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A Balancing Act

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As an index manager, successfully navigating whipsawing markets is both a science and an art. This year's events have driven our activity levels to an all-time high, even as we remain working from home. As summer comes to a close, we pause, catch our breath and look back at the primary drivers and unprecedented circumstances that impacted both benchmark and index portfolio returns in the first half of the year. We also share our expectations for the road ahead and how this market landscape will likely shape the remainder of 2020.

Shockwaves

The rapid and disruptive spread of COVID-19 posed a generational challenge to governments, industries and markets around the globe. The novel nature of the virus hampered initial efforts to contain the first modern pandemic, which were exacerbated by uncoordinated and uneven responses by national authorities. Despite the eventual massive policy intervention and efforts to mitigate the impact, the pandemic significantly impacted global economic growth during the first half of the year.

Real GDP	Annual	Change	· · · · · ·	hange From Ir Ago	IMF WEO Projections		
	2018	2019	1Q20	2Q20	2020	2021	
World Output	3.6	2.9	-3.2		-4.9	5.4	
Advanced Economies	2.2	1.7	-1.2		-8.0	4.8	
United States	2.9	2.3	0.3	-9.5	-8.0	4.5	
Euro Area	1.9	1.3	-3.1	-15.0	-10.2	6.0	
Japan	0.3	0.7	-2.0	-10.0	-5.8	2.4	
United Kingdom	1.3	1.4	-1.7	-21.7	-10.2	6.3	
Emerging Market and Developing Economies	4.5	3.7	-4.5		-3.0	5.9	
China	6.7	6.1	-6.8	3.2	1.0	8.2	
India	6.1	4.2	3.1		-4.5	6.0	
Brazil	1.3	1.1	-0.3		-9.1	3.6	

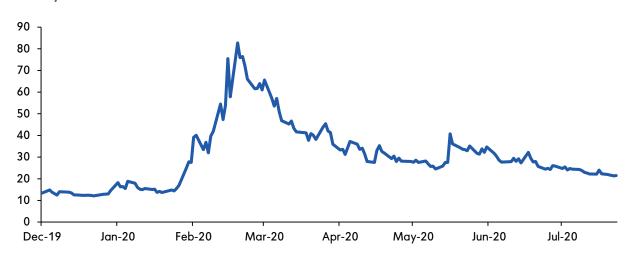
Global Economic Growth

Source: Bloomberg, FactSet, International Monetary Fund World Economic Outlook. As of June 2020.



Major equity markets displayed marked differences in returns between the first and second quarter, with major selloffs tracing the spread of COVID-19. Selling initially hit emerging markets in January then spread to global developed equity markets by March. Market volatility, as shown in the CBOE Market Volatility Index (VIX), spiked dramatically in mid-March, briefly reaching levels last experienced in the Global Financial Crisis.

Volatility



Source: Bloomberg and FactSet. As of August 18, 2020

Equity benchmarks expressed significant contagion fear, plummeting double digits in March. In late March, when the Federal Reserve and other central banks stepped in to provide support to global financial markets, market volatility began to subside. Equity markets celebrated a relief rally in April, recouping most if not all of their negative returns from March.

Within fixed income markets, US Treasuries and sovereign bonds experienced a significant rally in the first quarter as investors sought safe havens in response to the looming pandemic and dramatic equity market selloffs. Credit markets followed a similar downward path as equities in March, but subsequently rallied through the second quarter as policymakers introduced numerous measures intended to support corporate bonds and fixed income markets in general.

In response, there was a significant uptick in corporate actions, postponed index rebalances, and increased client cash flows during the period. With the dramatic fall and subsequent rise of market volatility and equity markets, the impact of sampling and the mix of cash and futures became more important than ever.

Over the first of half of 2020, there was significant dispersion within individual benchmarks, all due to COVIDrelated selloffs or rallies of specific sectors or stocks. For example, the tech-heavy FTSE Russell 1000[®] Growth Index declined -14.10% during the first quarter, then witnessed an astounding second-quarter rebound of +27.84%. The FTSE Russell 1000[®] Value, in contrast, sold off by -26.73% in the first quarter and only rebounded by +14.29% in the second. Within the Health Care sector, small biotech securities rallied significantly based on the potential promise of a future pandemic vaccine, rallies which had outsized impacts on benchmarks that contained these securities. Conversely, we saw large selloffs impacting airlines, energy companies and retailers as markets digested the growing impact of the virus.



Finding Solid Ground

Such wide performance dispersion makes the index sample selection process crucial to successfully managing index portfolio returns in line with the benchmark returns. Similarly, the impact of cash and futures balances within index portfolios also had an outsized impact during this period, as any unequitized cash acted as a boost to portfolio returns when equity markets were down double digits, but reverted to becoming a drag on portfolio returns during the subsequent rebound. Further, equity index futures and the mix of liquid futures contracts used to provide equity exposure to cash and cash accrual balances were crucial, as was the alignment of foreign exchange exposure where we were exposed or hedged to local markets.

Period	S&P 500*	R1G	R1V	R2	EAFE	EM	Agg Bond	Long Treasury	Long Credit	Global Agg
Jan	-0.04%	2.24	-2.15	-3.21	-2.09	-4.66	1.92	6.85	4.06	1.28
Feb	-8.23	-6.81	-9.68	-8.42	-9.04	-5.27	1.80	6.70	1.99	0.67
Mar	-12.35	-9.84	-17.09	-21.73	-13.35	-15.40	-0.59	6.05	-10.16	-2.24
1Q20	-19.60	-14.10	-26.73	-30.61	-22.83	-23.60	3.15	20.90	-4.65	-0.33
Apr	12.82	14.80	11.24	13.74	6.46	9.16	1.78	2.02	6.69	1.96
May	4.76	6.71	3.43	6.51	4.35	0.77	0.47	-1.87	1.54	0.44
Jun	1.99	4.35	-0.66	3.53	3.40	7.35	0.63	0.13	2.54	0.89
2Q20	20.54	27.84	14.29	25.42	14.88	18.08	2.90	0.25	11.08	3.32
YTD	-3.08	9.81	-16.26	-12.98	-11.34	-9.78	6.14	21.20	5.92	2.98

Sample Monthly Benchmark Returns

Source: Mellon, Bloomberg, Standard & Poors, FTSE Russell, MSCI. As of June 30, 2020.

Much of the performance dispersion of winners and losers found its way into the corporate action arena. We experienced a wave of company dividend cancellations that profoundly impacted dividend-weighted benchmarks, forcing index portfolio rebalances to track their benchmark methodologies. A major ETF issuer who did not rebalance a large dividend-weighted ETF in line with a benchmark change paid a cripplingly high trade-error fee as they attempted to catch up to the benchmark.

Uncharted Territory

The uncertainty expressed during this period entered uncharted territory with index rebalances. After lightning-fast consultations, major index providers such as MSCI and S&P Dow Jones decided to postpone their rebalances, which were originally scheduled for the end of the first quarter. At the time, the decision to postpone regular rebalances was a welcome relief to index managers, traders and executing brokers all suddenly working from their kitchen tables and concerned about market and liquidity risk. However, the pause in rebalancing also marked a step away from the systematic and transparent methodologies that index practitioners and index clients have come to expect. The subsequent rebalances at the end of the June compounded two quarters of rebalancing adjustments, thereby increasing pressure on liquidity and price action from index actions, as well as attracting unwelcome attention from index rebalance speculators.



As market moves triggered client plan rebalancing, opportunistic trading or flights to safety, the treatment of client flows required skill and seamless execution beginning with portfolio management through to trade execution. In particular, we found that bid-ask spreads widened significantly through March in certain fixed income sectors, which made it ever more important to employ our trading expertise and innovative skill. For instance, we executed a custom basket of mortgage bond securities in March in order to fulfil a funding client's required exposure. This innovation, borne out of our deep trading experience in the corporate markets, was extended to mortgages as a necessary and cost-effective solution for our clients.

What's Next?

Looking ahead to the rest of the year, we can expect additional market volatility prompted by uncertainty in the upcoming US elections, the return of the fall flu season, the ongoing US-China trade dispute, and the potential for heightened geopolitical risk precipitated by attempts from the US to re-impose sanctions on Iran. Our additional index rebalances will include adding or removing promoted or potentially demoted countries like Kuwait and Argentina for certain benchmarks. There may also be a major inclusion event with Tesla potentially set to join the S&P 500[®] index.

We remain vigilant around market volatility and continue to consider the global macro condition and its micro expression on the securities within the benchmarks we manage. While "passively" managing index portfolios seems straightforward to the uninitiated, as an index manager we must actively navigate these challenging market conditions in our pursuit of the tight-tracking index performance that our clients have come to expect.

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Stephanie Hill

Managing Director, Head of Index - Business & Strategy

Stephanie is a Head of Index - Business & Strategy. She is responsible for articulating equity and fixed income index strategies to clients and prospects, as well as developing and refining new strategies and solutions for our clients.

Prior to joining the firm, she was a strategic product innovator within the iShares division at BlackRock, focused on designing and developing new ETF products and business solutions. Prior to joining iShares, she was an institutional investment strategist for BlackRock in San Francisco and New York. Previously, she was an investment strategist with Merrill Lynch Investment Managers. Stephanie has been in the investment industry since 1999.

Stephanie earned an MFA from New York University and a BA from the University of California at Berkeley.

Theodore Bair Jr., CFA

Vice President, Senior Investment Strategist

Ted is a senior investment strategist, responsible for articulating the firm's index strategies to clients, prospective clients and consultants to help grow and retain Mellon's index business. He works closely with sales and client service staff worldwide to guide the messaging and positioning of index strategies and to develop product solutions for client portfolios.

Previously, Ted oversaw attribution and risk analytics for Mellon's Active Fixed Income division. Prior to that, Ted held roles of increasing responsibility in fixed income trading and portfolio management for Mellon Bond Associates, followed by roles as a senior portfolio manager and investment strategist for Standish Asset Management and Cash Investment Strategies. Ted has been in the investment industry since 1995.

Ted earned a BA in finance from Westminster College and an MBA in finance from the University of Pittsburgh. He holds the CFA designation and is a member of the CFA Institute and CFA Society Pittsburgh. BNY MELLON | INVESTMENT MANAGEMENT



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