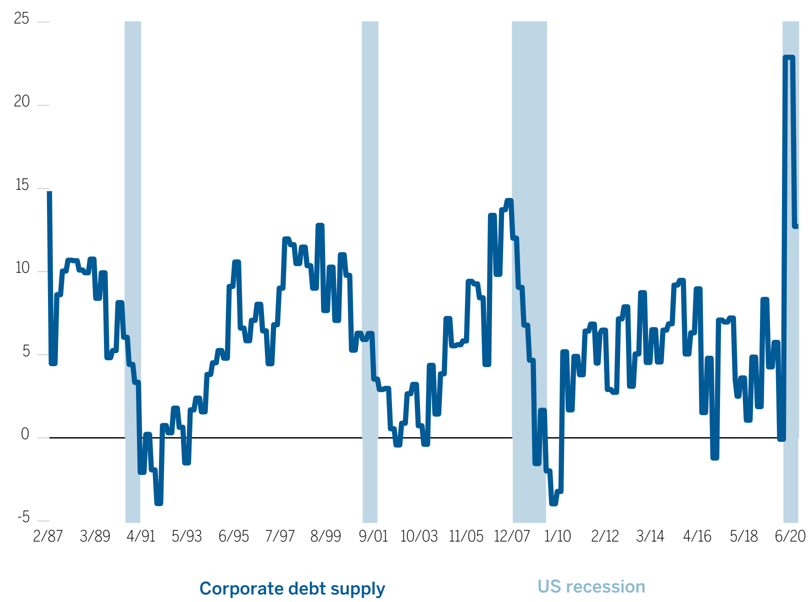
Rising corporate debt: Warning signal to markets?

Many bond-market participants have warned about the massive expansion of corporate debt that has taken place during the pandemic (**FIGURE 2**). In the past, elevated levels of debt growth predicted subpar returns for corporate credit. Historically, we have viewed rapid debt growth as driven primarily by speculative behavior on the part of corporate managements — for example, debt-financed expansions that later proved to be poor capital allocation decisions. Today's debt growth, however, has not been fueled by mergers and acquisitions, but mainly by a judicious desire to improve liquidity in today's highly uncertain business environment.

We therefore do not view the current increase in corporate debt in a wholly negative light, as it is indicative of precaution rather than risk-taking. Moreover, the bond-market technical backdrop looks very strong: The rising debt supply has been met by a commensurate increase in demand, as central bank bond purchases have enabled the market to absorb more corporate debt. We suggest that investors focus on those issuers best positioned to quickly deleverage their balance sheets as the global economy mends.

> **The brightest spots in securitized credit are primarily securities exposed to residential housing.**

Figure 2
US economy-wide corporate debt supply
(%)



Sources: US Federal Reserve, National Bureau of Economic Research, Wellington Management. Chart data as of 31 October 2020

Fewer opportunities in structured credit

For many years, we have believed the structured credit market abounds with investable opportunities. In the post-pandemic period, however, we see fewer investment opportunities in structured finance than we once did.

Malls and other retail-exposed businesses, which were under pressure even before the onset of COVID-19, must battle stiffer headwinds than ever. Hotel and office properties may now face a difficult slog as well. In the mezzanine areas of structured credit, outcomes are likely to be quite binary, with 100% losses for certain tranches and enticing yields unlikely to be realized in many cases. We have seen a growing number of malls' equity owners choose to stop making their loan payments and effectively "hand over the keys" to their lenders.

The brightest spots in securitized credit are primarily securities exposed to residential housing. Housing prices remain buoyant amid continued low mortgage rates, fiscal stimulus, and a favorable supply-demand dynamic that has persisted since the global financial crisis.

Where fixed income meets ESG

During periods of uncertainty, companies that are able to adapt and address new challenges are more likely to emerge stronger and more sustainable. Today, as the world struggles to overcome the economic downturn caused by the COVID-19 pandemic, we look for issuers to incorporate ESG factors into their strategic planning decisions.

We believe investing to maximize risk-adjusted returns should include investing with a lens for ESG alignment. In our view, ESG issues can be meaningful drivers — or destroyers — of long-term value. Because we find that traditional investment security analysis fails to appropriately price ESG risks, we consider ESG risk premia as an integral part of our valuation framework and trading decisions.

While we see many ESG risks as tail events, they can have significant impacts on issuers. Academic research suggests that low-probability events create inefficiencies for market pricing; our research seeks to exploit the resulting dislocations. As market participants grow more aware of ESG risks, the costs of such risks should rise accordingly. As with other forms of risk, investors will demand greater compensation for holding securities with negative ESG attributes or assessments. Given the widening focus on ESG in the wake of COVID-19, the importance of these risks to security valuation is unlikely to wane over our investable time horizon. We seek to identify and quantify all underappreciated investment risks. If we feel that a security's valuation accurately reflects associated ESG risks, we may choose to own it. If not, we may be less likely to do so.

Stay long credit, keep some cash ready

As we navigate between two powerful forces — supportive government policy and healthy bond-market technicals on one side, juxtaposed with a turbulent economic landscape on the other — we steer more toward the positive side, because we still see a number of attractive investable opportunities, including US bank loans, EM corporate debt, and residential housing-linked securities. Cash and other liquid assets may also be worth considering now, especially for clients who want optionality to invest elsewhere as market dislocations arise.

We continue to monitor several multiyear themes and trends that may materially impact long-term investment strategies, particularly global policymakers' responses to the pandemic; the progress of COVID vaccine development; and inflationary pressures, which could eventually rise but seem to be in check for now. We are thematically focused on debt issuers that we believe can continue to generate solid earnings in today's weaker global economy, along with those that are challenged today but likely to emerge from the crisis as industry-level leaders down the road. Finally, we also favor issuers that we judge to have superior environmental, social, and governance (ESG) attributes. (For more on that, see sidebar titled "Where fixed income meets ESG.")

Wendy Cromwell, CFA
Director of Sustainable Investment

About the author

Wendy sets the research agenda and strategies for the firm's sustainable investment practice, including impact, climate, and long-term engagement strategies. As vice chair, she is a senior member of the firm's management team and works with the CEO with respect to strategic initiatives and Wellington's external affairs. She also serves as a director on the board of the United Nations-supported Principles for Responsible Investment.

ESG AND SUSTAINABILITY

Sharper focus on sustainability

KEY POINTS

- In 2021, our Impact Investing Team will focus on opportunities in areas of the market that represent much-needed solutions in the COVID era, including health care, digital connectivity, and technical support for small businesses.
- Our Climate Research Team will deepen their research agenda to more fully understand and value the advancing risks and high costs of climate change.
- Our ESG Research Team will engage on critical issues like transparency, diversity and inclusion, executive compensation, and resiliency.

The defining issues of 2020 were a stark reminder of the inextricable links between capital markets and real-world events. Investors do not sit in a siloed world of earnings reports and Bloomberg screens. They are very much a part of the global economy, which is shaped by climate change, public health crises, and social justice issues.

Real-world events present both opportunities and risks for financial market participants. COVID-19 jolted the world awake to the economic devastation a pandemic can cause, highlighting the need for market-based solutions that help society prepare for and manage such a crisis. A record year for heat, hurricanes, and wildfires displayed in real time the advancing risks and high costs of climate change. And increasing calls for companies to take a leading role in improving social justice and racial equity have permeated industry discourse.

Looking toward 2021, these challenges affirm the need for us to continue to engage with companies and issuers on their response to social justice concerns, their preparedness for physical climate risks, and their approach to human-capital management and supply-chain resiliency in the COVID era. We believe that both engagement and market-pricing signals can prompt issuers to adapt and build resilience to real-world risks.

We also feel compelled to expand our offerings that invest in solutions to some of the world's most pressing problems. We plan to deepen our climate research agenda to more fully understand and value the impact of physical and transition risks on companies, economies, and society. And we will engage on social justice, diversity and inclusion, and other material ESG issues. As always, our primary objective is to deliver competitive total returns for clients across the investment platform. We firmly believe that these initiatives will help us do so.

In this Outlook, members of our Impact Investing, Climate Research, and ESG Research teams share the themes they plan to focus on and discuss with clients and portfolio companies.

Campe Goodman, CFA
Fixed Income
Portfolio Manager

Tara Stilwell, CFA
Equity Portfolio Manager

About the authors

Campe is a portfolio manager on Wellington's Impact Investing Team. He has been managing multisector fixed income portfolios for nearly two decades. He is also the lead manager on a multisector portfolio and leads a specialist team responsible for the development of sector-rotation strategies.

As a portfolio manager on Wellington's Impact Investing Team, **Tara** manages equity assets on behalf of our clients, drawing on research from Wellington Management's global industry analysts, equity portfolio managers, and team analysts. She provides research to her team on the financials, health care, and media/telecommunications sectors.

IMPACT INVESTING

Looking for solutions that matter most

In 2021, we plan to continue our research into our 11 impact themes, with a particular focus on new opportunities in certain areas that we have identified as representing much-needed solutions in the wake of the COVID-19 pandemic.

Digital connectivity

As the world went into lockdown, reliable digital connections became social and economic lifelines almost overnight. Expanding, improving, and securing digital connectivity remains an overarching concern as lockdowns and social-distancing requirements drag on.

As schools and higher education institutions struggle to adapt and expand online teaching, the need for technologies that enable communication and connectivity has exploded. And as the societal benefits of remote learning become entrenched, we hope improved access will translate to better educational outcomes for more students, particularly in underserved populations.

The surge in remote connectivity also highlights the risk of cyberterrorism. Computer hackers targeting hospitals, food-supply chains, and other critical infrastructure have been more active during the pandemic, as have phishing scams aimed at destabilizing business activity. We will seek to identify innovative technologies with a positive impact in this area. In fixed income, we will look at the debt of companies providing telecommunications, broadband, and cellular solutions in rural areas and developing countries.

Health care

The ramifications of COVID-19 on health care systems will likely be profound and long lasting. The pandemic has revealed a widespread lack of access to affordable, quality health care and chronic underinvestment in health care infrastructures. In 2021, we expect to continue our research into biopharmaceuticals companies developing novel treatments for diseases, including COVID-19. We also expect to focus on molecular diagnostics capabilities, as the public-health crisis has highlighted the need for real-time testing and diagnostics.

We will look at businesses whose tools help health care professionals capture and analyze data, save time, and treat more patients safely and efficiently. These include pre-mixed-insulin delivery systems, remote sensors, and dictation software. Technologies like these can reduce errors and increase the time spent with patients, all while helping to keep doctors and nurses safe by minimizing touchpoints on workstations and devices.

Within fixed income, we will focus on not-for-profit hospitals in the US. Many such facilities have launched efforts to increase or create virtual urgent-care consultations to treat patients at home. While the crisis pressured valuations of these and many other credit assets, the combination of easing lockdown measures, more short-term financing, and government support has helped us maintain confidence in these critical resources.

“ ”

The social and economic challenges of clean-water access will garner increasing attention from markets and policymakers, and 2021 could be a tipping point.

Support and infrastructure for small- and medium-sized enterprises

When lockdown measures brought some sectors of the global economy to a screeching halt, small businesses scrambled for liquidity to stay afloat. The need for cash has prompted a significant increase in new public-bond issuance. Some of the commercial and international development bank green bonds in which we invest make loans to small enterprises, and many have come to market with so-called COVID-19-relief bonds. While their function may not have materially changed, the moniker does highlight the impact these types of loans can have during a crisis.

Longer term, small businesses may need to pivot away from brick-and-mortar dependency and develop a strong online presence to survive. This need creates vulnerabilities as the costs to shift business models can be high. We will seek opportunities to invest in platforms that enable small businesses to scale up their online business and become proficient and competitive.

Clean water

In many regions, water scarcity is a critical problem. The social and economic challenges of clean-water access will garner increasing attention from markets and policymakers, and 2021 could be a tipping point. As governments focus on infrastructure spending to ensure economic resiliency in the wake of the pandemic, updating aging water infrastructure is a likely goal.

Desalination technologies interest us, but the costs, logistical hurdles, and potential negative externalities have kept the market too small to invest in. With climate change exacerbating water scarcity, desalination may become a viable option in some regions in coming years. For now, we continue to look for impact companies along the water value chain, including delivery of clean water and water reuse. We believe businesses will increasingly find opportunities to consolidate and drive needed change, particularly by leveraging digital capabilities.

Impact of Green Deals

Discussions around potential large-scale “Green Deals” in the EU and US aimed at delivering fiscal stimulus and addressing climate change have underscored the linkage between economic recovery and environmental sustainability. As the scope and details of the deals are negotiated, we believe many strategies focused on alternative energy and resource efficiency will see their opportunity set accelerate as governments seek to direct regulation, policy, and capital.

Within fixed income, the issuance in 2020 of euro bonds and corporate issues aimed at funding green activities (green bonds) in exceeded 2019’s record-breaking pace, jumping from US$258 billion to an estimated US$350 billion.[1] With such a strong technical market backdrop, we expect issuance to further increase in 2021, across a range of issuers.

[1] “Green Bonds Market 2020,” Climate Bonds Initiative (climatebonds.net), 2020.

CLIMATE RESEARCH

Drawing connections and going deeper

Chris Goolgasian, CFA, CPA, CAIA
Director of Climate Research

Julie Delongchamp, CFA
Climate Transition Risk Analyst

About the authors

As director of Climate Research on the Sustainable Investment Team, **Chris** spearheads a collaborative initiative between Wellington Management and Woodwell Climate Research Center (WCRC) to integrate climate science and asset management. This alliance, launched in 2018, focuses on creating investor tools to help analyze and better understand how and where climate change may impact global capital markets.

Julie researches risks and opportunities associated with transitioning to a low-carbon economy and works with investors to translate findings into investment ideas. Julie also works with portfolio managers to enhance portfolio-level climate risk measurement, including carbon-emissions footprinting and scenario analysis, and to implement clients' long-term climate goals.

COVID-19 has underscored the direct and immediate effects than an existential threat can have on society and the global economy. The need to understand the range, scale, and location of the risks and to establish coordinated policies based on scientific data are paramount. As we continue our climate research in 2021, we do so with the affirmation that climate change, like a pandemic, is an existential threat to global economic stability that investors and asset owners need to appreciate.

Continued research on physical risks

In 2021, we will pursue an aggressive research agenda on the physical risks of climate change and the direct application into our investment processes. Our work with Woodwell Climate Research Center continues, expanding to deepen and broaden our understanding of the intersection between climate change and capital markets. We will be researching the macroeconomic and microeconomic implications of climate migration, looking at physical, environmental, and geopolitical factors. We will also step up our work studying potential adaptive solutions to acute and chronic climate-related events, building on our evolving risk analysis. We will expand our deep dive with country-level case studies to gain a broader understanding of the regional risks of climate change.

We will share our climate research with issuers and encourage them to develop climate-resiliency planning and set their own carbon-reduction targets. Our Physical Risks of Climate Change (P-ROCC) framework is designed to help issuers establish clear strategies for delivering and disclosing their progress in the near to medium term. Finally, we will explore practical ways of including the effects of physical climate change in the portfolio-construction process.

Expanding global focus on transition risks

Despite recent economic deceleration, the governments of several high-carbon-emitting economies, including China, Japan, and South Korea, have translated their commitment to the Paris Agreement into time-bound, net-zero and carbon-neutrality commitments. In those countries and many others, stimulus plans to jump-start economic recovery are being seized as opportunities to create greener economies. The EU and UK in particular have focused explicitly on including green investments in economic recovery funds, incentive schemes, and regulation.

And while the US formally withdrew from the Paris Agreement in 2020, significant state and local action is ongoing, with 23 states (including five of the 10 highest emitters) establishing their own greenhouse gas (GHG) emissions targets. In the next few years, we expect an increasing number of local and national commitments to transition to a low-carbon economy, with potentially profound effects on nearly every industry and sector.

As we continue our climate research in 2021, we do so with the affirmation that climate change, like a pandemic, is an existential threat to global economic stability that investors and asset owners need to appreciate.

In 2021, we will work with our colleagues on the Global Macro Team to identify opportunities to invest in companies that deliver products and services that support decarbonization. We believe government-sponsored recovery incentives and emerging carbon regulation, along with significant, sustained demand, should allow these companies to benefit from a lower cost of capital and revenue tailwinds.

We find that market participants increasingly recognize climate mitigation and strategic transition efforts as having a material impact on investment returns and, more broadly, on the overall stability of the global financial system. In 2020, two global initiatives — the Paris Aligned Investment Initiative, started by the Institutional Investors Group on Climate Change (IIGCC), and the United Nations-convened Net-Zero Asset Owner Alliance — presented the first frameworks for asset owners to incorporate carbon neutrality as a core objective, alongside financial returns. We have seen, and believe we will continue to see, rapid and increasing momentum behind such initiatives, creating a call to action for large, global asset managers, including Wellington.

We will engage with our clients in 2021 to develop, evaluate, and implement methods for approaching carbon neutrality in the portfolios we manage on their behalf. Our team will work with each portfolio manager to ensure consistency with their investment philosophy and process. The transition to a low-carbon economy depends in large part on markets. Our goal is to actively support that shift while continuing to deliver competitive investment returns for our clients.

Hillary Flynn
Director of ESG, Private Investments

Carolina San Martin, CFA
Director of ESG Research

ESG AND STEWARDSHIP

More opportunities for engagement

COVID-19 has highlighted the potential for ESG factors to become even more relevant to our clients' investments. This year, an unprecedented number of our conversations with companies have broached ESG topics, a pattern we expect to see in 2021 as well. Keeping workers and customers safe, building supply-chain resilience, better aligning executive compensation with long-term success: Issues like these are recognized by parties on both sides of the table as material to our investment framework.

Transparency in the wake of COVID-19

One of the biggest shifts we've seen during COVID-19 is an increased openness among boards and management teams to engaging on a wider range of ESG issues. The pandemic's black-swan nature has crystallized a realization that company leaders cannot predict everything, yet they must be prepared for anything. We find that companies are now acknowledging that long-range topics such as climate change, scenario planning, and crisis management are not outside their planning horizon.

With companies welcoming this dialogue and given our focus on risk management, we will discuss issues like the following:

- What were your priorities at the onset of the pandemic, and how have they shifted? What would you have done differently?
- How has this crisis informed your strategic planning?
- How are you proactively mitigating the unique risks facing your company? What new opportunities or risks might emerge after the crisis has passed?
- How have you sought to maintain your company culture and values during the pandemic?
- What steps are you taking to ensure employees are safe and have the physical and mental health resources they need through this challenging time?
- What feedback have you received from customers, vendors, suppliers, and shareholders on how your company has responded to COVID-19?
- How do you approach burden sharing across leadership, employees, customers, and shareholders? Are there metrics in place that allow the board to use discretion over CEO compensation?
- Has the crisis exposed a need for additional skills or backgrounds on your board?

About the authors

Hillary evaluates portfolio companies from an ESG perspective, with a specialty in private markets. She is responsible for assessing nonfinancial issues that can have a material impact on the long-term success of a company and, potentially, investment returns. Hillary works closely with Wellington's portfolio managers and investment teams to help identify and assess ESG risks and opportunities within their portfolio companies.

Carolina oversees the firm's ESG research and stewardship activities, including company engagement and voting efforts. She works to ensure that the firm's ESG capabilities meet the evolving needs of our clients globally. Through her research responsibilities covering the energy sector, she collaborates with investors to identify and assess ESG risks and opportunities in client portfolios and engage with portfolio companies. She regularly meets with clients, prospects, and consultants to discuss ESG integration.

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In 2021, we plan to redouble our engagement efforts to better understand our portfolio companies’ response to racial inequity. This dialogue will form the basis of a practice-sharing document that we plan to share publicly.

Executive compensation

We have been seeing greater scrutiny of the size and structure of executive compensation plans. Boards in many industries are struggling to manage incentive plans, since the performance hurdles established at the beginning of 2020 are now unachievable. We are seeking opportunities to engage, provide feedback, get ahead of detrimental behavior, and support pay/performance alignment in our clients’ best interest.

We will be considering how companies plan to rebuild their balance sheets while encouraging growth, and asking how boards gauge executives’ engagement with employees, now that so many are working from home.

The international context of US executive pay may also be a focus in 2021. Over the past few years, the quantum of pay has become a sensitive topic in Europe and Australia, occasionally leading to low shareholder support for executive pay plans. European companies are already required to enhance compensation disclosures, and plans are subject to annual shareholder reviews and votes. A few companies had acknowledged late last year that global pay discrepancies were hampering talent recruitment and retention, especially at the CEO and CFO positions. We wondered which way the pendulum would swing: Would US companies enjoy a talent advantage, or would this global trend eventually put pressure on US pay packages?

And then COVID happened. In the face of layoffs and furloughs, outsized executive pay plans suddenly fell out of favor globally, including across the US. While many companies showed solidarity with employees early on, with C-suite executives announcing voluntary pay cuts, we will be looking for signs of companies’ future plans. For example, will this behavior remain throughout and after the crisis? Will performance targets stay reduced? Will incentives see a permanent shift?

Diversity and inclusion

Assessing companies’ efforts to improve diversity and inclusion (D&I) has long been an engagement priority for us, as we see this issue as a material input to performance. In 2020, we heightened our focus in this area following multiple instances of racial inequity and injustice across the US. In 2021, we plan to redouble our engagement efforts to better understand our portfolio companies’ response to racial inequity. This dialogue will form the basis of a practice-sharing document that we plan to share publicly.

In 2020, we hosted our first diversity panel, featuring D&I executives from leading consumer-sector companies, who discussed challenges and lessons learned. Our goal is to gain deeper knowledge of the companies we invest in on behalf of our clients, enhance our internal approach to D&I by learning from others, and facilitate practice sharing across a wide swath of companies. We expect that the lessons we learn in this process will change how we hold portfolio companies accountable, including via our proxy voting policies.

We believe helping portfolio companies understand and address material ESG issues early in their life cycles is a long-term benefit for them. It also helps us make better investment decisions and develop stronger relationships with young companies.

Private-equity diversity investing

We are developing a concept currently called the Diverse Founders Fund, which seeks to leverage our strength as an investment firm to make a difference in our communities. The Fund will provide capital to diverse venture capitalists and entrepreneurs, with a focus on the Black community, which has historically lacked access to capital. We believe this action aligns with our values as a firm and will help us to evolve the diversity profile of both the industry and our organization. Member of Shades, our business network for Wellington colleagues of Black heritage, will be heavily involved in the Fund, participating in deal teams, having representation on the firm's investment committee, and sourcing ideas. We hope this experience will help Wellington's Black talent develop investment acumen and a private-equity knowledge base, opening new career paths.

The Diverse Founders Fund will be return seeking, investing in growth-oriented deals, with the concurrent goal of achieving positive societal change such as job creation and multigenerational wealth creation. The Fund will have a hybrid structure, investing primarily in Black-led venture capital funds, making co-investments, and making direct investments in diverse entrepreneurs. Beyond the capital invested, we believe that sharing Wellington's knowledge, infrastructure, resources, and network with diverse entrepreneurs and venture capitalists will also have a positive impact, helping them attract additional investors and accelerate growth.

Private-sector ESG

In 2020, we created a dedicated ESG analyst role focused exclusively on the private market. We plan to deepen and broaden that work in 2021. We believe helping portfolio companies understand and address material ESG issues early in their life cycles is a long-term benefit for them. It also helps us make better investment decisions and develop stronger relationships with young companies. We find that private-company management teams increasingly realize that enhancing ESG practices can translate into better potential financial returns, broader investor appeal (especially among sophisticated institutional investors), stronger brands with wider competitive moats, and reduced risk of shareholder activism once they go public.

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About the authors

Dennis serves as the portfolio manager for global multi-strategy and diversified long/short equity approaches, and is responsible for developing alternative solutions for clients, including strategic allocation decisions, portfolio construction, risk oversight, and portfolio hedging.

Lori is an investment director focused on the firm's alternative strategies. She works closely with our alternatives investors to help ensure the integrity of these investment approaches and meets with clients, prospects, and consultants to communicate our investment philosophy, strategy, positioning, and performance.

ALTERNATIVE STRATEGIES

Vicious liquidity cycles, volatility, and the role of alternative investments

As we wrote at mid-year, the pandemic and the resulting global economic shutdown brought bouts of market distress and dislocations that created investment challenges but also potential opportunities for alternative strategies. While we are certainly not yet on the other side of the pandemic and the related economic implications, we think it's worth considering some of the other market and industry dynamics that are likely to impact the environment for alternative strategies in the months and years ahead.

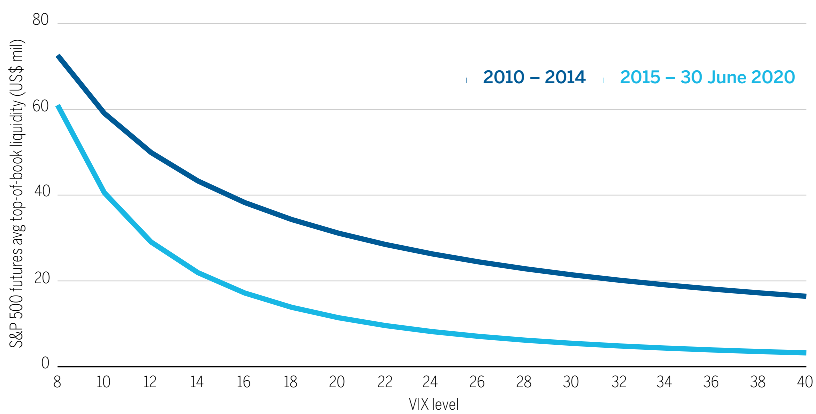
In particular, we continue to see mounting evidence that risk assets are becoming more illiquid in risk-off environments — a trend that predates the pandemic, is likely with us for the longer term, and may have a number of potential implications for alternative strategies.

"Walking with soup"

The COVID-driven market sell-off was just the latest in a long line of events that have highlighted the lack of liquidity in the market when it was needed most and the impact this can have on market behavior. In recent years, we've seen market sell-offs accelerate into more severe market downturns — in February 2018 ("Volmageddon"), the fourth quarter of 2018 (initiated by Federal Reserve rate hikes), and May 2019 (US/China trade tensions), to cite a few examples.

Figure 1, from our Global Derivatives Group, illustrates the changing relationship between the volatility environment (proxied by the VIX) and liquidity (based on the average level of futures liquidity). We see that for a given level of volatility, the average level of futures liquidity was significantly lower in the second half of the past decade than in the first half; the effect is particularly pronounced at higher levels of volatility.

Figure 1
Markedly lower liquidity at higher levels of volatility
Historical S&P 500 futures liquidity curves vs VIX level



Sources: Goldman Sachs, Bloomberg, Wellington Management. **PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.** For illustrative purposes only.

> As trading continues to become more concentrated and algorithmically driven, we would expect the potential for sharp drawdowns to grow.

The liquidity challenges can be traced to a number of profound changes in capital market structure and the asset management/trading ecosystem. Following the global financial crisis, regulatory action forced broker-dealers to greatly curtail their market-making activity. Gradually, we saw the emergence of the market-making role with certain systematically oriented trading firms, who have smaller amounts of capital behind them and, as a result, are programmed to be highly risk-averse, withdrawing liquidity when volatility rises to avoid "catching too many falling knives." At the same time, we've seen a proliferation of strategies (CTA, volatility targeting, volatility managed) that have a propensity to demand liquidity when volatility is rising.

When volatility is low, there is no problem, but it doesn't take much for higher volatility to drive down the supply of liquidity and simultaneously drive up demand for it. This results in larger-than-warranted moves to the downside, which in turn produce more need to sell/derisk and so on. As our colleague Gordy Lawrence, director of Global Derivatives, put it, "If you've ever tried walking with a hot bowl of soup, everything is fine as long as your gait remains stable, but once you hit a bump and the soup starts sloshing back and forth, it's pretty hard to get it to stop before it spills over the edge."

What it means for markets and the role of alternatives

As trading continues to become more concentrated and algorithmically driven, we would expect the potential for sharp drawdowns to grow. We would also expect correlations to trend up over time, driving potentially larger dislocations.

Another consequence of these market-plumbing issues may be less efficient market pricing. Over the short and medium term, pricing increasingly seems to be a reflection not of fundamentals but of liquidity.

Against this backdrop, we think investors may want to consider several ideas for their alternatives portfolios:

- Given the potential for more drawdowns, risk-mitigating strategies may become increasingly important, including market-neutral strategies and/or strategies that aren't correlated to risk markets. Investors may also see a growing role for tail-risk-protection strategies.
- There may be a growing role for specialized strategies that can exploit these broader trends. This may include fundamental long/short stock-picking strategies that can distinguish between winners and losers amid liquidity-driven price dislocations. In addition, while the market volatility spurred by the trends discussed above may create challenges for risk-asset performance broadly, we would also expect it to lead to greater dispersion across and within sectors, potentially making for a more fruitful environment for bottom-up stock picking by long/short managers.
- When liquidity is constrained across market subsectors, some credit relative-value strategies may benefit by serving as liquidity providers without assuming directional exposure to the market overall. These managers may be able to identify disconnects between market prices of dislocated securities driven by liquidity considerations and what they consider sensible clearing prices for those securities based on fundamentals.

Matt Witheiler
Private Equity Principal and Sector Specialist

About the author

Matt leads the firm's private company investment activity across the consumer and technology sectors. He works closely with portfolio managers, global industry analysts, and other global research resources within the firm to identify and pursue investments in private companies.

PRIVATE EQUITY

Cautious optimism in private equity markets

In the wake of broad market declines in the first quarter of 2020, we saw the private equity market gradually gain momentum in the second and third quarters, fueled by a sentiment of cautious optimism: Late-stage companies found a renewed confidence about their businesses (the optimism) but still had reasons to worry about the macro environment (the caution). Here I'll offer a few thoughts on this landscape as we approach the start of a new year.

Valuations — Uncertainty about events like the US presidential election, a potential second wave of COVID-19, or further deterioration in US-China relations can weigh heavily on private companies. A public company's stock price may fall if the market goes down, but the repercussions can be much more dramatic on the private side. A collapse in the public market could seize up funding on the private side and, if a private company is not yet cash-flow-positive, that's a scary proposition. Thus, private companies would rather give up an incremental 50 or 100 basis points of dilution at a lower valuation than potentially risk being unable to raise capital and going out of business. That risk is what keeps private-company CEOs awake at night, and we believe it's also the reason valuations have remained reasonable in the private space — in what otherwise could have been an incredibly frothy time, considering the strong public market rebound.

The IPO market — In a year full of the unexpected, we think one of the biggest surprises for markets was the high level of IPO activity, especially in the second and third quarters. As the public markets rebounded beginning in the second quarter, we saw many companies seek to take advantage of the attractive environment by accelerating their IPO plans. As of October 31, there had been more than 180 IPOs in 2020, totaling more than US$60 billion — the highest level of IPO activity since 2014.[1] This was unimaginable in March, as COVID-19 hit and the thought of having an open IPO window, let alone performing ahead of plan, seemed inconceivable.

We believe the second biggest surprise of this year is the rise of special purpose acquisition company (SPAC) IPO activity. There had been more than 185 SPAC IPO issuances with over US$65 billion raised as of November 15, the highest level in history.[2] While previously considered a less attractive path to liquidity, SPACs have become more institutionalized and may offer certain benefits, such as more certainty to close, which can be attractive in volatile market environments.

[1]Source: Renaissance Capital. Includes US-listed IPOs with a market cap of at least US$50 million and excludes closed-end funds and SPACs (special purpose acquisition companies). Data is as of 31 October 2020.

[2]Source: SPACResearch.com. Data is as of 15 November 2020.

> **In a year full of the unexpected, we think one of the biggest surprises for markets was the high level of IPO activity.**

Late-stage activity — Through the third quarter of 2020, late-stage deal volumes had outpaced the last three years on a quarterly basis.[3] We believe deal activity has remained robust throughout the pandemic for two reasons. First, certain sectors have realized newfound growth due to COVID-19 and are looking to capitalize on this growth by raising capital. Second, other sectors have seen disruption to growth and have needed to raise unplanned rounds for "insurance" purposes.

The pandemic's continued impact — It is worth noting that cautious optimism isn't the rule for all private companies. There remain companies that are still meaningfully impacted by the virus and therefore not so optimistic. That said, there are also companies that are throwing caution to the wind and raising "nosebleed" valuations. This issue appears to be especially acute among companies doing earlier rounds of financing.

One final note on a category of company we've found increasingly common in the past few months: the "COVID questionable" company. These are companies that have seen massive positive transformations thanks to effects of the pandemic and the economic shutdown but face an open question about whether those effects will last. For example, will a household products company that has seen increased demand and lower customer acquisition costs in 2020 continue to perform well once COVID-19 is out of the equation? We'll be watching this trend and others described here as the new year gets underway.

[3]Source: PitchBook. Includes all US late-stage venture capital deals, defined as any rounds of financing taking place Series C or later. Data is as of 30 September 2020.

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Investment Director

About the author

A.J. is responsible for the business and investment oversight of the firm's private equity strategies. He helps oversee all aspects of these strategies, including governance, product development, risk management, operations, and investor relations.

PRIVATE CLIMATE

On a mission: The disruptive force of private companies seeking climate-change solutions

Representing almost 6%[1] of total venture capital investing in 2019, companies focused on addressing climate change represent what we believe is one of the most innovative sectors within private equity. Mission-oriented entrepreneurs, investors, and consumers widely accept climate change as a defining existential challenge of our time and are rallying around the need for dramatic change. At the same time, decades of infrastructure investment and the steep reduction in the cost curve of alternative sources of energy have created a conducive environment for scalable, solutions-focused businesses.

A confluence of secular trends

We sense growing optimism and belief in the potential for innovation in the venture capital community as it joins with governments, scientists, consumers, and companies to find real solutions to climate change. We think several secular trends are supportive of disruptive climate-focused entrepreneurs:

- **Global coordination and continued infrastructure spend —** The 2015 Paris Agreement was the first truly global accord focused on the need for a lower-carbon world. Over 100 countries have committed to become "net zero" by 2050, the latest being Japan in October 2020. With these commitments should come continued high levels of global infrastructure spend, creating a foundation for innovative, asset-light companies to build on.
- **Consumer, investor, and corporate demand —** Consumers are demanding transparency and choices that match their values, and companies are in search of technologies necessary to be competitive in the future. According to a recent NYU Stern Center for Sustainable Business report, since 2015, sustainability-marketed products have grown 7.1x faster than products not marked as sustainable, accounting for 54.7% of market growth, despite representing only a 16.1% market share.[2]
- **New and cheaper technologies —** The economics of sustainable energy are becoming more competitive (**Figure 1**). As the cost curve has continued to fall, companies providing scalable solutions with business models more suitable for venture capital are being created. While the combination of long lead times and unproven technologies has historically restrained VC investment in this area, there is growing interest in innovation in areas such as data analytics, advanced computing, and agriculture technology, where companies are rethinking business models to address large markets beyond the energy sector, such as logistics, manufacturing, and food.

[1] Crunchbase News, 2019 Global VC Report, 8 January 2020.

[2] NYU Stern Center for Sustainable Business, Sustainable Business Index, 16 July 2020.

Figure 1
Levelized costs of energy have fallen

	Global weighted average (US dollar/kWh)		Percent change
	2010	**2019**	
Solar photovoltaic	0.378	0.068	-82%
Onshore wind	0.086	0.053	-38%
Offshore wind	0.161	0.115	-29%

Levelized cost of energy is defined as the expected lifetime, fully amortized cost of electricity supply. It is used to compare the costs of different sources of electricity. | Source: International Renewable Energy Agency (IRENA)

A broad transformation across sectors

According to the US Environmental Protection Agency, the largest producers of greenhouse gas (GHG) emissions are in five economic sectors: transportation, electricity, industry, commercial & residential, and agriculture. Within each sector, we believe there are compelling opportunities for private companies to mitigate GHG emissions (e.g., alternative energy producers and battery manufacturers) and help businesses and consumers adapt to and alleviate physical risk factors such as heat and drought (e.g., providers of data analytics/risk modeling).

As outlined by the Paris Agreement, in order to have a chance of limiting global warming to 1.5 degrees Celsius above pre-industrial levels, global carbon emissions must decline by nearly half by 2030 and become "net zero" by 2050. The economic transformation that needs to occur will influence all areas of the economy, not just the energy sector, and companies focused on finding innovative solutions will need partners to help them develop and grow. As the world rallies to this extraordinary challenge, we believe there will be a growing opportunity for private companies looking to align their businesses with these goals.

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