

Market Outlook & Strategy

Second Quarter of 2020

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Executive Summary

- Global equity markets turned sharply higher in Q2 fueled by early signs of economic recovery from the coronavirus pandemic, the easing of lockdown restrictions, and ongoing loose monetary policy from major central banks. The U.S. market led the way, increasing by +22.1%.
- As for investing style, we again saw growth beating value. But, for a change, smaller companies had a very good quarter, in part because they were so beaten down in Q1.
- International markets also posted strong gains, with developed market equities increasing by +15.3%. Europe and Japan, in particular, benefited from their relative success in containing Covid-19. Emerging markets rallied hard as well, increasing by +19.0%, which was their strongest quarterly return in over a decade.
- As for fixed income, U.S. Treasury returns were broadly flat over the quarter, with the yield on the 10-year Treasury ending slightly lower at 0.66%. In contrast, corporate bonds performed strongly (+9.5%), as they benefited from stronger risk appetite as did emerging market bonds (+12.9%) and real estate income (+16.8%).
- This quarter's report is dedicated to providing our readers an update on the thematic investments we started making in early 2018. This allocation is currently dedicated to the theme of disruptive innovation, and we have built our exposure to include a wide variety of new technologies across geographies and company sizes.
- Of interest is that this exposure has been slow to outperform the broader market indices in 2018, most themes actually underperformed due to the sharp market sell-off late in the year. In 2019, we began to see a bit of outperformance, but not much, as global markets had a terrific year no matter which way one looked.
- The situation is starting to change now, and almost all of our disruptive innovation exposures are nicely outperforming, especially genomics. The pandemic is driving some, but not all, of the outperformance in our view. The other main reason is that some of these technologies are simply now coming of age, as the information economy continues to grow.
- Artemis Portfolio Strategy. We implemented five important changes to our portfolios in Q2, and these changes were all discussed in our Q1 report. Toward the end of the quarter, we rebalanced portfolios back to their targets after the strong market rally as we do not believe it wise to continue to chase this rally.



Q2 in Review

Global equity markets turned sharply higher in Q2 fueled by early signs of economic recovery from the coronavirus pandemic, the easing of lockdown restrictions, and ongoing loose monetary policy from major central banks. The U.S. led the way, increasing by +22.1% (Figure 1).

Once again, the consumer discretionary (think Amazon and Home Depot) and technology sectors led the way, both increasing by just over +30%. Energy also had an excellent quarter as oil prices rose sharply after their steep Q1 decline. In terms of investing style, we again saw growth beating value. But, for a change, smaller companies had a very good quarter, in part because they were so beaten down in Q1 (Figure 2).

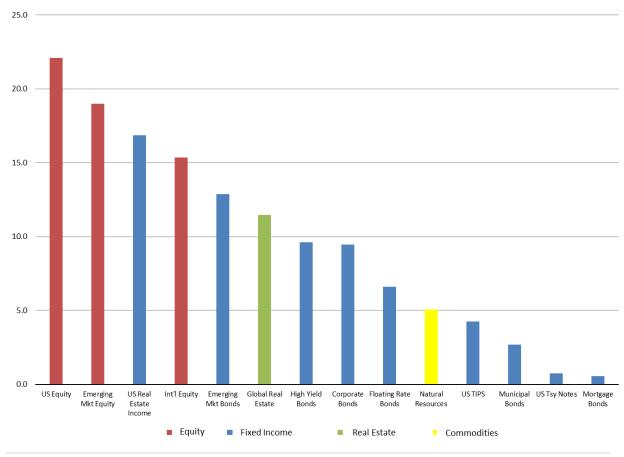


Figure 1. Asset Class Returns in Q2 2020



		Q1 2020			Q2 2020			
	Value	Core	Growth		Value	Core	Growth	
Large	-26.7%	-20.2%	-14.1%	Large	14.3%	21.8%	27.8%	
Mid	-31.7%	-27.1%	-20.0%	Mid	20.0%	24.6%	30.3%	
Small	-35.7%	-30.6%	-25.8%	Small	18.9%	25.4%	30.6%	

Figure 2. Q1 & Q2 2020 U.S. Equity Returns by Style

International markets also posted strong gains, with developed market equities increasing by +15.3%. Europe and Japan, in particular, benefited from their relative success in containing Covid-19. Another source of support was news that the EU (European Union) plans to establish an \$840M recovery fund to support the worst-affected EU regions. This is on top of the roughly \$600M rescue package agreed to in April.

Emerging markets rallied hard as well, increasing by +19.0%; this was their strongest quarterly return in over a decade. Exporter markets such as Taiwan and Thailand fared well, as did Brazil, despite its lack of control over Covid-19.

As for fixed income, U.S. Treasury returns were broadly flat over the quarter, with the yield on the 10-year Treasury ending slightly lower at .66%. In contrast, corporate bonds performed strongly (+9.5%), as they benefited from stronger risk appetite, as did emerging market bonds (+12.9%) and real estate income (+16.8%). See Figure 1 again.



Technology Disruption Investments – How are We Doing?

Just over two years ago, we introduced the concept of thematic investing as an alternative and/or complement to factor-based and market capitalization-based investing (how most investment professionals allocate assets). Thematic investing is a forward-looking investment approach that seeks to capture the opportunities created by long-term shifts in the basic ways a market or economy operates. The premise is that these structural trends (e.g., rise of online commerce) will provide attractive investment opportunities to those who can take a longer-term view.

As most of you know, we settled on disruptive innovation as our key investment theme. Our specific thesis is that developments in potentially disruptive technologies such as genetics, artificial intelligence (AI) robotics, cloud computing, nanotechnology, 3D printing, to name a few, are laying the foundation for a revolution potentially as all-encompassing as anything we have ever seen. As such, companies that produce or stand to benefit from the adoption of such technologies will outperform.

Since introducing this investment approach, we have slowly but steadily built out a highly diversified position across the above-named technologies, which collectively now comprises 7%-15% of portfolio assets. Figure 3 (next page) shows how the themes we are invested in (as measured by the returns of the ETFs we are utilizing) have performed since we got started versus a total global market benchmark and also the S&P 500.

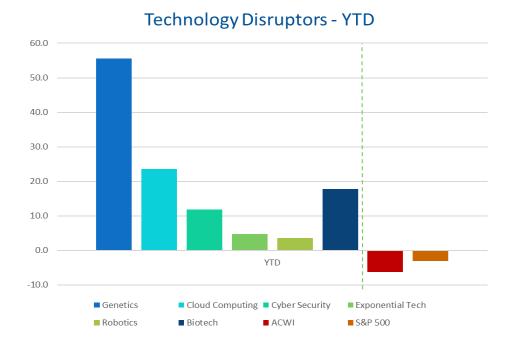
One key takeaway from the chart is that the addition of these portfolio diversifiers actually detracted from client returns in 2018, especially since we did not have exposure to genomics until 2019 and cloud computing until 2020. As you may recall, 2018 was a positive year for the markets until the fall when they sold off sharply as investors became very nervous that the economy would slow due to President Trump's trade war with China and the Federal Reserve's decision to hike interest rates. The former had a particularly strong impact on our robotics position, given its Asia (largely China) tilt.

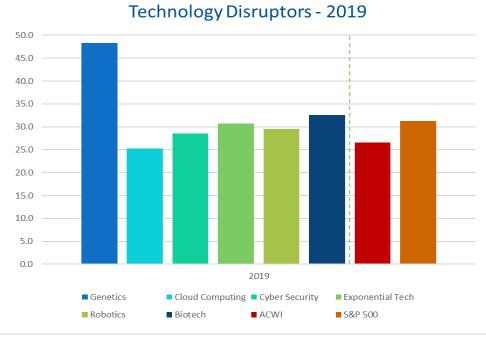
Returns for 2019 were better in that most of our themes kept pace with the overall market. However, with the exception of genomics, they did not exactly knock it out of the park.

And then we come to 2020. It's been full steam ahead for our technology disruptors, both before the market crash in late March and after. In April and May, we increased our overall allocation to technology disruptors by adding cloud computing and biotechnology.



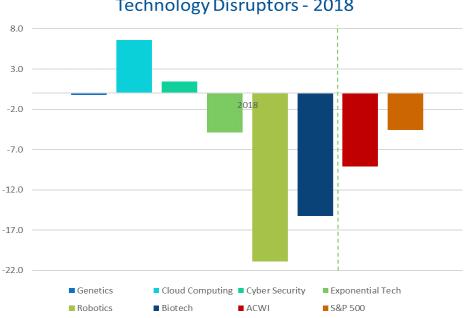
Figure 3. Technology Disruptor Returns – 2018-2020





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Technology Disruptors - 2018

As I wrote last quarter, we (and many others) predicted the virus would accelerate several big-picture secular shifts within certain industries. So far, the market tends to agree. Cloud computing is a good example as efforts to contain Covid-19 have forced many companies to transition their employees to a work-from-home environment, which has prompted those that do not have a cloud-based environment to accelerate the transition. The shift is also providing new opportunities to a host of increasingly successful software companies.

But genomics remains the clear leader so far. Why? The driving force behind the genomics revolution is next-generation DNA sequencing. Since 1993, the cost to sequence a human genome has dropped from nearly \$3.0 billion to less than \$1,000, following Wright's law: For every cumulative doubling in units produced, costs decline by 40%. At this rate, industry followers are projecting costs to fall to roughly \$200 by 2024, driving up the demand for sequencing for all sorts of medical tests such as liquid biopsies, solid tumor profiling, immune-oncology, and driving down drug discovery costs. By one estimate, next-generation DNA sequencing will grow 43% annually from \$3.5B in 2019 to \$21.0B by 2024.

In general, successfully implementing a thematic investment strategy requires getting three things right: 1. Correctly identifying structural shifts; 2. Finding good companies with exposure to those shifts; and 3. Timing so as to enter early enough that earnings and forecasts have not fully priced in the theme's potential. So far, we seem to be on the right track for genomics and, possibly, for a few of the others.



What's next? While I think we are at maximum prudent exposure to disruptive innovation currently, this doesn't mean we have the right mix, nor does it mean we should stop looking for better ideas. I do believe that COVID-19 is accelerating several other big-picture shifts (e.g., rise of digital payments, explosion in streaming media) and so we continue to look for new ideas and better ways to implement. Stay tuned.

Artemis Portfolio Strategy

Last quarter I outlined in some detail five changes we planned to make to Artemis portfolios, and we implemented all of them in May. In brief, we made the following adjustments:

1. Increased our overweight to the U.S. versus other developed markets.

This is proving to be a somewhat contrarian move based on some of the more recent analyst reports I have read, in large part because U.S. equities are more expensive (this is true) and European governments (particularly Germany) are demonstrating increased willingness to use fiscal stimulus to moderate the decline in economic activity. But I remain unconvinced. U.S. stocks have consistently outperformed European benchmarks over the past decade, underpinned by steadily higher relative corporate earnings. (Remember, growth drives earnings and earnings drive the stock market.) As such, unless and until there is a shift in the outlook for relative earnings in favor of European (and Asian) developed markets, it's hard to argue that these markets are going to meaningfully outperform.

2. Tilted our U.S. equity allocation more toward growth versus value from a style perspective.

This is an even more controversial move, according to some. The mantra of value stocks (those with a lower stock price relative to book value or some other like measure) having higher expected returns over the long run is far from dead (although the definition of long is getting longer....). Value is currently very cheap relative to growth, and P/E (price-earnings) ratios are a reasonable predictor of medium to long-run performance. But then the pandemic came along and upended things for banks, airlines, industrials, energy – all core constituents in the value bucket. The only scenarios I can think of in which value might outperform growth over the next couple of years are a very sharp V-shaped recovery, rising interest rates, or a spike in inflation—each of which looks increasingly unlikely by the day. In the meantime, investors seem more willing to gravitate to stocks that have a higher relative earnings potential. Today, it's technology and consumer discretionary stocks. It appears to



be a bit of "go for growth, when growth is slow" attitude. Figure 2 earlier in this report suggests the market is following this adage, for now anyway.

3. Added additional technology disruptors.

This has been a home run recently, but it's still early days and technological change takes a long time to reap benefits. Also, technology stocks are expensive these days, so we might give back a bit in the short run.

4. Substantively reduced real estate exposure.

Probably the most obvious move in this list, with some of you wondering why I didn't sell out entirely. In hindsight, I wish I had kept more of our real estate income fund, even though it was our principal performance detractor in the fixed income space last quarter, declining by 25%. Banks heavily marked down assets in March, forcing a liquidity squeeze for mortgage REITS (real estate investment trusts) that utilize leverage to goose returns. That problem is unwinding rapidly and the fund we utilize increased by +16.8% during the quarter. In contrast, our global real estate REIT lagged most other sectors in Q2.

5. Tightened up our fixed income exposure.

By this I mean that we reduced credit exposure by eliminating emerging market bonds and reducing our exposure to real estate income as discussed in the prior point. We did, however, add back some high-quality corporate bonds, which seem to be doing very well, in part due to Federal Reserve purchasing activity. In brief, our fixed income exposure is now safer than it was six months ago, but with overall interest rates lower than ever currently, we can't expect much from this allocation, other than its insurance value.

6. Rebalanced portfolios to their targets in a timely fashion

If you held a 60% equity / 40% fixed income portfolio on February 18, you were at best holding a 55%/45% portfolio by March 20, and were destined to underperform your benchmark if you did not rebalance back up to 60/40. So, we did exactly that, but then the market moved upward so much in Q2 that we are back to rebalancing as I write, this time in the other direction.

My view here is that risks abound right now relative to the strong upward movement in the market – the virus has not been contained, nor a vaccine approved. Another risk is that governments may roll back their fiscal stimulus too soon before economies are able to



recover. As such, it is indeed possible that the stock market we are all grateful for could start to falter for a time. For most (not all) clients, it seems to make sense that we not overextend and chase this rally any longer. However, at some point, I believe a vaccine will be invented that puts an end to this crisis, or the crisis will subside due to collective immunity. When it happens, markets are likely to take off, and the only way to benefit is to stay in despite the bumpy ride we are likely in for.

In summary, while I am pleased so far with the moves we have made to the portfolios, we are monitoring very closely these days and keeping portfolios very close to their targets. If you are uncomfortable with your exposure, please give us a call.



Market Index Descriptions (for Figure 1)

Equities:

The **Dow Jones U.S. Total Stock Market** is a market cap-weighted index providing broadbased coverage of the U.S. stock market. Considered a total market index, it represents the top 95% of the U.S. stock market.

The **MSCI EAFE + Canada (net)** is a market cap-weighted equity index that is designed to measure the equity market performance of developed markets, excluding the U.S.

The **FTSE Emerging Markets All Capitalization China A Inclusion (net)** is a market capweighted index representing the performance of large-, mid- and small-capitalization stocks in emerging markets.

Fixed Income:

The **Bank of America Merrill Lynch U.S. Treasuries 7-10 Year** measures the performance of U.S. Treasury securities that have a remaining maturity of at least seven years and less than 10 years.

The **Bank of America Merrill Lynch U.S. GNMA Mortgage Backed Securities Index** is a market cap-weighted index, including generic-coupon Ginnie Mae mortgages, with at least of \$150 million principal amounts outstanding.

The **Barclays Capital 1-15 Year Municipal Bond** measures the performance of tax-exempt investment grade debt of U.S. municipalities having at least one year and less than 15 years remaining term to maturity.

The **Bank of America Merrill Lynch U.S. Corporate 5-7 Year** measures the performance of U.S. dollar denominated investment grade rated corporate debt having at least five years and less than seven years remaining term to maturity.

The **J.P. Morgan Emerging Market Bond Global Core** is a broad, diverse U.S. dollardenominated emerging markets debt benchmark that tracks the total return of actively traded debt instruments in emerging market countries.



The **Bloomberg Barclays U.S. Treasury U.S. TIPS** measures all publicly issued, U.S. Treasury inflation-protected securities that have at least one year remaining to maturity.

The **Bloomberg Commodity Index** is a broadly diversified commodity price index that tracks the prices of futures contracts on physical commodities on the commodity markets.

The **Fidelity Real Estate Income Composite** is a benchmark that combines the total returns of the Merrill Lynch Real Estate Corporate Bond Index (40%), Morgan Stanley REIT Preferred Index (40%), and the FTSE NAREIT All REIT Index (20%).

The **S&P Global REIT Index** measures the performance of equity REITs and real estate operating companies (REOCs) traded globally.

The **Bank of America Merrill Lynch U.S. High Yield Master II** tracks the performance of U.S. dollar denominated below investment grade-rated corporate debt publicly issued in the U.S. domestic market with a maturity of at least one year remaining.

The **S&P/LSTA U.S. Leveraged Loan 100** reflects the performance of the largest facilities in the leveraged loan market.