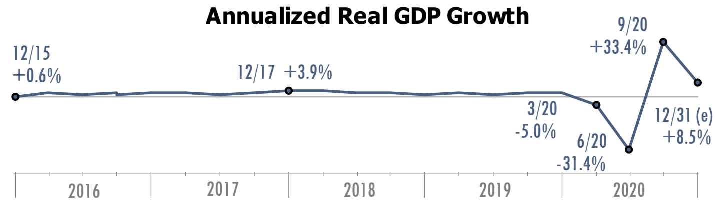
Bellwether CONSULTING

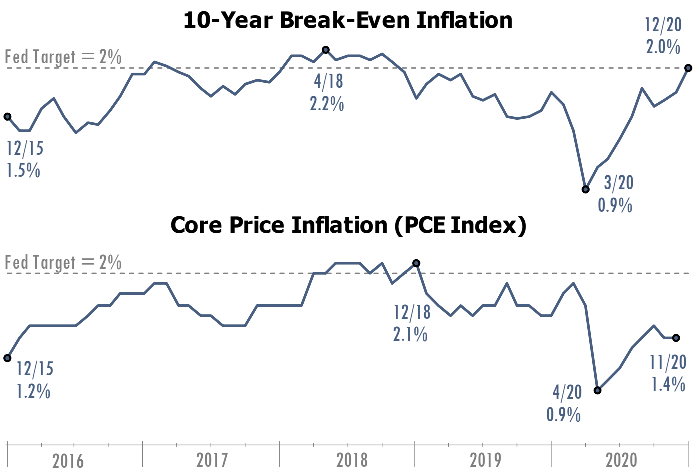
Your Quarterly Update on the Financial Markets
December 31, 2020

MARKET Recap

The US Economy: "Anticipation is Making Me Wait"



GDP growth rebounded in the third quarter, and is currently projected at an 8.5% annualized pace for Q4, according to the Atlanta Fed's GDPNow forecast. For the full year, the median projection of growth from the December survey of Fed board members and bank presidents stood at -2.4%. Productive activity continued to grow where possible in manufacturing and certain services sectors, particularly healthcare and technology. Those service industries most impacted by COVID continue to struggle, particularly travel and hospitality-related businesses. Expiration and roll-off of fiscal stimulus measures detracted from GDP growth.



The December PMI Index of manufacturing health came in at a robust 60.7%, an eighth consecutive up-month. Of the 10 sub-components of the PMI, prices were up most sharply (by 12.2 points), and were accelerating. One can scarcely notice looking at core consumer prices, which flattened following a summer rebound, but at levels below the Fed's 2% target.

Even nascent signs of inflation are important, as monetary policy is tied to production of inflation – and stock prices are tied to monetary policy. Traditional measures like the CPI or the Personal Consumptions Expenditures deflator are lagging indicators of inflation. It takes time for money to propagate through the economy and actually change consumer buying behavior or the business production cycle. It takes more time for transactions to occur, and be aggregated and measured. The markets (and policymakers) are well aware of this.

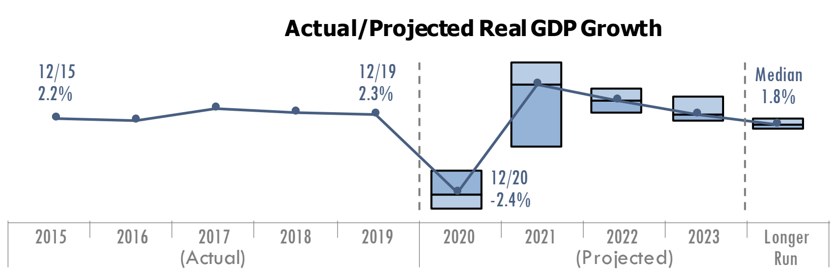
One real-time measure of market sentiment is the "break-even inflation" rate, which is the rate of inflation that equates the expected return of nominal treasury bonds and TIPS. That rate on the 10-year achieved 2% at year-end, continuing to climb notwithstanding a stall-out in direct price measurements. Clearly the bond market is beginning to believe that monetary stimulus, combined with fiscal stimulus and a vaccine, will drive up consumer prices.

Why is that so very important? Because markets do not price based on current policy or economic data; they price on anticipation of future policy and data. The more investors believe loose money will stimulate prices, the more they will anticipate the end of that policy. That puts upward pressure on long yields, and downward pressure on stock prices.

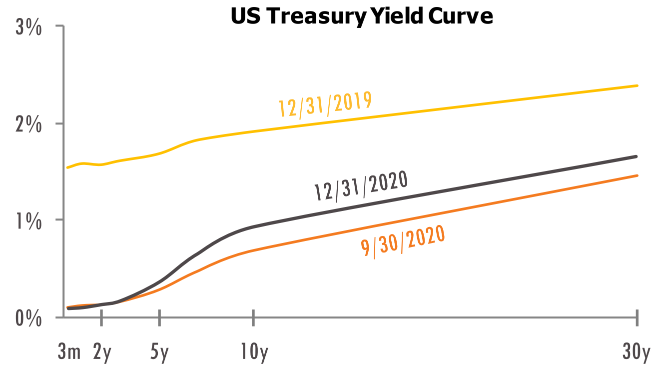
Does that portend a crash, as many pundits now predict? No, although it doesn't preclude one. It does portend gradual downward pressure on stock prices. That pressure may be partially offset by earnings growth over time, but even so, the overall outlook for stock market returns should be reduced accordingly. And woe to those companies that fall short of growth expectations!

12/20 Survey of Fed Board Members & Bank Presidents

	Median				Range			
	2021	2022	2023	Longer Run	2021	2022	2023	Longer Run
Change in Real GDP	4.2	3.2	2.4	1.8	0.5-5.5	2.5-4.0	2.0-3.5	1.6-2.2
Unemployment	5.0	4.2	3.7	4.1	4.0-6.8	3.5-5.8	3.3-5.0	3.5-4.5
Core PCE Inflation	1.8	1.9	2.0	n/a	1.5-2.3	1.6-2.2	1.7-2.2	n/a
Fed Funds Rate	0.1	0.1	0.1	2.5	0.1-0.1	0.1-0.4	0.1-1.1	2.0-3.0



The US Bond Market



As vaccination efforts begin to ramp up, so goes the yield curve. Yields up to the 3-year remain locked in place by Fed forward guidance assuring no hikes are within view. However, beyond this point, a marked steepening is visible from the prior quarter end. This is an improvement from the perspective of most investors and pension plans, for certain. And yet, the 10-year key rate remains stuck below 1%, as it has been since March 4th. This newfound trough fueled long-duration indices to lead fixed income sectors in 2020. US TIPS also put up an impressive double-digit return for the year thanks, in part, to investors bidding the securities' real yields into firmly negative territory.

For Q4, high yield led fixed income sectors. Credit spreads continued to tighten through the end of the year. Investment grade corporate bond spreads stand at 103 basis points and are nearing their 15-year lows. High yield spreads fell 135 basis points during the quarter and closed at 386 basis points. While this is more than 50% above the 15-year low, high yield spreads spent most of 2019 above 3.86%. At the same time, bankruptcies reached a 10-year high of 630 companies. The 10-year average stands at 555 bankruptcies per year. With the vaccine rolling out there may be light at the end of the pandemic, but investors should avoid a myopic focus.

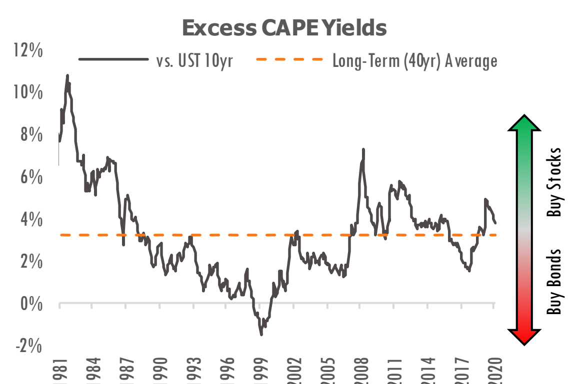
US Bond Indices - Total Returns		
Blmbg Barclays	**4Q20**	**2020**
Aggregate	0.67%	7.51%
Short Gov't	0.04%	1.83%
Interm. Gov't	-0.22%	5.73%
Long Gov't	-2.95%	17.55%
TIPS	1.62%	10.99%
Municipal	1.82%	5.21%
Interm. Credit	1.55%	7.08%
Long Credit	4.92%	13.32%
High Yield	6.45%	7.11%
(**CS**) Lev. Loan	3.64%	2.78%
MBS	0.24%	3.87%

Corporate bond issuance for 2020 totaled $2.3 trillion, blowing away the previous record of $1.6 trillion. While this can be attributed mainly to the second and third quarters, companies kept up a strong pace in the fourth quarter.

Government issuance also surged through 2020 and should continue to increase well into 2021. In Q4, net issuance of Treasuries totaled $200 billion per month, on average. Meanwhile, the Federal Reserve continues to buy back at least $80 billion in US Treasuries each month. As the economic recovery gains more stable footing, the Fed will look to reduce these buybacks. This may finally nudge long-term rates back to levels that seem normal. Yet, why is the 30-year not already heading higher than a meager 1.66%?

Twenty years from now, the yield curve is pricing in a 10-year rate of less than 3%. It is hard to imagine the pandemic or any other current event having a measurable or predictable impact that far into the future. Over the past 150 years, the historical average is 4.5%. This may seem like a longer period than relevant or necessary, but bond cycles take many decades to play out. If rates form a trough here, it would be just the third such occurrence within the past 150 years.

The yield curve, however, does not simply price in the likely path of future interest rates. At the short end, these expectations do dominate yields, but the long end of the curve defies forecasts and is instead determined by other factors. It seems that investors today are either supremely confident that inflation will remain subdued for the better part of thirty years or feel that they have few other attractive investments. Comparing equity and fixed income valuations is not straightforward, but an approximate measure can be divined by treating the earnings of a company like the coupon of a bond. An equity has no maturity, so it becomes a perpetuity in insurance parlance.



In October, Robert Shiller added such a measure to his monumental data website. He deems it "excess CAPE yield." This metric takes the inverse of the cyclically adjusted price-to-earnings ratio and subtracts from it the 10-year yield after adjusting for inflation. For example, a CAPE of 10 and inflation of 5% over the cycle would convert to a yield of 10% + 5% = 15%. Shiller shows, as you'd expect, that when the CAPE yield is much higher than the Treasury yield, it tends to be better to invest in equities, and vice versa. With the S&P 500 CAPE now at 33.4, the CAPE yield is approximately 3%. After factoring in trailing inflation of 1.7%, the yield over the 10-year is 3.8%. This compares favorably to 1.5% from September 2018, 1.2% in June 2007, and especially -1.5% in January 2000. It is also higher than the 3.2% historical average over the past 40 years. So, by this measure, long term yields do have some room to move higher in order to align with equity valuations.

The US Stock Market

In a year where the US faced a global health pandemic, widespread civil unrest, and a hotly contested presidential election cycle, the major market indices astonishingly posted a third consecutive quarter of positive returns – strongly double-digit, in most cases. Proof once again that the stock market is not the economy.

US Stock Indices - Total Returns					
Large-cap Stocks	**4Q20**	**2020**	**Mid-cap Stocks**	**4Q20**	**2020**
S&P 500	12.15%	18.40%	S&P Midcap 400	24.37%	13.66%
Russell 1000	13.69%	20.96%	Russell Midcap	19.91%	17.10%
Growth	11.39%	38.49%	Growth	19.02%	35.59%
Value	16.25%	2.80%	Value	20.43%	4.96%
Broad Markets			**Small-cap Stocks**		
S&P 1500	13.24%	17.92%	S&P Smallcap 600	31.31%	11.29%
Russell 3000	14.68%	20.89%	Russell 2000	31.37%	19.96%
Growth	12.41%	38.26%	Growth	29.61%	34.63%
Value	17.21%	2.87%	Value	33.36%	4.63%

In some ways, Q4 was an extension of Q3, but with even stronger returns across the major indices, driven by the promise of imminent coronavirus vaccines, a continuation of the largest federal stimulus ever, and unprecedented support from the Fed. The Nasdaq finished its best year since 2009, while the Dow Jones Industrial Average and the S&P 500 Index ended the quarter with record high closes, the 14th of the year for the Dow and the 33rd of the year for the S&P. 2020 was only the eighth time since 1928 the S&P 500 Index closed a year at a new peak. While the S&P 500 Index had a banner year, the stellar performance was concentrated in a small number of firms. Apple, Amazon and Microsoft accounted for over 53% of the S&P 500's total return for the year, and returns for the S&P 500 would have been negative in 2020 without the largest 30 companies [S&P Global].

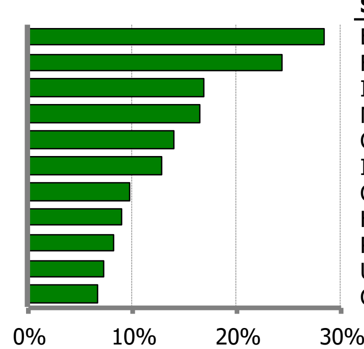
However, the quarter also saw some notable reversals. Although not as extreme as the growth dominance for the year, a rotation into value occurred across the capitalization spectrum in Q4 led by the energy and financials sectors, two of the worst performing sectors in Q3 as well as for the year as a whole. After struggling to achieve supply/demand balance through most of 2020, the energy sector benefitted from rising oil prices and optimism that a successful coronavirus vaccine would support more normalized demand. The sector posted Q4 returns that were almost double those of any other with the exception of financials.

Difference in Returns of Russell 3000 Growth and Value Indexes 2000 - 2020

While still challenged by a low interest rate environment (and a lower-for-longer strategy from the Fed), financials benefitted from optimism that economic activity would pick up in 2021, potentially driving longer-term rates higher and steepening the yield curve. The sector recorded the largest improvements in expected earnings for the quarter (albeit in the form of largest decrease in an expected decline). Over 80% of financials sector firms increased their Q4 EPS estimates since September 30, with more than half of those increasing estimates by more than 10%. Wells Fargo, Bank of America, Citigroup, Capital One Financial, and Goldman Sachs were the largest contributors in this regard [FactSet]. This was on the heels of a Q3 earnings season where estimates also improved significantly (by becoming less negative) over the quarter. A surge of IPO activity was a bright spot for the financials sector in 2020. (For more on developments in the IPO market, see this quarter's Focus piece.) For the year, technology and consumer discretionary (where Amazon is the largest constituent) dominated. Both sectors were beneficiaries of the pandemic as the work-from-home environment drove demand for cloud services and computer equipment and online shopping increased.

Earnings growth in Q4 for S&P 500 companies overall is predicted to come in at -9.7% YOY. If this materializes, it will be the third largest decline since Q3 2009, behind Q1 and Q2 2020. It will also be the seventh time in the last 8 quarters that the index has reported a YOY decline in earnings. However, analysts are predicting a return to earnings growth in Q1 2021, and Q4 2020 revenue growth in the S&P 500 is expected to be 0.1% YOY [FactSet].

S&P 1500 Economic Group Components - Total Returns



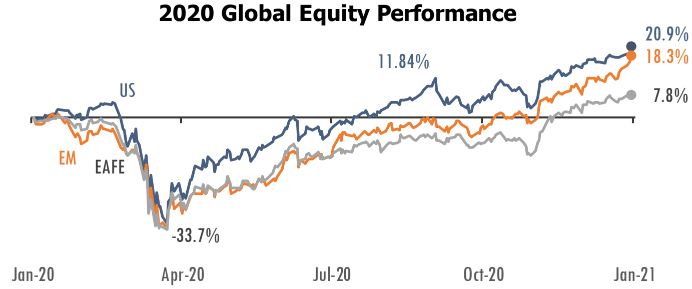
Sector	4Q20	2020
Energy	28.46%	-33.81%
Financials	24.31%	-1.91%
Industrials	16.85%	11.69%
Materials	16.50%	19.60%
Comm. Services	13.99%	23.36%
Info Tech	12.89%	43.23%
Consumer Disc.	9.68%	32.88%
Health Care	8.91%	14.55%
Real Estate	8.27%	-4.25%
Utilities	7.16%	-0.90%
Consumer Staples	6.69%	11.10%

Source: Morningstar

International Markets

International equity markets recorded their best quarter since 2009, with the MSCI ACWI ex-US surging. Gains were broad-based, and emerging markets outperformed the US and other developed markets. Investors piled into EM equity and debt at the fastest pace in seven years, with over $205 billion in inflows in November and December alone. The dollar's continued slide in Q4 also helped boost commodity prices, a tailwind for emerging economies.

2020 Global Equity Performance



Europe

The pan-European Stoxx 600 index rose over 10% in Q4. While October saw a moderate selloff across the region with a second wave of COVID-19 infections and the associated containment measures weighing on sentiment, the recovery rally resumed following the results of the US elections and announcements of fresh stimulus from the European Central Bank (ECB). The central bank added €500 billion to its bond-buying program in December and increased the program term until at least March 2022. It also plans to grant more subsidized loans to European banks to stimulate lending as the recovery continues. Despite these new measures, the euro gained materially versus the US dollar in Q4, appreciating 4.2%.

This unwavering monetary support helped curb bond market volatility and keep rates at record lows. The biggest beneficiaries of the ECB's programs continued to be lower quality sovereigns such as Greece and Italy – yields on the Italian 10-year fell from 0.85% to 0.52% over the quarter, while the 10-year yield in Greece slid 40 bps to 0.63%. Credit spreads also tightened across the board, with investors adding risk to their portfolios in search of yield. European high-yield credit rallied through the quarter, with spreads falling 120 bps.

Despite the runup in asset prices, the economic recovery may have stalled in the fourth quarter. With lockdowns continuing into the new year, the ECB cut its Eurozone growth forecast to 3.9% for 2021, down from 5.0% in its September forecast. Inflation continued to lag estimates, with core Eurozone inflation coming in at 0.2% and 0.3% YOY in October and November respectively – far below the long-term target of 2%.

Near the tail-end of the quarter, the UK finally secured a Brexit agreement that cements the nation's exit from the European Union. The deal, which came into effect on January 1st, outlines the future relationships on trade, security and nuclear power between the EU and the UK. Both sides have agreed to not impose any tariffs or quantitative limits on imports and exports to minimize economic disruption.

Americas

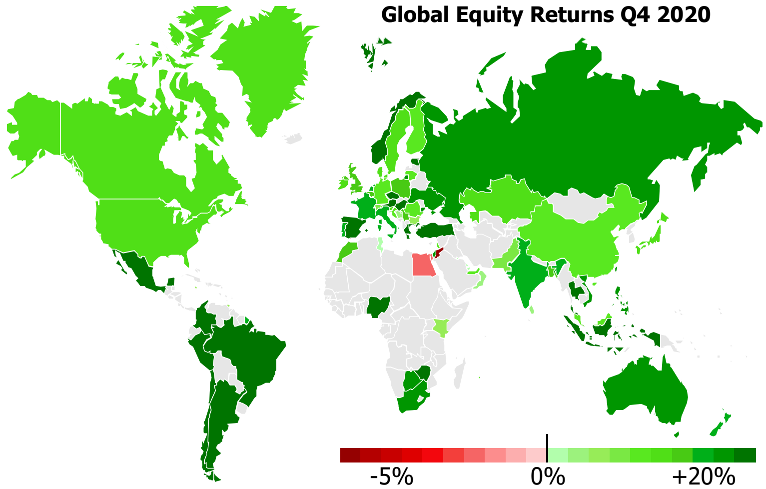
Easing worries of a sharp slowdown in a second wave of coronavirus, Canada's economy expanded more than forecast. GDP grew 0.4% in October from a month earlier, according to Statistics Canada, above the 0.3% growth expectation. The agency also released a preliminary estimate for November, which showed a 0.4% expansion. Economists still expect a rough December reading with reinstated restrictions (lockdowns in Ontario and Quebec) which will likely cause another contraction in economic activity. The government outlined a historic C$381.6 billion deficit in December and pledged up to C$100 billion in stimulus spending to "jumpstart" the recovery, once the virus is under control.

The pandemic has significantly impacted the Mexican labor market. Between April and May, 12.5 million people left the labor force and unemployment rose to 4.5% from 3.3% in March. The pandemic shrunk the size of the economically active population from 60.5% in February to 47.5% in April. A partial recovery of the Mexican economy has helped bring 10.2 million workers back. A significant number of those reentering the labor force are joining the "informal market," wage earners that don't have access to social security and self-employed workers that do not appear on payrolls and don't pay taxes. Mexico's National Statistics Office estimates that around 60% of workers are informal. In October, the number of people working part-time hours doubled to 15.7% compared to 7.5% in January, signifying that, despite the recovery, jobs remain a major concern.

Foreign Stock & Bond Indices - Total Returns

MSCI Broad Indices	4Q20	2020	Barcap Global Indices*	4Q20	2020
MSCI ACWI ex-US	17.01%	10.65%	Global Aggregate	3.28%	9.20%
EAFE (Developed)	16.05%	7.82%	Pan-Euro	5.93%	12.88%
Emerging Markets	19.70%	18.31%	Asian-Pacific	3.85%	6.57%
			Eurodollar	1.10%	6.06%
MSCI Regions			Euro-Yen	4.14%	8.30%
Europe	15.61%	5.38%	Other Currencies	11.96%	8.09%
Japan	15.26%	14.48%	** Unhedged*		
Pacific ex-Japan	20.07%	6.55%			
Latin America	34.82%	-13.80%			

A report released by the Economic Commission for Latin America and the Caribbean (ECLAC) expected growth of 3.7% in 2021 after a 7.7% contraction this year. Inflation is expected to rise in 2021 after dropping this year due to declining output and low oil prices. To further support their economies amid the ongoing pandemic, the central banks of Brazil, Chile, Colombia, Paraguay and Uruguay held policy rates stable at multi-year lows during Q4 while Argentina loosened its policy.



Asia

China's GDP expanded by 4.9% in Q3 from a year earlier as the rest of the world struggled with coronavirus. The growth number moved the country's economy into positive territory for the first nine months of the year, expanding 0.7% YOY. Also, unemployment fell to 5.4% in September, lower than prior months' and Beijing's target of around 6%.

China revived its economy in roughly three stages. First, shutting down most economic activity in the first quarter. Second, reviving factory production in the second quarter. Third, encouraging consumers to begin venturing outside of their homes and start taking advantage of a virus-free country, which eventually led to consumer recovery in the Q3.

The fourth quarter continued to deliver strong results. The industrial sector has led the nation's economic recovery since the second quarter of the year. The official manufacturing PMI, a key measure of factory activity, declined slightly from September's 51.5 to 51.4 in October, but then rose to 52.1 in November, the highest level in 3 years, tapering off slightly to 51.9 in December. Manufacturing data showed strength beneath the headline number. The subindices measuring production and total new orders peaked in November, declining slightly in December. Meanwhile, nonmanufacturing PMI, which includes services and construction activity, declined to 55.7 in December from November's 56.4, an 8-year high.

With the coronavirus staying broadly under control, life has returned to normal, which has helped the other major segment of the economy – services – to catch up. Retail sales have been increasing steadily since Q3. They grew by 4.3% and 5.0% in October and November, respectively. China's stock market ended 2020 on a high note, with the CSI 300 Index, up 14% in Q4, and 27% for the year, reflecting the country's economic revival during the pandemic.

China's trade surplus widened in October as the global recovery buoyed demand for made-in-China goods, helping export growth beat market expectations. Exports rose 11.4% from a year earlier in October, higher than the previous month's 9.9% increase. Imports rose by a more modest 4.7% in October YOY, down from September's 13.2% rise. In recent months, overseas sales of pandemic-related medical gear and work-from-home computer products have remained resilient, serving as twin pillars for China's export sector.

Consumer prices dropped for the first time in over a decade in November. The fall was driven by volatile food prices, including the continued retreat of pork prices as supply recovers from the ravages of African swine fever. November CPI was down 0.6% from a month earlier, the second straight monthly fall. Core inflation, which strips out volatile food and energy prices, held steady at 0.5% for the fifth straight month. The decline in factory-gate prices eased in November as PPI was down 1.5% from a year earlier, compared with October's 2.1% decline. Robust external demand and domestic infrastructure investment are expected to buoy demand for industrial goods and lift the PPI in the months ahead.

Although Japan's economy grew by 5.3% in Q3, analysts expect the recovery to be muted as a third wave of COVID-19 cases blooms. To encourage growth, Japan's new Prime Minister Yoshihide Suga announced a fresh round of stimulus in early December. The ¥73.6tr ($708bn) package included subsidies for green investment and spending on digitalization.

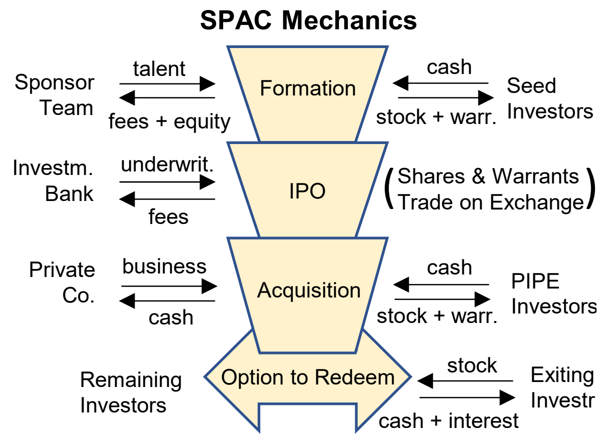
About $384bn of the stimulus package will come in the form of direct spending. The package includes extensions of subsidy programs aimed at promoting domestic travel and spurring consumption. It also has a $19.2bn fund to promote carbon neutrality by 2050, $9.6bn to accelerate digital transformation and $14.4bn in subsidies to support restaurants hurt by shortened hours during the pandemic. Suga's cabinet endorsed the stimulus package, bringing the combined coronavirus-related stimulus to about $3tr for the year.

As of this writing, Mr. Suga is contemplating a possible emergency declaration due to a significant uptick in COVID-19 cases. Retailers and restaurant operators are carefully watching the central government to see if they give prefecture authorities the power to enact stronger measures including business suspensions. Estimates are that if an emergency declaration is enacted covering Tokyo and a number of major prefectures, closing businesses for a month, consumer spending will contract by $28.9bn and 147,000 jobs will be lost.

Focus On: The Special Purpose Acquisition Company

One of the hottest toys this season is the Playstation 5. A prime target for scalpers, within the first 30 minutes of restocking it for sale online, Walmart blocked over 20 million automated purchases from internet bots. Presumably, had Sony priced the first units of its new console higher, it could have removed scalpers from the supply chain and kept their profits for itself. However, this would mean slowing down the rate of sales, potentially diminishing a sizable user base and ceding the console market to Microsoft's Xbox for the next 5 years. Scalping is undesirable but unavoidable.

Initial Public Offerings ("IPOs") intentionally bake scalping into the process. Select investors are able to procure new stocks at the IPO price. And though there is risk of loss, the tendency is a first day pop in the secondary market that generates a windfall for the well-heeled investor. In 2020, the median pop was +20%. Note this figure is not annualized. In each year since 2008, the average IPO has achieved a first day return ranging from +9% in 2009 to +21% in 2013.



In 2020, IPOs notched an all-time record, registering $180 billion in new listings in the US, beating out the previous record of $102 billion set in 2000 [Bloomberg]. This is in spite of tepid first quarter activity, which rolled to a stop amid the COVID-19 outbreak in March. The remarkable rebound in equity valuations provided fertile soil, prompting some exciting IPOs to cap off the year, chiefly Airbnb and DoorDash. The coupling of favorable broad market sentiment and company-specific excitement compelled both stocks to close at prices ($145 and $190), well above their IPO prices ($68 and $105) upon their exchange debuts and akin to the PS5 selling at twice its $499 MSRP on eBay.

The CEO of Airbnb was, in his words, "humbled" by speculators bidding up the stock price to such heights. He was mid-interview when he learned of the price jump and was momentarily at a loss for words – a sign of mixed feelings? Had the IPO price been set closer to where it ended up trading on the NASDAQ, those extra billions would now line the company coffers instead speculators' pockets. In addition to pricing risk, the traditional IPO is further burdened by significant cost and regulatory rigamarole. Those looking for an alternative may appreciate the Special Purpose Acquisition Company (SPAC). While the price of a traditional IPO is determined by the lowest price at which shares will clear the market (a.k.a., Dutch auction), the SPAC auction price is determined by the highest price a bidder will pay for the company.

Mechanics

SPACs are one of three ways to bring a company public, and they have much in common with the competing alternatives: the traditional IPO and a reverse merger. SPACs start off by raising a pool of money from investors through an IPO...of a shell company. Investors pay $10 per share by convention and also receive warrants (i.e., the right to purchase future shares or fractional shares at a stated price). Without an actual business to report or market to the public, the IPO is relatively straightforward, cheap, and quick. After the IPO, this pool of capital sits around waiting for a reverse merger (a.k.a., reverse takeover; unlike a normal takeover, the acquired company gains control). Any publicly traded company could do this, but SPACs don't come with the same financial baggage as legacy businesses.

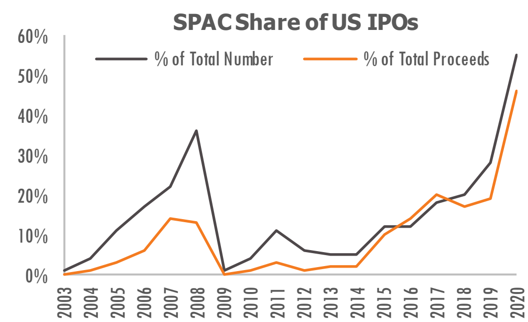
The SPAC may sit on its cash for up to (typically) two years before executing a merger. In the meantime, it usually invests in US Treasury bonds or similarly low-risk, low-yielding securities. Once a target non-listed company has been identified for acquisition, the shareholders of the SPAC vote on the transaction. Prior to this, investors may redeem shares to recoup their initial $10 plus interest, and institutional investors often retain warrants essentially as a free bonus.

After the merger has been approved by shareholders and regulators, the SPAC is rebranded and effectively becomes the once non-listed company. Shareholders now hold stock in the new company as well as warrants, in the case of institutional investors, which typically carry an $11.50 strike price. Investors in the SPAC can sell their interest at any time. The SPAC sponsor receives a 20% "promote" share of the post-merger equity for a nominal cost (e.g., $25,000).

Additional capital needs to be raised after IPO because SPAC sponsors hunt for target companies often valued at several times the capital raised and many investors redeem their shares when given the option after the acquisition target has been announced. The additional capital comes from Private Investment in Public Equity (PIPEs). Institutional investors looking to invest through PIPEs and those that already committed capital to the SPAC will get the first look at a potential target company. While this can leave retail investors somewhat in the dark, those getting the early peak usually need to commit to holding onto their shares for a number of months following the merger.

Explosion in Popularity

By all accounts, SPACs represented a record-high proportion of the IPO market in 2020, although the drivers of this sea change may not be so obvious. A good portion of the SPACs announcing deals in 2020 necessarily raised funds prior to the global pandemic that drove many companies to the capital markets as a way to make it through. For this SPAC share of IPOs, analysts have pointed to a "right place, right time" theory. Some have credited the combination of recent high profile SPAC successes (e.g., DraftKings and Virgin Galactic) and an increasingly fraught traditional IPO market (e.g., the abandoned WeWork IPO in 2019) with creating interest in the alternate path. Still others point to the relatively recent "reinvention" of SPACs where respected capital markets players have added a sense of legitimacy along with a record of strong deal management, increasing the appeal of SPACs to both investors and the targeted businesses.



Once the domain of a small set players and considered to represent the seamier side of investing, the 2020 SPAC explosion included Wall Street giants. The 10 largest SPAC underwriters accounted for the lion's share of 2020 activity – almost 80%. Cantor Fitzgerald was pushed from the top spot it held in 2018 and 2019 to fourth on the list after Credit Suisse, Citigroup, and Goldman Sachs, which together accounted for 38% of 2020 SPAC underwriting, overtook it. The list was rounded out by UBS, Deutsche Bank, and, for the first-time, Morgan Stanley, JPMorgan Chase, and Bank of America [Dealogic / WSJ].

Who Benefits, At What Cost?

While SPACs do have numerous potential benefits, what accrues to the initial investors, later investors, the target company, and the SPAC sponsor? An article titled "A Sober Look at SPACs," published in October, notes that SPACs are a cheaper path to take a company public only because investors are bearing much of the cost. While it is true that early SPAC investors may redeem their shares for their initial principal investment plus interest, that does not mean those remaining in the SPAC are holding stock with an intrinsic value above $10 per share. In fact, the median cash holdings of a SPAC at the time of the merger are $6.67 per share [Klausner and Ohlrogge]. How can this be?

Investors in a SPAC face a three-pronged threat of dilution. The first is from the 20% post-merger equity promote given to the sponsor. The second dilutive compounder stems from investors themselves redeeming shares prior to the merger while often retaining their warrants as a literal free option. Aforementioned underwriting fees mark the third and final step down. As a percent of the cash delivered in the merger, including PIPEs, the median total cost of a SPAC works out to 50% after factoring in dilution. The net promote is responsible for 31%, underwriting fees for 7%, and warrants for 17%. By this measure, SPACs are twice as expensive as a traditional IPO, which has a typical 7% underwriting cost and 20% "pop."

SPAC Returns (2019-2020 Mergers)

	Months After Merger		
	3	6	12
Median	-15%	-24%	-65%
Average			
All	-3%	-12%	-35%
HQ* Sponsor	32%	16%	-6%
vs. IPO Index	25%	0%	-12%
vs. Russell 2k	38%	23%	10%
Non-HQ*	-39%	-38%	-57%

*High Quality sponsors are defined those having either an existing fund with AUM >= $1 billion or senior officer experience at a Fortune 500 company

Source: Klausner & Ohlrogge

The 20% promote has represented 31% of cash delivered in a merger, at the median. In more than 25% of transactions, the promote exceeded cash delivered. After costs and dilution, the promote has given sponsors a median post-merger equity share of 7.7%. Recently, the median percent of SPAC redemptions pre-merger has been 73%. Underwriting fees are paid on the SPACs IPO proceeds, not on lower SPAC assets at the time of the merger. Redemptions can be replaced by new investments, but tend to fall short.

Even when an IPO is priced close to market, it is still an expensive affair. Underwriting fees are the largest direct expense and average 7% for smaller IPOs and 3.5% for those over $1 billion [PWC]. Legal, accounting, regulatory and other expenses can total almost as much for smaller companies, and still add around 1-2% to the cost of a larger IPO. It would seem cheaper to reduce some of these costs, particularly the underwriting cost, by going public through a SPAC. In fact, SPAC direct costs are slightly below those of a traditional IPO. Investment banking fees for SPACs average 5-6% [Lead Left], charged, as noted above on the IPO proceeds of the SPAC which tend to be higher than the SPAC assets at the time of the merger. A typical structure is for the SPAC manager to charge 2% plus $2 million to cover the initial underwriting fees and operational maintenance costs.

So far so good; but the small advantage SPACs may offer on direct costs is often far outweighed by indirect costs. As a percent of post-merger equity, costs total 14% at the median, with top and bottom quartile cutoffs of 10% and 21%. This is the amount that share prices will have to increase by to make investors whole. If the acquisition price is cheap enough, this should be possible. However, post-merger returns indicate instead that public equity investors bear the cost of dilution [Klausner and Ohlrogge]. This is contrast to traditional IPOs where the issuing company and its private investors bear the cost of the IPO, including the presumed "pop."

Post-Merger Costs (% of Equity)

	Percentile		
	25th	50th	75th
Net promote	8%	5%	12%
Underw riting	2%	1%	3%
Warrant/right	4%	3%	7%
Total costs	14%	10%	21%

Source: Klausner & Ohlrogge

Many recent SPACs have posted strong returns for investors. Overall, however, they have lagged IPO performance. Within the past 5 years, only about half of SPACs launched have made it through IPO and completed a merger. The average return for these "successes" has been -14% compared to a 49% average return for traditional IPOs during the same time span [Renaissance Capital]. Further, SPACs debuting from 2010 through 2017 have lagged the broader equity market returns by an annualized average of 3% over the following 3-year period [WSJ].

Wild "SPACulation"

It is hard to imagine a more speculative equity investment than a pre-merger SPAC. When you buy into a SPAC at $10 with a downside of $10 plus interest, you are really investing in Treasuries and securing a place in line. Yet, many SPACs trade well above this par amount even when no potential candidates for acquisition have been identified. The $4 billion Pershing SPAC (ticker PSTH) was issued at a $20 share price (a rare exception to the standard $10) and closed at $27.72 at the end of 2020. For this to be a successful bet, Pershing's SPAC team has to close on a merger within its 2-year time limit with a deal that the market will immediately value far above what the target company is willing to accept.

Amidst rightful concern over the explosion in SPAC popularity, SPACs have shown progression toward more prudent structures and operation. Indirect costs need to come down to justify investor enthusiasm, but are headed in that direction. Covenants and other improvements to the structuring of SPACs can help better align the interests of all parties. However, there is no clear reason why SPACs should continue to eat away at the market share of the traditional IPO. IPOs have burdensome regulatory and due diligence requirements to protect investors from imprudent, mismanaged, or outright fraudulent financial tomfoolery.

SPAC Summary Statistics

	Percentile		
	25th	50th	75th
IPO Proceeds	$220mn	$141mn	$328mn
Cash Delivered	$152mn	$26mn	$353mn
Post-Merger Cap	$502mn	$321mn	$955mn
Redemptions	73%	18%	95%
PIPE Investment	25%	0%	43%
Post-Merger Equity			
Sponsor	12%	6%	15%
Other Investors	23%	18%	35%

Source: Klausner & Ohlrogge

Circumventing safeguards may be marketed as investor-friendly cost-saving. Yet, it is not the average investor who seems to benefit. While a competent investment manager will be well aware of these "SPAC-falls" and invest accordingly, there is little and less to protect index funds from becoming littered with these speculative vehicles trading at multiples of their intrinsic value.

SPACs are not the only class of stocks active managers may actively avoid. Portfolio managers face similar choices on whether to exclude Business Development Corporations (BDCs) and State-Owned Enterprises (SOEs). BDCs are portfolios of private debt and SOEs are controlled in part, or in whole, by government authority. Where these risks are appropriate and fairly compensated by risk premia, they may prove worthwhile additions at the margin. For example, one investment manager has allocated to SPACs selectively, with the total exposure limited roughly to the size of a typical holding for the strategy. However, given the likely range of policies and controls for these securities across managers, there is no substitute for understanding what comprises an investment.

SPACs may prove a short-lived fad for another reason altogether. In December, the SEC decided to allow firms to raise fresh capital through direct listings, cutting investment banks and scalpers out of the process. NYSE President Stacey Cunningham responded, "This is a game changer for our capital markets, leveling the playing field for everyday investors and providing companies with another path to go public at a moment when they are seeking just this type of innovation."