2020 Global Alternatives Outlook

Celebrating 50 years of Alternatives Asset Management
As we embark on our next 50 years as an alternatives investment manager, we celebrate our longevity but don’t rest on our laurels. We recommit ourselves to the values that allow us to endure—integrity, partnership, creativity, leadership, transparency, risk control, service and performance. We thank you, our clients. With your support and trust, we have developed a wide range of innovative strategies across private equity, private credit, hedge funds, real estate and real assets, and liquid alternatives. We work hard every day to fulfill your trust and exceed your expectations.

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FOREWORD

MACROECONOMIC OUTLOOK
Why the global economy—and markets—still have room to run

ALTERNATIVE ASSET ALLOCATION
Beyond the traditional lies a world of alternatives

HEDGE FUNDS
Opportunities in sustainability, next-generation digital and value

PRIVATE INFRASTRUCTURE EQUITY AND DEBT
Concentrating on the core

TRANSPORT
Increasing stability across sectors

PRIVATE CREDIT
Amid negative yields, opportunities to generate alpha above comparable public debt

PRIVATE EQUITY
Rapid innovation and small to mid market dynamics offer opportunities in a challenging environment

GLOBAL REAL ESTATE
Building a diversified core real estate allocation for income and stability
ONE-DIMENSIONAL. FLAT. SILOED. GENERIC.

A common criticism of alternatives investment guidance is that it lacks the depth, breadth and context to have a meaningful impact on broader portfolio design and implementation.

In this, our second annual Alternatives Outlook, with an ever-greater need for alternative sources of diversification, yield and return, we strive to bring you a varied, nuanced perspective on the alternatives investment landscape. It's the perspective of an alternatives manager with 50 years’ experience; the perspective of 15 distinct alternative investment engines spanning private equity, private credit, hedge funds, real estate and real assets, and liquid alternatives; and the perspective of 700 professionals around the globe.

To deliver this rich, multi-dimensional picture, we challenged a diverse group of CEOs, CIOs and strategists from our USD 146 billion alternatives platform to provide a 12- to 18-month outlook for their respective markets and explore their most promising investment ideas over that time horizon. We have also included a macroeconomic overview from the alternatives perspective and a strategic framework for alternative asset allocation.

Please let us know if we can be of help in implementing any ideas presented or if you need additional information from any of our contributors.

On behalf of J.P. Morgan Asset Management, thank you for your continued trust and confidence.

Anton Pil
Global Head of Alternatives
Why the global economy—and markets—still have room to run

David Lebovitz, Global Market Strategist

Although some of the risks that have weighed on the global economy may be starting to fade, it is too soon to sound the all-clear. We anticipate that 2020 will be a year of moderate global growth and contained inflation, with risks skewed to the downside.

Expectations of a U.S.-China trade deal, accommodative monetary policy and a clearer timeline for Brexit have spurred equities to all-time highs, while interest rates remain well below year-ago levels. This apparent ebbing of geopolitical and policy uncertainty has coincided with a slight improvement in manufacturing activity—albeit from depressed levels—but this is occurring at a time when consumption is showing some signs of pause.

The trajectory of growth in 2020 will likely be uninspiring, with the rest of the world looking a bit better but the U.S. economy growing at a trend-like pace. The risk of recession should remain contained, but other risks may continue to build. The pace of profit growth looks set to decelerate further on the back of falling margins, which could potentially lead businesses to pull back on hiring. Further, geopolitical risks persist, leaving the economy and markets susceptible to a flare-up in the medium term.

MODERATE PACE OF ECONOMIC GROWTH

Over the past year, while global manufacturing slid into contraction, the consumer once again rode to the rescue, helping to keep the global economy afloat. An improved inventory picture suggests that better times may lie ahead for the industrial economy, but we are not out of the woods yet. The overall pace of growth in the coming year should remain soft before gradually accelerating toward trend over the first half of the year.

Any improvement in manufacturing activity (EXHIBIT 1) should provide a lift to European and emerging markets

**EXHIBIT 1: GLOBAL PMI FOR MANUFACTURING AND SERVICES**

growth, while the fading drag from inventory drawdowns should allow the U.S. manufacturing sector to gradually come back online. Labor markets should continue to tighten, pushing wages higher and providing support for the consumer.

In aggregate, this should lead to an environment of moderate economic growth. The risk is that corporate profitability decelerates more sharply than we expect. S&P 500 profits look to have risen by about 5% in 2019, and we currently forecast low to mid single digit growth in 2020. However, that outcome will depend on what happens to profit margins. From a peak of 12.1% in 3Q18, operating margins fell to around 11.3% at the end of last year. If profit margins settle at 11% for 2020, earnings growth should be around 3%, but if they deteriorate below 11%, earnings growth will start to approach zero. And waning profitability could encourage companies to slow their pace of hiring, putting pressure on the consumer and therefore on the outlook for GDP growth.

INFLATION AND MONETARY POLICY

Moderate economic growth would suggest limited risk of a significant pickup in inflation. Wage growth is not likely to accelerate meaningfully, and energy prices look set to remain range-bound. Beyond these cyclical factors, there are also structural forces at work. Little if any inflation in physical goods should keep a lid on overall inflation going forward; at the same time, aggregate demand is likely to remain soft, as the gains from capital markets and wages over the course of the cycle have accrued to wealthier individuals, who tend to spend less of their disposable income than those in lower income brackets. The bottom line: The pace of inflation should remain relatively steady.

Against this backdrop, policymakers will stand ready to act if the economic data begins to show signs of deterioration. With its mid cycle adjustment complete, the Federal Reserve (Fed) has said that policy will remain data dependent, while the European Central Bank (ECB) has stated that it is ready, willing and able to act if necessary. It is unclear what will come next from the Bank of Japan (BoJ), but a recently approved fiscal package should provide a lift to the Japanese economy in 2020. At the end of the day, accommodative global monetary policy looks set to continue providing support for the broader expansion.

INVESTMENT IMPLICATIONS

In sum, 2020 looks to be a year of moderate growth, contained inflation and accommodative policy. While the potential for a further deterioration in corporate profitability presents a risk to this view, a recession over the next 12 months is not our base case. But we may well see more of the geopolitical shocks that have buffeted the economy over the past 24 months, particularly with a U.S. presidential election on the horizon.

In this delicate investing environment, we look to mute portfolio volatility through a focus on quality companies and strategies that generate robust streams of income without adding to a portfolio’s equity risk. Investors who take this approach, we believe, can be well positioned to capture any upside in risk assets in a way that allows for a more comfortable ride. There will come a time to turn more defensive, but we have not yet reached that juncture—from where we sit, markets still have room to run.
Beyond the traditional lies a world of alternatives

Jamie Kramer, CFA, Head of Alternatives Solutions Group
Pulkit Sharma, CFA, Head of Alternatives Investments Strategy & Solutions

A recent innovation on the food front—a plant-based burger that echoes the flavor and texture of meat—has captured the attention of many people, including the authors of this article, a sustainability champion and a vegetarian. Moving beyond the traditional is a theme with parallels in asset management. Investors are increasingly reaching beyond traditional to alternative asset classes to achieve outcomes similar to or better than what they’ve realized from public markets.

Given high valuations in public equity markets and lower yields in fixed income, we believe alternatives offer a strong solution as investors look to mitigate those pain points. We hone our views by utilizing an alternatives framework that is essential to building resilient portfolios that are able to reach beyond the traditional. Alternative portfolio construction should be holistic, comprising three basic components: a core foundation (think of a burger patty), with assets such as core real assets and core private credit, designed to provide stable income with lower volatility; core complements (the burger bun), with assets such as hedge funds adding diversification and uncorrelated alpha; and return enhancers (burger toppings), with assets such as special situations and private equity seeking opportunistic returns.

ALTERNATIVES FRAMEWORK: OVERWEIGHT PREDICTABILITY AND DIVERSIFICATION

In Exhibit 1, we illustrate our alternatives framework, which we believe offers an innovative approach to investing in alternatives. It categorizes asset classes according to what they do for investor portfolios—not what they are. At the current market juncture, we suggest that investors overweight the components shown in purple.

Framework-driven portfolio construction: What role do different alternative categories play in the portfolio?

EXHIBIT 1: THE ALTERNATIVES SOLUTIONS BUILDING BLOCKS

| RETURN ENHANCERS | Global diversification and tactical/opportunistic returns |
| CORE COMPLEMENTS | Added diversification and/or enhanced returns |
| CORE FOUNDATION | Stable income with lower volatility, diversification and inflation sensitivity |

Source: J.P. Morgan Asset Management Alternatives Solutions Group. For illustrative purposes only.
Here’s how we come up with that particular focus: In the core foundation, we look to source returns from scalable categories with stable cash flows that are also diversifying vs. traditional assets; generally, we emphasize income and income growth over price appreciation. We think this is a prudent way to build portfolio resilience. In the core complements category, we like investments that focus on less trafficked and less transparent opportunities, as well as low beta categories that benefit from secular themes. Among return enhancers, we find attractive opportunities in special situations and categories of private equity, which can produce outsized returns across a market cycle. Right-sizing the mix of these various components should reflect an investor’s specific objectives and constraints. Later in the economic cycle, greater emphasis should be placed on the core foundation and core complements categories.

BEYOND THE TRADITIONAL WITHIN ALTERNATIVES

Beyond the traditional in the core foundation

Domestic core real estate is traditionally held in the core foundation. Beyond domestic real estate, investors can uncover a wide range of opportunities offering stable return streams from myriad cities and sectors. We recommend striking a global balance, with ideally 50% nondomestic. Beyond real estate are rapidly expanding segments including infrastructure and transportation, which offer greater income potential and diversification vs. both public markets and traditional real estate. Within private credit, investors can move past direct lending to find less crowded opportunities, from private residential mortgages to mezzanine commercial real estate lending.

Beyond the traditional in core complements

Moving beyond the traditional in hedge funds can take many forms. For example, beyond traditional quantitative investing are funds that can harness the power of machine learning (ML) to find new sources of uncorrelated alpha. ML systems identify patterns and continuously evolve to potentially enhance alpha generation across different market environments.

Beyond traditional long-short hedge funds are sustainable alpha strategies generating alpha from structural changes driven by long-term sustainability trends. For example, a strategy might identify winners and losers in a particular sector’s transition to a low carbon economy. Investors can earn attractive returns and have a positive impact by allocating capital to companies that are driving positive sustainable improvements and increasing the cost of capital for bad actors.

Beyond the traditional in return enhancers

Beyond the traditional in long-short hedge funds are sustainable alpha strategies generating alpha from structural changes driven by long-term sustainability trends. For example, a strategy might identify winners and losers in a particular sector’s transition to a low carbon economy. Investors can earn attractive returns and have a positive impact by allocating capital to companies that are driving positive sustainable improvements and increasing the cost of capital for bad actors.

CONCLUSION

Beyond the traditional lies a world of alternatives. Think about what role alternatives play in a portfolio. Focus on what they do rather than what they are (just as vegetarians and omnivores enjoy meatless burgers as a sustainable source of protein). Investors who use an outcomes-based approach that looks beyond the traditional within alternatives can craft a resilient portfolio, one that satisfies an appetite for income and alpha.
Opportunities in sustainability, next-generation digital and value

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Shrenick Shah, Head of Macro Strategies
Paul Zummo, CFA, Chief Investment Officer, J.P. Morgan Alternative Asset Management

Among the convictions shared by our hedge fund professionals investing across a diversity of strategies: Technological advances will continue to reshape the investment landscape in 2020, offering stock selection opportunities—some arising from ongoing tech disruption and others from investors’ utilization of sophisticated techniques such as machine learning. They also see excellent opportunities in sustainability themes, both long and short, as companies evolve their businesses and investors grow more supportive.

NEXT-GENERATION DIGITAL TRANSFORMATION

As tech spending continues across industries, our managers anticipate opportunities as digital transformation initiatives go mainstream, such as the broadening adoption of artificial intelligence, the build-out of public 5G networks and the growth of cloud computing. That should fuel capex\(^1\) and rising demand for software and services. Already, 5G telecom has been rolled out in Korea and China, and further expansion should create a tailwind for manufacturers, supply chains and telecoms, spurring M&A. This macro backdrop informs hedge fund strategies as our managers anticipate a new generation of industrial applications and opportunities such as connected cars, the internet of things (IoT) and smart cities.\(^2\)

They expect one advancement in particular—the increased application of machine learning—to continue making a material, positive impact on many industries, including finance and hedge funds. Statistical arbitrage managers apply machine learning techniques to the ever-increasing amounts of available data, producing unique alpha signals that drive returns. Those operating on shorter time horizons can often benefit from equity market volatility; the 2020 U.S. presidential election and other uncertainties may increase the attractiveness of such a strategy.

THE ASCENT OF SUSTAINABILITY

We believe that the hedge fund industry is at an inflection point: 2020 should be an important year for managers to increase the integration of environmental, social and governance (ESG) criteria and sustainability across their businesses and investment activities.\(^3\) Whereas ESG was previously seen as an approach to risk measurement, it has begun to be a broader consideration (EXHIBIT 1). Sustainability is becoming a driver of growth and a disrupter

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\(^1\) USD 1 trillion in capex, globally, is expected in the coming 10 to 15 years, accelerating in 2020 and 2021.

\(^2\) Cities that incorporate information and communication technologies to reduce resource consumption and wastage and lower costs in energy, transportation, utilities, etc.

\(^3\) Following a landmark 2019, when “climate emergency” was the Oxford Dictionaries Word of the Year.
The sustainability gap

EXHIBIT 1: % OF INVESTORS VS. MANAGERS WHO THINK ESG WILL BECOME MORE IMPORTANT IN THE NEXT 5 YEARS

<table>
<thead>
<tr>
<th>Real estate</th>
<th>Infrastructure</th>
<th>Private equity</th>
<th>Private debt</th>
<th>Hedge funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>73%</td>
<td>75%</td>
<td>83%</td>
<td>83%</td>
<td>76%</td>
</tr>
<tr>
<td>3%</td>
<td>0%</td>
<td>1%</td>
<td>7%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Source: Preqin Investor, fund manager interviews; data as of November 30, 2018.

Creating investible, structural themes in the marketplace—from millennial habits to metals recycling—as consumers and governments put pressure on businesses to deliver more sustainable products and services. The fundamental changes involved in this transition to a lower carbon economy should influence medium-term money flows. Our managers call the risk-adjusted returns from this type of investing “sustainable alpha.” Sustainability-led disruption was first seen in power generation (in the shift from carbon-intensive fuels to wind and solar); the next sectors to experience it should include transport, agriculture, automotive, buildings and industrials.

While some sectors and businesses are leading this evolution, others are falling behind (none look more troubled than the commodities sector). Investing in sustainability will be crowded, making manager selection crucial. Active investors will be able to take full advantage of the theme across industries, through long and short exposures in different asset classes.

FACTOR INVESTORS EXPECT THE REBOUND OF VALUE

Our quantitative beta strategists say value, which has become extremely inexpensive, is one of their best bets. They expect a rebound to reverse a factor trend prevalent since early 2017. They see a bubble building among lower quality, higher growth names, so the opportunity is likely to come from shorting those rather than just being long the value factor. It is hard to say just when a catalyst could effect this rebound, however. One potential catalyst is a hiccup in the credit markets—highly levered companies in need of refinancing, for example, experiencing a hit to their bottom line.

In addition to finding many value stocks attractive, several other trends and areas across equities continue to present interesting opportunities. For instance, in biotechnology, advances in gene therapy and ongoing consolidation in the space continue to offer very good opportunities for those with the technical expertise to compete. Geographically, our hedge fund investors consider Asia an attractive region—particularly Japan, as positive trends in corporate governance continue to unlock value. Finally, a few overlooked areas present interesting, albeit selective, opportunities, such as special-purpose acquisition companies (SPACs) and closed-end fund arbitrage, including activism.

Riskwise, our hedge fund investors note that full valuations, an increased probability that a less business-friendly candidate could win the U.S. presidential election, strategy crowding and factor volatility all constitute downside risks.
For the better part of a decade, and in particular over the last five years, institutional investors have increasingly embraced the potential of equity investment in core private infrastructure assets: diversification, inflation protection and yield. Now, late in the economic cycle, they are asking how opportunities can best be seized and risks most effectively managed.

From a financing perspective, infrastructure debt is an increasingly mature market in which institutions compete against banks and sit together in new financing structures. We see no letup in the terms on offer for financing core assets—despite historically low base rates and cyclical, regulatory and political uncertainties.

**TOO MUCH MONEY CHASING TOO FEW DEALS?**

As a core infrastructure equity investor, we are hearing a refrain that has become more frequent in late cycle: “Too much money is chasing too few deals.” Yet this narrative doesn’t capture the full picture. Although significant capital has been raised, it is from a relatively low base, and private capital remains a small percentage of the market’s overall financing. And while equity returns have fallen on an absolute basis over time, in our view they remain quite attractive relative to traditional asset classes, particularly on a risk-adjusted basis.

We continue to find promising transactions for middle market regulated and contracted assets in OECD markets, mostly in the U.S. and Western Europe. Mid market transactions represent more than 90% of all infrastructure transactions, and they are generally insulated from the typically intense competition for large, core “trophy” assets—where the “too much money” narrative often arises (EXHIBIT 1).

Mid market transactions are generally insulated from the intense competition for large, core trophy assets.

**EXHIBIT 1: INFRASTRUCTURE TRANSACTIONS, 2010–19**

Source: J.P. Morgan Asset Management; data as of November 30, 2019.
Taking a “strategic platform investment” approach, we make bolt-on acquisitions and also deploy equity capital in our portfolio companies. This approach seeks more efficiently deployed capital and less competitive processes, while allowing us to enhance our existing businesses and management teams. Examples include adding solar assets to a broadly diversified solar portfolio and expanding a regulated utility into a new jurisdiction, organically or by acquisition.

As a debt investor, we focus on those sectors offering real barriers to entry and visibility of cash flows, noting that the “energy transition” away from fossil fuels is presenting challenges as well as new investment opportunities.

NOT STRAYING FROM THE CORE

We continue to view core infrastructure equity risk-adjusted returns as attractive on a relative basis. But as the “too much money chasing too few deals” narrative suggests, we are seeing some investors increase their risk tolerance in order to maintain expected returns. Whether that takes the form of investing in new geographies or sectors, the additional return does not come without additional risk.

Particularly in a late-cycle environment, we concentrate on assets that fit the established definition of “core,” chiefly the ability to provide clear visibility into long-term yield. True core infrastructure assets can offer low volatility, low correlation to equity and fixed income, and reliable cash yield streams. In late cycle, especially, we believe that diversification and downside protection will serve investors well.

ESG AND RENEWABLES

A focus on environmental, social and governance (ESG) considerations continues to be fundamental as we look to optimize risk-adjusted returns. An ESG focus aligns closely with the objectives of infrastructure investments, in both equity and debt.

For example, renewable energy’s environmental benefits are lifting both supply and demand in the sector, resulting in the availability of long-term contracts that are aligned with the investment objectives of the infrastructure asset class. Indeed, renewables have become a mainstream infrastructure sector in the past decade. We see evidence of that trend in both supply and demand dynamics.

- Boosting demand: new government targets for increasing renewable production’s share within the overall energy mix; changes in corporate strategy and consumer preferences that are broadly driving sustainable consumption and investment.

- Increasing supply: Greater economies of scale are delivering lower costs for wind and solar power generation, with wind/solar now the most cost-effective option for new generation in many jurisdictions. Energy-related infrastructure financing now makes up the bulk of new financing; renewable transactions’ value has caught up to conventional power and is far ahead in number (EXHIBIT 2).

Energy-related infrastructure financing now makes up the bulk of new financing

EXHIBIT 2: GLOBAL VALUE BY SECTOR (USD BILLION)

Investing in infrastructure debt, like infrastructure equity investing, puts ESG at the forefront. The alignment of renewable energy demand and supply drivers has spurred a sharp uptick in the need for financing. This will likely lead to greater infrastructure debt allocations to the renewables sector.
Increasing stability across sectors

Andrian R. Dacy, Chief Investment Officer, Global Transportation Group

Even as global transportation investments have grown in size and stature, the real asset class remains little known to institutional investors. Driven by decades of globalization, the diversity of transport assets has increased dramatically. Ranging from vessels and aircraft to rail and trucking, transport assets are integral components of global trade. While certain transport assets provide attractive opportunistic returns, a significant part of the market is core-plus—characterized by capital-intensive, stable, income-generating assets, contracted over long periods to high quality end users. The core-plus transport investment is a welcome environment for investors looking for reliable income protected by long-term leases, low leverage and the financial strength of high quality end users.

One compelling aspect of the core-plus transport sector is its end user (lessee) profile. While the transport market may be buffeted in the short term by trade tensions, regulatory changes or movements in demand, core-plus transport is protected from such vicissitudes by the balance sheets of its lessees, including energy majors, multinationals and airlines, among others. With lease durations ranging from five to 15 years, over the course of the lease a core-plus transport investor relies on the credit profile of the lessee and is insulated from market volatility.

MODEST TRADE WAR IMPACT

For a core-plus investor, monitoring the impact of market developments is an important risk assessment. The trade war has had a less severe impact on seaborne trade than many expected—with an estimated 0.5% decline in global seaborne trade for 2019. Of the three main shipping sectors (dry, wet and container), the dry cargo sector experienced the most significant fallout, as tariffs disrupted trade in agricultural products. Overall, substitutions in the supply chain mitigated the impact of the trade war (EXHIBIT 1), as we anticipated in our 2019 Global Alternatives Outlook. For example, instead of shipping soybeans from the U.S. directly to Asia, agricultural suppliers first shipped soybeans to South America, where they were mixed with South American soybeans and then transshipped to Asia.

In a similar fashion, some manufacturers moved operations out of China into Vietnam and other Southeast Asian markets. One result: Container trade from Southeast Asia to the U.S. increased over 30% in the first nine months of 2019 vs. a 7% decline in container trade from greater China to the U.S.

NEW CLEANER FUEL REGULATIONS IN 2020

As of January 1, 2020, a new International Maritime Organization regulation requires ships to meet more demanding fuel emission standards. To comply, vessels can either switch to low sulfur fuels or they can install exhaust gas cleaning systems (scrubbers) to reduce their emissions of sulfur oxide and nitrous oxide.

Over the past year, ships have been taken out of the market to install scrubbers. We expect these trends will continue in 2020, reducing industrywide supply growth and providing support for rates. We also anticipate that a number of older, less fuel-efficient ships will be demolished, further limiting supply. Finally, we project that average vessel speeds will slow to reduce fuel consumption. Such decreases in vessel speeds lead to supply contraction as vessels take longer to complete voyages, thereby supporting market rates.
As a core-plus investor, we focus on modern, fuel-efficient vessels; these are the most attractive to lessees with long-term, ESG-focused transportation requirements.

CONTINUED STABILITY IN AIRCRAFT LEASING

The aircraft leasing sector provides a clear example of the stability of core-plus transportation investing. Even in the depths of the financial crisis, when airline profits plummeted, aircraft lessor operating margins remained stable (EXHIBIT 2).

Long-term aircraft leasing contracts insulate a lessor from potential fluctuations in asset values and rates during periods of market stress. A core-plus transport portfolio will focus on quality counterparties, young aircraft and long term leases—airlines’ first leases typically run up to 12 years. The long duration of these leases provides an attractive, diversified source of income.

CONCLUSION

By focusing on capital-intensive assets, critical to the long-term requirements of high quality, often investment grade end users, core-plus transport investors can secure long-term, high single digit current yields over lease periods of five to 15 years.

Aircraft leasing (core-plus transport) has remained remarkably stable, even through the global financial crisis

Supply chain substitutions have mitigated the impact of the trade war

Source:Clarksons, MSI, J.P. Morgan estimates; data as of December 2019.

Source: Clarksons, MSI, J.P. Morgan estimates; data as of December 2019.

EXHIBIT 1: WORLD SEABORNE TRADE GROWTH BY SEGMENT, 2010–20

EXHIBIT 2: VOLATILITY ANALYSIS*

Source: Bloomberg, IATA, J.P. Morgan Asset Management.

*Index of profitability and passenger data; all numbers rebased to 100 with 2006 as base year.
Amid negative yields, opportunities to generate alpha above comparable public debt

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Jay DeWaltoff, Portfolio Manager, Commercial Mortgage Loans
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Jason Hempel and Jonathan Segal, Co-Chief Investment Officers, Highbridge Capital Management
Meg McClellan, Head of Private Credit, J.P. Morgan Global Alternatives

Our managers’ outlook unfolds against an unusual backdrop: a remarkable rate environment, in which the number of negative-yielding debt instruments is on the rise, with a powerful impact on private credit investing. If risk-free (and even corporate bond) rates’ plunge continues, private credit yield spreads may continue to widen—lifting demand and helping the asset class march into the mainstream.

A second 2020 theme is the strength of the U.S. consumer, in contrast to the concerns surrounding corporate credit, including high yield, leveraged loans and middle market direct lending. Corporate debt levels are at historical highs as debt service coverage ratios worsen, default rates gradually creep up, recoveries decline slightly and surveys show relatively low business confidence. While corporates and consumers are inextricably linked, and consumer confidence at publication time has shown some declines, U.S. consumers’ good health and continuing deleveraging make for a relatively much more attractive investment theme. Household debt service ratios, improving since the global financial crisis, are at 40-year lows. This is a supportive environment for mortgage lending opportunities, in particular.

Finally, a much-discussed trend looks to worsen in 2020: In a lenders’ race to the bottom, which some of our managers call a leveraged finance bubble, companies are overborrowing based on higher leverage multiples and “adjusted” EBITDA as an excess of private lenders compete by lowering their underwriting standards. This phenomenon points to potential future opportunities in special situations, distressed and other less liquid debt sectors if these overleveraged companies default. Our distressed investors see stresses building very slowly, and eventually they expect a downturn—though perhaps not in 2020—will open up many new opportunities.

ACCESSING U.S. CONSUMER STRENGTH WITH HOME LOANS

Amid nervousness about corporate lending, some of our investors like exposure to U.S. housing and consumer credit. Home prices are generally affordable (in most locations) by historical standards, and interest rates are low, yet tight credit standards for residential mortgage underwriting have made it hard for many qualified borrowers to get mortgages. (Further U.S. regulatory change set to reduce lending by Fannie Mae and Freddie Mac could also increase the market opportunity size for others.) One strategy our managers like is mortgage origination to the self-employed and other borrowers who are strong financially but are disqualified by their FICO score. These loans

1 2017 1%, 2018 near 2%, now 2.5%: slowly drifting higher.
2 The Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC).
have attractive coupons and are made at low loan-to-value, reducing default risk and providing a greater cushion in the event of a default. Another favored strategy: loans to U.S. consumers with very good credit quality to put solar panels on their rooftops.

**OTHER POTENTIAL 2020 OPPORTUNITIES**

Longer-duration, less liquid debt of mid cap public companies

At a time when the market places a high premium on liquidity, our investors see significant value and a more attractive risk-reward trade-off in less liquid, more off-the-radar issues of mid cap public companies, relative to those of larger and more liquid issuers (EXHIBIT 1). Pressure among distressed investors has also caused higher market pricing of risk premia in mid cap public debt, unrelated to intrinsic fundamentals vs. larger, more liquid companies. Niche opportunities may include small issuances; unrated securities; senior, secured direct loans at the top of the capital structure to underserved, midsize public companies; and debt instruments that are excluded from credit indices.

Distressed lending and nonperforming bank loans

Strategies that our hedge fund professionals favor include “re-performing” assets created during loan modifications and restructurings, or purchased at a discount after an issuer’s creditworthiness has been rerated. Some sectors of interest: medical equipment, health care (where commercialization has become more costly), pharmaceuticals, metals and mining, energy services and the highly disrupted retail and automotive sectors (the latter challenged by ride-sharing and battery power).

Credit is typically senior secured, first lien. Nonperforming loans on bank balance sheets are an opportunity that is, geographically speaking, most present in Europe due to post-financial crisis regulatory pressure. Our managers also point to hard-to-source, one-off (“bespoke”) European lending transactions with customized deal structures. In Europe, we may benefit because language and regulatory regimes have created a fragmented market, leading to high barriers to entry, which result in attractive pricing.

**Commercial mortgage loans (CMLs)**

Another mortgage strategy is core, high quality multifamily, industrial and office lending in the U.S., with a bias toward the South and West, regions experiencing strong population and job growth. Our CML investors find several positive trends reinforcing the opportunity to generate alpha above comparable public corporate debt, with attractive risk-adjusted returns well supported by stable commercial real estate fundamentals. Liquidity among all lender types remains very strong, with balance sheet lenders the preference of most sponsors, even if terms are less favorable than for structured products, such as commercial mortgage-backed securities (CMBS). In addition, Fannie and Freddie have made a policy shift, closing some loopholes that will allow private capital to be more competitive on multifamily loans.

**RISKS**

All these private credit strategies involve risks, beginning with default risk in the event of a recession, a spike in unemployment or a severe downturn in, for example, earnings or home prices. An escalation of the ongoing trade war, if it caused volatility and a risk-off environment, would hurt these strategies’ currently wide spreads above public corporate debt. A weakening of underlying U.S. macro fundamentals would cause damage to commercial real estate in turn.

One of our large credit strategies is currently positioned defensively in relation to looming macro risks, with the expectation that when spreads of high yield bonds to Treasuries do widen, as contagion potentially spreads outward from an isolated credit incident, they will aggressively position to provide liquidity at fair levels of risk-reward.

Whatever their strategy, private credit managers will be well served by a deep understanding of fundamental credit analysis (using proprietary analysis as well as traditional credit metrics), structuring expertise and underwriting discipline.

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**EXHIBIT 1: MIDDLE MARKET VS. LARGE CAP CORPORATE LENDING SPREADS**

Source: S&P LCD; data as of September 30, 2019.
As we enter 2020, we see global challenges as well as opportunities in the private equity (PE) markets. Fundraising continues apace, investor demand is strong, dry powder remains available, and competition is intensifying (EXHIBIT 1). However, unique opportunities remain for those with discipline and a focused approach.

We see little reason to expect the current competitive environment to change in the near to midterm absent a recessionary or geopolitically induced major dip in capital markets, or a significant upturn in interest rates—which are not our base-case assumptions. Debt financing continues to be accessible at low rates, supporting valuations and activity. Demand for the above-public market returns needed to reach investors’ overall return targets remains robust. Investors are rebalancing out of appreciating public equity holdings and into PE to maintain strategic allocations.

For investors with experience and specialized skills, opportunities can be found. The world economy is still growing, albeit modestly in the U.S., Europe and Japan, and at a declining, though relatively healthy, rate in

Dry powder continues to pile up, with the vast majority in funds over USD 1 billion

EXHIBIT 1: PRIVATE EQUITY DRY POWDER, BY FUND SIZE

Source: PitchBook; data as of February 2019.
*As of June 30, 2018.
China as markets seemingly continue to outperform initial forecasts. While the PE market is competitive, the smaller end of the market continues to offer opportunities for disciplined investors, and value can be realized through the creation of unique platforms or investment in companies that may have return-enhancing synergies with existing portfolio companies.

Perhaps most encouraging, the pace of technological change and innovation is accelerating globally and, we believe, will continue to be a major source of opportunity for PE investors.

OPPORTUNITY: WHERE GROWTH AND INNOVATION MEET EXPERIENCE AND COMMON SENSE

As we emphasized in our 2019 outlook, investing gets harder when fundraising gets easier. But working with experienced, skilled managers can help investors realize their PE objectives across markets and environments. We would add: Be patient. If the right opportunity isn’t presenting itself, wait for it.

Small to midsize private companies

While corporate finance deals are increasingly competitive, we still see attractive opportunities in firms with revenues of USD 10 million to USD 100 million. These investments tend to stay below the radar and be less leveraged, with less inflated valuations than more prominent mega deals. We continue to rely on a global, bottom-up approach, looking for solid investment opportunities wherever they may lie rather than trying to fill prescribed, relatively fixed allocation buckets. Outside the U.S., our focus is on opportunities in Europe. On the venture capital/growth side, the U.S. remains our primary focus, while the high growth areas of China and, selectively, India represent additional areas of opportunity.

Innovation: Assessing the likely winners

Realistically, innovation is far more likely to emerge from smaller, lesser known, private enterprises than from large, visible, public companies—making high growth opportunities difficult to find.

Where will these opportunities be found? E-commerce, cybersecurity and software as a service (SaaS) are a few areas where we continue to see tremendous promise. That said, it is incredibly difficult to see the world as entrepreneurs do; conventional wisdom often dismisses tremendous opportunity as business as usual or even irrelevant. Think Amazon, for example, debating as an online bookseller (at least, viewed through a traditional lens) and now a multi-faceted, dynamic company valued at well over USD 800 billion. Of course, not all companies fare as well in the public market. Some may perceive the recent short-term performance of several high profile company IPOs as representative of a broadly difficult and unattractive public market. In reality, venture-backed IPOs over the past 10 years have performed well, up 25% in the first 12 months following their IPOs. Individual company performance is a reminder of the public market’s volatility as it looks for businesses with solid unit economics and strong governance. In our view, the public market continues to represent exit and liquidity opportunities for venture-backed companies with solid vision and strategies.

How then can investors separate the winners from the losers?

The key is having access to unique new economy opportunities and the specialized skills and experience to assess the long-term potential of innovative startups and their management teams. Investors also need to be diversified and consider their own risk-return objectives: Getting in on the ground floor can be very lucrative, while allocating to some later-stage investments may provide attractive returns with less risk.

Sustainable investing: Environmental, social and governance (ESG) factors

A business, to be successful, has to make sense for the long term and be aligned with customers’ values. It must deliver a product or service that consumers need, is easy to use and is produced in a way that not only generates returns but exercises strong governance; protects the rights and well-being of labor, management, consumers and investors; and strives to mitigate environmental risks.

We are encouraged by investors’ increasing focus on these ESG dimensions, which have always been an integral component of our investment due diligence and ongoing monitoring processes. We view ESG factors as common-sense guidelines to be reviewed holistically in assessing the material risks and potential opportunities that can make companies or PE managers more or less attractive for investment. We have an established philosophy and approach to incorporating ESG factors into our investment process and actively encourage and help the portfolio companies and managers with which we invest to carefully consider ESG factors in their own business and investment practices.

1 As of December 5, 2019.
2 FactSet, Thomson Reuters, as of December 5, 2019.
Building a diversified core real estate allocation for income and stability

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David Chen, Chief Investment Officer, Real Estate Asia Pacific
Tony Manno, President and Chief Investment Officer, Security Capital Research & Management, Inc.
Pete Reilly, Chief Investment Officer, Real Estate Europe
Doug Schwartz, Chief Investment Officer, Real Estate Americas
Alan Supple, Head of Global Real Estate Securities

Economies are another year further along in their mid to late cycles, and many asset classes, including real estate, are generally fully priced. In past cycles, investors concerned about cyclical downturns relied on bonds as a source of income and stability. In a low to negative rate environment, that portfolio insurance comes at a cost.

In our view, a well-diversified core real estate allocation can help address investors’ needs for income and portfolio ballast. Core real estate has become increasingly global while, at the same time, structural shifts within real estate markets have broadened the range of core investment opportunities beyond traditional property types. Together, these trends are providing investors with an expanded set of building blocks for constructing diversified core portfolios.

To be sure, there are pockets of opportunity across the global core, value-added and opportunistic sectors. However, our outlook this year focuses on regions and sectors within core real estate that our specialists view not as off-the-chart return opportunities but as particularly suitable for building core allocations with the stable income streams and downside protection so many investors are seeking.

U.S.—BEYOND THE TRADITIONAL CORE

“Core real estate” refers to assets whose returns are mainly from stable cash flows, generated by high quality, well-leased properties in gateway markets. But the term “core” also reflects the central role of these properties in the functioning of an economy. As economies evolve, through technology, demographics and other structural trends, so too does the definition of core—and core allocations need to adapt.

REITs, given their specialized operational expertise and platforms, have laid the groundwork for the evolution of core investing beyond the four major property types (office, residential, retail and industrial) into what we refer to as “extended core” sectors (such as single family rentals, hotels and health care facilities). These less traditional sectors now account for over 40% of the U.S. REIT market cap—but less than 5.0% of the market cap of the NFI-Open-End-Diversified Core Equity (ODCE) Index (EXHIBIT 1).

We expect extended core sectors to make up an increasing share of private real estate allocations as investors come to better understand these opportunities and their risks and roles in a diversified core portfolio. Among our investment team’s preferred extended core opportunities:

**Single family rentals:** Technology has given REITs and, more recently, private real estate managers a platform for buying, managing and renting a large number of single family properties, spread over a broad geography, allowing
The definition of core allocations is evolving.

EXHIBIT 1: U.S. REIT AND U.S. PRIVATE REAL ESTATE PROPERTY TYPE COMPONENTS

<table>
<thead>
<tr>
<th>Traditional core:* 82.4%</th>
<th>Office: 11.9%</th>
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<tbody>
<tr>
<td></td>
<td>Apartment: 15.5%</td>
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<td>Retail: 13.4%</td>
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<td></td>
<td>Industrial: 12.5%</td>
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<td>Diversified: 4.1%</td>
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<td>Extended core: 17.6%</td>
<td><strong>Industrial category includes classification of industrial mixed.</strong></td>
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<tr>
<th>Traditional core: ** 57.5%</th>
<th>Office: 11.9%</th>
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<tbody>
<tr>
<td></td>
<td>Apartment: 15.5%</td>
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<tr>
<td></td>
<td>Retail: 13.4%</td>
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<tr>
<td></td>
<td>Industrial: 12.5%</td>
</tr>
<tr>
<td></td>
<td>Diversified: 4.1%</td>
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<tr>
<td>Extended core: 42.5%</td>
<td><strong>Industrial category includes classification of industrial mixed.</strong></td>
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<tr>
<td>Self-storage: 7.9%</td>
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<tr>
<td>Hotel: 4.9%</td>
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<tr>
<td>Student housing: 0.8%</td>
<td></td>
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<tr>
<td>Health care: 13.3%</td>
<td></td>
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<tr>
<td>Man. homes: 3.0%</td>
<td></td>
</tr>
<tr>
<td>Data centers: 10.7%</td>
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<tr>
<td>Single family: 1.9%</td>
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</table>

<table>
<thead>
<tr>
<th>Traditional core: 95.4%</th>
<th>Office: 33.8%</th>
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<tbody>
<tr>
<td></td>
<td>Apartment: 25.3%</td>
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<tr>
<td></td>
<td>Retail: 17.1%</td>
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<tr>
<td></td>
<td>Industrial: 19.3%</td>
</tr>
<tr>
<td>Extended category: †† 4.6%</td>
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</table>

Source: Wilshire Associates for U.S. REITs—Wilshire US Real Estate Securities Index (WILRESI), National Council of Real Estate Investment Fiduciaries (NCREIF) for NFI-Open-End Diversified Core Equity Index (NFI-ODCE); data as of December 31, 1999 (~20 years ago) and September 30, 2019 (now/2019).

*WILRESI core components as of December 31, 1999—office: 22.8%, apartment: 21.1%, retail: 16.9%, industrial: 7.4%, diversified: 14.2%.

**Industrial category includes classification of industrial mixed.

†NFI-ODCE market cap represents equity only.

††Extended category includes classifications of land and other.

these properties to be run at attractive margins. The result is a new investment opportunity for institutional investors, with attractive return and diversification potential. We anticipate more private real estate managers entering this space, partnering with REITs or other third-party businesses with the required platforms and specialized expertise.

Biotech: Laboratories can be viewed as a specialized type of office space and another area in which REITs have laid the foundation for institutionalizing investment. This industry is growing rapidly around knowledge nodes and requires highly specialized and customized physical environments.

Self-storage: With low capital leasing intensity (i.e., relatively cheap to build and maintain), this surprisingly resilient sector offers investors an income-driven return with low beta to the overall real estate market.

Data centers: Tenant demand for this specialized extension of the industrial sector continues to rise, particularly for locations with access to cheap power, multiple internet connection points and low risk of natural disasters.

U.S. mezzanine debt

Real estate mezzanine (mezz) debt—when used to finance experienced borrowers’ investments in high quality, well-leased core assets in primary and fast-growing secondary markets—provides another opportunity for diversifying U.S. core real estate exposure while earning attractive yields.

Mezzanine loans are subordinate to senior loans and secured by the borrower’s equity in the underlying property. Core mezz generally offers a modest yield premium to high yield bonds or leveraged loans while maintaining robust covenants and loan structures.
Our U.S. mezz team favors two sectors for investors looking for income and diversification: high quality, well-leased multi-family properties, generally outside of the super-luxury apartment sector, and stabilized multi-tenant office buildings in established markets exhibiting strong employment growth.

**EUROPE—A HETEROGENEOUS CORE**

Overall, modest economic growth, low vacancy rates and limited new supply—combined with a still-cautious banking system—should support rental growth in major European markets. In the UK, where supply is somewhat less constrained, we are carefully monitoring the market as Brexit developments proceed and trade agreements evolve.

We highlight a few examples of the European core real estate market’s heterogeneous nature and diversification potential, given differences in regulation, demographics, taxation, politics and cyclical dynamics across economies:

**Apartments:** Many highly regulated residential markets (in Germany and the Nordic economies, for example), where specialized housing companies manage thousands of relatively low rent apartments, can provide stable, bond-like returns through both private and public real estate investment. In contrast, the fragmented, largely individually owned UK apartment market is slowly giving way to a private rental sector, with apartment complexes currently being developed akin to those in the U.S. This should lay the foundation for a strong residential investment market in the UK over the next three to five years.

**Offices:** As in the U.S., supply-demand dynamics are supportive of the office sector. Berlin, for example, is coming off a low base, and rents and capital values, in our view, still have room to rise toward those of other large German cities, despite significant rental growth in Berlin during the past several years. We believe the results of the UK’s recent general election have alleviated much of the political uncertainty that had concerned London occupiers and investors, freeing the city’s office market for more robust growth over the coming months and years.

**Logistics:** The U.S. is further along in the build-out and reconfiguration of the industrial supply chain. As Europe follows suit, and we think it will, we see opportunity for real estate managers and REITs to build the infill (“last mile”) industrial product that is required to satisfy consumers’ next-day delivery expectations.

**Peripheral economies:** In the context of a diversified global core portfolio, peripheral economies, such as those of Central and Eastern Europe or the Nordics, may offer attractive yields. However, care must be taken to distinguish between areas that are truly becoming “core”—growing, developing and becoming more liquid, transparent and established—and those that may address the need for yield but may not yet align with the risk-return parameters of private core real estate.

As in the U.S., we do see investors becoming more active in extended core sectors (self-storage, data centers, student housing, etc.). This is particularly true among REITs with the specific operating expertise and platforms required to invest prudently in them. However, since many of these sectors are, relatively speaking, in their infancies in Europe vs. the U.S., it may take longer for these core opportunities to become accessible in Europe at scale.

**ASIA PACIFIC—STILL GROWING ITS TRADITIONAL CORE**

The Asia Pacific region (APAC) appears to be at a slightly earlier stage of the economic cycle vs. the U.S. and Europe. While growth is slowing, especially in China, APAC economies are holding up quite well—as is real estate transaction volume—and fundamentals remain sound. APAC core real estate returns and the diversification opportunities the market can provide are attracting investors’ attention globally. Here are a few of its key diversifying opportunities:

**Logistics:** Our APAC team has strong conviction in this expanding sector. A growing middle class driving consumption and regional trade, together with high and rising e-commerce penetration rates (EXHIBIT 2), a shortage of modern warehouses and, in some markets, the land to build them on should support returns and future growth.

**Offices:** Core office markets are tight or expected to tighten, with vacancy rates for Singapore, major Japanese cities and Sydney, Melbourne and Auckland projected to be at or below 6% by 2021. Eight distinct countries or economies account for 90% of APAC’s core office market—the largest investible core real estate market

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1 As used here, “modern warehouses” generally refers to those built within the last five to 10 years. Compared with older facilities, they tend to have greater functionality, greater capacity, floor loading, more automated systems for racking and distribution, redundant power sources, etc.—features needed to support e-commerce.
in the region—providing building blocks for a well-diversified core office allocation.

Residential: Multi-family markets in major cities in Japan remain attractive. Occupier demand is supported by small household formation and positive net migration from within and outside of Japan, given favorable job prospects in these cities. With supply constrained by rising construction costs, occupancy is anticipated to remain high and stable.

Of course, there are risks to our APAC outlook, most notably the impact of a potential trade war. We can’t predict that. What we can do is try to understand what’s behind tenant demand across the region and invest in those areas driven more by intraregional activity and less by international trade.

In summary, in this late-cycle, low to negative rate environment, global core real estate and its extended sectors offer investors a wide range of opportunities to address their need for income and stability.