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Bailard Wealth Management
Quarterly Review of Economic and Market Developments
Q2 2019

Huawei: How Trade Tensions Permeate National Security, Infrastructure and the Smartphone in Your Pocket

For Q2, Eric P. Leve, CFA (Bailard's Chief Investment Officer) chats with David H. Smith, CFA, Bailard's Senior Vice President of Domestic Equities.

Eric P. Leve, CFA: The Chinese company Huawei has captured a lion's share of headlines and emerged as a fundamental issue in the current trade hostilities between China and the U.S. Dave, can you give a thumbnail sketch on the company and why it's so important?

David H. Smith, CFA: First, Huawei is massive. But being a private company, it has been underappreciated in the West and, particularly, in the U.S. As the #2 smartphone manufacturer in the world by volume, Huawei leads Apple, trails only Samsung and boasts remarkably strong market share in both Asia and Europe. It leads in telecommunications equipment and is widely expected to play a crucial role in the upcoming global move to 5G cellular technology. In May, Goldman Sachs estimated Huawei's market share in wireless hardware at 35% in Europe, 40% in the Middle East and 30% in Latin America. Huawei claims almost 200,000 employees and

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last year broke through $100 billion in annual revenue, placing at #72 on the 2018 Forbes Global 500 list, just behind Microsoft. In addition to strong technology and market share, Huawei's revenue growth has been strong at 39% year-over-year in the first quarter of 2019. This giant is one of the crown jewels of China. But, since 2016, the company has been a target as the U.S. has pushed nations across the globe to diversify away from Huawei's technology, fearing that it could be a vehicle for espionage or include secret "back doors" for foreign hackers. These details are important to remember as we reflect on how this situation could evolve.

Eric: That's a great point. Looking at recent speeches by members of the Trump Administration, it's clear that the White House views China as the greatest threat to American hegemony. China is an economic powerhouse—the second largest globally—and is on its way to becoming a military one as well. When China was exporting cheap household goods, it was a boon to the U.S. consumer; now that China is supplying cutting-edge technology, it is perceived as a threat to America's companies and intellectual dominance. China achieved this feat through hard work but also, it seems, from abusive trade practices including forced technology transfer and the theft of intellectual property. Huawei embodies this fear. As you mentioned, the company is (or perhaps, was) poised to be a primary supplier of critical global telecommunications infrastructure. Huawei is likely more than a pawn in these discussions; this latest move from the U.S. represents an attempt to cut off China from controlling 5G and slow the nation's rise as a global technology super power. Dave, can you give us some color on the current situation and the potential impacts?

Dave: Of course. Huawei's situation is very fluid at the moment, with negotiations ongoing. The broadest and most hard hitting of the U.S. actions is the addition of Huawei to the Entity List by the Commerce Department, which was done in May in response to accusations of prohibited business with Iran. The addition to the Entity List restricts U.S. companies from selling any products or technology to Huawei. Further,

China is an economic powerhouse—the second largest globally—and is on its way to becoming a military one as well.

companies abroad are restricted from selling any product that contains U.S.-originated parts to Huawei. There are some exceptions, but the application of this rule is broad and includes parts as simple as pieces of plastic. In the age of modern supply chains and U.S. technology leadership the impact of this action is quite simply monumental. In many cases, U.S. firms are the world leaders and there may not be an acceptable foreign replacement. Further, sophisticated technology systems are not simply "plug and replace." Removing a supplier from a product can shut down production and force an intensive, lengthy redesign.

The second action the U.S. has taken is an executive order that designates China as an adversary and places restrictions on the use of Chinese telecommunications equipment. At the moment, Huawei's business in the U.S. is relatively small, but it has had some success with smaller rural networks. This business would be at risk: indeed, the order allows the Federal government to cancel contracts already in place. The timing of this executive order is under review as rural networks plead for more time to switch away from Huawei equipment. After the G20 meeting in June, President Trump stated he would remove some restrictions. However, comments from White House economic advisor Larry Kudlow suggested Huawei will remain on the Entity List but that the U.S. government will make some exceptions for products that pose no threat to national security. All together, these actions continue to look potent and if left in place are likely to continue to have wide-ranging impact, both on Huawei and its suppliers. Eric, can you think of a precedent for this type of action?

Eric: Industrial policy can be a dirty phrase, but it is

used by emerging countries to protect their nascent industries and larger countries to protect their market share. Throughout the 20th century it was a way to keep the challengers at bay. The difference this time is that the U.S. is competing with not just a radically-different economic system, but a political one. These enmeshed forces in China make any mercantile loss for the U.S. feel like a political loss as well. With that in mind, Dave, how do you think about the broader impact of Huawei on the technology sector?

Dave: The early pain in tech has been felt by direct suppliers of Huawei, including many semiconductor firms. Chipmakers designed into Huawei's mobile phones and networking equipment have been forced to slash revenue and profit estimates. Uncertainty has spiked with many firms across the globe still analyzing the impact of the restrictions and determining which sales are permissible and which are banned.

Longer term, my view is that more competition results in better and cheaper outcomes for consumers, and thus any action that reduces competition will be a net negative for consumers. Huawei telecommunications products have historically been selected because of solid reliability, advanced technology and low cost, and the company's mobile phones were highly reviewed and quite popular outside of the U.S. That said, it is abundantly clear that the U.S. intelligence agencies consider Huawei captive to the whims of the Chinese government and could be compelled to take actions against other nations. Under this worldview, the concept that this entity could be a dominant player in the backbone of the global telecommunications infrastructure market is a frightening one. To Huawei's competitors, this ban represents an opportunity to fill gaps. The end market demand for mobile phones and 5G technology will continue to roll on. While this action could delay individual projects as companies are forced to redesign systems, our research suggests the technological solutions will be there from other technology giants.

> A festering wound in the relationship between the two largest global economies represents persistent risk and opportunity cost for many multinational U.S. firms.

I grow increasingly concerned about the rising hostility. Retaliation can take many forms, from an outright ban on large companies to stoking nationalist sentiment against U.S. firms. A festering wound in the relationship between the two largest global economies represents persistent risk and opportunity cost for many multinational U.S. firms.

On that note, it's worth recalling that this is not the first time sanctions have been issued against a Chinese company. For those less familiar, in 2018 the U.S. slapped sanctions on a smaller Chinese telecommunications firm, ZTE, for its dealings with Iran. The ZTE comparison is an apt one given it was enacted, then settled by the current administration. Within 30 days of the sanctions, ZTE announced that it had ceased major operating activities, in large part because of lack of access to critical U.S. technology components. In a surprise turnaround the U.S. agreed to remove the ban two months later in exchange for a large monetary fine, corporate restructuring and new oversight by U.S. representatives.

The ZTE case was different in several fundamental ways. First, ZTE is significantly smaller than Huawei, about one tenth of the size. Additionally, as we mentioned earlier, there appear to be serious national security concerns about Huawei being an integral supplier of next generation telecommunications equipment; this could be a further headwind to resolution, particularly as the White House's appeals for other nations to avoid Huawei have largely fallen on deaf ears. The last contrast I would make is that ZTE appears to have been caught unaware by the breadth of the sanctions; Huawei's stocking of inventory may help prevent or delay a dramatic operations shutdown, although Huawei's CEO recently projected revenues 30% below the initial target. In the end, my hope is that cooler heads prevail and that a Huawei deal can be reached with additional provisions similar to ZTE. China may

still be willing to make concessions to “even the playing field” for U.S. firms, and both countries may be able to move forward under free and fair trade. Is this just wishful thinking, Eric?

Eric: Perhaps this can still happen. It’s worth recalling that only five years ago China banned Microsoft’s Windows operating system from government use, claiming that the newest release contained a secret “back door” in the source code that could enable espionage. Microsoft claimed this code was used for telemetry and reporting data and refused to share the code. In the end, Chinese officials and Microsoft teams collaborated and reviewed code: eventually Microsoft released a special version specifically for the Chinese government that excluded the reporting functionality. China then rescinded the ban.

The stakes are much higher today for the many reasons you’ve enumerated Dave. China will make concessions mostly because in a (near) future—when it is a net exporter of intellectual capital as opposed to the importer it has been historically—it will want exactly the kinds of protections the U.S. is now pursuing. The powerful benefits of free trade among nations can be set back at times but, in the end, it is a win for all parties.

Worried About the Next Real Estate Downturn?

Ronald W. Kaiser, CRE, is Bailard's Director of Real Estate Research

As we go longer into the current economic expansion, investors become ever more anxious about the next downturn. After all, the last one in 2008-2009 (known generally as the "Great Financial Crisis" or "GFC") was, to say the least, not much fun.

Though private real estate does not directly correlate with the broader public equity markets, its health is most assuredly dependent upon the strength of the economy. There have been four distinct real estate cycles since 1980 and, the real estate investment team at Bailard has learned that once a downturn begins, price adjustments come so quickly that there is almost no time or ability to make any material portfolio adjustments. Even in good markets, transactions (acquisitions, dispositions and financings) take two to four months to execute. And because it's impossible to "time the market," Bailard believes that the best way to protect against the most damaging effects of a real estate recession is to constantly monitor the markets, make appropriate adjustments in light of market indicators and maintain a well-diversified and defensively-postured portfolio.

As to the next real estate downturn, it is nearly impossible to divine what will trigger it, how deep it will be and/or how long it will last. Regardless, the Bailard real estate team is not overly worried about its impact on the portfolio, except in select instances. Looking at the historical record, another crash on the order of the GFC is highly unlikely; there have been only three in the past hundred years (as Bailard has previously described in some detail*):

- The 2008-2009 downturn was the result of a toxic mix of lax regulatory enforcement, irresponsible lenders, reckless investment bankers, negligent "independent" ratings agencies, over-eager/imprudent borrowers, impulsive/fee-hungry mortgage bankers and delinquent investors... all carelessly participating in the creation and dissemination of complicated financial products with little concern for the consequences of their collective actions.
- The 1988-1992 real estate depression resulted from incomprehensible over-building of all property types (especially office and multifamily) in virtually all markets around the country. Excessive debt availability was fueled by ill-considered (and, in some cases, criminal) lending practices engaged in by numerous banks and savings and loan companies (S&Ls). At the same time, government tax policy provided incentives for equity investors to do "non-economic" tax-oriented deals that distorted the normal relationship between risk and reward.
- Finally, the very painful and deeply analyzed Great Depression of 1929-1932 was the result, again, of excesses on the part of overhasty banks and exuberant/imprudent investors leading to massive over-building during the roaring 1920s. (For years, the Empire State Building, completed in 1927, was referred to as the "Empty State Building").

> Other downturns in the past 50 years were more muted and/or more localized, and did not particularly affect the national data trends.

* *The Long Cycle in Real Estate, Journal of Real Estate Research, Vol. 14, No.3, 1997.*

Other downturns in the past 50 years were more muted and/or more localized, and did not particularly affect the national data trends. A good example of this was the dot-com/telecom bust of 2000-2002. The real estate downturn in tech/telecom-heavy places like San Francisco, Seattle, Austin, Denver and Boston was severe. Other markets like Los Angeles, Dallas, Houston, Chicago, New York and Washington, DC barely felt a ripple. It may well be that the next pullback in real estate will be local and/or limited.

Given the state of the U.S. economy today, and the reasonably good balance between supply and demand in most markets, the Bailard team sees just a few areas of vulnerability. True, there are some areas of excess reliance on debt—student loans, automobile financing and leveraged corporate loans—but practices in the commercial real estate industry have generally remained fairly prudent. In terms of any looming over-building, the most likely pain this time will be in office buildings that, because of their capital intensity, are always more sensitive to broad economic conditions.

Specifically, Bailard is concerned about those markets that in recent years have attracted a disproportionate share of equity and debt capital directed at developing new space at historically-significant levels. While all of the global gateway markets (Boston, New York, Washington DC, Chicago, Seattle, San Francisco and Los Angeles) have enjoyed enviable job and economic growth and commensurate additions to supply, the markets that are most vulnerable are those experiencing construction booms fueled by growth in the technology sector including Seattle, San Francisco and Boston. The table below reflects new office space that has become available since 2013, as well as the square footage (SF) that is currently under construction. Highlighted in tan, the Tech cluster markets are far and away looking at exceptional changes (SF currently available and under construction), notably Seattle with nearly a 23% increase from 2013. Time will tell but, at the risk of generalizing, it seems that Tech has a way of engendering animal spirits and excess.

There's another fascinating trend that's taken hold in this current economic expansion that's both independent of and inextricably linked to the Tech boom, to wit, the explosion of "co-working" alternatives. Though there are many different models, the one that has captured the most attention is WeWork. Unfortunately, not only because WeWork is growing at a breakneck pace but also because of WeWork's opacity, it is difficult to get reliable up-to-date statistics on the company. This much is known as of the first quarter, 2019:

1) WeWork was valued at $47 billion.
2) WeWork lost $1.9 billion in 2018 on $1.8 billion of revenue.
3) WeWork lost $264 million on $728 million in revenue in the first quarter of 2019 (better ratios than full-year 2018 thanks, in large part, to several one-time positive items).

Commercial Office Space Increases in Gateway Markets, as of 6/30/2019

	Office Supply as of Q1-2013 (SF, 000s)	Current Office Supply (SF, 000s)	% Change	Current Construction (SF, 000s)	% of Existing Supply	Total Change in Supply (SF, 000s)	Total % Change
New York	571,623	582,052	1.8%	18,507	3.2%	28,936	5.1%
Los Angeles	266,814	269,267	0.9%	5,811	2.2%	8,264	3.1%
Chicago	175,834	180,405	2.6%	7,092	3.9%	11,663	6.6%
Washington, D.C.	172,565	177,855	3.1%	5,958	3.3%	11,248	6.5%
Boston	97,061	103,341	6.5%	5,196	5.0%	11,476	11.8%
Seattle	75,067	88,789	18.3%	3,496	3.9%	17,218	22.9%
San Francisco	56,129	60,990	8.7%	1,250	2.0%	6,111	10.9%
Total	1,415,093	1,462,699	3.4%	47,310	3.3%	94,916	6.7%

Source: CoStar, Bailard Research.

> Time will tell if WeWork's backers (and management) have a chair to sit in when the music stops.

4) WeWork is eager to go public to fuel its growth and cash-out its private investors.
5) WeWork's business model generally involves signing long-term (i.e., ten-year) leases and then breaking that space into smaller increments to sub-lease (on a short-term basis) to start-ups, free-lancers and even some larger enterprises.
6) WeWork is the largest tenant in Manhattan (the second most expensive office market in the United States)… with approximately 5.4 million square feet of space under lease, surpassing JP Morgan Chase in September, 2018.
7) WeWork claims to have 425 locations and 400,000 members.

Unfortunately for WeWork, the scheme of taking on long-term liabilities and paying for them with short-term assets has been tried many times before… and it generally hasn't ended well. In fact, it hearkens back to the S&L excesses and "mis-matches" that were the proximate cause of the 1988-1992 real estate depression referenced above. Again, time will tell if WeWork's backers (and management) have a chair to sit in when the music stops.

What are some safe strategies to pursue either while waiting for, or in anticipation of, a correction? Some obvious answers come to light:

- Prudently capitalize assets and only utilize modest leverage. It's important to make sure that property debt can be serviced comfortably even if rents drop 25% and occupancy hits 70%.
- Invest in cities where—while there is economic growth—rent levels have not risen to the point that developers can earn ready profits. Outside of the Tech markets, most metros would qualify.
- Source grocery-anchored and "necessity" retail, quality industrial leased to credit tenants and multifamily properties in markets with solid job, population and household formation growth metrics. Each of these should hold up fairly well.
- Finally, refrain from speculative office development where, because of the time involved from conceptualization to lease-up, the investor is in greater peril of being in the wrong place at the wrong time when an economic downturn strikes.

Exposure to private equity real estate is intended to serve as a portfolio diversifier. At Bailard, the belief is that as long one "buys right"—that is, invests in good quality real estate at a fair price in markets with strong fundamentals—then one should be able to weather quite safely all but the most severe economic storms.

The Appeal of Municipal Bonds in the Era of the Tax Cuts and Jobs Act of 2017

Linda M. Beck, CFA is a Senior Vice President of Bailard and the Director of Fixed Income

The Tax Cuts and Jobs Act of 2017 (TCJA) had a significant impact on the supply, demand and relative value of municipal bonds. The TCJA reduced taxes for many Americans by raising the standard deduction, doubling the child tax credit and reducing the top personal marginal tax rate. However, it also capped the amount of state and local tax deductions (SALT) and curtailed the mortgage interest deduction. The Act slashed corporate income tax rates and virtually eliminated tax-exempt advanced refundings for municipal bonds.

The Effect on Demand for Municipal Bonds

For roughly 65% of Americans, the TCJA did generate tax cuts; although at an average of only $1,200, the tax cut was less than the $4,000 advertised by the Trump Administration. The top marginal tax rate was cut from 39.6% to 37.0%. Normally, lower tax rates would translate to decreased demand for tax-free municipal bonds; however, this decline was too small to impact demand. In fact, the cap on the SALT deductions and the curtailment of the home mortgage interest deduction led many investors in high-tax states to increase their municipal bond purchases. Prior to the TCJA, taxpayers in California, New Jersey and New York claimed an average SALT deduction of over $17,000. The cap eliminated about 40% of this average deduction, and negatively impacted approximately 11 million taxpayers. With the changed deduction rules, owning municipal bonds became one of the few remaining ways to reduce tax payments to the federal government.

The TCJA also dramatically reduced the number of taxpayers who pay the individual alternative minimum tax (AMT). Prior to the Act, the number of individuals paying the AMT grew as the tax system was adjusted for inflation, but the dollar threshold for the AMT was not. Over time, when Congress lowered individual tax rates, they lowered normal tax rates but not the AMT rates, so more and more Americans became subject to the tax. The TCJA reduced the number of taxpayers subject to the AMT from about five million to only about 200,000 currently. This adjustment, as well as the SALT cap and limit on mortgage interest are all set to end by 2025. Higher taxes for individuals in high-tax states, along with this year's more dovish stance by the Federal Reserve and a slowing economy, have further stoked bond purchases. Municipal bond mutual funds have had positive flows every week in 2019, and inflows into municipal funds totaled $36.8 billion through June 30, making this the third largest annual net inflow ever and the highest inflows in the first half of the year for nearly three decades.

Municipal bond mutual funds have had positive flows every week in 2019, and inflows totaled $36.8 billion through June 30.

Although the changes in the tax code—coupled with the current monetary and economic environment—increased the demand for municipal bonds, the change to the corporate tax rate offset some demand. Insurance companies and banks have traditionally been big buyers of municipal bonds (owning about 28% of all outstanding municipals). The TCJA cut the top U.S. corporate tax rate from 35% down to 21%. This brought the U.S. rate below the average for most other Organizations for Economic Co-operation and Development countries. With lower taxes, many insurance companies and banks were less motived to buy tax-exempt bonds. That said, these companies have other reasons for holding their municipal bonds aside from the tax advantages. These include low correlation

with other assets, low default rates and built-up income through "book yield" portfolio management.

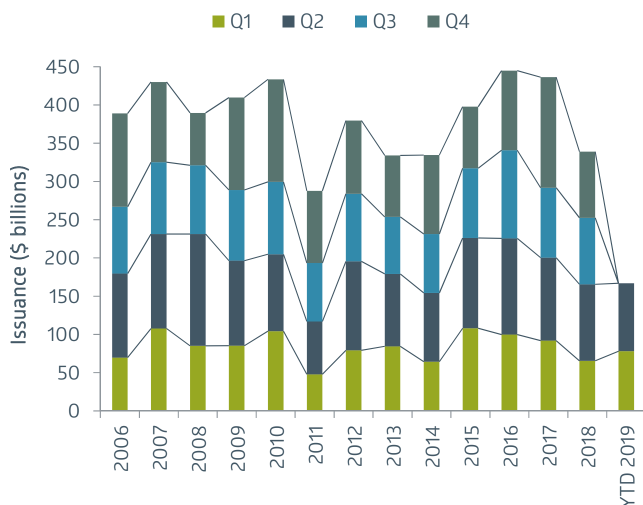
Supply Changing Too

While the TCJA stimulated demand for municipal bonds, it also reduced supply. The TCJA eliminated the ability of municipalities to advance refund bonds. Before the Act, municipalities would issue new bonds to pay off another outstanding bond, in order to lower borrowing costs when interest rates declined. The TCJA made the previously tax-exempt interest on advance refunding bonds taxable, all but eliminating the appeal. Advance refunding issuance, which typically accounts for about 20% of bond issuance, largely disappeared starting in 2018. As seen in the graphs below, 2018 municipal supply dropped 25% from the prior year. Evaluating the supply by tax status reveals that refunding volume also decreased in 2018, by 60%. Supply in 2019 has thus far been continuing at a low level. Despite significant infrastructure and capital needs, many municipalities are not issuing bonds as they try to keep spending in line with tax revenues. Cash flow from tax revenues is positive but constrained, as revenues flow from the slowly-expanding economy. Any hopes of new major infrastructure projects (which could increase bond issuance) are fading as current plans have reached a political impasse.

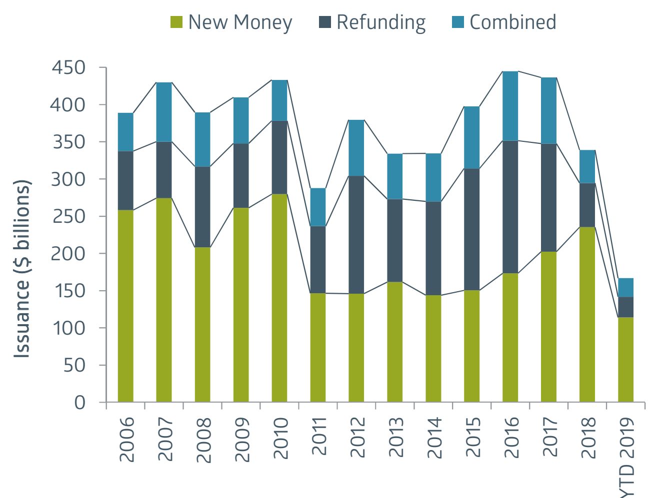
Looking at the Fundamentals of the Municipal Credit Market

Municipal credit fundamentals are positive, with tax receipts flowing in from the long period of economic growth. Positive credit fundamentals, in concert with strong demand and with low supply, have been driving up the market value of municipal bonds. One way to gauge the value of municipal bonds relative to other securities is to compare yields of AAA rated municipal bonds with yields of relatively risk-free U.S. Treasury bonds. By dividing the yield of AAA municipal bonds by similar maturity "risk-free" Treasuries, you can gauge their relative value. At the start of the year, this ratio for 10-year securities stood at 85%, close to its long-term (30-year) historical average. A ratio of 85% means that anyone paying in excess of a 15% federal tax rate would obtain more after-tax income by owning a municipal bond rather than a Treasury. However, investors generally demand a higher after-tax yield on municipals than treasuries to compensate for the lower liquidity and higher credit risk of municipal bonds. As demand continued to increase in 2019 and supply remained tepid, this supply/demand imbalance drove the relative value ratio down to 73% by April. Municipal ratios for short-dated maturities are typically even lower than for longer-dated maturities. As these ratios reached low levels through much of 2018 and 2019, it

Municipal Supply by Quarter



Municipal Supply by Tax Status



Source: Bond Buyer.

was often profitable for even the highest-taxed investors to diversify into either Federally-taxable (but still state tax free) municipal bonds or to purchase corporate bonds (which are subject to both federal and state tax). At low ratios, diversifying into these other bond sectors boosted investors' after-tax income, even when paying the taxes.

Municipal bonds issued by high-tax states (think California, New York and Oregon) have richened significantly relative to similarly-rated bonds issued out-of-state. This is due to extremely high demand from in-state investors seeking the shelter of double tax-free income. As of June 30, short-dated municipal bonds issued in California were trading at about a 0.30% lower yield than out-of-state bonds.

Investors can also add yield to their portfolios by buying bonds subject to the AMT. With so few investors now being subject to the AMT, more individuals can buy the bonds without a tax penalty. These private activity bonds typically yield 0.25% to 0.35% more than similar rated non-AMT bonds. Investing in bonds maturing prior to the 2025 (when the AMT revision ends) is particularly attractive.

Longer term, the aging of the U.S. population and the wave of retiring baby boomers should add to demand for municipal bonds. The outlook for supply remains constrained unless a large infrastructure program gets approved and passed. These positive technical dynamics should keep municipal bonds trading at richer market values than otherwise; however, they remain an attractive investment for investors seeking relatively stable tax-free income.

Perspectives from Bailard's SRII Group: Pushing for Progress in Standardized ESG Reporting

Blaine Townsend, CIMC®, CIMA® is a Senior Vice President and the Director of Bailard's Sustainable, Responsible and Impact Investing group.

This year, Bailard celebrates its 50th anniversary. It's a compelling prompt to look back and see how far we've come. When the firm was founded, the accepted role of a company (and its sole focus) was to drive growth. But, we believe, this shorted-sighted emphasis of value over values failed to account for certain risks including legal, reputational and supply chain among others. The last decade has been a reckoning, but it's well past time we account for and measure business success by multiple factors: financial and performance as well as environmental, social and ethical.

Judging by financial and performance metrics, the post-World War II economy boomed. But the emphasis on growth created incentives for governance scandals, including those featuring Penn Central Railway, Equity Funding Corporation of America and Allied Crude Vegetable Oil Refining Corp. In the 1970s, the Securities and Exchange Commission prompted the New York Stock Exchange to require public companies to have an audit committee composed of all independent board directors. Board governance has since further improved with the introduction of audit committees, nomination committees, compensation committees and limiting manager-appointed board members. Progress.

On paper, the Civil Rights Act of 1964 outlawed discrimination based on race, color, religion, sex or national origin. But the power to enforce the act was limited. A year before Bailard's founding, President Lyndon Johnson signed an executive order prohibiting sex discrimination by government contractors and requiring affirmative action plans for hiring women. Court cases later set precedent and solidified protection of women and minority rights, particularly those in the office. Progress.

A 1969 blowout on a Union Oil rig in Santa Barbara set off one of the worst environmental disasters in U.S. history. For two weeks, oil flooded the California coast, fouling beaches and killing thousands of birds and marine animals. Yet out of this catastrophe, an environmental movement was born. On April 20, 1970, activists marched down Wall Street to declare the first Earth Day, and the U.S. Department of Environmental Protection was founded in December of the same year. Progress.

The New Regulators

It took corporate fraud, years of discrimination and a devastating oil spill to catalyze corporate, social and environmental policy changes. And though there have always been outlier companies that welcome their responsibilities as great corporate citizens, it did take policy or legal precedent to shift the tide—to set and mandate the "new normal." This reliance on regulators is a luxury, we believe, investors can no longer afford. Today's regulators can't or won't act to effect change. And even if they did, corporations yield more power in the Beltway than they once did. In many ways, we've reverted to our post-World War II business mentality. And in this pursuit of growth, investor sentiment yields power. In our opinion, the greatest regulators now are investors. But to regulate effectively, these investors need accurate, standardized data about the things they value; data that, like financial reporting, is standardized, measured, reported and audited. Without that same standardized approach to environmental, social and governance (ESG) reporting, investors can't accurately assess and compare the triple bottom lines of public institutions.

A Growing Investor Need

There's been progress in non-financial reporting over the last half-century—but it was hard-fought and arguably still isn't as effective as investors need. Initiatives like the Dow Jones Sustainability Index or the Carbon Disclosure Project relied heavily on voluntary self-reporting by companies and the development of sustainability rating systems by various stakeholders and data providers. So data was measured and reported, but not necessarily standardized from one firm to the next and not audited by an impartial third party.

Corporate culture or social reporting is similarly flawed. Employee reporting tools like Glassdoor and FairyGodBoss allow for more transparency, and some semblance of checks and balances, but they still lack standardization in how to measure data and how to convert qualitative insight into quantitative reporting. There's limited opportunity to audit these inputs, except through whistleblowers or investigative reporters and analysts, and these reports rarely tie social qualitative data to a company's financial performance. There's been some progress here. Bloomberg launched a gender-equality index in 2016. Though the data isn't audited or otherwise verified by a third party, it standardizes specific metrics and provides guidance on how to measure them. Not all companies that submit data are included in the index, and those that do aren't ranked.

These examples show there are frameworks in place, and many companies do volunteer impact metrics. Some even pay to audit that information. At this point, standardization is the most challenging issue: from firm to firm, and from one industry to the next. How might an investor compare environmental "returns" in a technology company vs. a transportation company?

Founded in 2011, the Sustainability Accounting Standards Board (SASB) aspires to create a unified standard of what nonfinancial factors public companies should report and how they should report them. And it's acknowledged that comparing one industry to another is difficult. Last November, SASB launched a set of 77 codified standards, providing a complete set of global, industry-specific standards that identify financially material sustainability metrics for a typical company in an industry. It also created a "materiality map" to help investors and companies identify which sustainability metrics have the greatest chance to affect financial performance. Crucial intelligence for investors.

It took corporate fraud, years of discrimination and a devastating oil spill to catalyze corporate, social and environmental policy changes.

This Is Not a Drill

ESG—what we call SRII, or sustainable, responsible and impact investing—is not just a dogooder trend. We believe these metrics are correlated to financial viability. And, in our SRII work, their accuracy is paramount to inform risk modeling and to accurately price financial products. Until support comes from Congress and other regulatory bodies, the responsibility of due diligence falls to the investor.

We take this responsibility seriously and vet potential investments thoroughly. In our SRII portfolios, we've created models that leverage self-reported and third-party data and account for shifts in industries in order to inform our investment strategies. But the accuracy of this system is only as strong as the data.

Closing Brief: Bailard's View on the Economy and Market Performance

Art Micheletti, CFA, Economic Consultant

U.S. Economy

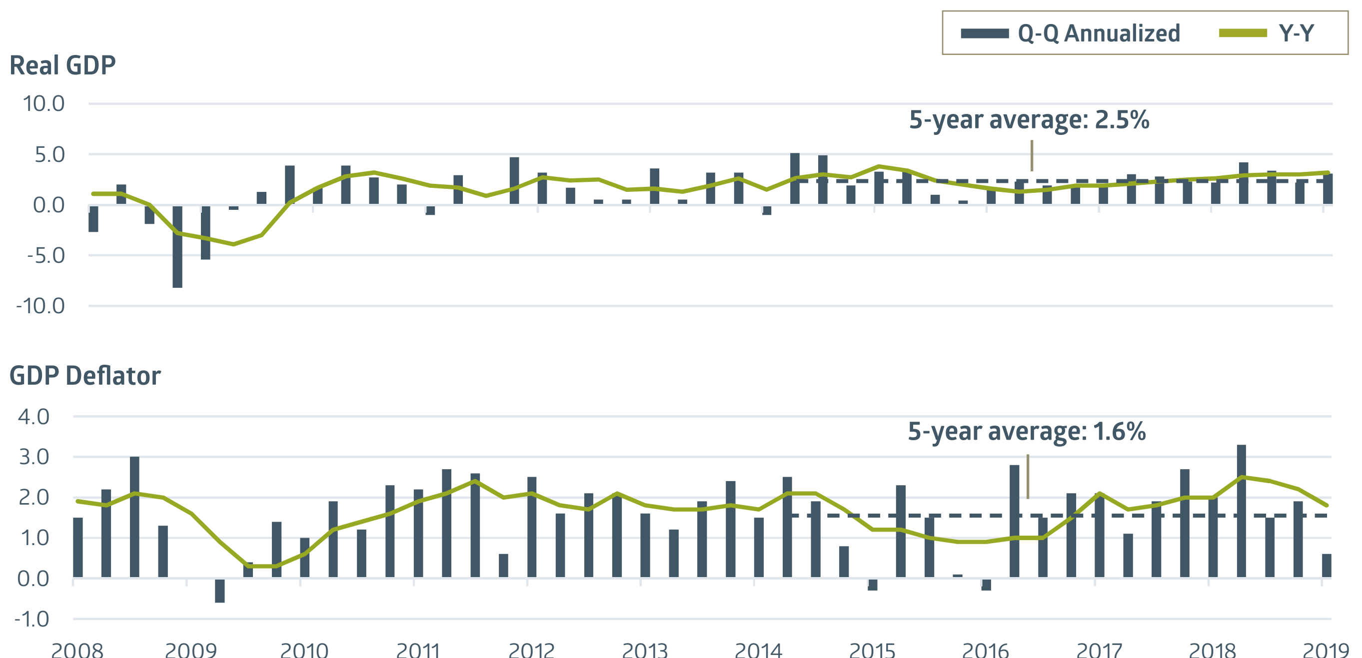
U.S. economic activity appears to have deteriorated in the second quarter of 2019: the Bloomberg Consensus forecast is currently projecting 1.8% annualized growth and the Atlanta Fed GDP Now Model improved to 2.1%. Both projections are well below the first quarter pace of 3.1%, where real growth was boosted by a sharp drop in the GDP deflator (a measure of inflation) from 1.9% to 0.5%. With energy prices rising again the headline inflation indicators are likely to rise and slow future real growth.

Since the 2016 presidential election, growth has been steady around 2.5%, supported by the 2018 tax cuts. This is about 0.5% more than the 2% growth rate during President Obama's eight years. As the benefits of tax cuts fade, we expect to see growth moderate again.

Employment growth held steady at 1.5% year-over-year and real average hourly earnings were up 1.1%, but the work week has declined 0.3%.

As of May, 2019, real consumer income was growing at a 2.2% annual pace. Employment growth held steady at 1.5% year-over-year and real average hourly earnings were up 1.1%, but the work week has declined 0.3%. Real personal consumption has continued to rise faster than income, as the consumer dips into savings and takes on more debt.

Real GDP and GDP Deflator (%), 2008 - Q1 2019



Sources: Bloomberg, Bailard

Corporations used the 2018 tax cuts to boost dividends, buybacks and mergers. Beyond that, corporations went further into debt; in fact, the Federal Reserve's Financial Stability Report (May 2019) noted that corporate debt is historically high relative to GDP. Further, the riskier firms—those with signs of deteriorating credit—have been experiencing the greater increases in the corporate debt-to-GDP ratio. Capital expenditures have dropped year to date through April, which is concerning as increasing capital expenditures indicate investment in future growth.

The manufacturing sector has been trending weaker as auto sales remained soft and the aircraft sector is feeling the impact of Boeing's distress. Weakness can also be seen in the purchasing managers survey, as reported by the IHS Markit US Manufacturing Purchasing Managers Index (PMI). The Index fell to 50.1 in June, a crucial inflection point. A PMI of 50.0 or greater signals growth, while a PMI of less than 50.0 indicates contraction.

Residential construction has been down for four straight quarters and the sharp drop in mortgage rates has yet to provide much of a boost to home sales. New home sales were down 3.7% year-over-year in May, while existing home sales were down slightly less at -1.1%. As mortgage rates decline, this could be one sector that helps upcoming growth.

Inventories have been building for three quarters, which has helped boost GDP growth by an additional 0.5% over the last year. With growth slowing faster than inventories, this accumulation appears to be involuntary and will likely weaken growth going forward as those inventories are worked off.

Net exports are likely to be a drag in the second quarter, after they had added 1.0% to growth in the prior quarter. As trade tensions escalated earlier in the year, China and the U.S. both increased trade to beat the tariff deadline. Going forward, if the trade war with China is not resolved, it is likely to negatively impact growth.

A PMI of 50.0 or greater signals growth, while a PMI of less than 50.0 indicates contraction.

With growth slowing, the Federal Reserve has moved toward a more dovish view. Most economists predict two to three more interest rate cuts in 2019. The big question is how effective Fed policy will be when started from such a low level. The Fed has much further to go to catch up with negative short rates in Europe and Japan, both of which have continued to struggle economically suggesting ineffective monetary policy. For now, we see continued slow growth and would like to see it bolstered by broad stability in the near-term.

International Economies

China

China's GDP growth continued to slow through early 2019 and into the second quarter. GDP slowed to 5.6% annualized growth in the first quarter and the year-over-year pace decelerated to 6.4%. The Li Keqiang Economic Index (named after Premier Li Keqiang) is considered a more accurate measure of GDP because its inputs are less easily manipulated. The Index measures electricity usage, rail freight volume and credit growth. As of May, the Index continued to trend lower and the current reading is consistent with 6% growth, well below the 9% average growth rate China has enjoyed since 2005.

Coincident indicators such as retail sales, industrial production and capital spending have all been trending lower. Leading indicators (including the Markit Manufacturing Purchasing Managers Index) point to continued weakness as the impact of the trade war takes hold. The Caixin China General Manufacturing PMI fell to 49.4 in June, crossing that 50.0 threshold into contractionary territory.

Recent weakness is partially due to the trade war but also due to the mid-2016 monetary policy shift from stimulus to austerity in response to a rapid buildup in debt along with concerns about speculation and financial risks. Monetary policy has recently shifted back to providing more liquidity. The question going forward, like everywhere else, is: will monetary policy be less effective with interest rates so low? So far, China's stimulus has underwhelmed the financial markets as the focus has remained on trade.

Japan

Japan's economy unexpectedly grew at an annualized 2.2% pace in the first quarter, pulling the

year-over-year growth rate up to 0.9%. Unfortunately, the gains were for the wrong reasons. Both imports and exports fell, with imports falling faster than exports, which created a positive shift in the trade balance. But falling exports reflect weaker global growth and falling imports indicate weaker domestic demand. Domestic demand continued to cast a shadow over the economy, with private domestic demand increasing only 0.4% and consumer spending decreasing 0.4% (both quarter-over-quarter, annualized). While generating a short-term positive impact on GDP, trade is likely to be a drag in coming quarters as global tensions have escalated.

Capital spending and public investment ahead of the 2020 Summer Olympics in Tokyo also provided a temporary boost to GDP. While inventories have continued to grow (and are over three times higher than one year ago), the coming inventory reductions should be a drag on growth going forward. With that, the consensus forecast predicts flat growth through the rest of 2019.

Europe

European growth improved in the first quarter, to 1.6% following two quarters of less-than-1% growth. Year-over-year growth remained stable at 1.2%, and appears to be locked on a slow growth path.

Leading indicators—such as the Markit Manufacturing Purchasing Managers Index—have fallen into contraction territory and coincident indicators are showing signs of weaker growth in the second quarter. Real retail sales growth slowed to a 1.5% pace year-over-year in April, as sales declined for the second month in a row. Real industrial production also declined for three months in a row, pulling the year-over-year rate of growth down to -0.4%, as of April, 2019. The European Union trade surplus with non-European countries continued to trend lower, further contributing to slower growth.

The consensus outlook for 2019 has been steadily declining for the Eurozone, with expectations of 1.2% growth for the full year. After a strong first quarter, this pace would indicate lower growth expectations for the remainder of the year.

The start of the third quarter brings plenty of uncertainties for the region. Besides tensions between the U.S. and China, there are a number of uncertainties that lie ahead, including: if the U.S. settles with China, will trade focus go back to Europe? And, a new European Central Bank (ECB) president will replace current president Mario Draghi with limited firepower remaining. Tensions with the ECB surrounding Italy's budget, and political instability surrounding Italy's coalition government are not going away. The UK will appoint a new Prime Minister after leadership races in July, with Boris Johnson being the favorite to be appointed; this suggests rising risks leading up to the current Brexit deadline of October 31st.

Arthur A. Micheletti, CFA, retires after 38 years with Bailard

Art Micheletti, Bailard's Chief Economist and Investment Strategist who joined the firm in 1981, deservedly retired at the end of June.

From his early days as a bond investment analyst, Art brought insightful perspective and discipline to the firm's investment strategies.

We would like to thank Art for his service and tremendous contributions that helped shape the firm we are today. And, moving forward, we are grateful for the opportunity to benefit from Art's perspective as he will serve as an economic consultant among Bailard's deep bench of research professionals.

Market Performance
As of June 30, 2019

U.S. Interest Rates	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Cash Equivalents				
90-Day Treasury Bills	2.20%	2.36%	2.39%	2.09%
Federal Funds Target	2.25%	2.50%	2.50%	2.50%
Bank Prime Rate	5.25%	5.50%	5.50%	5.50%
Money Market Funds	2.13%	2.42%	2.46%	2.35%
Bonds				
30-Year U.S. Treasury	3.06%	2.69%	2.41%	2.01%
20-Year AA Municipal	2.71%	2.48%	2.18%	1.82%

Source: Bloomberg, L.P.

U.S. Bond Market Total Returns (US$) through 6/30/2019	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Bonds				
Bloomberg Barclays U.S. Treasury Index	3.01%	5.18%	5.18%	7.24%
Bloomberg Barclays U.S. Corporate Index	4.48%	9.85%	9.85%	10.72%
Bloomberg Barclays U.S. Aggregate Index	3.08%	6.11%	6.11%	7.87%
Bloomberg Barclays U.S. 1-15 Municipal Blend Index	1.84%	4.40%	4.40%	6.12%

Source: Bloomberg, L.P.

Global Stock Market Total Returns (US$) through 6/30/2019	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Stocks				
S&P 500 Index	4.30%	18.54%	18.54%	10.42%
Morningstar U.S. Small Value Index	0.22%	12.72%	12.72%	-7.22%
Morningstar U.S. Small Growth Index	2.47%	22.38%	22.38%	3.47%
Morningstar U.S. Large Growth Index	5.05%	21.60%	21.60%	11.43%
Morningstar U.S. Large Value Index	3.11%	13.75%	13.75%	9.98%
International Stocks				
MSCI EAFE (Europe, Australasia, Far East) Index, net dividends	3.68%	14.03%	14.03%	1.08%
MSCI Emerging Markets, net dividends	0.61%	10.58%	10.58%	1.21%

Sources: Bloomberg, L.P. and Morningstar Direct

Alternatives (US$) through 6/30/2019	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
NFI-ODCE Index*	0.99%	2.41%	2.41%	6.41%
Gold Spot	9.07%	9.90%	9.90%	12.47%
WTI (West Texas Intermediate) Crude Oil	-2.78%	28.76%	28.76%	-21.15%

Sources: Bloomberg, the National Council of Real Estate Investment Fiduciaries
**The second quarter return for the NFI-ODCE Index is the preliminary return released by NCREIF on 7/12/19.*

Past performance is no indication of future results. All investments have the risk of loss.

Bailard Investment Strategy: A Strategic and Tactical Asset Allocation Overview

U.S. Bonds

Bonds remain overvalued relative to underlying inflation. With inflation trending around 2% and—assuming a long-term historical real yield of 3%—the fair value yield on the 10-Year U.S. Treasury should be closer to 5%. Bond yields are at extremely low levels due to the Fed's monetary accommodation. From a strategic perspective, bonds remain unattractive relative to stocks.

U.S. Stocks

With U.S. stock markets hitting new highs and the Fed turning more dovish, the monetary backdrop turned positive in the second quarter. Yet, stocks are overvalued on most metrics and, if the economy and earnings outlook continue to deteriorate, stocks could sell off from their currently overbought conditions. On the other hand, a more aggressively dovish Fed policy or a favorable resolution to the current trade dispute with China could trigger and support further gains in the equity markets. It is anyone's guess how long the trade tensions will last and, with stocks hitting new highs, the Fed may be slower to ease its monetary policy than expected.

International Stocks

In the second quarter, international stocks remained extremely undervalued relative to U.S. stocks as they battled a strong dollar environment, weakening global economic conditions and geopolitical risks. With global central bank overnight interest rates near zero and the Fed Funds rate at 2.5%, there is a strong bid for the dollar. However, as the Fed eases and the interest rate spread narrows, the U.S. dollar could weaken and provide a tailwind for international stocks.

Real Estate*

Just as low interest rates are making stocks more attractive than bonds, low interest rates continue to make a compelling value argument for real estate. Real estate is more attractive than bonds and serves as the preferred portfolio diversifier. In addition, the operating environment may have tempered (a slowing trend in rental rates and occupancy), but we have yet to see the broad overbuilding typically reflected late in the economic cycle.

Tactical Asset Allocation Strategy

TAA tends to hold four of thirteen major asset classes and is designed to be both opportunistic and defensive in response to the investment markets on a short-term basis. During the quarter, TAA shifted to an increased equity allocation than in the previous quarter.

**Real estate has significant risks and is not appropriate for all investors.*

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DISCLOSURES

the 9:05 is produced by the Asset Management Group of Bailard, Inc. The information in this publication is based primarily on data available as of June 30, 2019 and has been obtained from sources believed to be reliable, but its accuracy, completeness and interpretation are not guaranteed. We do not think it should necessarily be relied on as a sole source of information and opinion.

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ABOUT *THE 9:05*

Since 1978, we've held a weekly company wide meeting during which we talk about the prior week's activities and those anticipated in the week to come. We refer to this meeting, which begins just after nine each Monday morning, as "the 9:05." Just as the 9:05 enables us to share our knowledge and insights with each other, this newsletter provides us with a valuable means of communicating with our clients. Hence its title: *the 9:05*.

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