Yardeni Research

MORNING BRIEFING
November 10, 2020

The Distribution of Corporate Equities Among US Households

Check out the accompanying chart collection.

(1) Can you hear the roar of the 2020s? (2) Pfizer announces vaccine that is 90% effective. (3) Trump's Operation Warp Speed is on speed. (4) There are still several important known unknowns about Pfizer's vaccine. (5) Other vaccines are still in the running. (6) Large Fed research team compiles impressive database on distribution of household wealth. (7) Households own about 65% of corporate equities directly and indirectly. (8) The One Percent holds about 50% of corporate equities and mutual fund shares. (9) Older generations own a larger share of equities than younger ones. (10) Education is a key contributor to financial success.

Vaccine I: Speeding Along. Roaring 2020s, here we come! Yesterday morning, Pfizer and partner BioNTech announced that they've developed a Covid-19 vaccine that is 90% effective. Stock prices soared on the news, led by all the pandemic-challenged businesses. Value outperformed Growth and may continue to do so as the bull market broadens and continues to rise in record-high territory. Yesterday, I wrote: "Joe and I still have a target of 3800 for the S&P 500. We just aren't sure whether that happens by mid-2021 or by the end of this year." Now we think it could happen well before mid-2021.

According to the "Fact Sheet: Explaining Operation Warp Speed" posted on HHS.gov, the website of the US Department of Health and Human Services (HHS), on July 22 "HHS announced up to $1.95 billion in funds to Pfizer for the large-scale manufacturing and nationwide distribution of 100 million doses of their vaccine candidate. The federal government will own the 100 million doses of vaccine initially produced as a result of this agreement, and Pfizer will deliver the doses in the United States if the product successfully receives FDA EUA or licensure, as outlined in FDA guidance, after completing demonstration of safety and efficacy in a large Phase 3 clinical trial, which began July 27th."

The Fact Sheet also outlines the plans for manufacturing and distributing the vaccine. Congress directed almost $10 billion to this effort through supplemental funding, including the CARES Act. Congress also appropriated other flexible funding. The almost $10 billion specifically directed includes more than $6.5 billion designated for countermeasure

development through BARDA (the Biomedical Advanced Research and Development Authority, an office of the HHS) and $3 billion for National Institutes of Health research.

Operation Warp Speed (OWS) certainly seems to be operating at warp speed thanks to the funding provided by Congress and the efforts of the Trump administration.

STAT covered the Pfizer news yesterday in an article titled “Covid-19 vaccine from Pfizer and BioNTech is strongly effective, early data from large trial indicate.” Here are the key points:

(1) *Crossing a safety threshold.* “In keeping with guidance from the Food and Drug Administration, the companies will not file for an emergency use authorization to distribute the vaccine until they reach another milestone: when half of the patients in their study have been observed for any safety issues for at least two months following their second dose. Pfizer expects to cross that threshold in the third week of November.”

(2) *Missing pieces of information.* “There is no information yet on whether the vaccine prevents severe cases, the type that can cause hospitalization and death. Nor is there any information yet on whether it prevents people from carrying the virus that causes Covid-19, SARS-CoV-2, without symptoms.”

(3) *Important unknown details.* “Because the vaccine has been studied for only a matter of months, it is impossible to say how long it will protect against infection with the virus. The vaccine does cause side effects, including aches and fevers, according to previously published data. …

“The results have not been peer-reviewed by outside scientists or published in a medical journal, and even Pfizer and BioNTech have been given no other details about how the vaccine performed by the independent monitors overseeing the study.”

(4) *Distribution challenges.* “Initial supplies of the vaccine, if authorized, will be limited. Pfizer says up to 50 million doses could be available globally by the end of the year, with 1.3 billion available in 2021. There are also expected to be distribution challenges. The vaccine must be stored at super-cold temperatures, which could make it extremely difficult to deliver to many places. Pfizer has said it is confident those issues can be managed.”

(5) *Bodes well for other vaccines.* “Although the estimate of the efficacy of the vaccine could change as the study is completed, it is close to a best-case scenario. That also bodes well for other vaccines in the late stages of testing, including those developed by Moderna, AstraZeneca, and Johnson & Johnson.”

(6) *A big diverse sample.* “The study has enrolled 43,538 volunteers the companies said, and 38,955 have received their second dose. About 42% of global participants and 30% of U.S. participants have racially and ethnically diverse backgrounds.”

Vaccine II: More Silver Bullets. Some 170 Covid-19 vaccine candidates are in development globally, according to yesterday’s update of the *WSJ* vaccine roundup, citing World Health Organization information. Ten are in Phase 3 of the five phases of development and testing. But just a handful of frontrunners are sponsored by reputable US and European-based teams and backed by OWS—including Pfizer & BioNTech, Moderna & National Institute of Allergy and Infectious Disease, AstraZeneca & University of Oxford, Johnson & Johnson’s Janssen, and Novavax.

Huge swaths of the population would need to be vaccinated to eradicate the virus, especially if the protection lasts less than a year or so. But even if a vaccine doesn’t put a swift end to the pandemic, it should end the pandemic of fear gripping high-risk populations and their families. Here is more background and an update on the other vaccine candidates:

(1) *Naturally waiting*. Phase 3 involves injecting people with the candidate vaccine or a placebo, then evaluating the severity of any Covid-19 symptoms and vaccine reactions they exhibit, according to Johnson & Johnson’s website. Now that Pfizer has shown that it has sufficient naturally occurring confirmed cases in its sample for an initial analysis, we can assume that preliminary efficacy results for other manufacturers’ vaccine candidates will not be far behind.

(2) *Unprecedented speed*. To get at enough early infections to trigger an analysis, sponsors have amped up the scale of testing to tens of thousands of volunteers; frontrunners’ studies range from 30,000 to 60,000 volunteers, many of whom already have received the presumed necessary two doses of a vaccine candidate.

Two Covid-19 vaccine trials (AstraZeneca’s and Johnson & Johnson’s) were put on a short pause not long after the initial shots were administered due to the possible identification of

adverse reactions, but those issues have since been resolved and testing has resumed. Sponsors remain hopeful that initial efficacy analysis may be completed sometime before the end of the year. Pfizer just proved that the hope is warranted with its interim analysis of 94 confirmed cases. As noted in yesterday's press release, 164 cases are targeted for final analysis.

(3) *Low bar*. After the initial stages of Phase 3, sponsors will need to seek either emergency-use authorization or formal approval and licensure from regulatory bodies such as the European Commission or the US Food & Drug Administration (FDA). Requirements include minimum standards of effectiveness, such as at least 50% under the FDA. But based on Pfizer's promising headline, that's an awfully low bar! The FDA is also recommending a minimum two-month waiting period to monitor for side effects, Reuters recently noted, but that's a lot faster than the typical timeline of several years. The post-approval manufacturing and distribution phases involve ongoing monitoring of production and testing of vaccines for potency, safety, and purity.

(4) *Promising technology*. Pfizer's early better-than-expected efficacy results are promising not only for Covid-19 but also for the future of vaccine technology. Three main types of vaccinations are in the final stages of testing: gene, virus, and protein based. Pfizer's and Moderna's candidates use the gene-based technology to synthetically instruct the body's cells to make a virus component protein and induce an immune response through mRNA. Virus-based vaccines like AstraZeneca's and Johnson & Johnson's use either a weakened or modified form of a virus or else a viral component to trigger an immune response. Novovax's protein-based vaccine injects a protein from the virus to generate a response. There is a long history of proven vaccinations using virus and protein-based techniques, while an mRNA vaccine has never been approved before.

(5) *Large capacity*. OWS set out to produce and deliver tens of millions of doses of a safe and effective Covid-19 vaccine for the US population by the end of 2020, with 300 million doses available and deployed by mid-2021, an unprecedented timeline, observed the *New England Journal of Medicine*. It looks like that incredible goal may be reached. Significant doses from one or more vaccine candidates could be available for distribution this year. Pfizer expects to deliver up to 50 million vaccine doses before the end of this year and up to 1.3 billion doses in 2021.

(6) *Take rate.* An October 19 STAT news report raised concerns that the share of folks willing to take an initial vaccine was falling. But a new survey by STAT and The Harris Poll suggests that more than half of the population would get vaccinated as soon as a shot becomes available. Vaccinating nursing home populations alone would significantly lower hospitalization and death rates, in our opinion.

Strategy I: New Fed Database on Household Wealth. A large team of the Fed's researchers have been busy constructing a new database containing quarterly estimates of the distribution of US household wealth since 1989. They launched it with the release of a March 2019 working paper titled "*Introducing the Distributional Financial Accounts of the United States*." Melissa and I reviewed it in the July 31, 2019 *Morning Briefing*. The Distributional Financial Accounts (DFA) is an impressive accomplishment combining quarterly aggregate measures of household wealth from the *Financial Accounts of the United States* (FA) and triennial wealth distribution measures from the Survey of Consumer Finances (SCF).

We believe that the new database can be used to resolve lots of controversial issues about wealth distribution in the US. The DFA's balance sheet of the household sector is much more comprehensive and timely than previously existing sources. The Fed's researchers observe that their "approach produces rich and reliable measures of the distribution of the Financial Accounts' household-sector assets and liabilities for each quarter from 1989 to the present." The data can be used to study the distribution of wealth in America by wealth and income percentiles, education, age, generation, and race. Melissa and I intend to do just that in coming months with the goal of assembling a comprehensive *Topical Study* tentatively titled "Income & Wealth in America: Myths & Realities."

Strategy II: Who Owns Equities in America, According to FA? Our October 27 *Morning Briefing* was titled "Who Owns Stocks in America?" We based it on the aggregate data available in Table L.223 in the FA for corporate equities held by each of the major sectors in the accounts. Unlike the DFA, the household sector in the FA includes nonprofit organizations, and this sector's data are calculated residually from the other accounts. Let's review our findings:

(1) *The supply side of equities.* The total market value of equities held in the US during Q2-2020 was $52.0 trillion, with domestic issues totaling $43.5 trillion and foreign issues totaling $8.5 trillion (*Fig. 1*). Domestic issues included $33.5 trillion of nonfinancial issues and $10.0 trillion of financial issues and consisted of $37.2 trillion of publicly traded and $6.3 trillion of

closely held equities (*Fig. 2* and *Fig. 3*). The $6.3 trillion of closely held equity consisted of $4.7 trillion in S corporations and $1.6 trillion in C corporations (*Fig. 4*).

(2) *Ownership by sectors.* During Q2-2020, of the $52.0 trillion in equities, the major sectors directly held the following amounts and percentage shares: household sector ($19.5 trillion, 37.6%), mutual funds and exchange-traded funds (ETFs) ($14.5 trillion, 27.8%), rest of the world ($8.2 trillion, 15.8%), and institutional investors ($7.0 trillion, 13.4%) (*Fig. 5* and *Fig. 6*).

(3) *Directly and indirectly held by households.* The FA includes a Table B.101e titled "Balance Sheet of Households and Nonprofit Organizations with Debt and Equity Holdings Detail." It provides extraordinary insight into the indirect equity holdings of households through life insurance companies, private and public pension funds, and mutual funds. During Q2-2020, households and nonprofits directly held $19.5 trillion (37.6% of all equities) and indirectly held $12.4 trillion (23.8% of the total) (*Fig. 7*). In other words, their direct and indirect holdings of equities totaled $31.9 trillion, or 61.4% of all equities (*Fig. 8*). Interestingly, this percentage has been remarkably stable around 65% since the early 1980s.

Strategy III: Which Households Own Equity, According to DFA? The link between the household sector in the FA and in the DFA is Table B.101.h titled "Balance Sheet of Households," which unlike Table L.223 excludes nonprofit organizations from the household sector. On the other hand, this balance sheet shows the household sector's combined holdings of corporate equities and mutual fund shares, which include bond funds but not money market mutual funds or ETFs. The assets and liabilities in this version of the household balance sheet are the ones for which the DFA provides all the data needed for analyzing the distribution of household net worth. (See "Household Balance Sheet" from our forthcoming study on income and wealth in America.)

Now, let's analyze the distribution of the DFA's various series for corporate equites and mutual fund shares held by households, sliced and diced by wealth percentile, generation, and education:

(1) *DFA by wealth percentiles*. We repeat: The DFA is based on the FA's Table B.101.h, which is the "Balance Sheet of Households" excluding the assets and liabilities of nonprofit organizations. It shows only annual data and reveals that corporate equities and mutual funds held by households at the end of 2019 totaled $29.1 trillion (*Fig. 9*). In the DFA, this series is shown on a quarterly basis. By the way, we can derive a similar quarterly series as the sum of

corporate equities held by households *and* nonprofits plus mutual fund shares held by them, as reported in FA Table L.224, which excludes money market funds and ETFs (*Fig. 10*).

The DFA shows that corporate equities and mutual fund shares held by households was down slightly to $26.8 trillion during Q2-2020, with the following ownership and percentage shares of the total among wealth percentile groups: top 1% ($14.1 trillion, 52.4%), 90%-99% ($9.5 trillion, 35.8%), 50%-90% ($3.0 trillion, 11.2%), and bottom 50% ($0.2 trillion, 0.6%) (*Fig. 11* and *Fig. 12*).

The bottom 50% never owned more than 1.6% of this asset category. The 50%-90% crowd's share peaked at 21.4% during Q3-2002 and since has fallen to 11.2% currently. The 90%-99% group has held a fairly steady share around 35% since the early 1990s. The top 1% has ranged between a low of 40.2% and a high of 52.8%.

The widespread notion that the very rich own a disproportionate share of corporate equities is true, but their collective share is more like 50% of the total held by households than the urban legend of 80%-90%.

(2) *DFA by generations.* The DFA allows us to compare the amount of an asset or liability held and the percentage shares by four generations: Silent (born before 1946), Baby Boomer (1946-1964), GenX (1965-1980), and Millennial (1981-96).

Here are the values of corporate equities and mutual funds held by the four generations and their percentage shares during Q2-2020: Silent ($5.1 trillion, 19.0%), Baby Boomer ($14.8 trillion, 55.3%), GenX ($6.3 trillion, 23.4%), and Millennial ($0.6 trillion, 2.2%) (*Fig. 13* and *Fig. 14*).

Since the start of the data in 1989, the percentage share held by the Silent generation has dropped from around 80%-90% to 19% currently, while the percentage share of the Baby Boom generation increased from 10%-20% to 55% currently. The GenX share was close to zero in early 2009 and has been trending up; it's around 23% currently. The Millennials' share remains close to zero.

(3) *DFA by education.* Finally for today, let's have a look at the impact of education on the ownership of corporate equities and mutual fund shares. The DFA data show that households headed by college-educated persons held 82.9% of corporate equities and mutual fund shares

during Q2-2020 (*Fig. 15* and *Fig. 16*). That percentage has been trending higher since Q1-1995, when it fell to a series low of 60.2%. Households with heads who had some college, high school, and no high school owned only 9.9%, 6.3%, and 0.8%. Education is clearly a vitally important determinant of financial well-being.

CALENDARS

US: Tues: NFIB Small Business Optimism Index 102.2, Job Openings 5.59m, API Crude Oil Inventories, Brainard, Quarles. **Wed:** MBA Mortgage Applications, Veterans Day. (DailyFX estimates)

Global: Tues: Germany ZEW Economic Sentiment Index 40, Germany ZEW Current Conditions -65, France Unemployment Rate 7.5%, France Industrial Production 0.7%, Italy Industrial Production -2.5%m/m/-2.2%y/y, UK Employment Change & Unemployment Rate -135k/4.8%. **Wed:** Japan Machinery Orders -11.6% y/y, Lagarde, Guindos, Lane, Adachi. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500/400/600 Forward Earnings (*link*): Forward earnings rose for all three of these indexes last week. In a typically V-shaped recovery, LargeCap's forward earnings has risen for 25 straight weeks, MidCap's is up in 22 of the past 23 weeks, and SmallCap's posted its 22nd gain of the past 25 weeks. LargeCap's forward earnings is now up 16.2% from its lowest level since August 2017; MidCap's has risen 33.8% from its lowest level since May 2015; and SmallCap's is up 52.6% from its lowest point since August 2013. These indexes had been on a forward-earnings uptrend from November 2019 until mid-February, before tumbling due to the Covid-19 economic shutdown. LargeCap's forward earnings is now 8.4% below its record high at the end of January. MidCap's and SmallCap's are 11.1% and 16.4% below their October 2018 highs. The yearly change in forward earnings soared to cyclical highs during 2018 due to the boost from the Tax Cuts and Jobs Act (TCJA) but began to tumble in October 2018 as y/y comparisons became more difficult. In the latest week, the yearly rate of change in LargeCap's forward earnings improved to -7.5% y/y from -8.6%. That's up from mid-May's -19.3%, which was the lowest since October 2009 and down from 23.2% in September 2018, which was the highest since January 2011. The yearly rate of change in MidCap's forward earnings rose w/w to -6.2% y/y from -9.1% y/y, and is up from a record low of -32.7% at the end of May; that compares to a TCJA-boosted 24.1% in September 2018 (the highest since April 2011). SmallCap's rate improved to -8.3% y/y from -12.0% y/y and is up from a record low of -41.5%

in early June. SmallCap's prior record low in its y/y percent change occurred during July 2009 and compares to the TCJA-boosted eight-year high of 35.3% in October 2018. Analysts' y/y earnings growth forecasts for 2020 are down substantially since early March but have been improving since July as companies easily beat the consensus Q2 and Q3 forecasts. Here are the latest consensus earnings growth rates for 2020 and 2021: LargeCap (-16.4%, 23.5%), MidCap (-25.5, 43.2), and SmallCap (-44.3, 90.5).

S&P 500/400/600 Valuation (*link*): Valuations rose for all three indexes last week from their lowest levels in six months. LargeCap's forward P/E rose to 21.4 from 20.2. That compares to a 19-year high of 22.7 at the end of August and is up from 13.3 in mid-March, which was the lowest since March 2013. MidCap's was up to 18.3 from 17.5, and is down 4.6pts from its record high of 22.9 in early June. SmallCap's improved to 18.0 from 17.7, which is down 8.7pts from its record high of 26.7 in early June. That compares to MidCap's 10.7 and SmallCap's 11.1 in mid-March, which were their lowest readings since March 2009. LargeCap's forward P/E in mid-February—before Covid-19 decimated forward earnings—was 18.9, the highest level since June 2002. Of course, that high was still well below the tech-bubble record high of 25.7 in July 1999. Last week's level compares to the post-Lehman-meltdown P/E of 9.3 in October 2008. MidCap's P/E was below LargeCap's P/E yet again last week, where it mostly has been since August 2018. It was last solidly above LargeCap's from April 2009 to August 2017. SmallCap's P/E was below LargeCap's for an 11th week and for the first time since May. SmallCap's P/E had been mostly below from May 2019 to May 2020 after being solidly above since 2003. During mid-March, SmallCap's P/E was below MidCap's last week for the first time since mid-March. Prior to that, it had been below very briefly for three weeks during the Great Financial Crisis.

S&P 500 Sectors Quarterly Earnings Outlook (*link*): Since the Q2 earnings season—which came in substantially better than greatly reduced forecasts—analysts have been raising all of their future quarterly forecasts instead of lowering them as is the norm. In the latest week, the S&P 500's Q3 blended EPS estimate/actual soared 198 cents w/w to $38.08. That $38.08 estimate represents a decline of 9.6% y/y on a frozen actual basis and -7.8% y/y on a pro forma basis. That compares to a pro forma 30.6% decline in Q2-2020, a 12.8% decline in Q1-2020, a 3.1% gain in Q4-2019, a 0.3% decline in Q3-2019, and y/y gains of 3.2% in Q2-2019, 1.6% in Q1-2019, 16.9% in Q4-2018, and 28.4% in Q3-2018 (which marked the peak of the current earnings cycle). The last time earnings fell markedly y/y was during the four quarters through Q2-2016. All 11 sectors had been expected to record negative y/y earnings growth for Q2 when that earnings season began, but three recorded positive y/y earnings growth: Health

Care, Tech, and Utilities. That was a big improvement from Q1 when all 11 sectors posted a y/y decline in earnings. For Q3, five sectors are posting a y/y earnings gain so far, a big improvement from the end of September when none were expected to do so. All but Utilities are expected to post less worse growth on a q/q basis, reflecting the reopening of the US economy. Energy is on track to report a second straight quarterly loss during Q3. Here are the S&P 500 sectors' latest Q3-2020 earnings growth rates versus their Q2-2020 growth rates: Health Care (11.2% in Q3-2020 versus 6.8% in Q2-2020), Information Technology (6.8, 5.6), Consumer Staples (4.1, -4.2), Communication Services (1.0, -16.8), Utilities (0.9, 6.4), Materials (-1.3, -28.6), Financials (-2.4, -46.7), Consumer Discretionary (-7.1, -64.6), Real Estate (-11.4, -15.2), Industrials (-54.3, -85.3), and Energy (-107.6, -168.1).

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