



ETF Analysis: Banks & Financial Services

Investors that may not be comfortable dabbling in shares of one individual bank equity may find a low-cost, diversified banking ETF more amenable.

Top Considerations

Financial Select Sector SPDR Fund (XLF)

SPDR S&P Bank ETF (KBE)

SPDR S&P Regional Banking ETF (KRE)

VALUENTUM SECURITIES

August 8, 2017

Authored by:
Brian Nelson, CFA
Kris Rosemann

ETF Analysis: Banks & Financial Services

Investors that may not be comfortable dabbling in shares of one individual bank equity may find a low-cost, diversified banking ETF more amenable.

Banks & Financial Services ETF Industry Listings (sorted by AUM)

Name	Symbol	Launch	Gross Ex. Ratio	Net Ex. Ratio	AUM (\$ - mil)
Financial Select Sector SPDR Fund	XLF	12/16/1998	0.14	0.14	26192.86
Vanguard Financials ETF	VFH	1/26/2004	0.10	0.10	6400.00
SPDR S&P Regional Banking ETF	KRE	6/19/2006	0.35	0.35	3608.34
SPDR S&P Bank ETF	KBE	11/8/2005	0.35	0.35	3411.77
iShares U.S. Financials ETF	IYF	5/22/2000	0.44	0.43	1872.02
Direxion Daily Financial Bull 3x Shares	FAS	11/6/2008	1.06	1.05	1540.00
iShares U.S. Financial Services ETF	IYG	6/12/2000	0.44	0.43	1320.12
First Trust Financials AlphaDEX Fund	FXO	5/8/2007	0.64	0.64	1150.25
SPDR S&P Insurance ETF	KIE	11/8/2005	0.35	0.35	964.85
PowerShares KBW Bank Portfolio	KBWB	11/1/2011	0.35	0.35	957.10
Fidelity MSCI Financials Index ETF	FNCL	10/23/2013	0.08	0.08	945.50
ProShares Ultra Financials	UYG	1/30/2007	0.96	0.95	828.24
iShares U.S. Regional Banks ETF	IAT	5/1/2006	0.44	0.43	704.45
First Trust NASDAQ ABA Community Bank Index Fund	QABA	6/29/2009	0.61	0.60	364.63
Guggenheim S&P Equal Weight Financial ETF	RYF	11/1/2006	0.40	0.40	341.71
PowerShares KBW High Dividend Yield Financial Portfolio	KBWD	12/2/2010	2.99	2.99	312.80
PowerShares S&P SmallCap Financials Portfolio	PSCF	4/7/2010	0.29	0.29	245.50
Direxion Daily Financial Bear 3x Shares	FAZ	11/6/2008	1.13	1.10	186.64
iShares U.S. Insurance ETF	IAK	5/1/2006	0.44	0.43	179.04
iShares U.S. Broker-Dealers ETF	IAI	5/1/2006	0.44	0.43	164.80
PowerShares KBW Regional Banking Portfolio	KBWR	11/1/2011	0.35	0.35	164.10
Powershares KBW Property & Casualty Insurance Portfolio	KBWP	12/2/2010	0.35	0.35	109.40
SPDR S&P Capital Markets ETF	KCE	11/8/2005	0.35	0.35	108.65
PowerShares DWA Financial Momentum Portfolio	PFI	10/12/2006	0.84	0.60	76.40
RevenueShares Financials Sector Fund	RWW	11/10/2008	0.83	0.49	63.21
ProShares UltraShort Financials	SKF	1/30/2007	1.07	0.95	44.78
ProShares Short Financials	SEF	6/10/2008	1.15	0.95	27.28
ProShares UltraPro Financials	FINU	7/10/2012	1.98	0.95	25.81
ProShares Ultra KBW Regional Banking Index ET	KRU	4/20/2010	2.06	0.95	11.63
ProShares UltraPro Short Financials	FINZ	7/10/2012	2.52	0.95	1.82
ProShares Short KBW Regional Banking Index ETF	KRS	4/20/2010	5.23	0.95	1.61

Source: Relevant ETF Documents, State Street

Introduction

The banking industry is based almost entirely on the confidence of intermediaries and counterparties that make up the building blocks of the financial system. An investment in a bank or money center must, in our view, come with the acknowledgement of the distinct possibility that another financial crisis may occur at an unknown time in the future.

Though we don't expect one anytime soon given the recent favorable stress-test results of the largest US banks (revealed later in this work), it's worth noting that there have been three significant banking crises during the past three decades alone: the savings and loan crisis of the late 1980s/early 1990s; the fall of Long-Term Capital Management and the Russian/Asian financial crisis of the late 1990s; and the Great Recession of the last decade that not only toppled Lehman Brothers, Bear Stearns, Washington Mutual, and Wachovia but also caused the seizure of Indy Mac, Fannie Mae and Freddie Mac.

As such, we generally prefer diversified bank exposure via exchange traded funds (ETFs) such as the Financial Select Sector SPDR (XLF) and/or the SPDR Bank ETF (KBE) over any one individual banking constituent. Such vehicles may allow investors to capture valuation upside within the banking sector (as the financial system continues to heal from the Great Recession) without exposing them to any firm-specific risk that will always be inherent to the assets contained in any one large bank's relatively opaque and far-reaching operations.

Valuing Constituents in the Banks & Money Centers Industry

We use a residual income model to derive our fair value estimates for banking firms.

A bank's current tangible book value is first grossed up or down by the discounted value of its forecast annual net income less an annual capital charge (10% of tangible book value) during the next two years. We then use normalized earnings less the annual capital charge in our perpetuity function (discounted to present). The firm's fair value is then compared to its stock price. For banks, we use a standard 20% margin of safety to determine both the upper and lower bounds of our fair value range. If a bank is trading below (above) the lower bound of our fair value range, we consider it undervalued (overvalued). If its stock price falls within our fair value range, we think its shares are fairly valued.

We use price/tangible book as the primary measure to determine whether one bank is more attractive than another on a relative value basis. For banks in the top tier of our relative-value ranking (those with low price-to-book ratios), they receive a rating of attractive. Banks at the bottom tier receive an unattractive rating. Banks in the mid-tier receive a neutral rating. All banks receive a ValueRisk rating of high due to their inherent dependence on the capital markets.

Evaluating the Economic Returns of Constituents in the Banks & Money Centers Industry

We rank banks by their respective return on tangible common equity (ROTE), which we define as diluted earnings per share divided by tangible book value per share. Firms that score in the top tier of our bank universe on this measure in their most recently-reported fiscal year receive a ValueCreation™ rating of excellent, while firms that score in the mid-tier of our bank universe receive a ValueCreation™ rating of good. Firms that score in the bottom tier but still have a positive ROTE receive a poor rating, while firms with a negative ROTE receive a very poor ValueCreation™ rating.

Evaluating the Capital Adequacy of Constituents in the Banks & Money Centers Industry

The Tier I capital ratio is a measure of the firm's Tier I capital (consisting largely of shareholders' equity and disclosed reserves) divided by the firm's risk-weighted assets. We rank banking firms based on this measure to show which banks have the greatest capital strength after considering the riskiness of their underlying assets. Banks in the top tier earn a capital strength rating of excellent, while banks that do not fall in the top tier but still have a Tier I ratio above 10% earn a capital strength rating of good. Banks that have a Tier I ratio lower than 10% earn a rating of poor on our scale. This is a relative measure with absolute threshold considerations.

Please view our individual bank equity report for stock fair value estimates.

The More Things Change...

A lot has changed since the Financial Crisis that saw some of the best-known banking entities fail, but a lot has also stayed the same. We now have stricter oversight of the banks and increased regulation, but the tendency for publicly-traded banking firms to engage in risk-seeking behavior to please shareholders has not gone away. The banks continue to pursue improved lending standards, but then there are reports that entities such as Wells Fargo are again edging back into subprime home loans, the slice of mortgages that drove the global financial system to its knees during the last decade.

The Federal Reserve's annual stress tests provide a degree of visibility into a banking company's operations like never before, and investors should applaud the increased transparency that will only aid in the process of value estimation, but instances like the 2012 trading loss at JP Morgan can still occur despite the heightened oversight. In what is now called the London Whale incident, derivative losses on credit default swaps ballooned to \$5-\$10 billion at JP Morgan, after initial reports from the bank significantly downplayed the risks.

Risk management and internal controls can still falter.

The banking system is undoubtedly smarter and stronger than it was prior to the Financial Crisis, if only because it had to endure the pain. There are a vast number of banks and money centers in our coverage that are very healthy and doing the right things, but banks operate on confidence, which can be shaken by opaque events that are even beyond the control of executives at the helm. This will never change.

We always want to be as comfortable as possible with the companies we include in the newsletter portfolios, but the banking sector's business-model risks and the lack of tangible and measurable cash-flow generation may mean that having confidence in any one bank idea may be an elusive task. We don't have any firm-specific banking exposure in the newsletter portfolios for this very reason, making banks and financial services ETFs all the more interesting considerations, in our view.

The Banking Industry Is All About Confidence

The financial sector, and the underlying banking industry in particular, is distinctly different than most other sectors like industrials, retail, or healthcare, for example. Unlike the latter industries, banks use money to make money (net interest income), instead of using operating assets like property, plant and equipment (PP&E) and raw materials to drive revenue and resulting free cash flow. This means that continued access to money and credit is the primary source of banks' economic returns and more specifically their survival.

The "5 Cs of credit" — character, capacity, capital, collateral, and conditions — is a widely-followed framework and generally-accepted guideline for lending to consumers, but for corporate entities, we think another C is much more important: confidence. In almost every situation where a bank has encountered trouble, it has resulted from a loss of confidence in the sustainability of the entity as a going-concern. The loss of confidence could originate from counterparties, intermediaries, depositors or clients, or from any other core stakeholder. Lack of confidence typically spreads quickly.

Lehman Brothers' bankruptcy filing in 2008, for example, was accelerated by clients leaving the firm and credit rating downgrades that completely obliterated market confidence in the sustainability of the entity. Barclays now owns Lehman, which had been a staple in American society since its founding in 1850. Washington Mutual had its foundation rocked that same year when its customers, over a period of just 9 days, withdrew ~\$17 billion in deposits, or about 10% of its total deposits, in the modern-day equivalent of a bank run. The Federal Deposit Insurance Corporation seized Washington Mutual and sold the 120-year-old company to JP Morgan (JPM)

shortly thereafter. In both cases, the loss of confidence prompted disaster, leaving shareholders with only a fraction of their invested capital.

Quite simply, if the market does not have confidence in a banking entity, that banking entity will cease to exist. Though other business models such as master limited partnerships and real estate investment trusts depend on continuous access to the credit markets and incremental capital, a run-on the-bank dynamic is a risk that is almost entirely unique to banks. FDIC insurance does not cover the financial products that a bank offers, including stocks, bonds, mutual funds, and life insurance, and the standard FDIC insurance amount is \$250,000 per depositor, per insured bank. Because the government cannot insure everything and plan for all risks, traditional run-on the bank dynamics can never be completely hedged away, no matter how advanced or regulated the banking system becomes.

An insufficient capital position brought about by excessive risk-taking (leverage), poor lending standards, and under-water loans as a result of asset declines may be more tangible operating reasons for a bank's failure, but without confidence, even strong banks cannot survive. This important concept of confidence is in part why the Federal Reserve mandates annual "stresstests" on the largest US banks. Any bank holding company (BHC) with more than \$50 billion in total consolidated assets and all non-bank financial companies designated by the Financial Stability Oversight Council (FSOC) are subject to the testing, which breaks into two related programs: the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act supervisory stress testing.

Per Dodd-Frank Act Stress Test 2017, released June 2017:

The Comprehensive Capital Analysis and Review (CCAR) consists of a quantitative assessment for all BHCs with \$50 billion or more in total consolidated assets and a qualitative assessment for BHCs that are LISC or large and complex firms. The quantitative assessment evaluates a firm's capital adequacy and planned capital distributions, such as any dividend payments and common stock repurchases. The Federal Reserve assesses whether firms have sufficient capital to continue operating and lending to creditworthy households and businesses throughout times of economic and financial market stress. CCAR also includes a qualitative assessment of capital planning practices at the largest and most complex firms. As part of the qualitative assessment, the Federal Reserve evaluates the reliability of each firm's analyses and other processes for capital planning, focusing on the areas that are most critical to sound capital planning—namely, how a firm identifies, measures, and determines capital needs for its material risks, and a firm's controls and governance around those processes. The Federal Reserve recently further tailored its rules to remove large and noncomplex firms from the qualitative objection process. At the conclusion of the process,

the Federal Reserve either does not object or objects to a firm's capital plan. If the Federal Reserve objects to a firm's capital plan, the firm may only make capital distributions that the Federal Reserve has not objected to in writing.

Dodd-Frank Act supervisory stress testing is a forward-looking quantitative evaluation of the impact of stressful economic and financial market conditions on BHCs' capital. The supervisory stress test that is carried out pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and the Board's rules serves to inform the Federal Reserve, BHCs, and the general public of how institutions' capital ratios might change under a hypothetical set of stressful economic conditions developed by the Federal Reserve. The supervisory stress test results, after incorporating firms' planned capital actions, are also used for the quantitative assessment in the Comprehensive Capital Analysis and Review (CCAR). All BHCs and U.S. IHCs with \$50 billion or more in total consolidated assets are currently subject to Dodd-Frank supervisory stress testing. In the spirit of preventing another global credit catastrophe, every year the Federal Reserve projects the balance sheet, risk-weighted assets, net income, and resulting post-stress capital levels and regulatory capital ratios over a nine-quarter "planning horizon" of banking entities that qualify for the stress tests. The projections are based on three hypothetical macroeconomic scenarios (baseline, adverse, and severely adverse), which are developed annually by the Federal Reserve. Qualified companies must also conduct their own stress tests periodically and submit them to the Federal Reserve. The added regulatory oversight has been a source of increased confidence in the global financial system, but key firm-specific banking risks remain.

The stress tests, released June 2017, revealed that the US banking system is on solid ground. One of the most informative tables in the stress-test report is the one that ranks 'Pre-tax net income rates in the severely adverse scenario' as it shows, in our opinion, which banking entities' P&L would be most resilient in the face of broad-based economic weakness, falling asset prices, and rising unemployment. In no particular order, American Express (AXP), Bank of NY-Mellon (BK), Northern Trust (NTRS), State Street (STT), and Discover (DFS) are likely able to handle the greatest adversity on the P&L, while CIT Group (CIT), Goldman Sachs (GS) and Banco Bilbao (BBVA) may be most exposed should financial markets encounter another crisis.

Figure 13. Pre-tax net income rates in the severely adverse scenario

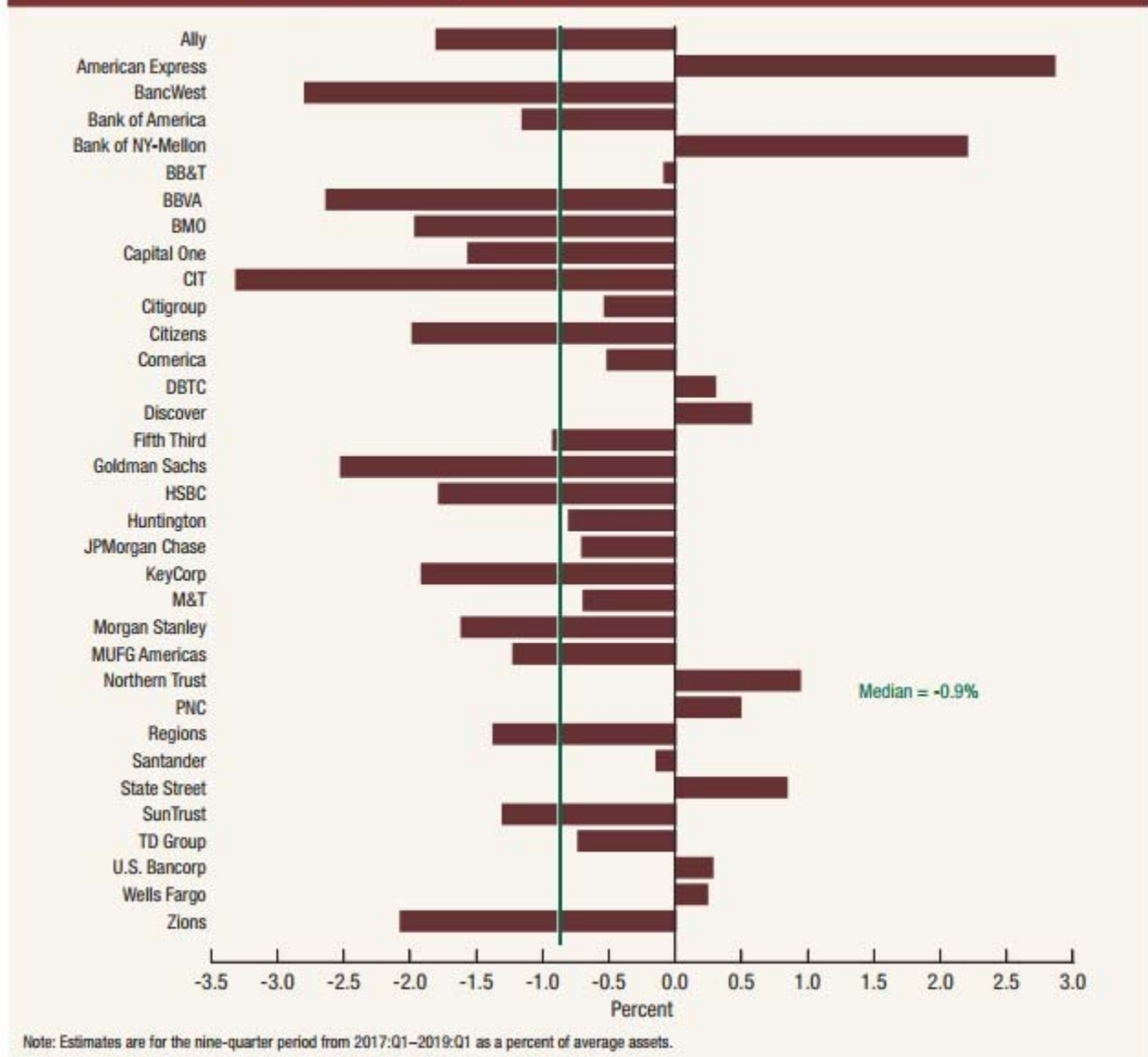


Image Source: Dodd-Frank Act Stress Test 2017: Supervisory Stress Test Methodology and Results June 2017

There are a variety of ways to gauge the financial risk of banking entities, however, and we find the 'total loan loss rates in the severely adverse scenario' to be an informative one, too (shown on next page). Interestingly, a couple of the same credit card companies--American Express, and Discover, as well as Capital One (COF)--and Santander (SAN) would be most exposed to heavy losses in this department, perhaps contradictorily. Under a crisis scenario, hardly anything happens as expected, so investors should take even the stress-test results with a grain of salt.

Figure 11. Total loan loss rates in the severely adverse scenario

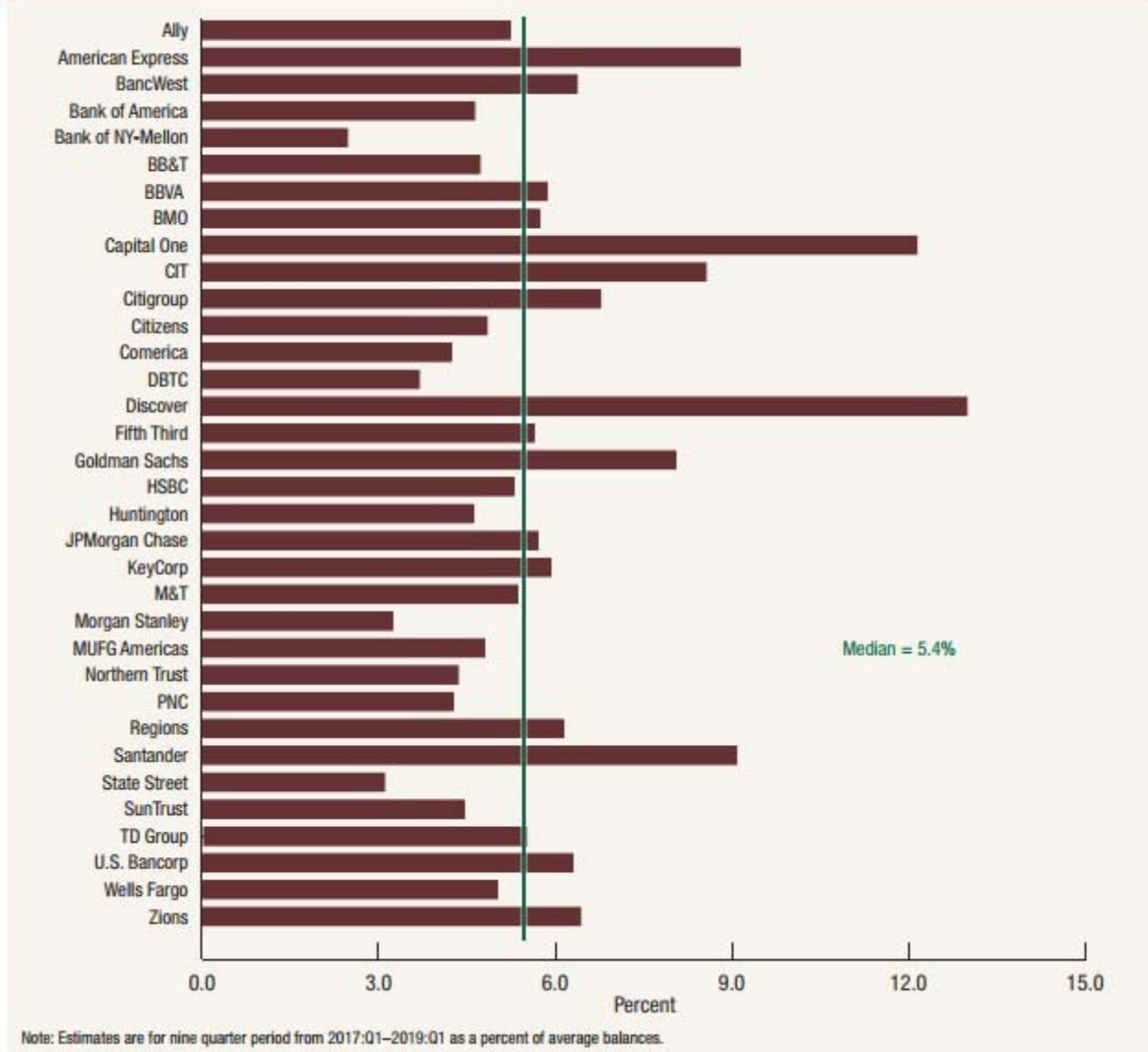


Image Source: Dodd-Frank Act Stress Test 2017: Supervisory Stress Test Methodology and Results June 2017

Perhaps the biggest news related to the banking system during 2017 probably wasn't the stress tests, per se, or even Berkshire Hathaway's decision to exercise warrants to buy 700 million shares of Bank of America (BAC) stock, but instead, Fed Chair Janet Yellen's comment that another financial crisis is not likely "in our lifetime." Many have since jokingly pondered whose lifetime she may be referring to--regardless, it seems as though the financial industry has some form of crisis every 20 years or so, with each coming generation.

Could Janet Yellen's quote end up being the 2017 equivalent of Yale economist Irving Fisher's famous 1929 quote: "Stock prices have reached what looks like a permanently high plateau." Time will tell.

Before getting into our ETF analysis, let's explain why we continue to be so cautious on banking business models.

A Bank Run Is Always Possible

Though the history of banking dates back to as early as 2000 BC in Babylonia, the makings of the present-day banking system in the US really didn't take hold until the beginning of the 20th century. Some financial historians may argue for a later date, but we think the Panic of 1907 is of particular importance, where the core of the fragility of the banking system was highlighted yet again in this episode, which followed two other well-known panics in 1893 and 1873.

Also dubbed the Knickerbocker Crisis, the Panic of 1907 primarily came about from lost confidence driven by the failed attempt by Otto Heinze and company to corner the market in shares of United Copper. Once the attempt failed, shares of United Copper collapsed, bringing down with it Heinze's brokerage house (Gross & Kleeberg) and causing the insolvency of the supporting bank (State Savings Bank of Butte Montana). However, it wasn't until the association of Heinze and the Montana bank to the Mercantile National Bank in New York City that a panic actually spread.

Depositors, stripped of their confidence in the banking system as a result of the string of events to this point, began withdrawing deposits en masse. The panic extended to one of the largest banks in the US, the Knickerbocker Trust Company, where in but a few hours it was forced to suspend banking operations as a result of hefty withdrawals. Then two other large trusts, the Trust Company of America and Lincoln Trust Company, started facing runs, followed by a number of other banks. Confidence in the banking system had been shaken to the core, and creditors that were willing to lend money just a few weeks before were now hunkering down with any capital they had left. It wasn't until Mr. JP Morgan and John D. Rockefeller came to the aid of America's credit that the panic finally subsided.

Just a couple of decades later, America saw yet another crisis of confidence during the Crash of 1929. Margin requirements were so thin back in the 1920s that brokers were left holding the bag when stocks collapsed and investors could not settle debts. During the first months of 1930, more than 700 US banks failed and the financial institutions left standing built up reserves (and stayed far away from expanding their loan books), creating one of the greatest depressions the world had yet seen.

Most investors credit the Great Depression as the primary cause for the creation of the Securities and Exchange Commission in 1933 and the passing of the Glass-

Steagall Act, which separated commercial banking operations from investment banking endeavors. The Gramm-Leach-Bliley Act subsequently repealed part of Glass-Steagall in 1999, allowing the combination of a variety of banking, insurance, and securities-related operations.

The Financial Crisis of 2008 and the Great Recession

During the past three decades alone, there have been three significant banking crises: the savings and loan crisis of the late 1980s/early 1990s; the fall of Long-Term Capital Management and the Russian/Asian financial crisis of the late 1990s; and the Great Recession of the last decade that not only toppled Lehman Brothers, Bear Stearns, Washington Mutual, and Wachovia but also caused the seizure of Indy Mac, Fannie Mae and Freddie Mac.

We believe that an investment in a bank must come with the acknowledgement of the distinct possibility that another financial crisis may occur at an unknown time in the future. The primary reason for this view rests on the fact that banks do not keep a 100% reserve against deposits. Our good friend George Bailey, played by actor Jimmy Stewart, in the movie *It's a Wonderful Life* knew this very well when he tried to discourage Bedford Falls residents from making a “run” on the famous and beloved Building and Loan. It's a movie that some of us have watched a dozen times or never at all, but it's a scene that's unforgettable.

Washington Mutual fell prey to this very dynamic in 2008.

In the testimony of Mr. JP Morgan before the Pujo Committee of 1912-1913, character is the only thing that matters in banking—or said differently, perceived confidence that the banking system will continue to work is really the duct tape that holds the financial markets together. Once this perceived confidence breaks down as it has many a time before, a “run on the bank dynamic” occurs. Stakeholders can't get their money fast enough. Such a unique risk will always be present for banking-firm investors relative to investors in general operating corporations.

“Cash Flow” Is Not As Meaningful at Banks

In corporate finance, there are generally three types of free cash flow: traditional free cash flow (cash flow from operations less capital expenditures); free cash flow to the firm (see our valuation models); and free cash flow to equity (which is applied to banking and insurance firms). There are myriad other measures of “cash flow,” but in terms of the “free cash” variety the aforementioned three are the most common.

Though ‘traditional free cash flow’ and ‘free cash flow to the firm’ are acceptable methods for calculating the intrinsic value of general operating corporations, our valuation methods apply a residual income model to assess the value of banking

and insurance firms, as we have reduced confidence in the use of ‘free cash flow to equity’ as a way to value banking entities. For one, free cash flow at banks is arbitrary because banks use cash to generate cash. On the other hand, almost all other non-banking entities use noncash assets to generate cash—a subtle but very important difference.

Said differently, unlike a general operating company where weight can be placed on its balance-sheet net cash position and future expected free cash flows, the survival of a banking entity rests more on market confidence than on its trajectory of pretax pre-provision earnings or even its capital position, in our view. If stakeholders and counterparties lose confidence in a bank’s ability to remain a going concern, the bank will inevitably cease to do business. As market onlookers learned during the Financial Crisis of late last decade, when this occurs bank market price adjustments are not slow and gradual, but abrupt and devastating. The nature of banking will always come with this risk.

Perhaps in this banking ETF report, we have placed more (arguably too much) emphasis on the risks of the banking system than anything else, but we want readers to be prepared if history rhymes. Financial crises have happened much too frequently in the past for us to say that they cannot happen again. Certainly, and as we’ve mentioned prior, the banking system is smarter and stronger than it was prior to the Financial Crisis now about a decade ago, but banks have and will always operate on confidence, which can be shaken by opaque events that are even beyond the control of executives at the helm. With all of this said, diversified banking ETFs may still be a great idea if the risks of investing in any one banking entity may be too great.

Our Three Favorite Financials ETFs

Fund Top Holdings					
SPDR Financial Select Sector (XLF)		SPDR S&P Bank (KBE)		SPDR S&P Bank (KRE)	
Name	Weight	Name	Weight	Name	Weight
Berkshire Hathaway Inc. Class B	10.99%	Voya Financial	2.09%	BB&T Corporation	2.46%
JPMorgan Chase & Co.	10.71%	BB&T Corp.	2.07%	Zions Bancorporation	2.44%
Bank of America Corp.	7.99%	Bank of New York Mellon Corp.	2.07%	Fifth Third Bancorp	2.43%
Wells Fargo & Co.	7.65%	Zions Bancorporation	2.06%	PNC Financial Services Group	2.41%
Citigroup Inc.	6.11%	Firth Third Bancorp	2.05%	Regions Financial Corp.	2.33%
Goldman Sachs Group Inc.	2.71%	JPMorgan Chase & Co.	2.04%	SunTrust Banks	2.32%
US Bancorp	2.71%	PNC Financial Services Group	2.03%	CIT Group	2.31%
Chubb Limited	2.25%	Citigroup Inc.	2.02%	SVB Financial Group	2.30%
Morgan Stanley	2.20%	Bank of America Corp.	2.00%	First Republic Bank	2.28%
American Express Co.	2.08%	Regions Financial Corp.	1.96%	Comerica Inc.	2.28%

The banks and financial services sector offers investors a wide selection of ETFs. Our favorite one to consider is the SPDR Financial Select Sector ETF (XLF). The ETF is the largest in this grouping, by assets under management, by far, as State Street remains the dominant provider. Topping the XLF’s list of holdings is Warren Buffett’s Berkshire Hathaway (BRK.B) at more than 10% of the ETF, followed

closely by one of the most resilient financial entities, JP Morgan (JPM). Rounding out the top 5 holdings, Bank of America (BAC), Wells Fargo (WFC), and Citigroup (C), revealed their vulnerabilities during the latest downturn, but all three have taken considerable steps to improve asset quality and capital positions since then.

Though Vanguard's VFH has a modestly lower expense ratio and holds many of the same top positions as State Street's XLF, the VFH has Berkshire Hathaway at roughly half the weighting (less than 6%), perhaps exposing it more directly to banking and financial trends, as opposed to offering a conglomerate anchor with sprawling industrial operations at the top. An expense ratio of 0.14% for State Street's XLF is a rather cost-effective way to gain diversified exposure to the largest financial entities, while retaining some nice exposure to the Oracle of Omaha. We would expect the XLF to be more resilient given the "Berkshire hedge."

The SPDR S&P Bank ETF (KBE) offers a somewhat different bent than the XLF, which focuses on some of the world's largest global money centers based in the US. State Street's KBE is a modified equal-weight index with a much greater focus on banks and thrifts. Though several large national money centers are included in the ETF, regional banks account for ~75% of the KBE's holdings compared to a ~45% weighting of banks in the XLF. The key benefit of the KBE relative to the XLF, in our view, is that it is less exposed to global systemic uncertainty, given the regional nature of holdings. A 0.35% expense ratio is not too much to pay as a shield to contagion risks, in our view.

For those looking for exclusive exposure to the regional banking industry, the SPDR S&P Regional Banking ETF may be the best option. A modified equal-weight index like the KBE, it is comprised of equities of some of the leading regional banks on US exchanges. The ETF's expense ratio also matches that of the KBE, and for the most risk-averse investors seeking some exposure to the banking sector, the KRE may have the least systemic and contagion risks, even if regional pressures impact some constituents. The KRE can share many of the top holdings as the KBE, however. With the XLF, KBE, and KRE, State Street has effectively run the table when it comes to ETFs in the banks and financials-services sector.

Our views on the ultra-leveraged (long/short) products such as Direxion's and ProShares' financial ETF offerings are somewhat unique relative to similar products in other sectors. During the Financial Crisis of late last decade, these ultra-leveraged financial ETFs became quite useful for investors and traders alike in capturing the wild swings and ultimate deterioration of some of the weakest banking firms. Though erosion risk is very much present over long holding periods, in the event of the next financial crisis, the timing and magnitude of which may be the only uncertainty, savvy investors and opportunistic traders may find use in these ultra-leveraged financial ETF products, whether as a hedge or in profit-

seeking motive. Individual investors may still be best served by steering clear of these “dangerous” vehicles, however. They are certainly not for everyone.

Valuentum Buying Index Ratings

We think the best ETFs are those that have low or reasonable expense ratios, have holdings that are collectively underpriced, and have technical and momentum indicators that are currently exhibiting bullish trends. Similar to how we arrive at the Valuentum Buying Index rating for stocks, we perform a process in arriving at a Valuentum Buying Index rating for each ETF.

The highest-rated ETFs will have best-in-class expense ratios, have undervalued constituents in aggregate, and possess strong technical and momentum indicators. The Valuentum Buying Index rating reflects our assessment of the relative attractiveness of each ETF on a scale from 1 through 10 (10 = best).

An ETF that registers a 5, for example, is relatively more attractive than an ETF that registers a 4 within its defined category based on the three defined parameters of “expense,” “valuation,” and “technical.” That same ETF can also be considered relatively more attractive to an ETF that registers a 4 in another defined category.

ETFs that register a 9 or 10 on the Valuentum Buying Index are not only best-in-class within their respective categories, but also may represent ideas for the opportunistic investor.

The information contained in this report is not represented or warranted to be accurate, correct, complete, or timely. This report is for informational purposes only and should not be considered a solicitation to buy or sell any security. The securities mentioned herein may not be suitable for all types of investors. The information contained in this report does not constitute any advice, and especially on the tax consequences of making any particular investment decision. This material is not intended for any specific type of investor and does not take into account an investor's particular investment objectives, financial situation or needs. This report is not intended as a recommendation of the security highlighted or any particular investment strategy. Before acting on any information found in this report, readers should consider whether such an investment is suitable for their particular circumstances, perform their own due-diligence, and if necessary, seek professional advice.

Assumptions, opinions, and estimates are based on our judgment as of the date of the report and are subject to change without notice. Valuentum is not responsible for any errors or omissions or for results obtained from the use of this report and accepts no liability for how readers may choose to utilize the content. In no event shall Valuentum be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the information contained in this document. Investors should consider this report as only a single factor in making their investment decision.

Valuentum is not a registered investment advisor, does not offer brokerage or investment banking services and adheres to professional standards and abides by formal codes of ethics that put the interests of clients and subscribers ahead of their own. As of the date of this report, Valuentum has not received any compensation from the company or companies highlighted in this report. Valuentum, its employees, and affiliates may have long, short or derivative positions in the stock or stocks mentioned herein. Redistribution is prohibited without written permission.

Valuentum's company-specific forecasts used in its discounted cash flow model are rules-based. These rules reflect the experience and opinions of Valuentum's analyst team. Historical data used in our valuation model is provided by Xignite and from other publicly available sources including annual and quarterly regulatory filings. Stock price and volume data is provided by Xignite. No warranty is made regarding the accuracy of any data or any opinions. Valuentum's valuation model is based on sound academic principles, and other forecasts in the model such as inflation and the equity risk premium are based on long-term averages. The Valuentum proprietary automated text-generation system creates text that will vary by company and may often change for the same company upon subsequent updates.

Valuentum uses its own proprietary stock investment style and industry classification systems. Peer companies are selected based on the opinions of the Valuentum analyst team. Research reports and data are updated periodically, though Valuentum assumes no obligation to update its reports, opinions, or data following publication in any form or format. Performance assessment of Valuentum metrics, including the Valuentum Buying Index, is ongoing, and we intend to update investors periodically, though Valuentum assumes no obligation to do so. Past performance is not a guarantee of future results.

For general information about Valuentum's products and services, please contact us at valuentum@valuentum.com.