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The Schwab Self-Directed Brokerage Account Indicators TM

An industry-leading benchmark on retirement plan participant investment activity within self-directed brokerage accounts.

All Participants Quarter Ending 6/30/2019

The Schwab Self-Directed Brokerage Account Indicators[™]

Key Schwab Observations for the Second Quarter 2019:

Asset Balance Summary

In the first half of 2019, major stock indexes including the S&P 500 reached new highs, yet the outlook for global economic growth softened. Recession risk has risen, and rising tariffs have created even more uncertainty.

A few themes will be important to watch in the second half of the year. The U.S. stock market will balance recession risk vs. rate cuts. Recession risk is rising, but markets currently expect the Federal Reserve to keep it at bay by cutting short-term interest rates at least once before the end of the year. If the economy holds up and the rate cuts are simply "insurance," stock markets could rally strongly. However, if the economy weakens or the Fed doesn't ease monetary policy as expected, the market's rate-cut optimism could become a negative.

The average account balance for all participants in the Schwab Personal Choice Retirement Account[®] (PCRA) was up by 4.00% to \$276,547 from \$265,902 a year ago and also up by 3.33% from \$267,609 last quarter. Trading volumes were even with last quarter at an average of 6.5 trades per account. Participants made the most trades in their equities holdings, followed by mutual funds and ETFs.

On average, participants held 10 positions in their PCRA, very similar to last year and the same as last quarter. Participants aged 55 and over (part of the Baby Boomer generation) were at 39.1%, while the Gen X (age 39-54) participants were slightly higher at 41.6% and Millennials (age 27-38) at 12.6%.

Investing Behavior and General Investing Characteristics

Asset Allocation

There was a major change in the Global Industry Classification Standard (GICS) structure in 2018. The Telecommunication Services Sector was renamed to Communication Services and expanded to include companies from Consumer Discretionary and Information Technology sectors. The new sector includes companies from media, advertising, broadcasting, cable & satellite, movie & entertainment, publishing, internet software & services, interactive home entertainment, and interactive media & services. The new Communication Services sector represents roughly 10% of the S&P 500[®] Index market cap.

Mutual Funds held the majority of participant assets and were largely unchanged from last year at 37.56%. That included a 19.34% allocation for OneSource Mutual Funds and an 18.22% allocation for transaction fee and other Mutual Funds. Equities were the second largest holding at 28.91%, with ETFs coming in at 17.60%, Cash & Equivalents at 12.60% and Fixed Income at 3.32%. Overall, participant holdings increased from last quarter, due to the continuing upturn in the market for Q2 2019.

Mutual Funds

Large Cap Stock Funds had the largest allocation at 30.18%, very similar to last year. They were followed by Taxable Bond Funds at 20.11% and International funds at 16.02%. Overall, the market value allocation was very similar to last year.

Equities

The largest equity sector holding was Information Technology at 24.82%, which was very close to last quarter. Apple stock, which is part of the Information Technology sector and the largest individual stock holding in PCRA at 8.76%, experienced a 4.17% increase in the second quarter and as a result, participant account balances increased as well. Other equity holdings remained similar to last quarter and to a year ago. Consumer Discretionary was at 14.78% and Financials was third at 10.99%, followed by Health Care (10.8%). The new Communication Services sector was fifth at 10.4%.

Exchange-Traded Funds (ETFs)

U.S. Equity ETFs, comprised of Large Caps, the most popular segment, Mid Caps and Small Caps, continued to be the top ETF holding in participant accounts and was very similar to last year and last quarter at 49%, followed by International Equity ETFs at 15.37%, U.S. Fixed Income at 13.84% and Sector ETFs at 11.21%.

Asset Flows

The largest asset net flow class was again Fixed Income, followed by ETFs, Mutual Funds (OneSource) and Equities.

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Key Schwab Observations for the Second Quarter 2019 (continued):

Investing Behavior Across Generations: Millennials, Gen X and Baby Boomers

As expected, the older generation ended the quarter with the largest balance (\$391,526), which was up from \$374,622 last quarter. They were followed by Gen X (\$211,375) and finally Millennials (\$68,214).

All three generations had very similar equity holdings, with Apple, Amazon, Berkshire Hathaway, Microsoft, Netflix and Facebook coming in at the top.

As for the top ETF holdings, they were very similar across generations: Schwab US Broad Market ETF, SPDR, S&P 500 ETF, Vanguard and Schwab International Equity were at the top for all.

All continued to hold Schwab S&P 500 Index as their top Mutual Fund holding, followed by Schwab Total Stock Market Index.

Millennials and Gen X again had the same percentage of mobile trades at 21%, and Baby Boomers came in slightly higher than last quarter at 16%. Millennials once again had the highest percentage in cash out of the three generations-15.66%, which was lower than last quarter's 16.7%. The cash holdings for Gen X and Baby Boomers also decreased to 13.08% and 11.86% from 13.33% and 12.35% respectively.

Investing Behavior: Roth vs non-Roth Accounts

The Roth PCRA account holder balance was much lower than the non-Roth PCRA: \$67,878 vs \$276,547. Gen X once again had the most Roth Accounts as a percentage of accounts in their respective generations, and they were very similar to Baby Boomers in non-Roth accounts. Those with Roth accounts also had lower trade volumes- 4.1 vs. 6.5.

While non-Roth account holders' equity holdings were the standard holdings across all accounts such as Apple, Amazon and Berkshire Hathaway, the Roth PCRA accounts continued to hold Glenview Offshore equity at the top followed by Apple and Amazon.

Investing Behavior: Advised vs. non-Advised Accounts

Gen X had the the most PCRA advised accounts at 43.9%, and Baby Boomers was not far behind at 43%, while only 9.7% of the Millennials chose to use an advisor. The average participant balance for advised accounts was up to \$448,515 from \$436,593 last quarter, while non-advised accounts were at \$234,673, almost half of advised accounts. Those with advised accounts also had more average trades-10 total vs. 5.7 for non-advised accounts. Overall, the trading volume remained very similar to last quarter and to last year.

Those participants who used advisors, displayed a more diversified asset allocation mix and had a lower concentration of assets in particular securities, with Apple being the top one for everyone; advised participants only had 5.88% of their equity assets with Apple, while non-advised participants had 9.54%. Advised participants also had a lower percentage in cash: 3.82% vs. 16.69% for non-advised, showing a good balance among all the advised investments.

As for ETF holdings, advised participants again had more balance among all the holdings, not having more than 3.6% of any one ETF, with the Schwab US Broad Market ETF being the top one. Advisors preferred DFA as a top fund family and the DFA US Core Equity Institutional fund as a top holding, with a 19.43% mutual fund asset allocation. Non-advised participants had Schwab S&P 500 Index as the top mutual fund holding and 17.19% of the mutual fund asset allocation went to the Vanguard fund family, followed by Schwab.

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PCRA Profile Information					
Account Balances and Types		Participant Demographics			
Average PCRA Balance	\$276,547	Male Participants	76.2%		
Advised Participants	19.6%	Female Participants	23.8%		
Average Advised Balance	\$448,515	Average Age	51		
Self-Directed Participants	80.4%	Millennial* (Age 27-38)	12.6%		
Average Self-Directed Balance	\$234,673	Gen X** (Age 39-54)	41.6%		
Traditional Accounts	98.1%	Baby Boomer*** (Age 55-72)	39.1%		
Roth Accounts	1.9%	Birth years: *1981-1992, **1965-1980, ***19	47-1964		

Average Position	Average Positions/Trades Per Account			
	Positions	Trades		
Total	10.0	6.5		
Equities	4.4	2.8		
ETFs	1.6	1.3		
Fixed Income	0.3	0.1		
Mutual Funds	2.7	2.2		
Other	0.0	0.2		
Cash Investments	1.0	n/a		

Top 10 Equity Holdings	%EQ Assets	Top 10 ETF Holdings
APPLE INC	8.76%	VANGUARD TOTAL STOCK
AMAZON.COM INC	6.41%	SPDR S&P 500 ETF
BERKSHIRE HATHAWAY CLASS	2.56%	SCHWAB US BROAD MARKET
MICROSOFT CORP	2.33%	SCHWAB US LARGE CAP ETF
FACEBOOK INC CLASS	1.86%	INVESCO QQQ TRUST
NETFLIX INC	1.37%	VANGUARD S&P 500 ETF
VISA INC CLASS	1.22%	SCHWAB INTERNATIONAL
ALPHABET INC. CLASS	1.14%	ISHARES CORE S&P 500 ET
BOEING CO	1.04%	SCHWAB US AGGREGATE BC
BANK OF AMERICA CORP	1.03%	SCHWAB EMERGING MARKE

Top to Ell Holdings	
VANGUARD TOTAL STOCK MARKET ETF	4.06%
SPDR S&P 500 ETF	4.02%
SCHWAB US BROAD MARKET ETF	3.71%
SCHWAB US LARGE CAP ETF	2.73%
INVESCO QQQ TRUST	2.67%
VANGUARD S&P 500 ETF	2.51%
SCHWAB INTERNATIONAL EQUITY ETF	2.15%
ISHARES CORE S&P 500 ETF	1.94%
SCHWAB US AGGREGATE BONDETF	1.52%
SCHWAB EMERGING MARKETS EQUITY ETF	1.51%

Top 10 Mutual Fund Holdings**	% MF Assets	Top 10 Fund Families	% MF Assets
SCHWAB S&P 500 INDEX FD	4.27%	VANGUARD	13.00%
SCHWAB TOTAL STOCK MKT INDEX	2.42%	SCHWAB	11.64%
PIMCO INCM INST CL	0.98%	DFA	8.78%
DFA US CORE EQTY 2 PORT INSTL	0.84%	PIMCO FUNDS	3.89%
PIMCO INCM CL A	0.81%	T ROWE PRICE	3.78%
VANGUARD 500 INDEX FD INVESTOR SHS	0.79%	FIDELITY	2.66%
DOUBLELINE TOTAL RETURN BD FD CL I	0.78%	AMERICAN FUNDS	2.55%
SCHWAB INTL INDEX FUND	0.78%	DOUBLELINE FUNDS	1.72%
DFA INTL CORE EQTY PORT INSTL	0.70%	JANUS	1.71%
T ROWE PRICE BLUE CHIP GROWTH FD INV	0.69%	DODGE & COX	1.65%

**Top 10 Mutual Funds does not include Money Market Funds.

%FO Assets

Market Value Allocation - All Assets (Quarter over Quarter)



The above charts illustrate the percent of PCRA participant assets in each noted asset class as percentage of total PCRA assets. Percentages are calculated as of quarter-end. Money Market Funds are classified under Mutual Funds.



Net Flow - All Non-Cash Assets (3-Month Period Ending 6/30/2019)

Market Value Allocation - Mutual Funds (Quarter over Quarter)



The above charts illustrate the percent of PCRA participant assets in each noted asset class as percentage of total PCRA assets. Percentages are calculated as of quarter-end. Money Market Funds are classified under Mutual Funds.



Net Flow by Sector - Mutual Funds (3-Month Period Ending 6/30/2019)





The above charts illustrate the percent of PCRA participant assets in each noted asset class as percentage of total PCRA assets. Percentages are calculated as of quarter-end. Money Market Funds are classified under Mutual Funds.



Net Flow by Sector - Equities (3-Month Period Ending 6/30/2019)



The above charts illustrate the percent of PCRA participant assets in each noted asset class as percentage of total PCRA assets. Percentages are calculated as of quarter-end. Money Market Funds are classified under Mutual Funds.



Net Flow by Sector - ETF (3-Month Period Ending 6/30/2019)

Average Monthly Trades Per Account (3-Month Period Ending 6/30/2019)



Trading Channel Mix (Month over Month)



Important Disclosures

Schwab Personal Choice Retirement Account (PCRA) is offered through Charles Schwab & Co., Inc. (Member SIPC), the registered broker/dealer, which also provides other brokerage and custody services to its customers.

For participants who utilize the Personal Choice Retirement Account (PCRA), the following fees and conditions may apply: Schwab's short term redemption fee of \$49.95 will be charged on redemption of funds purchased through Schwab's Mutual Fund OneSource® service (and certain other funds with no transaction fee) and held for 90 days or less. Schwab reserves the right to exempt certain funds from this fee, including Schwab Funds®, which may charge a separate redemption fee, and funds that accommodate short-term trading.

Trades in no-load mutual funds available through Mutual Funds OneSource service (including Schwab Funds) as well as certain other funds, are available without transaction fees when placed through schwab.com or our automated phone channels. Schwab reserves the right to change the funds we make available without transaction fees and to reinstate fees on any funds. Funds are also subject to management fees and expenses.

Figures are based on all PCRA participants with a minimum balance of \$5,000 and a maximum balance of \$10,000,000 in their PCRA account. All data is for informational purposes only. Schwab does not guarantee the accuracy, timeliness or completeness of the information.

Investors should consider carefully information contained in the prospectus, including investment objectives, risks, charges, and expenses. You can request a prospectus by calling 800-435-4000. Please read the prospectus carefully before investing. Money Market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the funds see to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

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