

Omaha:

Berkshire Hathaway just hosted its annual investor meeting and we were reminded of a wonderful Warren Buffett quote. He said, "Only when the tide goes out do you discover who's been swimming naked." In a booming market and economy, one does not need to be terribly concerned with debt levels. Only when things become more volatile and complex are the deep dives and research into the numbers rewarded. In this note, we will attempt to frame where we prefer to be positioned in the payment ecosystem. We will highlight why we believe card issuers possess a higher level of risk than we are comfortable taking. This is particularly an interesting time for a thorough bank analysis, as the Federal Deposit Insurance Corporation or FDIC just reported that US banks earned a record quarterly profit in the first quarter of 2018. Last quarter, US bank profits were \$56 billion and grew over 27% year-over-year. Are banks benefitting from rising interest rates, an improving economy, and lower taxes? The answer to that is "absolutely yes." Are some banks beginning to stretch for yield, taking unnecessary risks and experiencing rising delinquencies and charge-offs? Unfortunately, for some banks, the answer to that question is also "absolutely yes." From our investing standpoint and factoring in our strong disdain for credit risk, our preference will be to swim in a full wetsuit with a bright orange life vest, and just to be safe – don't go swimming for a full hour after eating.

Simple Question:

We start many of investor meetings with one simple question: "Do you have a Visa or MasterCard in your wallet?" The answer is always "YES!" Our response is always the same: "No, you don't!" Most people believe that piece of plastic in their wallet was issued or provided to them by Visa or Mastercard. In fact, it is a line of credit granted by a bank. Wells Fargo, JP Morgan, Bank of America, or another financial institution like Capital One is providing a monthly credit line, based upon a number of risk factors. Visa and Mastercard do not even know your name, address, or income. As payment networks, Visa and MasterCard simply allow billions of purchase transactions to occur at millions of merchants in over two hundred countries. The networks are gatekeepers, earning a small but recurring toll on each transaction. It is the bank or financial institution that is providing the credit or funding source. If you would ask JP Morgan's CEO Jaime Dimon, he would state that the card in your wallet is a Chase card. It probably drives him nuts that his consumers are not truly appreciating this relationship.

Banks:

As FinTech investors, we are attracted to the secular growth of the payments industry. However, not all payment companies are positioned the same, nor are all taking a similar level of risk. There is no doubt that issuing credit cards and loans can be profitable. Nearly 160 million Americans have credit card debt outstanding, which represents well over half of our adult population. Card balances are continuing to increase, reaching 7% year-over-year growth in 2018. According to the Federal Reserve, total card balances exceeded \$1.03 trillion in January of 2018, its highest level ever. The juicy profits a financial institution can earn from credit lines is being copied around the world. Like any asset, these rewards come with a certain amount of risk.

Cards:

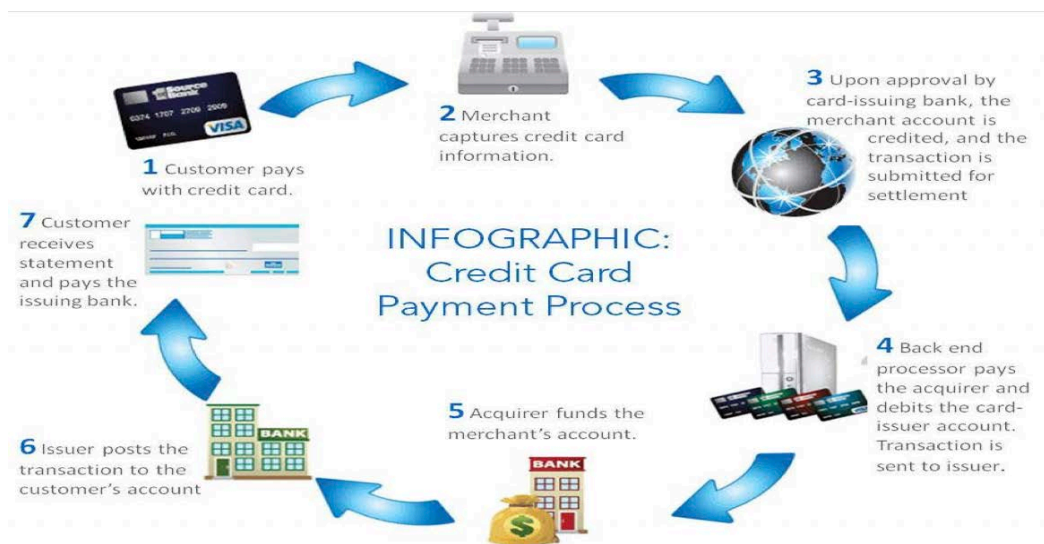
In the US, transactions on cards exceed \$6 trillion. Whether it is credit, debit, or even prepaid cards, usage continues to climb. PayPal's CEO Dan Schulman recently stated that he believes credit cards will be largely obsolete in the next twenty years. Others believe bitcoin will replace traditional fiat currency for purchase transactions. These are the same people that believed nobody would be writing paper checks by 2018. Unfortunately, we are often behind the lady that insists on writing checks and insuring she records each and every transaction in the back of her checkbook. We are more in the camp that traditional plastic cards will undergo an evolution, not a revolution. Over years, maybe even decades, traditional cards will get replaced by more convenient digital methods, like contactless, QR code-based or mobile-based payments. While the growth rate of these newer payment methods will be impressive, it will likely take years, if not a decade, for them to become widely adopted. With new technology, the front-end mechanism or back-end logistics can vary. Ultimately, a key aspect to remember is that each transaction needs a funding source to occur. It is our opinion that this remains a financial institution's key advantage. Without the access to credit, most transactions simply could not occur. Merchants understand this, which is why they are absolutely willing to accept the

cost of doing business, known as the merchant discount rate or MDR. We strongly believe that cards will continue to be the dominant player in the payments ecosystem and that these transactions will ride on the network rails. Nothing in payments land moves quickly. The US only embraced EMV or chip in card technology in 2015. Cards will likely remain the simplest and best method for payments for the foreseeable future.

Why Take Unnecessary Risk?

We are often asked about our thoughts on risk and how we best manage our exposures. We believe this starts by doing bottoms up research, knowing your companies well, and understanding their fundamentals. Before we would ever invest or own a company, we must understand how it generates free cash flow, its forward-looking prospects, and its issues and risks.

Where an entity is positioned on the complicated payments food chain is critically important to understand. As the chart details, there are numerous players involved in a simple credit card payment. While it takes only a few seconds for approval to be granted at the point-of-sale, several intermediaries or parties insure every card transaction is authorized, cleared, and settled.



Issuer Competition:

It is estimated that fees and interest tied to card lending is a \$180 billion a year business. The card industry remains highly lucrative for banks and the multiple players in this payment ecosystem. Relentlessly advertising and offering an endless array of perks, card issuers vie to become the go-to card in your wallet. With 15% historical attrition rates, the competition for new customers and accounts is intense. This steady stream of revenue and profits is attracting entities that previously never would have entered the card market. In mid-May, the Wall Street Journal reported that Goldman Sachs was looking to enter the credit-card business with Apple as its partner.

In 2017, US credit card issuers generated 66.6 million new accounts, but this fails to account for attrition. The net, new account growth last year was a measly 2.3 million. High volumes of account attrition are impacting issuers, with some rate surfing and other consumers outfoxing the rewards incentive model. Most sell-side analysts believe that portfolio growth for the US issuer industry will be flat in 2019. It is our belief that some issuers are not properly and fully measuring important metrics like net revenue per account.

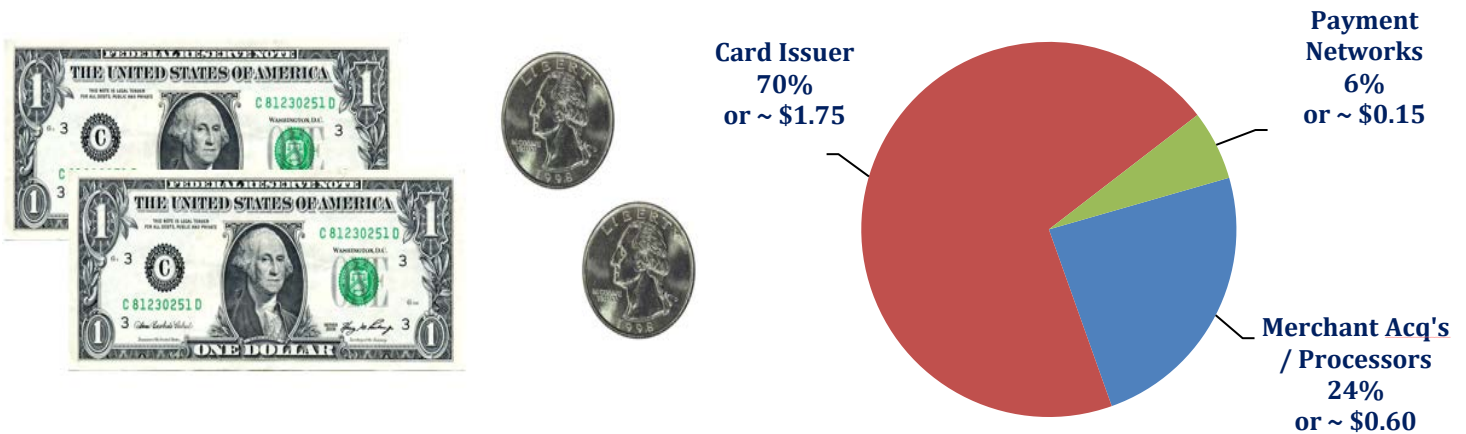
How Issuers Really Make Money:

The largest US card issuers are American Express, Capital One, Citigroup, Discover Financial and Synchrony Financial. These are the entities that own the underlying card customer. These are the companies that are providing monthly lines of credit, enticing consumers with attractive rewards programs, and responsible for the settlement and payment of each transaction.

In the most recent quarter, according to Autonomous Research, these companies were able to generate median return on assets or ROA of 2.1%. Per Mercator Advisory Group research, US credit card issuer ROA has declined from 7.65% in 2006 to 3.74% in 2017. While this is certainly respectable, we wonder what the true amount of risk is taken for this level of return.

Card issuers earn interchange for “owning the customer” and taking the credit risk associated with that spending. To earn this payment profit stream, a bank must add consumers and their corresponding transactions. Once a card gets prime positioning in your wallet, the issuer can earn profits in two distinct ways. The first way is transactional and is an attractive stream of revenue. Each and every time a card gets used, merchants pay fees for the right to receive their funds. This MDR is charged to both physical stores and online merchants and is the cost of doing business and for the acceptance of card payments. Ask any merchant and they will claim this fee is no different from their electric bill. As the pie chart below shows, for each \$100 credit card transaction, roughly \$2.50 of fees are earned. A number of payment players are involved, but the vast majority of this fee, 70% or \$1.75, goes to the card issuer. This entity will pay and move money from its consumer’s account to the merchant in question. The issuer always bears the most amount risk and also has an embedded cost of those costly rewards programs to consider.

Payment Economics



In our opinion, interchange revenue is mainly offset from customer acquisition costs and expensive reward program costs. Unfortunately, many issuers are so focused on driving revenue growth, accounts, and loan balances, that they do not fully consider the risks of certain new clients. We view the effective reward rates as the “cost of doing business” for an issuer. With heightened competition, the cost of attracting customers is steadily increasing. For its Platinum Card, American Express issues points to its members for each payment transaction. This cost is estimated to be 1.5%. Citi’s Prestige card is enticing customers to sign-up, offering an effective rewards rate of 1.8%. The Chase Sapphire card, with an effective rewards rate of 2.1%, was so successful at bringing new cards to JP Morgan that the promotion was quickly dropped. Discover pioneered the cash back program that many other issuers have copied. Offering \$2 or even \$5 back (at certain merchants) for each \$1 spent is not a wise economic transaction. The interchange revenue is far outweighed by the marketing or reward costs. The only logical or rational model that allows these issuers to continue to offer these rewards programs is that the card issuer plans to earn additional profit from future interest charges.

The Not-So-Hidden Downside:

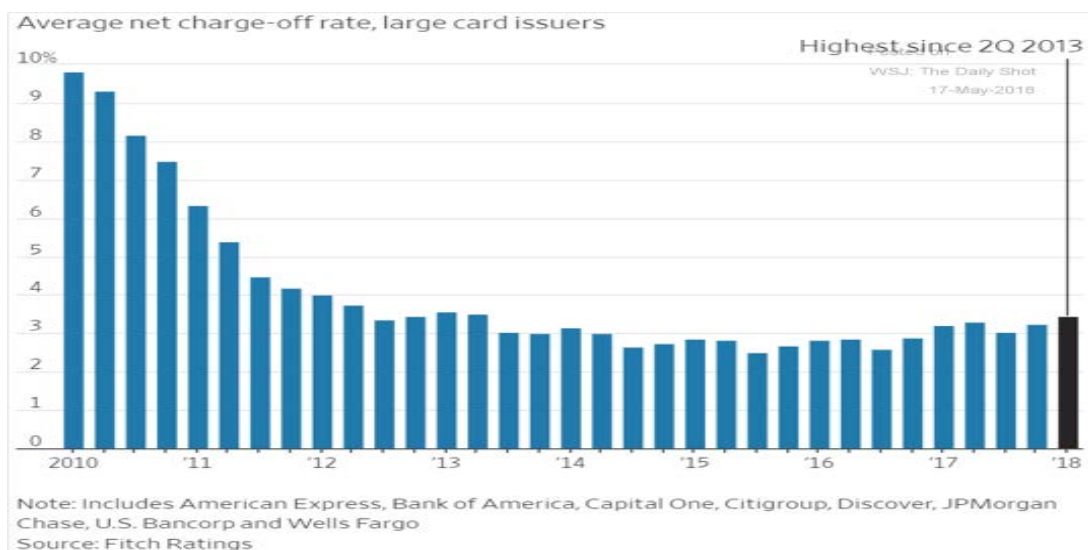
The second and riskier stream of revenue for an issuer is from interest charges. If you pay your credit card statement in full each month, the financial institution will not make this stream of profits. However, millions of people pay the minimum amount and the card issuer earns interest fees. These can be quite attractive and sizeable. Banks think of card receivables just as they think of auto loans or mortgages. For providing a line of credit to the consumer and taking the risk that the individual will or

will not re-pay this loan, a fee is earned. However, unlike a home or auto loan, the issuer cannot seize the underlying asset in the event of a default. While a car or home may have some tangible value in resale, prior card transactions (i.e. that dinner at Outback Steakhouse last month) do not.

Understanding trends in delinquencies and charge-offs is one of the primary jobs of a card or bank analyst. Reading the monthly master trust data and attempting to understand the risk sitting on a bank's balance sheet is not exciting research. However, this is critical to understanding what risks financial institutions are taking and to whom they are providing lines of credit. Capital One has a successful marketing advertisement campaign asking, "What's in your wallet?" From our perspective, any investor in a card issuer should be asking "What's on your balance sheet?" What are risk factors being used to provide an increasing amount of debt to consumers? As we learned from the financial crisis, financial institutions believe they are properly protected from a downturn with ever increasing amounts of quantitative analysis, research and risk scoring. We do not know when the next downturn is coming, but we are certain these banks will not have properly modeled the underlying causes and threats to their prior loans.

While many issuers can generate a solid and predictable return on their assets, this growth is not sustainable. Investors in banks and issuers simply think that as interest rates rise, these companies will get the benefit from being able to charge an increasing APR. According to a CompareCards analysis of Federal Reserve data, the average APR reached 15.32%, an 18-year record high in March of this year. In our opinion, this is a fantasy for two reasons. First, card issuers are seeing increased funding costs as they are being forced to pay more to their bank customers for online deposits. Second, and maybe more importantly, card issuers are wrestling with and starting to see a rise in credit card losses. A thorough analysis of issuer master trust data sees provisions for loan losses are ticking higher. After hitting an all-time low two years ago, credit-card losses are starting to perk up. If banks make the vast majority of their profits on charging interest on delinquent loans, then an increase in delinquencies should almost be viewed as a positive, right? While student loans, mortgages, and auto loans are slowly rising after peaking during the Financial Crisis, credit card delinquent loans are rapidly increasing. As we said, some banks might like to see this trend, as they can now begin to earn those attractive and high interest fees. We prefer to avoid these risks and would rather not take on this credit sensitivity.

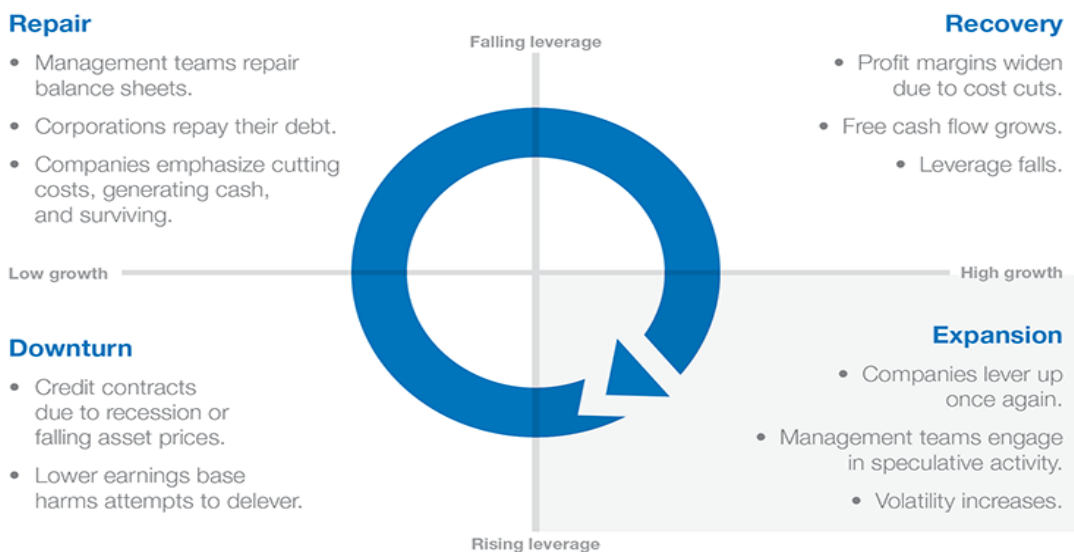
The NCO or net charge-off rate is what a bank will write off as uncollectable on its share of outstanding debt. According to Fitch Ratings, in the first quarter of 2018, the eight largest credit-card issuers had an NCO rate of 3.50%. This was a five-year high and a trend that should continue to climb. When, not if, the economy stumbles, it will surely spike even higher. This will be when the "tide goes out" in that Warren Buffett quote on page one.



Cyclical Businesses:

The credit business is totally dependent upon where we are in the market cycle. As we highlighted, issuer economics often take a “loss leader” approach. Issuers increasingly focus only on generating new accounts and cardholders at any cost. The economics on each customer can be quite complex and vary across each financial institution. Where we are in the credit cycle is critical, especially if one invests in card issuers. As the chart below shows, the credit cycle can be broken into four distinct areas.

Credit cycle



In **Repair**, financial institutions attempt to fix their balance sheets following a difficult period of debt losses. By cutting outstanding lines of credit, banks can survive and “live to fight another day.” In our opinion, this occurred in the 2008 to 2010 time period. In **Recovery**, leverage rates decline, and cost-cutting measures allow profits to expand. In our opinion, this occurred in the 2011 to 2013 time period. In **Expansion** mode, banks begin to expand credit lines, leverage ratios increase, and companies begin to seek more risky endeavors. We would argue that this part of the credit cycle is occurring right now. The \$64,000 question is, “How long are we going to continue to expand?” After years of tranquil markets, volatility has only recently begun to increase. Rising leverage rates and increasing credit lines are items that we are closely monitoring and beginning to worry about. During this period of high growth, companies begin to use new methods to attract customers. For example, SoFi and Lending Club are actively seeking customers with loans that are easier and easier to get. While both are not doing the egregious “no doc” lending we witnessed in 2006 and 2007, the ease and speed of FinTech lending certainly has some similar characteristics. To comfort investors, companies will tell of rigorous scoring methods to ensure that their loans are safe and backed by volumes of data. We worry when companies claim to have a better model or mouse trap. When we hear “it is different this time”, we have enough experience – and gray hair – to run away.

Lastly, the credit cycle always ends with a **Downturn**. Credit falls, delinquencies rise, and banks feel the pain of their prior indiscretions. We are not predicting a downturn. In fact, we have articulated in recent research notes (see here), that we are quite bullish. The current economic recovery is in its ninth year. With the average recovery being 5.8 years in length, we are clearly not in the early innings of this expansion. The National Bureau of Economic Research is assuming growth will continue, which will make this the longest bull market in recent history. With a simulative tax cut and global economic growth, who are

we to disagree with this trend continuing? All we are trying to state is that the credit cycle is unpredictable. Where we are in this cycle is unknown. Are we closer to the next downturn? Maybe we'll just say that tomorrow we will be one day closer...

Valuation:

The business models and risks associated with their profits help to determine individual payment company valuations. Are payment networks, acquirers, and processing trading at a premium to card issuers? Absolutely! We would argue that it is justified based upon having a superior and less risky business model. Growth is more predictable and free cash flow and revenues are recurring. Lastly, these transaction-based businesses come without the credit risk and sensitivity we worry about.

For this ever-present credit risk, banks and issuers trade at significant discounts to the overall market. If the S&P 500 trades at a 2018 P/E valuation of 17x, banks trade at an average P/E of 12x. Being cyclical and having a strong correlation tied to rising interest rates matters. For illustrative purposes, we analyzed the Top 4 "pure play" issuers of American Express (AXP), Capital One (COF), Discover (DFS), and Synchrony (SYF). In 2018, these four issuers are expected to grow earnings by 27%. This is somewhat inflated, as all are expected to benefit from having a lower tax rate. We prefer to look at a more normalized rate of growth for these businesses. For example, in 2019, sell-side expectations are looking for growth in the 13% range. Despite being a respectable double-digit growth rate, the market is only willing to assign the issuers a 9.9x forward multiple. Is this a function of their positioning in the payment food chain, or does it properly reflect the risk these businesses are taking? We do not believe issuers deserve a higher multiple, certainly not a market multiple. These businesses are inherently risky, and their respective earnings streams are cyclical. Some investors might be able to time the cycle and capture upside as issuer returns are improving. We are not market timers.

Recent issuer results have been impressive, as these four companies averaged a 23% and 17% return in 2016 and 2017. So far this year, performance has been a little bit more challenging, as they are down roughly 4% versus the stock market of plus 3%. With these impressive annual returns, the average dividend yield has fallen below historical levels. With the average US bank still having a dividend yield approaching 3% to 4%, these top issuers currently yield only an average of 1.6%. Capital One and Discover both trade at 10x 2018 and have identical 1.7% dividend yields. Synchrony is expected to have the best earnings growth over the next few years (both 2018 and 2019 above 20%), but it has the lowest P/E multiple. American Express, with its high-end customer base, historically garnered a market multiple. Up 36% in 2017, AXP now trades at the highest 2018 P/E of this group, at 14x. Since it also owns its payment network and does attractive acquiring and processing, we would argue that it deserves a slight premium to its issuing peers. This is the attractive component of AXP's franchise, but it cannot escape the credit sensitivity and risks of being a card issuer. On its recent earnings call, AXP management highlighted that it will continue to "invest" in rewards to existing customers and will continue to aggressively market to attract additional consumers. The rewards race continues as issuers vie for that valuable spot in your wallet. This merry-go-round is not a ride that we plan on hopping aboard.

Our Preference:

At Manole Capital, we avoid the cyclical credit card issuers, which require a strong economy to succeed. Our preference is to own secular growth business, particularly the payment networks, acquirers, and processors. Quite simply, these businesses are toll takers, not bridge builders. These companies are transaction-based business models that earn predictable revenue and profits. We are attracted to companies that can consistently and steadily grow, regardless of where we are in the economic cycle. We liken this to being recession resistant, not necessarily recession proof. Instead of taking cyclical credit risk, our payment companies earn money for each card swipe. This type of recurring revenue is secular and sustainable.

The displacement of cash and checks is inevitable. eCommerce growth is marching higher and is only now approaching 10% of annual US retail sales. In addition, there are 2.5 billion people around the world who are underserved by banks. As they move into higher earning income brackets, they will eventually learn to appreciate a line of credit and the ease of card usage. The

secular growth of the payments industry is flourishing and entering new channels. Cards are now being accepted at hundreds of thousands of new merchants, especially small to mid-sized businesses.

Looking Forward:

As the world becomes more mobile, the payments industry will continue to migrate away from cash. This is a slow, but steady move that will yield decades of future growth for the industry. This “cashless society” will likely not happen in our lifetime, but we continue to see this march away from cash. The correlation between non-cash transactions and debt levels is startling. The fallout from this digital expansion will be that debt levels will eventually balloon to epic proportions. As households use cards for more everyday purchases, they ultimately will pile up ever-increasing debt. Quite simply, people will follow the US example and likely spend more than they earn and more than they should.

For example, Sweden, South Korea, and Denmark are often applauded for their disdain of physical cash. Each country now has over 75% of its purchase transactions occurring on cards or other digital payment vehicles. This flipside of this is that all three countries also have household debt as a percentage of their net disposable income exceeding 160%. The debt danger is growing and there clearly is a link with the secular growth of non-cash transactions. When the ultimate day of debt-reckoning comes, we do not want to be left holding the proverbial bag.

Moody’s Research has summarized recent credit card results as being “weak economic adjusted performance.” As we analyze Federal Reserve data, we anticipate that delinquency erosion should continue. Over the next year or so, we expect to see delinquencies grow from the high 5% into the low 7% range. We believe now is the time for issuers to tighten up their lending standards and get their collection functions ready for increased volumes. Unfortunately, we believe the opposite is actually occurring.

Conclusion:

The stock market likes stability, predictability, and certainty. Despite numerous mostly political issues, the market in 2016 and 2017 was fairly calm. Volatility was practically non-existent, and the S&P 500 rose 21% last year. During 2018, we have seen volatility re-emerge. Will something occur to break this almost historically lengthy bull market? We are long-term investors and not market timers. We strongly believe that value is driven by time, not timing. We have positioned the portfolio to capture the secular growth of payments while avoiding its dangerous credit sensitivities. The timing of credit cycles continues to worry us. When the downturn comes - and it will - we believe our investors will benefit from our avoidance of issuers and their hidden credit risks. Our portfolio, with more sustainable business models and steady free cash flow, should outperform and prove quite resilient. For those swimming naked, we hope the water isn’t too cold!



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