

# URI | *Capital Partners*

URI Capital Partners was down 1.2% for the full year 2015, net of all fees. Since inception in August of 2012, URI Capital Partners has posted annualized returns through the end of 2015 of 12.8%, net of all fees. For the full year 2015, the S&P 500 was down 0.7% and up 1.4% including dividends paid through the year. Also over 2015, the Dow Jones was down 2.2% and up 0.1% including dividends paid.

As you will read below, in an investing climate where great opportunities are hard to find, the opportunities with our core holdings are unique and highly compelling with outsized return potential resting on strong foundations. I cannot predict what any one year will look like but I am confident in what the medium and long term holds for us given our concentrated portfolio of wonderful companies with undeniable return potential. And, as words can be hollow, you should know I added materially to my own holding in our two funds throughout the last year including just this past month.

Our perspective is long and enduring. And our future is bright.

## **Gumption and Patience**

Charlie Munger, Vice Chairman of Berkshire Hathaway and longtime business partner of Warren Buffett, often says that successful investing requires “this crazy combination of gumption and patience, and then being ready to pounce when the opportunity presents itself.”

Gumption is the intestinal fortitude needed to fully take advantage of unique opportunities that arise infrequently. When highly unusual opportunities are present, it is incumbent on the successful investor to invest aggressively. Such opportunities often arise in the face of industry or business specific issues that create degrees of uncertainty, particularly for those with a shorter term perspective on investing. The flip side of this shorter term angst and uncertainty is that an opportunity can arise for those who have fully researched, read, analyzed and thought through the past, present and future of the business or industry at hand.

This studying often goes on for years before an opportunity presents itself, which brings us to the patience that must be paired with gumption. Successful long term Investing requires deep, fundamental research and understanding along with the patience to wait for only the very best opportunities. Truly unique and compelling investment opportunities are few and far between so much of successful investing is waiting. Waiting does not mean the studying and learning stops, but only that they rarely lead to action in the form of new investments. Sitting on your hands while continuing to compound learning is the most productive form of investing on most days. Frequent buying and selling brings activity and excitement, but rarely good results.

Patience must also endure once an investment is made. We must remember that investing in even just a single share of a company is investing in a real and actual business. It takes time for a business to

compound value and it often takes even more time for the market to realize that such value creation is occurring. The needed patience just begins when the investment is made.

How does this apply to our investments in URI Capital Partners?

Our long term investing horizon is one of our greatest advantages. We have the ability and the patience to see further into the future for value creation than most other market participants. We take advantage of opportunities where short term headwinds for a business create the opportunity for long term investing tailwinds. And through our willingness to look past the noise of the day, we create the opportunity to outperform over the longer term. When people ask how I will judge success, I say we will be judged by the returns we will provide our partners twenty years from now. This allows us to look through quarter to quarter or even year to year volatility to accomplish something unique for our partners over the long term. If we can provide 12% annualized returns over twenty years, every \$1 million invested would compound to nearly \$10 million. That is a rate of return higher than what the market has historically provided, but our goal is to exceed market returns over long periods of time through conviction founded on deep research and a perspective that moves past the noise of today.

To capture these higher returns, we are heavily concentrated in a small number of companies that fit the bill for successful investing. We have the gumption to concentrate on only the very best opportunities and the patience to allow our investment thesis to play out. I have written extensively about several of our companies throughout the last year and I have included these larger investment summaries at the end of this letter but I will highlight four companies that represent the highly compelling opportunity that lies in front of us in shorter form right here.

As most of you know, I believe the large banks continue to present an extraordinarily compelling opportunity for a long term investor. We are able to buy world class companies operating at great scale for a fraction of their intrinsic value. Thought of as if we were a one town fund, we are able to buy the best bank in town at a significant discount to fair value. While there is tremendous noise that surrounds the banking industry, they are quietly posting record profits. Most importantly, these record profits are just a fraction of what these businesses should earn given the scale, breadth and quality of their franchises. Nearly every line of business is facing headwinds which is most clearly seen in the low interest rate environment. It takes the same resources to write a loan at 3% as it does at 5% but the underlying profitability of that closer to normal priced loan is dramatically higher.

As headwinds turn to tailwinds, the earnings power and operating leverage inherent in these best in class deposit-based franchises will shine through. Earnings and returns will grow. And the market will remember that best in class deposit-based financial institutions operating at great scale are indeed very good businesses. All of which should lead to great returns for investments in these world class banks which is why they carry by far the largest weighting in our portfolio.

In the larger summaries after this letter I cover both JP Morgan and Bank of America in greater detail including a discussion of the opportunity with their TARP warrants, which serve to amplify the same underlying thesis. This report is titled "A Basket of TARP Warrants" and describes the underlying businesses, the risk and opportunities they face and the return potential of their common shares and their TARP warrants. In short, I share how there is potential for the common shares to double in the coming years while, over that same period of time, one dollar invested in the warrants can increase greater than three times.

I also have included an updated summary on Berkshire Hathaway. As with JP Morgan and Bank of America, Berkshire has been a core holding since day one. Its ability to compound capital at high levels consistently over long periods of time is strangely underappreciated. My own hypothesis as to this underappreciation is that most market participants do not have the patience and longer term perspective to see the value of the compounding through. Berkshire most often moves in range of what can be considered a reasonable to slightly low valuation. There are times however when it spends time at the low end of reasonable making incremental investments even more attractive than usual. This was case when we first opened the fund in 2012 and it is the case again today. The included summary provides more of why I believe Berkshire is in the range of 30% undervalued today.

The investment summary "A Basket of TARP Warrants" also covers the business, risks and opportunities of investing in the common shares and TARP warrants of AIG (as well as JP Morgan and Bank of America as described above). While the report goes into much greater detail, in short, we are buying AIG today for roughly 75% of book value and that book value is growing consistently. Through time, AIG has been valued well above 1.5x book value but if over the next five years or so, book value continues to grow as expected and it returns to a historically reasonable valuation of 1.5x book value, the common shares can return over 2.5x by 2021 and their warrants would return roughly 4.5x.

Beyond the return potential associated with each of these core holdings, we also have invested on a strong foundation provided by paying a low price relative to even very conservative measures of value. Each of these companies stand on incredibly strong balance sheets with historically high levels of capital and liquidity. They are generating strong profits and in two of the four cases we are paying well less than book value. It is not often that you can invest with such a firm foundation while also retaining significant amounts of upside.

The situation described above calls for the gumption to invest aggressively and we have. The situation also calls for patience to allow these businesses the time to show what their world class franchises can do and we will show such patience.

Even amidst recent volatility, our perspective is long and enduring. And our future is bright.

## **Healed By Love**

I had a health scare late in the year which taught me lessons I could never learn from reading annual reports hunting for our next great investment. The short version of a long story is an ER doctor in New York found "something" in my lung during a CT scan after I had substantial pain coming from left lung. The following weeks brought mixtures of anxiety and peace to both Kelly and me. But even while not sharing my situation broadly (no reason for others to worry unnecessarily about an unknown), we were overcome and overwhelmed by the outreach of love and prayers from those who found out as we moved through life. I was blanketed with love and came away fully healed with nothing unusual in my lung on a follow up scan roughly one month later.

I was and am fully healed. Healed by love.

Please know that while I believe this investment vehicle can be used to great ends and will help each of us achieve some of our financial goals and life dreams, it must be put in its proper place. It will not hug

and it will not love you. We can achieve financial success together but it will be a hollow victory without the more important things that bring true purpose and meaning to our days.

Finally, thank you all for your belief in what we are working to accomplish. I take the responsibility of stewarding your investment very seriously. To paraphrase from the Book of Luke 12:48: "To Whom Much is Given, Much Is Expected". That should hold true for all of us both personally and professionally and it certainly does for me.

Our perspective is long and enduring. And our future is bright.

Warmest Regards,  
Brian Pitkin  
URI Capital Management, LLC

**URI** | *Capital Management*

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*“Seeking Understanding Through the Noise”*

**“It’s Déjà vu All Over Again”**

***Berkshire Hathaway - December 2015***

The late Yogi Berra famously quipped, “It is déjà vu all over again.”

I wrote about Berkshire Hathaway in the summer of 2012 and again in the spring of 2014. In both instances, shares were available at a discount to a conservatively defined intrinsic value with a greater discount in 2012 than in 2014. The gap has returned closer to 2012 levels and thus mandates another discussion this time with an emphasis on the surprising underappreciation of the intrinsic engines that create the unstoppable compounding machine that is Berkshire.

To fully appreciate how value creation cannot help but continue, we will discuss the power and uniqueness of the Berkshire model. We will also discuss how the business has changed in recent years, making some multiple of book value an overly simplistic path to valuation.

To set the perspective of our approach to investing, we aim to acquire stakes in world class companies at a discount to a consistently increasing intrinsic value, allowing for strong future returns with limited risk of permanent capital loss.

Our ideal investment would entail buying a (1) great business run by (2) superb management at a (3) reasonable valuation. The business should also be timeless, understandable and it should retain an ability to compound returns for years into decades with minimal tax drag. When we can invest in such a business, we invest aggressively.

“As everyone from Warren Buffett to his smallest investor knows, Berkshire Hathaway is worth more than the sum of its parts. Is it time to cash in?” asks a headline from Barron’s on November 14, 2015. We will try to answer that question and will end up perplexed why we would cash in when today the prevailing stock price allows us to receive all of the currently in place value at Berkshire at a healthy discount while also receiving all expected future value creation for free. While this future value cannot be quantified with precision, we can be certain it will continue in a meaningful way. Thus, looking out as little as one year we are paying less than \$0.70 for a very high quality dollar bill and the gap of what we pay versus what we receive will continue to grow over time. The Berkshire model nearly guarantees continued and significant compounding of value.

As Buffett himself says, time is the friend of a wonderful business. While investing in Berkshire can be likened to investing in the tortoise rather than the hare, let us not forget the tortoise ultimately wins. And in this case, the tortoise gets a head start given its prevailing discount to intrinsic value.

## **Underappreciation for the Power and Uniqueness of the Berkshire Model:**

### **The Power of Float, Flexibility, Internal Cash Generation and Deferral**

Berkshire has compounded book value at nearly 20% annualized since 1965. Berkshire's shares have returned 1,826,163% over the 50 years ending in 2014 (think about that for a minute). Since 1970, Berkshire has compounded its per share investments at 19% annually while earnings from businesses other than insurance and investments have compounded at 20.6% annually. Those numbers are just astounding. But how has it been possible? While many focus on the man of Buffett, it is the power of the Berkshire model which has made these returns possible. More importantly for today, it is the power of the Berkshire model that will persist into the future even when Buffett is no longer leading the company. The real genius of Buffett has been in the construction of a business model that is an unstoppable compounding machine. We will touch on four key aspects of the model: (1) the power of float, (2) the power of flexibility, (3) the power of internal cash generation and (4) the power of deferral.

**The Power of Float:** While Berkshire is widely known and even widely beloved, I think most investors underappreciate the power of the business model that underpins Berkshire. The prominence and appeal of Warren Buffett has in some ways blinded people to the business he constructed. While he has obviously created tremendous value in the last fifty years through his investing prowess, the far less discussed value he contributed was building Berkshire on a foundation of insurance businesses that provided the fuel for investing. The growth from investing alone would have fallen far short of what was accomplished through the use of increasing levels of float from the insurance businesses. It is nearly impossible to understate the importance that float has brought to growing the intrinsic value of Berkshire through time.

**The Power of Flexibility:** Beyond insurance providing the fuel for decades of outsized value creation, the combination of decentralized operations paired with centralized capital allocation has enabled Berkshire to capture the highest return value creation opportunities regardless of business, asset class or industry. The most obvious example of this capital flexibility stems from Buffett's start with Berkshire. At the time of his initial investment, Berkshire was a struggling textile manufacturer with little ability to earn above average returns on capital. Instead of plowing additional capital into the textile business, Berkshire ultimately bought National Indemnity which set the stage for the company's remarkable run of value creation. It is entirely accurate to say this step was paramount in building what Berkshire is today as it started the power of float generated investment returns.

That same degree of capital allocation flexibility exists today and insulates Berkshire from the institutional imperative of a business to keep throwing money at its own business, whether the prospects for future returns are high or low. Berkshire can and has shown great aptitude to invest where the prospects for return are high and avoid committing new capital to those areas where the return prospects are low. In addition, a team has been assembled in recent years with exclusive focus on investing to help ensure strong capital stewardship continues through the following decades.

It would be fruitless to detail all the new investments that have been made in recent years, whether in traditional investments or through the acquisition of entire businesses. But as one example, four of Berkshire's five largest non-insurance operating businesses have been bought in the last ten years and this does not consider the massive investments made in smaller acquisitions and more traditional investments, including well over \$40 billion in 2008 alone. The

scale of the growth in investments and operating businesses will be apparent in the next section but the important aspect to keep in mind will be our consideration of their respective values in per share amounts which exemplifies how this growth has been internally generated.

**The Power of Internal Cash Generation:** The cash generation of the enterprise in totality is enormous and enables a continuous flow of new capital for investments and to acquire new operating businesses. Some liken Berkshire to other companies posting growth through acquisition, or roll up, strategies. But this misses the most important distinction of Berkshire relative to most businesses. Its growth in value through new investments and acquired companies has been achieved through internal capital generation and was not done with large amounts of external debt or equity capital. While most acquisitive companies would falter without regular access to the capital markets, Berkshire's growth is self-generated and thus more sustainable than appreciated. The snowball cannot help but to keep rolling down the hill.

Returning to decentralization, it goes without saying that Berkshire's investments in publicly traded companies operate on their own accord and have value independent of Berkshire. The same can also be said for its non-insurance operating businesses. This extreme operational decentralization has led many to call for Berkshire to break apart in various pieces. And it is true they operate independently and thus can stand on their own apart from Berkshire. But the ability of all freely available capital to return to headquarters and be sent to the highest possible returns, its home not needing to bear any relation to where it came from, is a unique advantage that allows for long term durability. As any one business or industry in the portfolio falters over the longer term, its capital can be sent to where it can continue to create value, even if outside and away from its own business.

Many current forms of platform or acquisitive companies are likened to Berkshire but I believe most fall short in at least one very critical way. Their acquisition led growth is fueled by access to the capital markets rather than Berkshire's continued growth through investments and acquisitions which are predominately funded through *internal cash generation*. As with the power of float, it is hard to understand the difference and the importance of being able to grow organically rather than through a reliance of accommodative financing markets. Internal cash generation fueled growth is durable and sustainable. Berkshire is not prone to hiccups in the financing markets. Berkshire always has enormous levels of cash on hand for both durability and opportunism. The additions to the growing piles of investments and owned operating businesses will continue in good times and bad times and thus the growth in Berkshire's intrinsic value can grow sustainably for the foreseeable future.

**The Power of Deferral:** Berkshire's model of funneling generated capital back to headquarters to most effectively redeploy also has the benefit of the frictional costs of taxes often associated with companies moving cash out of the business. The below section from Buffett's 2014 annual letter highlights (1) the power of flexibility in capital allocation toward the highest available returns even if in another business, (2) the power of internal cash generation from a myriad of sources and (3) the power of deferral as these movements of capital occur within Berkshire free from the tax and other frictional costs that would be associated with the various businesses being standalone entities. The example highlighted is See's Candy which generates great free cash flow but in amounts beyond the level it can profitably reinvest. Given See's sits inside the larger Berkshire, it can keep generating very high returns on its own capital while allowing the cash to move within Berkshire to other businesses and investments where the prospects are much better for the incremental capital invested. And all of this occurs without the usual friction prevalent in most businesses and investments.

*“At Berkshire, we can – without incurring taxes or much in the way of other costs – move huge sums from businesses that have limited opportunities for incremental investment to other sectors with greater promise. Moreover, we are free of historical biases created by lifelong association with a given industry and are not subject to pressures from colleagues having a vested interest in maintaining the status quo. That’s important: If horses had controlled investment decisions, there would have never been an auto industry.*

*Another major advantage we possess is the ability to buy pieces of wonderful businesses – a.k.a common stocks. That’s not a course of action open to most managements. Over our history, this strategic alternative has proved to be very helpful; a broad range of options always sharpens decision-making. The businesses we are offered by the stock market every day – in small pieces, to be sure – are often far more attractive than the businesses we are concurrently being offered in their entirety. Additionally, the gains we’ve realized from marketable securities have helped us make certain large acquisitions that would otherwise have been beyond our financial capabilities.*

*In effect, the world is Berkshire’s oyster – a world offering us a range of opportunities far beyond those realistically open to most companies. We are limited, of course, to businesses whose economic prospects we can evaluate. And that’s a serious limitation: Charlie and I have no idea what a great many companies will look like ten years from now. But that limitation is much smaller than that borne by an executive whose experience has been confined to a single industry. On top of that,, we can profitably scale to a far larger size than the many businesses that are constrained by large taxes, and almost always, by frictional and agency costs.*

*I mentioned earlier that See’s Candy had produced huge earnings compared to its modest capital requirements. We would have loved, of course, to intelligently use those funds to expand our candy operation. But our many attempts to do so were largely futile. So, without incurring tax inefficiencies or frictional costs, we have used the excess funds generated by See’s to help purchase other businesses. If See’s had remained a stand-alone company, its earnings would have had to be distributed to investors to redeploy, sometimes after being heavily depleted by large taxes and, almost always, by significant frictional and agency costs.”*

*2014 Chairman’s Letter, Berkshire Hathaway*

## **The Building Blocks of Value**

Berkshire Hathaway is a collection of great businesses held both as owned and controlled operating businesses and as investments in publicly traded companies built on a foundation of a world class and profitable insurance business. The management at Berkshire carries a reputation for honest, reliably consistent and shareholder focused actions. The Company has the broadest of mandates, which allows the flexibility to invest wherever the best returns exist, irrespective of industry or asset class. Most importantly, Berkshire remains available for investment today at attractive valuations.



There are three core buckets of value in Berkshire: (1) the insurance operations, (2) owned and controlled non-insurance businesses and (3) investments predominately in publicly traded companies. The foundation of Berkshire is insurance. Insurance creates both float and cash flow that is the fuel for buying both owned and controlled businesses and stakes in publicly traded companies. When an insurance company writes policies to underwriting profitability, float becomes the best form of financial leverage available. When an insurance operation is profitable, the company enjoys the use of free money while getting paid to hold it. This form of financial leverage is cash generative without any timeline for repayment, assuming there is no decline in the aggregate value of float outstanding through time.

Flat or increasing float in the aggregate precludes any need for net cash outflows whereas declining float brings about a need for net cash outflows. Given that critical distinction, has float increased or decreased through the years at Berkshire? The chart below answers this question in striking form. And while the future is not likely to bring the same level of increasing float, we should also not expect dramatic declines in float either. This makes float, for a profitable insurer like Berkshire, long enduring without any repayment obligation on a net basis (inflows equal or exceed outflows) and profit generating, all of which makes it enormously valuable.

	Insurance Float (in millions)
1970	\$39
1980	\$237
1990	\$1,632
2000	\$27,871
2010	\$65,832
2014	\$83,921

Increasing levels of float along with sustainably profitable insurance operations have provided much of the fuel for Berkshire's gains in value over the years and will continue to do so going forward.

## Value Today

As described above, insurance drives and provides the foundation for Berkshire but there is great value in its collection of controlled businesses and investments, so let's summarize those two buckets of value.

Berkshire owns a growing collection of controlled business including the Burlington Northern Railroad, a sprawling utility operation called Berkshire Hathaway Energy, IMC, Lubrizol and The Marmon Group. These five companies generated \$12.4 billion in pre-tax earnings in 2014, an increase of \$1.6 billion from 2013. To accentuate how Berkshire has grown even in recent years, only of these five, Berkshire Hathaway Energy then called MidAmerican Energy, was owned by Berkshire ten years ago and produced pretax earnings of just under \$400 million at that time.

Part of our valuation exercise will be discussing what future value can be created by the cash generation of Berkshire in total. This one data point of four new companies and over \$12 billion

of new pre-tax earnings coming almost exclusively from internal cash generation (a small amount of stock was issued in the Burlington Northern acquisition) is remarkable and points to what lies ahead. You cannot overstate the power of the internal cash generated and how it has enabled additions to Berkshire's constantly growing buckets of investments and businesses without the need for issuing additional equity.

Berkshire also owns scores of smaller non-insurance businesses that in aggregate produced another \$5.1 billion in pre-tax earnings in 2014, up from \$4.7 billion in 2013. There are over 80 businesses that contribute the \$5 billion in pre-tax earnings. In fact, much of the premise of the Barron's article referenced above is how significant value could be created if Berkshire were to deconglomerate and spin off a great number of these businesses (they are actually over 200 entities that could be spun out). Part of the challenge in this strategy is it devalues the strong benefit today that the cash generated by all the Berkshire businesses can be brought back to corporate and allocated to the best opportunities wherever they may exist rather than in just one business silo. The far bigger challenge is the "value" that may be created through spinning out many businesses is stock market value, not true business value. So the deconglomeration may create a bump in the stock price but not fundamentally alter the value inherent in the business (and in fact is more likely to degrade existing value).

The more widely recognized component of Berkshire is its portfolio of publicly traded companies and other investments. Core holdings include Wells Fargo, Kraft Heinz, Coca Cola, Bank of America, American Express and IBM. Recent years have also brought a number of preferred equity investments to Berkshire include preferred stakes in Wrigley from the Mars acquisition, Dow Chemical, Bank of America and Restaurant Brands (the parent of Burger King and Tim Horton's). In addition to these and other meaningful stakes in publicly traded companies, Berkshire currently has over \$66 billion in cash and cash equivalents.

Two of the listed core holdings require further discussion: Bank of America and Kraft Heinz. The stake in Bank of America is not listed on quarterly filings as it is derived from Berkshire's ownership of 700,000,000 warrants exercisable to common shares in 2021. While the warrants will not be exercised until that time, Berkshire's economic stake in Bank of America is very real and very material. The warrants were part of the \$5 billion preferred investment from 2011 (the preferred equity investment has not yet been repaid and may not be redeemed until 2019). So, while an investment in the common shares of Bank of America is not found on Berkshire's current filings, it is a material holding for Berkshire. My own past investment summaries of Bank of America express its own undervaluation which should create value for Bank of America and Berkshire shareholders alike.

Berkshire's investment in Kraft Heinz is also two pronged with both an investment in preferred stock and common stock. The nuance with the Kraft Heinz stake stems from its equity method accounting resulting from the size of Berkshire's ownership. In short, the common shares owned by Berkshire were reported in the September 30, 2015 quarter at \$15.8 billion but its actual value exceeds \$24 billion as the stake is not marked to the current market price each quarter. So instead of the reported \$15.8 billion, Berkshire's 325.4 million shares, or roughly 26.8% of the company, is valued in excess of \$24 billion. Adding in the roughly \$8 billion preferred equity investment brings the total value of Berkshire's investment in Kraft to roughly \$32 billion. This roughly \$8 billion difference in reported and actual value will be accommodated for in our valuation.

## Discount on Today

If a certain multiple of book value is too simplistic, how should we think about valuation? We will consider it in three parts: (1) the current value of the non-insurance operating businesses, (2) the current value of the investment portfolio and (3) the value creation we can expect going forward. Importantly, we will not include any value for the insurance businesses above and beyond these three buckets. While the insurance businesses have consistently posted profits over the years, I view them in aggregate as the funding mechanism that has built the portfolio of businesses and investments currently in place at Berkshire and will continue to be part of the funding mechanism for additions to these two sources of value. As such, we will not add any of the insurance underwriting profits to our estimate of intrinsic value. It is important to note however that Berkshire has generated underwriting profits in each of the last twelve years producing cumulative underwriting profits through that period exceeding \$24 billion so it is seemingly overly conservative to not grant any value to such profits. However, a level of conservatism allows us to be directionally accurate even against unforeseen missteps or misunderstandings. It should also be noted that Berkshire writes a fair amount of insurance covering potentially large, one off events so not including all the good years provides a foundation to also look past the occasional large losses in the insurance businesses to the extent they occur.

In thinking about the value in place today, we will reference the chart below.

	<u>Per Share Value of Investments</u>	<u>Per Share Pre Tax Earnings</u>
1970	\$66	\$3
1980	\$754	\$19
1990	\$7,798	\$102
2000	\$50,229	\$918
2010	\$94,730	\$5,926
2014	\$140,123	\$10,847
Q3 2015	\$149,227	\$11,172
		10x
		\$111,724
Estimate of Current Value		<b>\$260,951</b>

*Note: The Q3 Investments and Pre Tax Earnings were both increased 3% relative to year end 2014 as book value has grown over 3% while operating earnings exclusive of investment income has grown just under 3%. The investments were also increased an incremental \$4900 per share to accommodate for the fair value of the Kraft Heinz stake relative to how it is reported.*

The investments are marked to market and thus we have a fairly easy to determine source of value for them. Of course, if Berkshire's holdings were significantly overvalued by the market we would need to make an offsetting adjustment but as you work through the list of holdings I consider them to be either fairly valued or in many cases undervalued.

In considering the value of the non-insurance operating businesses, we have ascribed a 10x multiple of pre tax earnings. This is a below market multiple for a collection of well above

average businesses with strong growth prospects ahead. As with excluding insurance underwriting profits, applying a 10x multiple to this growing pile of earnings affords much conservatism in determining value.

By ascribing a multiple to these pre tax earnings we can approximate a combined number (nearly \$261,000 per share) of value as if all the investments and businesses owned by Berkshire were publicly traded. And, as a reminder, this \$261,000 gives no value to insurance profits.

This \$261,000 compares to a current price of around \$200,000. So we can invest today at a price that is meaningfully lower than just the current value of Berkshire's investments and businesses.

But more significant than that, the \$261,000 gives no value to the business of Berkshire as a going concern. It is clear and obvious Berkshire will continue to grow in value over time as its massive internal cash generation will ultimately be put to work through new investments or buying new businesses. Additionally, and just as important, the existing businesses will continue to grow in value. While it may be challenging to paint a precise figure for the value of the going concern, it is certainly real, tangible and significant.

### **Tomorrow For Free – The Value of the Going Concern – An Unstoppable Compounder**

The combined cash flow from controlled businesses and insurance operations and the income from investments can be thought of as a water hose that continues to pour water/new capital, building larger and larger buckets of value across both operating businesses and investments. New water coming into the two buckets does not degrade or reduce the value of the water already there. The new value is only additive to the current value that remains. This will be relevant as we consider the intrinsic value of Berkshire as it nearly guarantees increases in our two components of value over time. Cash cannot help but build inside Berkshire and that cash is an immediate add to value before even accounting for how the newly created cash is ultimately invested.

This is also where another common misunderstanding of Berkshire occurs: the value of the buckets of businesses and investments relative to Buffett's role in the company. A common problem associated with investing in Berkshire is its reliance on Warren Buffett and the related question of what the company will be worth once he is gone. But think about those businesses and investments using a couple examples: If Buffett is gone tomorrow, what will happen to Burlington Northern Railroad? And what will happen to Wells Fargo? They will both continue to generate cash flow just as the day before. There will be no change. And the same can be said for all the other businesses inside of Berkshire. These great businesses have a permanence of value regardless of Buffett's presence.

The relevant question as it pertains to his effect on value is the value of tomorrow. As mentioned, the insurance businesses, along with cash flow from both controlled companies and investments, continue to add capital that is available for new investments. How will that capital be treated? The value that already exists is protected given the decentralized management approach to all operations excluding capital allocation. Responsibility for the allocation of new capital resides at headquarters. Again, we will return to this topic when discussing valuation but we can comfortably say that the current collection of businesses (excluding insurance) is not

reliant on Buffett. So the question of Buffett becomes a question of how intrinsic value can grow in the future.

But what can we see in the relative near term for value creation? There are two primary sources: (1) cash generation to expand the current roster of investments and businesses (2) continued growth in the underlying value of the existing operating businesses and investments.

As mentioned, the cash generation of Berkshire cannot be slowed down and will consistently and reliably add incremental value to the company, quarter to quarter and year to year, as time goes on. There is significant, organic new value creation every day through internal cash generation alone.

Additionally, the underlying earnings power of the myriad of businesses under the Berkshire umbrella will continue to grow through time. This is not to say there will not be some businesses in the fold that do degrade over time, but taken as a whole, underlying earnings power will continue to grow above and beyond cash generation.

Studying the past helps put perspective on what the future may hold. Since 1970, Berkshire's per share investments have grown at 19% compounded annually, while the per share amount of non-insurance operating earnings has compounded at a 20.6% clip. While not expecting this amount of growth in the coming years, it would be foolish to believe Berkshire's ability to grow has reached a ceiling considering its cash generation alone.

In 2014, Berkshire generated over \$32 billion in cash flow from operations. That cash was then used in growing our two sources of value by making new investments, buying new businesses and growth capital expenditures for existing businesses.

Value creation will continue unabated at Berkshire for years to come.

*"The next to last task on my list was: Predict whether abnormally good results would continue at Berkshire if Buffett were soon to depart.*

*The answer is yes. Berkshire has in place in its subsidiaries much business momentum grounded in much durable competitive advantage.*

*Moreover, its railroad and utility subsidiaries now provide much desirable opportunity to invest large sums in new fixed assets. And many subsidiaries are now engaged in making wise "bolt-on" acquisitions.*

*Provided that most of the Berkshire system remains in place, the combined momentum and opportunity is so great that Berkshire would almost surely remain a better-than-normal company for a very long time even if (1) Buffett left tomorrow, (2) his successors were persons of only moderate ability and (3) Berkshire never again purchased a large business.*

*But, under this Buffett-soon-leaves assumption, his successors would not be "of only moderate ability." For instance, Ajit Jain and Greb Abel are proven performers who would probably be under-described as "world-class." "World-leading" would be the description I would choose. In some important ways, each is a better business executive than Buffett.*

*And I believe neither Jain nor Able would (1) leave Berkshire, no matter what someone else offered or (2) desire much change in the Berkshire system.*

*Nor do I think that desirable purchases of new businesses would end with Buffett's departure. With Berkshire now so large and the age of activism upon us, I think some desirable acquisition opportunities will come and that Berkshire's \$60 billion in cash will constructively decrease."*

*Charles T. Munger, Berkshire Hathaway Vice Chairman, 2014 Letter*

## **The Same, Old Berkshire?**

While much of Berkshire remains the same from decades ago, much has also changed. The most striking change has been the accumulation of owned operating businesses that stand alongside a large portfolio of predominately publicly traded businesses. We will discuss this shift towards more owned and controlled businesses as it has important valuation implications requiring a move beyond trying to understand the value of Berkshire relative to its book value.

The preference for adding to the collection of owned operating businesses has accelerated in recent years both through purchases of new businesses and bolt-on acquisitions for existing businesses. As discussed above, four of the five largest non-insurance operating businesses have been newly acquired in the last ten years (Burlington Northern, The Marmon Group, IMC and Lubrizol). The latest most prominent example of an add-on acquisition was Berkshire Hathaway Energy's acquisition of AltaLink for \$2.7 billion in late 2014. For the full year 2014, Berkshire subsidiaries contracted for 31 bolt-on acquisitions for a total of \$7.8 billion.

Berkshire entered a new line of business in the first quarter of 2015 acquiring The Van Tuyl Group automotive dealership business for \$4.1 billion. The Van Tuyl Group, now named Berkshire Hathaway Automotive, is positioned and seeking additional acquisitions in the auto dealer industry while also building out related businesses around insurance, extended warranty and other automotive protection plans. Berkshire is about to complete an acquisition of Precision Castparts for roughly \$32 billion in 2016 which will dramatically increase its portfolio of owned and controlled businesses.

Berkshire has also completed tax efficient asset swaps with companies where it has a significant common stock investment. Just last year, Berkshire swapped its shares in Philips 66 for one of its chemicals business which has since been folded into Lubrizol and also tax efficiently swapped long held shares with in Graham Holdings (formerly The Washington Post Co.) for cash, Berkshire shares and a Miami-based TV station. Berkshire had essentially no cost basis in the Graham shares but was able to effectively sell the shares through the transfer on a tax free basis. Berkshire will also exchange its shares in P&G for full ownership of Duracell this year and in the process avoid roughly \$1 billion in taxes that would have been due if selling the P&G shares outright. In each of these cases, Berkshire has gained control of sought after businesses while using existing investments as the deal currency in a tax efficient manner including effectively buying back its own shares in one case. Taxes are avoided and Berkshire adds to its growing pile of controlled operating businesses. It should also be noted that Berkshire has rebuilt its Philips 66 stake to a much larger size than before its exchange for the chemicals business through recent investments.

The relatively recent moves described above highlight the dramatic change occurring at Berkshire as it seeks to own and control entire businesses compared to its historic practice of focusing more on making minority investments in the public markets.

### **Increasing Gap Between Book Value and Intrinsic Value**

Book value per share as a yardstick of intrinsic value per share for Berkshire is increasingly too simplistic.

When Berkshire was largely an insurance operation paired with a collection of investments, book value was a decent yardstick for conservatively assessing value. This is not to say that book value was the right value but rather that the relationship of book value to intrinsic value stayed consistent which allowed for using the growth in book value as a proxy for the growth in intrinsic value.

As Berkshire has evolved to where more and more of its value comes from controlled businesses rather than investments, the relationship of intrinsic value to book value is changing. There is an increasing gap between intrinsic value and book value and this gap is likely to widen going forward. A constant multiple of book value is too simplistic a method of valuation for Berkshire, largely as a result in the dramatic growth in the value of non-insurance operating earnings relative to the value in investments.

*"In our early decades, the relationship between book value and intrinsic value was much closer than it is now. That was true because Berkshire's assets were then largely securities whose values were continuously restated to reflect their current market prices. In Wall Street parlance, most of the assets involved in the calculation of book value were "marked to market."*

*Today, our emphasis has shifted in a major way to owning and operating large businesses. Many of these businesses are worth far more than their cost-based carrying value. But that amount is never revalued upward no matter how much the value of these companies has increased. Consequently, the gap between Berkshire's intrinsic value and its book value has materially widened."*

*2014 Chairman's Letter, Berkshire Hathaway*

In another sign of the increasing gap between intrinsic value and book value, we can look to Berkshire's share repurchase program. In addition to the current repurchase program, there has only been one other time when Buffett has offered to buy back stock. The current program was initiated in 2011 at a price to book of 1.1x or below but was subsequently increased to 1.2x or below in 2012 mirroring statements that the gap between intrinsic value and book value is expanding.

This can also be seen in the valuation chart below adding together the two pieces of current value: per share investments and the value of current operating earnings. As can be seen, the ratio of these combined values to book value has increased in recent years as the company has rapidly accumulated larger operating businesses.

	<u>Per Share Value of Investments</u>	<u>Per Share Pre Tax Earnings</u>	<u>Current Value Estimate</u>	<u>Book Value Per Share</u>	<u>Ratio of Current Value to Book Value</u>
2000	\$50,229	\$918	\$59,409	\$40,442	1.5x
2010	\$94,730	\$5,926	\$153,990	\$95,453	1.6x
2014	\$140,123	\$10,847	\$248,593	\$146,186	1.7x
Q3 2015	\$149,227	\$11,172	\$260,951	\$151,083	1.7x
	10x	\$111,724			
Estimate of Current Value		<b>\$260,951</b>			

The above chart details the moving yardstick of what is the appropriate multiple of book value for the value in place today, before even considering how to value the going concern. It is likely the gap will continue to increase as the amount of operating businesses grows in importance so we need our slightly more nuanced picture of valuation.

### What is the Number?

Valuation is not precise to the penny and is best thought of as ranges where investment is likely to be productive or not. That being said, I will work to accumulate our sources of value to a number but will leave open the important consideration of the value creation beyond the next year. If we can invest well below this conservative measure of value, we can invest comfortably and aggressively.

We know at a minimum there is value of roughly \$261,000 per share in place today. Value continues to accrue day by day. We can comfortably expect cash to build and underlying earnings power to increase. In more recent years, value has compounded at closer to 15%. While not expecting growth of 20% or even 15% as in years past, it is not at all unreasonable to expect growth in value of 10% per year for the foreseeable future. As we discussed, much of this growth is in place solely from reasonably certain internal cash generation before giving credence to the uses of such cash including incremental investments, buying new businesses, bolt-on acquisitions, high return capital expenditures and growth in the underlying earnings power of the investments and businesses already in place at Berkshire.

To quote from our last summary of Berkshire: "Berkshire Hathaway is a consistently growing amalgamation of businesses and investments augmented by consistent cash generation from profitable insurance operations. The additional cash generation from those same investments and businesses further add to the base of businesses and investments in a perpetual cycle of value creation. As important, the business can be acquired today at materially less than a conservative estimate of its intrinsic value."

If Berkshire's sources of value compound at 10% per year on average for the next five years, our estimate of value would exceed \$420,000. ***Pushing this 10% growth in value out one year brings value over \$287,000, a marked discount from today's price around \$200,000.*** Buying at a discount to current value in an unstoppable compounding machine provides an enormous opportunity and one that longer term investors should not look past.

Thought of in a slightly different way, if we compare the per share value of Berkshire's investments to its current stock price, we are left paying less than 5x pre-tax operating earnings



for Berkshire's non-insurance businesses while retaining future value creation for free and ascribing no value to the company's history of insurance profitability.

There are times when the best opportunities are hidden in plain sight and that is certainly the case with Berkshire today.

**World class company. World class management. Discounted valuation.**

**Why Does the Opportunity Exist?**

As widely known as Berkshire is, how can this opportunity exist? The same question could have been asked about our earlier summary in 2012 and many other points of time through its history. The reality is I cannot know with certainty why a company is undervalued by the market. Speculation is dangerous, even with words. That being said, I will point out a few hurdles others may have investing in Berkshire.

**Time/No Catalyst:** There is no near or medium term catalyst that can be seen to dramatically alter the stock market valuation of Berkshire. The lack of catalyst is enough for many investors to avoid a particular company. With a compounder like Berkshire, time is often the only catalyst you can find.

**Underappreciation of Compounders:** Several have commented about the market's underappreciation for platforms, or long term compounders. I am not certain all the platforms of today are truly long term compounders but Berkshire unequivocally is a long term compounder. And I continue believe the relative short or medium term focus of most market participants does not allow for a full appreciation of the longer term compounding power made possible through its unique operating model. The short term returns may not seem high enough and the long term returns may feel too distant. As a related point about the longer term power of a compounder, consider the chart from earlier in the report showing the increasing gap of current value to book value. In roughly fifteen years, the multiple changed by two tenths. While that may not seem like a large amount, it is a powerful additive over long periods of time and it should continue given the changes in relative preferences for owned business to minority investments.

**Boring/Not Smart Enough:** It is often way more compelling to find a highly complex, misunderstood idea than to invest in the broad daylight. The stories that can be told are so much more compelling. But investing should be about long term returns rather than compelling story telling. And I believe many market participants think it is just too simplistic to invest in a well-known business like Berkshire. This apathy creates our opportunity. We do not need to be the smartest in the room, but we do hope to have the most value creation twenty years from now. Our willingness to invest with a very long term perspective helps us move on opportunities that others tend to look past.

**Buffett/Key Man Risk:** While we touched on this topic above, Warren Buffett is inexorably tied to Berkshire. And much will be lost when he is no longer running the company. But, as we described above, the wonder of the business is the structure he devised as much as the capital allocation decisions he made. The two large buckets of investments and businesses that comprise our calculation of current value will continue to create value in current form with or

without Buffett in place. Additionally, Charlie Munger remains a source of cultural and intellectual capital at the company should he surpass Buffett's stay with the company. Berkshire has also built a highly capable team of insurance leaders including Ajit Jain, capital allocators and business managers.

**Overreliance on Book Value/New Emphasis on Owned Businesses:** We touched on this above as well but the gap between intrinsic value and book value has increased in recent years based in large part on the increasing amount of owned operating businesses. Opportunities can arise when you combine this change from a historically simple valuation metric because of slow moving changes in the underlying structure of the business with a degree of apathy preventing investors from diving anew into Berkshire.

**I Don't Know/But I Do Know:** The reality is it is impossible to know with any precision why a company trades at a certain price at a certain point in time. The above details a few possible reasons for Berkshire's undervaluation but they border on speculation more than true knowledge. I do know however that Berkshire is a great company, with durable long term advantages and is available at a very attractive valuation. Investment in Berkshire may require a longer term perspective than those looking for near term catalysts, but that longer term perspective suits our investing style and temperament quite well. We can invest and patiently wait while value continues to accrue.

There are risks to investing in Berkshire (significant insurance losses, economic contractions, market volatility, unforeseen natural or geopolitical events, amongst many others) but those risks are managed through the ownership of great businesses, a strong, liquid and stable balance sheet and a corporate philosophy with a unwavering eye towards thoughtful capital allocation.

No investment should be passive so what are the key aspects of the company that should be monitored through time? Much of the power of Berkshire and its ability to create value is described above and this structure must be maintained including its highly decentralized operations paired with a centralized, invest anywhere capital allocation operation. More specifically, we can focus of two broad categories to monitor while recognizing that investing requires constant learning, studying and vigilance. Those two categories are: insurance underwriting discipline and capital allocation discipline.

The business is built on a foundation of underwriting profitability so that the insurance business creates, rather than destroys, capital. Any longer term path to sustained underwriting losses would create a significant downward change in the company's value. Berkshire has also allocated capital with incredible proficiency through time but if future capital allocation degrades rather than creates value then the expected path of future value creation would be compromised.

There will certainly be bumps in the road across its businesses but Berkshire has the assets and the balance sheet to withstand shorter term challenges. Berkshire has constructed an incredibly resilient array of businesses and investments paired with an unbelievably strong balance sheet full of cash and devoid of any short term obligations. So while short term pain will certainly occur at different points in time, the overall business is well positioned for long term success.

**World class company. World class management. Discounted valuation.**

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## Appendix - Highlights from Prior Summaries

I thought it would be constructive to revisit the price and value relationship as described in 2012. Immediately below is a summary of the estimate of value at that time compared to the then prevailing share price.

From the Summer of 2012:

A conservative current estimate of intrinsic value comprises the combined value of Berkshire's investments and operating businesses per the playbook laid out by Buffett himself.

- Berkshire has roughly \$107,000 of per share investments at the end of Q2 2012
  - Berkshire has a per share earnings run rate from its operating businesses of roughly \$7,600 and this run rate is increasing on a year to year basis including in 2012
  - Buffet has historically implied (through discussions and annual reports) a fair value multiple for such earnings of 11x to 13x
  - I have used a 10x multiple to further the conservative nature of the calculation ascribing roughly \$76,000 per share for the operating businesses
  - I have conservatively ascribed no value to the insurance business even though it historically averages profitable operations
- ***Current estimate of intrinsic value is \$183,000 per share which should continue to increase over time***
- Cash levels continue to build quarter to quarter increasing the base of investments and/or dollars available for future full business acquisitions
  - Existing businesses continue to grow in value

	Per Share Value of Investments	Per Share Pre Tax Earnings
1990	\$7,798	\$102
2000	\$50,229	\$918
2010	\$94,730	\$5,926
2011	\$98,366	\$6,990
Q2 2012	\$107,000	\$7,600
		10x      \$76,000
Estimate of Current Instrinsic Value		<b>\$183,000</b>

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*Note: The Q2 numbers are my estimates from the 10Q and the pre tax earnings reflect a current run rate that includes full year ownership of Lubrizol.*

The current conservatively estimated intrinsic value of Berkshire Hathaway is significantly less than where Berkshire is available for investment today (roughly \$127,000 per A share). In addition to the current significant value gap, intrinsic value will continue to increase as time progresses. The insurance businesses will continue to add cash available to grow the base of investments and fully owned operating businesses. The existing investments and businesses will continue to grow in value.

To put valuation in another perspective, let's assume the investments are valued on a dollar for dollar basis. So, of the roughly \$127,000 in today's Class A share price, there is \$107,000 in per share investments. The remaining operating businesses can then be acquired for well under 3x earnings (paying \$20,000 for roughly \$7,600 in per share pre tax operating earnings).

An investment is available today to sit alongside one of the greatest investors of all time at a value well below intrinsic value in a company with a growing base of strong value investments and operating businesses.

#### **Key Elements of Value:**

1. High quality investment portfolio
2. Stable of owned businesses that continue to generate cash and grow in value
3. Insurance businesses that have a long history of profitable operations and generate significant cash flow for new investments
4. Corporate capital allocation from consistent cash generation deployed to most optimal uses by first class capital allocators: Warren Buffett, Charlie Munger and the investment team they have assembled
5. Consistently increasing intrinsic value through the acquisition and ownership of world class companies

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*"Seeking Understanding Through the Noise"*

## **A Basket of TARP Warrants**

***August 2015***

***Each dollar invested in a basket of warrants today has the potential to garner annualized returns exceeding 40% over the next three to five years.***

Much of the disdain felt for the financial sector came from the 2008-2009 financial crisis but that same crisis created a unique investment opportunity in the form of TARP warrants. These warrants were issued for many of the institutions that took TARP dollars, including JP Morgan, Bank of America and AIG. The TARP warrants are long dated with dividend protection allowing for magnified returns to the underlying thesis of a return to normalized earnings and valuations.

I spoke about JP Morgan at a SumZero event late last year and have written about Bank of America. Adding in AIG allows for owning a basket of TARP warrants with dramatic return potential. These warrants continue to represent a particularly unique and compelling opportunity as the investing public shuns many of the larger financial institutions.

### **What is the potential?**

- JP Morgan TARP warrants can go from \$20 today to \$78 at maturity in October 2018, leading to a 3.9x return and ***annualized IRR over 50%*** over the next three plus years.
- Bank of America Class A TARP warrants can go from \$6.25 today to \$21 at maturity in January 2019, leading to a 3.4x return and ***annualized IRR over 40%*** over the next three and a half years.
- AIG TARP warrants can go from \$25 today to \$112 at maturity in January 2021, leading to a 4.5x return and ***annualized IRR over 30%*** over the next five and a half years.

## What is the foundation of the opportunity?

- **Enduring Businesses** – Banking and insurance are businesses that stand the test of time.
- **Substantially Higher Capital and Liquidity** – The balance sheets and risk profiles of these businesses has undergone dramatic change. Each of these institutions has substantially higher capital and liquidity compared to before the crisis while also largely eliminating shorter term funding sources. Their fortress balance sheets enable them to withstand heavily stressed environments.
- **Simpler Operating Models** – While the core functions of these businesses remains, each company has undergone substantial simplifications further reducing underlying risk profiles. Peripheral and overly risky lines of business have largely been eliminated with a return to the more basic banking and insurance functions.
- **Earnings Power Well Above Current Levels** – The banks and insurance companies face headwinds in nearly every line of business compounded by historically low interest rates. A more robust economic environment and closer to normal interest rates will yield substantially more earnings power than what is seen today.
- **Historically Attractive Valuations** – Combining normalized earnings well above current levels with a return to more normalized valuations yields outsized return potential in the coming years.
- **TARP Warrants Allow for Amplified Return Potential** – The TARP warrants allow for more than a tripling of value between now and the various maturity dates leading to annualized rates of return from 30% to well over 50%.

## What are the Predominant Risks?

There are two predominant sources of risk associated with the warrants: (1) risks inherent in the underlying businesses and (2) timing risk. The normalization of earnings and valuations must come to fruition before maturity or the warrants will not capture the full return potential described above and could in fact impart permanent losses at maturity. While this period of time is from three to five years, it remains an important consideration.

## Conclusion:

Many investors have continued to avoid large financials and their valuations reflect such avoidance. Do these low valuations reflect the turbulences of yesterday, or tomorrow? I would argue rear view mirror assessment on the headline inducing challenges these businesses face is too prevalent and does not properly account for the earnings power of the franchise while their **TARP warrants allow for amplified returns to normalized earnings and valuations**.

What follows is an Executive Summary for each of the three TARP warrants followed by the full investment summaries covering both the underlying businesses and the specific terms and return potential with each of the warrants.

## **AIG TARP Warrants – Executive Summary**

AIG is one of the world's largest insurers operating in over 100 countries through two primary divisions: Commercial Insurance and Consumer Insurance. In many ways, AIG was the poster child for the ills of the 2008-2009 financial crisis and remains much maligned by investors as can be evidenced by its continued discount to book value.

We have owned AIG for several years and have seen its price rise from \$34 to its current price near \$57. AIG has posted strong earnings in recent years while continuing to grow its book value per share while dramatically simplifying its operations by selling or exiting businesses noncore to its insurance operations.

There are four core tenets to our investment in the AIG common shares and their TARP warrants:

1. The company has significantly derisked and reshaped its business and balance sheet since the financial crisis.
2. There is great and enduring earnings power in the more focused global franchise of AIG that will become increasingly apparent in the coming years.
3. The company trades at historically low valuations, currently trading below 75% of book value.
4. Time will be the friend of our investment in AIG as they improve profitability and returns, reduce their expenses, and continue to implement a very aggressive and accretive capital deployment strategy, all of which will continue to increase the underlying value of AIG.

In thinking about longer term valuation possibilities, we will use book value as our anchor. There are several measures of book value to consider when studying AIG. At the June 2015 quarter end, book value per share was \$79.74. Book value per share excluding Accumulated Other Comprehensive Income (AOCI) was \$73.91 and book value per share excluding AOCI and the company's deferred tax assets (DTA) was \$62.22.

The AIG TARP warrants mature in early 2021 so we will want to consider book value at that time. Since 2011, book value per share excluding AOCI and DTA has grown at a CAGR of 14%. If we assume a lesser growth rate of 10% between now and early 2021, we arrive at book value per share excluding AOCI and DTA of more than \$105 per share. As you will see in the larger summary, this \$105 per share of book value is at the low end of possible book values laid out under different scenarios and thus serves as a conservative foundation for a future valuation.

Since 1988 and including the crisis years and the lower valuations of recent years, AIG has averaged trading around 2x book value. We will use a more conservative 1.5x book value to arrive at an early 2021 target price of \$157 per share. Compared to today's stock price of \$57, the opportunity is compelling enough for AIG to warrant a healthy allocation in URI Capital Partners. I would also note when thinking about valuations in the insurance space that ACE just acquired Chubb for 1.8x book value.



To further solidify our thoughts on 2021 we have estimated using reasonably historic returns on equity of 12% that AIG can post earnings per share of \$12.60 in 2021. Using our \$157 price target would assume an earnings multiple around 12.5. This is well within and even below historic PE multiples for AIG and other globally dominant insurers.

I now want to take our investment in AIG one step further and summarize the opportunity with their outstanding TARP warrants.

The general terms of the AIG warrants are as follows:

- Original Strike Price: \$45.00
- Warrant Price (recent): \$25
- Maturity: January 16, 2021
- Original Conversion Factor: One Share per Warrant

### **What is the Potential?**

The common shares of AIG offer significant opportunity with a wide margin of safety. The significantly derisked and reshaped business and balance sheet of AIG along with its latent earnings power add to our margin of safety and provide the foundation of a strong investment opportunity.

As we assume that our estimate of the 2021 per share intrinsic value for AIG is \$157, it becomes immediately obvious the return potential with the warrants is quite high. Using a recent warrant price of roughly \$25 and assuming a slightly declining strike price (potential changes to the strike price and conversion factor to be discussed later), the warrants should move in value towards \$112 as maturity approaches in January 2021.

**Each dollar invested in an AIG TARP warrant today has the potential to become roughly \$4.48 equating to an annualized IRR over the five and a half years exceeding 30%.**

## **JP Morgan TARP Warrants – Executive Summary**

JP Morgan is one of the leading global financial services firms with businesses including consumer and community banking, corporate and investment banking, commercial banking, and asset management.

JP Morgan has risen in price from around \$37 at our initial purchase when the fund opened to roughly \$60 today. And while we continue to view the common shares of JP Morgan as compelling enough to warrant a top position in the fund, I want to talk about an opportunity that further amplifies the return potential of investing in JP Morgan.

The larger summary of the JP Morgan TARP warrants necessarily contains a full discussion of JP Morgan itself including the business, valuation and return potential of investing in JP Morgan at today's prices along with a discussion of how its long term value is protected with substantially bolstered capital and liquidity. In short, the broader summary of JP Morgan describes a path to \$9.75 per share in annual earnings for 2018 which, at a reasonably conservative 12x multiple, would yield a stock price of \$117.

From a different perspective, the broader summary also describes tangible book value per share growing to \$65 by 2018 (roughly 10% annualized growth which is below the 12% annualized growth since 2005). It is not out of line with historic norms for a bank to trade at or above 2x tangible book value which would imply \$130 per share.

With those metrics in mind, let's use \$120 as our 2018 target valuation. With the stock recently trading around \$60, a medium term valuation of \$120 allows for strong return potential in the coming years. Going one step further, let's consider the JP Morgan TARP warrants.

The general terms of the JPM warrants are as follows:

- Original Strike Price: \$42.42 (currently \$42.325)
- Warrant Price (recent): \$20
- Maturity: October 28, 2018
- Original Conversion Factor: One Share per Warrant

### **What is the Potential?**

If we assume that our above estimate of the 2018 per share intrinsic value for JP Morgan is \$120, the return potential with the warrants is dramatic. Using a recent warrant price of roughly \$20 and assuming a slightly declining strike price moving down from the original strike price of \$42.42 (potential changes to the strike price and conversion factor to be discussed later), the warrants should move in value towards \$78 as maturity approaches in October 2018 (three and a quarter years from today).

**Each dollar invested in a JP Morgan warrant today has the potential to become roughly \$3.90 equating to an annualized IRR over the three and a quarter years exceeding 50%.**

## Bank of America Class A TARP Warrants – Executive Summary

Bank of America is one of the leading global financial services firms with businesses including Consumer and Business Banking, Global Wealth and Investment Management, Global Banking, Global Markets and Consumer Real Estate Services. Bank of America has been a large holding since URI Capital Partners opened in August 2012 and continues to be a large holding today.

Bank of America has risen in price from around \$8 at our initial purchase to roughly \$16 today. While we continue to view the common shares of Bank of America as compelling enough to warrant a top position in the fund, I want to talk about the opportunity of investing in the Bank of America Class A TARP warrants.

The broader Bank of America summary describes in detail current normalized earnings power of \$2 per share which at a 12x valuation would yield a share price of \$24. The work behind current normalized earnings serves as the foundation for our investment and thus should be understood before moving forward.

It is important not just to create value through the earnings power of the franchise but also to protect the franchise with strong levels of capital and liquidity. The balance sheet of Bank of America has undergone a radical transformation since its acquisition of Merrill Lynch. Since that acquisition, the bank's liquidity has more than doubled to almost \$440 billion while the total value of the balance sheet has shrunk from \$2.7 trillion to \$2.1 trillion. Also since the acquisition, tangible common equity has more than doubled from \$70 billion to over \$150 billion. These substantially bolstered levels of capital and liquidity serve to protect the Bank of America franchise.

Bank of America's two classes of TARP warrants mature in October 2018 and January 2019. With those dates in mind, we need to assess how earnings power can change over the next three to four years and the strength of the bank's foundation in its capital and liquidity levels.

The summary also describes tangible book value per share growing to \$19.63 by 2018 (roughly 8% annualized growth). The current earnings power as summarized below equates to a return on tangible equity around 12%. Moving towards 2018 and making a few reasonable assumptions shared by management, we can see return on tangible equity moving to 14%. This would imply 2018 earnings power of \$2.75. We can value 2018 earnings power at 12x which would yield a share price of \$33. Thought of in a different way, it is not out of line with historic norms for a bank to trade at or above 2x tangible book value which would imply a share price above \$39 in 2018.

*Note: It is actually not out of line for banks to trade at or above 2x book value rather than tangible book value. In fact, Bank of America's average price to book value from 1996 to 2007 (12 years before the financial crisis) was roughly 2.2x. We however will discuss tangible book most often for purposes of conservatism.*

*Part of the reason to use tangible book for purposes of valuation today beyond conservatism is that current regulatory constraints on leverage, and thus the ability to generate higher returns on equity, are tied to measures more closely aligned with tangible book value.*

For now, and with the above metrics in mind, let's use \$33 as our 2018 target valuation. With the stock recently trading around \$16, a medium term valuation of \$33 allows for a doubling of your money over the next four years.

Taking this fundamental thesis one step further brings us to the opportunity with the Bank of America's Class A TARP warrants.

The general terms of the Class A warrants are as follows:

- Original Strike Price: \$13.30 (currently \$13.171)
- Warrant Price (recent): \$6.25
- Maturity: January 16, 2019
- Original Conversion Factor: One Share per Warrant

### **What is the Potential?**

The common shares of Bank of America offer significant opportunity with a wide margin of safety. Our current \$24 estimate of intrinsic value represents substantial upside over today's stock price of \$16. The high levels of capital and liquidity along with its latent earnings power add to our margin of safety and provide the foundation of a strong investment opportunity.

And as we assume that our estimate of the 2018 per share intrinsic value for Bank of America is \$33, it is clear the return potential with the warrants is quite high. Using a recent Class A warrant price of roughly \$6.25 and assuming a slightly declining strike price (potential changes to the strike price and conversion factor to be discussed later), the Class A warrants should move in value towards \$21 as maturity approaches in January 2019.

**Each dollar invested in a Class A warrant today has the potential to become roughly \$3.36 equating to an annualized IRR over the three and a half years exceeding 40%.**

# Full Summary on AIG and Their TARP Warrants

*August 2015*

**Each dollar invested in an AIG TARP warrant today has the potential to become roughly \$4.48 equating to an annualized IRR over the five and a half years exceeding 30%.**

To set the perspective of our approach to investing, we aim to acquire stakes in world class companies at a discount to an increasing intrinsic value, allowing for strong future returns with limited risk of permanent capital loss.

Given our fundamental approach to investing, it is important to fully understand AIG including its businesses, valuation and return potential before assessing the investment viability of its warrants. The following summary fully describes AIG and how that translates into the potential returns associated with their TARP warrants.

AIG is one of the largest global insurers serving over 90 million clients across more than 100 countries and jurisdictions. The Company provides a wide range of property casualty, life insurance, retirement products, mortgage insurance and other financial services to its customers.

In 2015, AIG reorganized into two main divisions: Commercial Insurance and Consumer Insurance. Commercial Insurance is a leading provider of insurance products and services to commercial and institutional customers. It includes one of the world's most far reaching property casualty networks, a leading mortgage guaranty insurer and an institutional retirement and savings business. Consumer Insurance is a unique franchise that brings together a broad portfolio of retirement, life insurance and property casualty products.

## Why Invest in AIG?

There are four core tenets to our investment in the AIG common shares and TARP warrants:

1. The company has significantly derisked and reshaped its business and balance sheet since the financial crisis.
2. There is great and enduring earnings power in the more focused global franchise of AIG that will become increasingly apparent in the coming years.
3. The company trades at historically low valuations, currently trading below 75% of book value.
4. Time will be the friend of our investment in AIG as they improve profitability and returns, reduce their expenses, and continue to implement a very aggressive and accretive capital deployment strategy, all of which will continue to increase the underlying per share value of AIG.

**AIG has significantly derisked and reshaped its business and balance sheet since the financial crisis.**

AIG was in many ways the poster child of bad behavior leading up to and during the financial crisis. The company helped bring the financial system to its knees through an obscure division operating out of London that provided enormous guarantees against what was thought to be riskless mortgage securities, largely in the form of credit default swaps.

During the 2008 and 2009 financial crisis, the company required enormous amounts of capital ultimately provided by the Treasury to protect itself from bankruptcy with the potential to bring even more distress to global markets and economies.

Today, AIG is a vastly different business having slimmed down to focus on its core insurance businesses while also significantly derisking its balance sheet.

The Financial Products division that was at the core of its problems is gone. Super senior credit default swaps are down over 92% from year end 2012 to the end of the first quarter 2015 and the legacy Financial Products derivatives portfolio is now insignificant relative to AIG's overall balance sheet.

The Company has pared back its lines of business to focus only on those where they have the competency and the scale to succeed. They exited the aircraft leasing business through a sale to AerCap which has provided large amounts of capital largely used to augment its buyback program. The Company has also reduced its exposure to capital intensive lines of insurance in order to improve risk adjusted rates of return.

This renewed focus on core competencies and risk adjusted returns has substantially altered the risk profile of the business. As will be discussed later, this has enabled substantial capital return that, when coupled with improved capital discipline inside the core businesses, will yield much more favorable risk adjusted returns as opposed to the unhealthy focus on growth that was so much a part of the old AIG.

In addition to the operational simplifications, AIG's balance sheet has also undergone substantial change. As mentioned, the Financial Products business and derivatives portfolios are now largely gone from the picture. Balance sheet leverage and total debt to total capital levels are materially lower. Since the end of 2012, balance sheet leverage has gone down 14% from 5.6x to 4.8x while the Company's total debt to total capital is down over 20% from the end of 2012 to 16.3%.

As important as the change in numbers is the change in culture. Conversations on calls and at conferences are much different in tone under the current management team. There is consistent talk of risk adjusted returns rather than growth and about maintaining a first class balance sheet. Incentives have been changed away from those rewarding growth to those rewarding risk adjusted returns. There has been significant investment spending in data analytics and science with the aim to bring more disciplined underwriting and better pricing.

This is not the same AIG. It is more focused in its operation and its balance sheet is a strong foundation and source of strength to withstand highly stressed environments and to position the Company for growth.

**There is great and enduring earnings power in the more focused global franchise of AIG that will become increasingly apparent in the coming years.**

AIG is often viewed, correctly I believe, as a turnaround story. But thinking about AIG simply as a turnaround story understates what it has already accomplished. AIG has posted very strong earnings in recent years while recognizing its return levels are not where they need to be.

As we look at future growth in value and earnings, we should first discuss the change that has already occurred. Operating earnings per share have grown from \$3.88 in 2012 to \$4.53 in 2014. (With many companies one would assume “operating” EPS to be much higher than reported EPS as it is common to adjust for “one-time” unpleasanties. That is not the case with AIG where reported EPS in 2014 was materially higher than what is describes as its operating EPS.)

Over the same period, book value per share excluding AOCI and DTA has grown from \$45.30 to \$58.23 with additional growth to \$62.22 over the first six months of 2015. In many ways, AIG’s balance sheet is its raw material for future earnings power. So, as we consider earnings per share growth in future years, growth in book value per share will be a powerfully positive contributor.

Since 2011, book value per share excluding AOCI and DTA has grown at a CAGR of 14%. If we assume a lesser growth rate of 10% between now and early 2021, we arrive at book value per share excluding AOCI and DTA of more than \$105 per share.

Thought of differently, we can expect at least \$6 per share in annual earnings over the next five and a half years before warrant maturity which would yield total earnings over the period to just under \$35. We can also expect much of the nearly \$12 in DTA to be converted to cash over that same period. Using \$62.22 as a base and aggregating those numbers brings book value per share to \$109, greater than our previous assumption.

In thinking about the reasonableness of the \$6 per share in average annual earnings, let’s consider the public targets AIG has in place for the years ending 2017. Using their target growth rates in book value along with their ROE targets would yield 2017 EPS of nearly \$7 per share with further growth anticipated thereafter. If we were to use an average of \$7 per share in earnings between now and 2021, it would bring book value to \$115 per share.

While this short form analysis does not contemplate dividends (which we would receive), it also does not contemplate the power of AIG’s buyback program. AIG has shown a willingness to grow by shrinking, which is to say they have taken steps to grow the per share value of the Company by reducing the shares outstanding. Because AIG trades below book value, each share it repurchases increases the book value of the remaining shares, augmenting the growth in per share value. Because of these dynamics, it is more than possible for book value per share to exceed our low end estimate of \$105.

What does that mean for the earnings power of AIG as we look to 2021? To start, AIG has been posting subpar returns on equity (ROE) for several years. Its operating ROE for the first six months of 2015 was 8.8%. This is well below historic levels and well below industry peers. This underperformance is not lost on AIG however and they are taking methodical steps to

improve ROE. In fact, they have a target of improving normalized ROE by 50 basis points per year over the three year period starting in 2015.

It should be noted there is a lot of noise in the earnings and thus the ROE of AIG. The Company attempts to normalize for a number of items which in 2015 has had the effect of a normalized operating ROE being lower than operating ROE. As mentioned above, talking about lower-than-reported numbers is somewhat uncommon but indicative of a healthy conservatism on the part of management. Over longer periods of time, the need for normalization should go away so we spend most of our time thinking about directional improvements in ROE with a goal towards believing the Company can return to historic and industry norms by 2021.

In a subpar environment where insurers are hampered by the low interest rate environment, many of AIG's peers post returns on equity at or above 12%. That 12% return on equity is also similar to historic industry norms over long periods of time so it is reasonable to assume that AIG can work its way back to 12% returns on equity over the next five years.

Beyond disciplined pricing and effective capital allocation, expense management will play a pivotal role in continued ROE improvements. AIG has an aggressive expense reduction plan in place that will reduce expenses between 3% and 5% per year over the three years starting in 2015. These are net reductions in overall operating expenses and the reductions overcome substantial increases in bolstered science and data analytics spending to enable more informed pricing decisions across the enterprise.

With all of the above in mind, we will assume 12% returns on equity by 2021. This would allow earnings per share of \$12.60 by 2021 using our assumption of \$105 per share book value in the same period. As more fully described above, there are many scenarios which would bring book value per share above \$105 which would then yield even higher earnings per share keeping constant the 12% return on equity.

### **AIG trades at historically low valuations.**

There are times when valuation work can be overly complicated. But if you need a highly complex spreadsheet to figure out if a company is undervalued, you already know the answer. Value should hit you in the face. We are paying roughly 75% of book value for a profitable insurer that operates at scale around the world with deep levels of both capital and liquidity enabling it to withstand economic, market and AIG specific stresses.

We spent time above determining the longer term earnings power of the franchise and we will soon discuss what that infers about a longer term valuation for AIG but, for now, we can rest comfortably knowing we are investing with a wide margin of safety today. Investing in a profitable and growing business with simplified operations and a bolstered balance at a value well below book value is a strong foundation from which to consider upside potential.

AIG's book value at quarter end June 2015 was \$79.74. AIG trades near \$57 today, a wide discount to current book value. A much more conservative measure of book value excluding exclude AOCI and DTA stood at \$62.22 at June 2015. The current share price of \$57 stands below even that number. But fully excluding DTA is unreasonable. While it can be appropriate to present value the DTA as it will be consumed in future years, to fully exclude it would imply it has no value. Regardless of the measure of book value we use, it is clear there is good value and a wide margin of safety investing in AIG today.



Thinking about near term earnings, AIG's public targets for growth in book value and normalized ROE imply earnings per share around \$6 for 2016. Operating EPS for the second quarter of 2015 was \$1.39 which is already approaching a \$6 per quarterly run rate. While AIG clearly has substantial potential for earnings growth in the coming years, we can first rest comfortably knowing we are making an investment at less than 10x 2016 earnings. That is a significant discount to historic multiples and gives us added comfort in considering the upside potential in an AIG investment.

Let's now revisit what we anticipate for 2021 with book value growing to \$105 and earnings per share moving to \$12.60 in relation to our target price for 2021. Our \$157 price target for 2021 implies an earnings multiple around 12.5. This is well within and even below historic PE multiples for AIG and other globally dominant insurers.

Our price target of \$157 also implies a price to book value at that time around 1.5x. That is below historic averages of price to book values around 2x for AIG. Regardless of the metric used, we have not made any heroic assumptions about a return to normalized valuation levels.

With a current price around \$57 and a 2021 price target of \$157, there is substantial upside ahead for those investors willing to look past the noise of the day and take a longer term perspective about investing in AIG.

**Time will be the friend of our investment in AIG as they improve profitability and returns, reduce their expenses, and continue to implement a very aggressive and accretive capital deployment strategy, all of which will continue to increase the underlying value per share value of AIG.**

AIG has undergone radical change since the financial crisis, the fruits of which are just starting to show. The next several years will bring continued growth in book value per share, higher returns on equity, reduced expenses and accretive capital deployment.

While we are confident in the value of AIG's shares today, in order to be a long term investor, we must also believe that management will continue to create additional value through effective stewardship of the company and shareholder capital. The public targets AIG has in place are solid indicators of where the management team believes they can go over the next couple of years which gives confidence about their desires for value creation in the form of per share growth in value alongside higher returns.

The greatest evidence of AIG's effective capital allocation is their buyback strategy. The strong earnings, shedding of noncore assets and substantial derisking of its balance sheet have enabled the company to implement an aggressive capital allocation strategy. For the three years from 2012 to 2014, the company deployed over \$26 billion in capital return including \$18.5 billion in share repurchases, \$6.5 billion in net liability management and \$1 billion in dividends. The company has bought an additional \$4.7 billion in shares back through July of 2015. The Company has \$6.3 billion in share repurchase authorization remaining which they hope to fully use before year end (CEO Peter Hancock referenced as much on the Q2 earnings call). If they do end up buying back the full reauthorization by year end, it would equal roughly 8.5% of its current market cap being bought back in just five months.

Buybacks can be good or bad depending on the price paid relative to the value of what is bought. In the case of AIG, the buybacks have been an extraordinarily good use of surplus capital as they have been done at prices well below what I and the company consider intrinsic value. Their aggressive buyback strategy at prices well below intrinsic value increases the per share value of our investment. In this way, we as shareholders are partnering with the company as they work to increase per share intrinsic value at a pace faster than could be done through growth in the business alone.

### **What is the Potential of the Warrants?**

The common shares of AIG offer significant opportunity with a wide margin of safety. The significantly derisked and reshaped business and balance sheet of AIG along with its latent earnings power add to our margin of safety and provide the foundation of a strong investment opportunity.

As we assume that our estimate of the 2021 per share intrinsic value for AIG is \$157, it becomes immediately obvious the return potential with the warrants is quite high. Using a recent warrant price of roughly \$25 and making an overly conservative assumption of no decline in the strike price and no increase in the conversion factor (potential changes to the strike price and conversion factor to be discussed later), the warrants should move in value towards \$112 as maturity approaches in January 2021.

**Each dollar invested in an AIG TARP warrant today has the potential to become roughly \$4.48 equating to an annualized IRR over the five and a half years exceeding 30%.**

The terms of the AIG warrants are as follows:

- Original Strike Price: \$45.00
- Warrant Price (recent): \$25
- Maturity: January 16, 2021
- Original Conversion Factor: One Share per Warrant

While we have not made any assumptions about changes in the strike price and conversion factor, the dividend protection that manifests itself through changes in these warrant terms is an important value protector and is a likely contributor to additional value creation.

As AIG continues to generate surplus capital, they will likely increase their dividend with the possibility of even large, one-time dividends given their focus on effective capital allocation leading to large capital returns. Today, share buybacks are incredibly attractive as AIG trades below conservative measures of intrinsic value. As their share price increases, it is possible the Company would favor larger dividends over continued buybacks. The warrants offer protection against that value leaving the Company and going directly into the hands of shareholders.

Above an annual threshold of \$0.675 per share, adjustments are made to both the strike price and the conversion factor. The strike price is reduced and the conversion factor is increased both of which serve to increase the value of the warrants. Until just recently, the quarterly dividend was below the threshold so there were no adjustments being made to the warrants.

Coinciding with releasing second quarter results, AIG announced an increase in its quarterly dividend to \$0.28 per share, or \$1.12 per share annually, moving the current dividend level above the threshold for adjustments to the warrants. Below is language from the warrant prospectus which details the formulaic changes followed by an example using the new quarterly dividend (annualized) and assuming a stock price of \$57.

Change in the Exercise (strike) Price

(d) the Company makes a distribution consisting exclusively of cash to all holders of Common Stock, excluding (1) any cash dividend on Common Stock to the extent that the aggregate cash dividend per share of Common Stock does not exceed the Dividend Threshold Amount, (2) any cash that is distributed as part of a distribution referred to in clause (c) above, and (3) any consideration payable in connection with a tender offer referred to in clause (e) below, in which event, the Exercise Price will be adjusted based on the following formula:

$$SR1 = SR0 \times (SP0 - C) / SP0$$

where,

*SR0 = the Exercise Price in effect at the close of business on the record date*

*SR1 = the Exercise Price in effect immediately after the record date*

*SP0 = the Current Market Price as of the record date*

*C = the excess of the amount in cash per share of Common Stock the Company distributes to holders over the Dividend Threshold Amount*

*The Dividend Threshold Amount shall equal \$0.675 per share of Common Stock in the aggregate in any twelve-month period. The Dividend Threshold Amount is subject to adjustment on a proportional basis whenever the Exercise Price is adjusted, provided that no adjustment will be made to the Dividend Threshold Amount for any adjustment made to the Exercise Price pursuant to this clause (d).*

Change in the Conversion Factor

*Upon each adjustment of the Exercise Price, each Warrant shall thereupon evidence the right to purchase that number of shares of Common Stock (calculated to the nearest 1/1000<sup>th</sup> of a share) obtained by multiplying the number of shares of Common Stock purchasable immediately prior to such adjustment upon exercise of the Warrant by the Exercise Price in effect immediately prior to such adjustment and dividing the product so obtained by the Exercise Price immediately thereafter.*

The new Exercise Price (strike price) was calculated as follows:

$$\frac{\$57.00 - \$0.445}{\$57.00} \times \$45.00 = \$44.65 = \text{new Exercise (strike) price}$$

The calculation for a change in the conversion factor is as follows:

$$\frac{\$45.00}{\$44.65} \times 1 = 1.008 = \text{new conversion factor}$$

The above would be the hypothetical change after one year of dividends at \$0.28 per quarter (current payout). It now is obvious that assuming no change to the strike price and conversion factor between now and 2021 is overly conservative.

If the dividend was to stay the same over the next five and a half years, there would be a cumulative change in the strike price of nearly \$2 and a change of the conversion to 1.044. If at our \$157 target price, the change in conversion factor would add nearly \$7 in value. The nearly \$9 in potential value add assumes no dividend increases over the next five and a half years (and simplifies further by assuming a constant share price) and adds to our conservatism. It is much more likely that the dividend will increase through time and the adjustments will be much greater, with the exact changes dependent upon both the dividend level and the stock price at the various record dates.

## **Questions and Risks**

No investment comes without risks and an investment in AIG and its TARP warrants is no exception. As with any company, you can and should review the risk factors in the company filings. I want to highlight a few risk factors I follow more closely that may serve to highlight a negative change in the stewardship of our investment.

**Misguided Acquisitions and Poor Capital Allocation:** As described above, AIG is likely to generate substantial surplus capital in the coming years. A core attraction of mine to the business has been its vigilance on strong stewardship of its surplus capital most prominently in its buying back significant amounts of its shares while trading at a wide discount to a reasonable estimate of its worth. Surplus capital is often misused in overpaying or extending beyond core competencies through acquisitions. AIG has avoided such misuse but we will continue to be mindful of that risk. And while shares stay well below my estimate of fair value, we will want to see the company continue on its aggressive and accretive share repurchase program. Any misuse of shareholder capital will be a red flag to keep an eye on going forward.

**Poor Underwriting Discipline:** Poor underwriting discipline can be the Achilles heel of an insurance business made doubly difficult by the fact that it may not rear its head for years into the future. We can however get a sense from listening to other market participants how the pricing environment is and compare that to the statements and actions taken by AIG. As pricing softens, surplus capital should not be used to chase growth. The Company's recent aggressive capital deployment program brings comfort in the recognition that buying its own shares is a better use of capital than growing just to grow. This however remains a risk for all insurance companies and requires constant vigilance.

## **Further Upside Potential**

As discussed several times above, we have been conservative in a few areas including our target book value per share in 2021. A higher book value per share would likely drive higher earnings per share than we have discussed, so whether on a price to book or price to earnings basis we could see a higher share price than assumed.

In arriving at our target warrant value of \$112, we have not assumed any changes to the strike price or the conversion factor. Even in conservative scenarios, this could add another \$5 to \$10

per warrant of value. In more likely scenarios where the dividend increases through time, the increase in warrant value from these changes would be even more substantial.

### **Conclusion:**

Many investors have continued to avoid AIG and their valuation reflects such avoidance. Do these low valuations reflect the turbulences of yesterday, or tomorrow? I would argue rear view mirror assessment of AIG is too prevalent and does not properly account for the changes in the business and balance sheet that have occurred and the latent earnings power of the franchise.

AIG is great value today and even greater value as we look forward with the TARP allowing for amplified returns to normalized earnings and normalized valuations.

**World class company. World class management. Discounted valuation.**

***Disclaimer: The opinions in this document are for informational and educational purposes only and should not be construed as a recommendation to buy or sell the stocks mentioned or to solicit transactions or clients. Past performance of the companies discussed may not continue and the companies may not achieve the earnings growth as predicted. The information in this document is believed to be accurate, but under no circumstances should a person act upon the information contained within. We do not recommend that anyone act upon any investment information without first consulting an investment adviser as to the suitability of such investments for his specific situation. A comprehensive due diligence effort is recommended.***

## Full Summary on JP Morgan and Their TARP Warrants

**Each dollar invested in a JP Morgan warrant today has the potential to become roughly \$3.90 equating to an annualized IRR over the three and a quarter years exceeding 50%.**

Below you will find a full summary on JP Morgan and their TARP warrants. The first section comprises a short update to the larger summary following its March 2015 Investor Day. The original summary which follows the update was written in October 2014.

It is important to fully understand JP Morgan including its businesses, valuation and return potential before assessing the investment viability of its warrants. The following summary fully describes JP Morgan and how that translates into the potential returns associated with their TARP warrants.

### JP Morgan TARP Warrants – March 2015 Update from February Investor Day

Based on information provided during JP Morgan's recent Investor Day, we have greater confidence in the opportunity for JP Morgan to bring higher earnings and a substantially higher valuation as we look out to 2018. We continue to believe there is a 4x potential in JP Morgan's TARP warrants over the next four years. Our confidence is aided in part by management's continued frank and thoughtful discussion about both the opportunities and *the challenges* the bank faces. Below are key takeaways from Investor Day followed by the full and original summary.

**JP Morgan is targeting 2017 earnings of \$30 billion with anticipated growth thereafter.** Management laid out a 2017 earnings target of \$30 billion which more than ***confirms our longer term thoughts on the bank's earnings power as laid out in the original summary below.*** In fact, this 2017 target with talk about additional growth thereafter from rates and general business growth serve to allow for the possibility of even greater potential as we look to and beyond 2018.

**JP Morgan renewed its medium term commitment to 15% returns on tangible common equity even as their Common Equity Tier I Capital Ratio moves to 12%.** These strong returns against a challenging environment while building capital serve as one of the foundations for our thesis and underpin the return potential to late 2018. Beyond 2018, we find it likely for returns above 15% as the banking industry returns to a more normalized environment.

**There is significant operating leverage in the business which is likely to become more apparent as the revenue and business environment improves.** In this difficult operating environment, JP Morgan has worked to wring costs and excesses from each of its businesses and this work continues. Companywide efficiency ratios are expected to move down to 55% by 2017 from a 2014 level of 60%. Total expenses (adjusted for heightened legal costs) have been decreasing in recent years even with continued investments in growth and the increasing costs of controls. The expense work being done by the bank today creates fuel for added profitability when the revenue and operating environment improve while preserving and enhancing profitability as challenges remain.

**JP Morgan has posted consistently strong results in recent years.** Headlines would tell you the banking business has been horrible since the financial crisis and there is some validity to those claims. Banks, including JP Morgan, are substantially under earning their potential. That being said, JP Morgan has posted record earnings alongside consistent revenue and returns on tangible equity. Even in a bad environment, this is a good business.

In the years 2010 through 2012, the bank posted returns on tangible common equity (ROTCE) of 15%. Adjusting for the large legal settlement in 2013, JP Morgan again posted ROTCE of 15% and followed that up with 13% in 2014 against still elevated legal expenses, a dire environment in many businesses (markets, mortgage, etc.) and the continued ultra-low rate environment. Over those same five years, JP Morgan has posted \$97 billion in profits including \$22 billion in after tax legal charges bringing total adjusted profits to \$119 billion over this five year period, or \$24 billion per year.

JP Morgan has also consistently grown its tangible book value per share (TBVPS). For the last 10 years including the financial crisis TBVPS has grown at an 11% CAGR. Its five year CAGR is also 11% while its three year CAGR and year on year growth in 2014 were both 10%.

*These strong and consistent returns were generated in what nearly all consider an incredibly difficult period for the banking industry.*

**JP Morgan's business is more stable than appreciated.** Roughly half of JP Morgan's revenue comes from net interest income and the other half constitutes noninterest revenue, or fee income. Net interest income is generally thought of as a reasonably stable and recurring revenue stream. JP Morgan's fee income (and thus its business more broadly) by contrast is often thought of as highly volatile. As an example, great focus is often placed on the "FICC trading environment" in nearly all analyst Q&As. The reality of their results shows a more stable business than is appreciated.

To that end, JP Morgan provided a great analysis of their noninterest (fee) income at Investor Day and detailed the overall level of stability in these revenue streams. Noninterest income for the years 2010 to 2014 were: \$51.7 billion, \$49.5 billion, \$52.1 billion, \$53.3 billion and \$50.6 billion. That constituted NIR volatility of just 3% over the five year period which was below the 4% NIR volatility of WFC and USB and well below JP Morgan's other large bank peers MS (8%), GS (12%), C (13%) and BAC (13%).

The broad diversity of businesses and revenue streams at JP Morgan leads to more stable results than is appreciated. Over 2/3 of their noninterest revenue is driven by stable revenue streams including asset management fees, lending and deposit fees, card fees, etc. The "story" of JP Morgan is often about their supposedly volatile business model with great variability from their trading business but the reality of their results paint a very different picture.

**Asset Management is a hidden gem.** The Asset Management business has seen significant growth in recent years and is often obscured by the bank's other businesses outside of full day presentations like Investor Day. The business has grown revenue 8% per year over the last three years and grown pretax income 11% per year over the same period. Over the next two years it is expecting to increase pretax income from \$3 billion to \$5 billion while increasing its ROE to 25%. The stable and predictable nature of its diversified revenue streams would be valued more highly if a standalone business, and serves to underscore another of the

misperceptions placed on JP Morgan by many market participants that it is a highly volatile and unpredictable business.

**Scale matters.** In many businesses, including banking, scale wins in the long run and JP Morgan is a scale player in each of its businesses and in aggregate which also matters since the businesses share technology, platforms, products, services and clients.

**JP Morgan has continued to bolster its already strong foundation.** In the full summary below, there is much discussion about the substantially higher capital (up roughly 50% from 2010 and more than double since 2007) and liquidity levels at JP Morgan and the banking system more broadly. In addition to having over \$600 billion in High Quality Liquid Assets, the roughly \$400 billion growth in the company's balance sheet since 2010 has gone almost entirely to *cash*. Cash has increased from \$39 billion in 2010 to \$440 billion at yearend 2014. This obviously bolsters available liquidity and strengthens the bank against unforeseen events but also serves as yet more fuel to greater levels of profitability as the rate and lending environments improve.

Beyond the higher capital and liquidity levels, JP Morgan has simplified its business and operations. Firm wide VAR and Level 3 assets are down 50% from 2010. The bank spun out One Equity Partners, exited the physical commodities business, ceased originated student loans, and terminated transaction services for 500 correspondent banking clients, amongst countless other actions to build a better and more stable business. The bank has also dramatically increased its efforts around controls where spending has tripled since 2012.

The credit profile of the loan book has also improved greatly. Since 2010, average FICO scores are up and LTVs are down. The percentage of wholesale loans that are investment grade are up to 74% from 66% in 2010 while firm wide net charge off rates have dropped from 3.81% in 2010 to 0.70% in 2014.

Having served as a port in the storm during the financial crisis, JP Morgan has further bolstered its strong foundation in recent years.

In summary, JP Morgan:

- Is **undervalued against current earnings** even as core earnings power is much higher than being shown today
- Is **substantially under earning its potential** in nearly every line of business
- Is **growing tangible book value per share** over 10% per year (11% CAGR over the last 10 years which includes the financial crisis)
- Has a **tremendous foundation** of (1) substantially higher capital and liquidity, (2) stronger risk discipline in a simplified business and (3) substantially enhanced controls
- Has shown **great stability in revenue and returns** in a volatile and challenging environment
- Is going to and beyond **\$30 billion in net income**
- JP Morgan remains a **best in class franchise trading at historically low valuations**



JP Morgan has greater earnings power with more stability and a stronger foundation than the market is accounting for, and their TARP warrants provide an unusually unique opportunity to take advantage of the market's shorter term viewpoint of JP Morgan and the banking business.

### **JP Morgan TARP Warrants – October 2014**

To set the perspective of our approach to investing, our aim is to acquire stakes in world class companies at a discount to an increasing intrinsic value, allowing for strong future returns with limited risk of permanent capital loss.

JP Morgan is one of the leading global financial services firms with businesses including consumer and community banking, corporate and investment banking, commercial banking, and asset management. JP Morgan has been a large holding since URI Capital Partners opened in August 2012 and continues to be a large holding today.

JP Morgan has risen in price from around \$37 at our initial purchase to roughly \$60 today. While we continue to view the common shares of JP Morgan as compelling enough to warrant a top position in the fund, I want to talk about an opportunity that further amplifies the return potential of investing in JP Morgan.

This summary of the JP Morgan TARP warrants necessarily contains a full discussion of JP Morgan itself including the business, valuation and return potential of investing in JP Morgan at today's prices along with a discussion of how its long term value is protected with substantially bolstered capital and liquidity. As covered in detail below, the broader summary of JP Morgan describes a path to \$9.75 per share in annual earnings for 2018 which, at a reasonably conservative 12x multiple, would yield a stock price of \$117.

From a different perspective, the broader summary also describes tangible book value per share growing to \$65 by 2018 (roughly 10% annualized growth which is below the 12% annualized growth since 2005). It is not out of line with historic norms for a bank to trade at or above 2x tangible book value which would imply \$130 per share.

With those metrics in mind, let's use \$120 as our 2018 target valuation. With the stock recently trading around \$60, a medium term valuation of \$120 allows for strong return potential in the coming years. Most of the major banks, including JP Morgan, remain much maligned by the investing public thus allowing for the possibility of these strong future returns.

Much of the disdain felt for the banking sector came from the 2008-2009 financial crisis but that same crisis created a unique investment opportunity in the form of TARP warrants. These warrants were issued for many of the institutions that took TARP dollars, including JP Morgan. ***The JP Morgan TARP warrants are long dated with dividend protection allowing for magnified returns to the underlying thesis of JP Morgan returning to normalized earnings and valuations.***

The general terms of the JPM warrants are as follows:

- Original Strike Price: \$42.42 (currently \$42.325)
- Warrant Price (recent): \$20

- Maturity: October 28, 2018
- Original Conversion Factor: One Share per Warrant

## What is the Potential?

If we assume that our above estimate of the 2018 per share intrinsic value for JP Morgan is \$120, it becomes immediately obvious the return potential with the warrants is quite high. Using a recent warrant price of roughly \$20 and assuming a slightly declining strike price moving down from the original strike price of \$42.42 (potential changes to the strike price and conversion factor to be discussed later), the warrants should move in value towards \$78 as maturity approaches in 2018 (roughly four years from today).

**Each dollar invested in a warrant today has the potential to become roughly \$3.90 equating to an annualized IRR over the three and a quarter years exceeding 50%.**

The dividend protection is not a straightforward calculation and is covered in detail in the full summary of the warrants. There are two components to changes associated with dividend payments: (1) a change to the strike price and (2) a change to the conversion factor. The dividend adjustments will not occur until the quarterly dividend exceeds \$0.38 per share.

Beyond that \$0.38 quarterly amount, the strike price will lower and the conversion factor will increase by amounts dependent upon the stock price at the time. The general direction allows that higher stock prices yield lesser changes and lower stock prices yield greater changes.

The actual formula and related terms for any changes to the strike price and conversion are summarized below from the Investor Relations site of JP Morgan. These and other terms related to the warrants are also covered in the prospectus of the warrants which should also be read before considering any investment.

*Under the terms of the warrants, the Exercise Price of the warrants (as defined in the warrants) may be reduced as of the record date for each quarterly dividend declared in an amount above \$0.38 per share. The new Exercise Price will be calculated by multiplying the current Exercise Price by the quotient of:*

- *the last reported sale price of the Firm's common stock on the New York Stock Exchange on a determination date (which is expected to be three business days before the record date), minus the difference between the amount of the declared dividend and \$0.38 per share; divided by*
- *the same last reported sale price of the Firm's common stock.*

*In addition, the Warrant Share Number of each warrant (as defined in the warrants) may be increased as of the record date for each quarterly dividend declared in an amount above \$0.38 per share. The new Warrant Share Number will be calculated by multiplying the current Warrant Share Number by the quotient of:*

- *the current Exercise Price of the warrants; divided by*
- *the new Exercise Price determined as described above.*

*The above calculations will be made with respect to the Exercise Price and the Warrant Share Number for each quarter for which a quarterly dividend is declared in an amount above \$0.38 per share. The calculations will be made to the nearest 1/10th of a cent or to the nearest 1/100th of a share. No adjustment of less than \$0.01 will be made to the Exercise Price, and no adjustment of less than 1/10th of a share will be made to the Warrant Share Number, but certain amounts below these adjustment thresholds will be carried forward into any subsequent*

*adjustments, or upon the exercise of a warrant if that occurs earlier.*

The dividend with a record date of July 3, 2014 and payable July 31, 2014 was the first dividend above \$0.38 per quarter and thus can provide an example of how the changes will occur. The dividend for the quarter was \$0.40 per share, \$0.02 higher than the threshold amount. The stock price of JP Morgan three days before the record date was \$57.62.

The new Exercise Price (strike price) was calculated as follows:

$$\frac{\$57.62 - \$0.02}{\$57.62} \times \$42.42 = \$42.405 = \text{new Exercise (strike) price}$$

The calculation for a change in the conversion factor is as follows:

$$\frac{\$42.42}{\$42.405} \times 1 = 1.00035 = \text{no change in conversion factor}$$

Since the change in the conversion factor is less than 1/10<sup>th</sup> of a share, the conversion factor remains at 1.

So, as a result of the \$0.40 quarterly dividend, the strike price was lowered by \$0.015 per share while the conversion factor did not change.

From a broader perspective beyond just this one quarterly example, while there is some level of dividend protection, the warrants fully give up the value of quarterly dividends up to \$0.38 per share and are likely to give up some portion of the dividends above that amount with the exact amount depending on the stock price. As detailed above however, the warrants offer substantial return potential even without full dividend protection.

### **Where is the Margin of Safety?**

The large margin of safety in the common shares of JP Morgan (described more fully in the longer summary) and the lack of any significant premium in the warrant pricing allow the warrants to share most of JP Morgan's margin of safety. However, the fixed maturity of the warrants reduces the margin of safety in the warrants as the normalization of the earnings and valuation of JP Morgan has to play out in a specified period of time (in this case by October 2018). While this period of time is over four years, it is an important consideration.

Most importantly, the foundation of this investment lies in the business of JP Morgan. With that in mind, I strongly encourage you to read the below summary of JP Morgan, its underlying businesses, the earnings power of its franchise and how that translates to the valuation of its common shares. It is both necessary and well worth the time to understand the underlying business of JP Morgan to fully assess the opportunity that exists with the warrants.

### **What are the Predominant Risks?**

There are two predominant sources of risk associated with the JPM warrants: (1) risks inherent in JP Morgan and (2) timing risk. The risks inherent in JP Morgan are discussed throughout their SEC filings and also discussed below in the common shares summary which serve as the

foundation to an investment in the warrants. There is however an added risk with the warrants. As described above, the warrants mature in October of 2018. So, the underlying thesis on the company JP Morgan must be correct but importantly the growth and revaluation must come to fruition before maturity or the warrants will not capture the return potential described above and could in fact impart permanent losses at maturity. In effect, the dynamics described pertaining to the common shares of JPM could end up being correct but if the revaluation does not occur until after the warrant maturity, the warrants will expire and an investment in those warrants will be lost. By way of example, if JPM trades at or near \$42 per share through 2018 only to rocket higher in early 2019 well above \$100 per share, the warrants could expire worthless (while the thesis of an undervalued JP Morgan would hold true assuming common shares are held through this theoretical 2019 move).

## **JP Morgan Common Shares**

JP Morgan is one of the leading global financial services firms with businesses including consumer and community banking, corporate and investment banking, commercial banking, and asset management.

### **How is Value Created?**

There are two primary sources of revenue for JP Morgan: fee income and net interest income. Fee income includes lending and deposit related fees, investment banking fees, asset management fees, card fees and market making fees, amongst others. Net interest income is simply the spread revenue generated from lending money at higher rates than what JPM pays for that money (largely in the form of deposits but also short and longer term borrowings and equity capital).

While this description may be overly simplistic for some, I believe many tend to view JPM as an investment banking and trading business largely different from a traditional banking franchise. The numbers would tell you otherwise.

Net interest income (traditional banking) comprised roughly 45% of total revenue in 2013 while fee income represented the other 55% (by way of comparison, in Q4 2013, Wells Fargo's net interest income was 52% of revenue while fee income was 48% of revenue). As described above, there are many components to the fee income many of which are not the volatile trading and investment banking related fees that drive the perception of JP Morgan. In fact, principal transaction fees (mostly market making) and investment banking fees comprise roughly 17% of total revenue. On the other hand, asset management fees alone comprise roughly 16% of total revenue.

Why does that matter? For good reason, investment banking and market making fees are valued differently than asset management fees. Asset management fees tend to recur on a consistent basis over time and thus allow for greater visibility and ultimately higher valuations per dollar of earnings. In short, asset managers are valued more highly than the more volatile investment banks. This distinction, along with the distinction between more traditional consumer and commercial banking, will become more important as we talk later about value.

One minor note on the principal transaction fees: the fee revenue attributable to that category was reduced in 2013 by DVA losses so the revenue figure excluding DVA attributable to principal transactions (arguably a more accurate measure) would be somewhat higher but that same DVA exclusion would also have shown higher total revenue mitigating its impact.

As above, net interest income (traditional banking) comprises roughly 45% of revenue. Net interest income is a function of the amount of interest earnings assets multiplied by the net interest margin (NIM) which is simply the spread between the bank's lending and investing rates less the costs of its funding. From 2005 to 2010, JPM's NIM averaged 2.95%. In 2013 its NIM was 2.23%, a historically low rate reflective of the current low interest rate environment.

JP Morgan is positively levered to a rising rate environment. Put another way, JPM has positioned its balance sheet in such a way that it is purposely making less money today to not take undue rising rate risk. To frame the magnitude of a return to more normalized rates, if JPM's NIM increases from the roughly 2.2% to 2.7%, net interest income and profits would increase by roughly \$6 billion after tax.

There will be more discussion about growth in later sections but it is important to note the future opportunity set that exists for the financial services broadly and JP Morgan as well. The financial needs of countries, companies and individuals will continue to expand and those expanding needs will need to be served by the financial system. World trade will expand, infrastructure needs will increase, new large companies will be developed, existing companies will expand, and financial assets will grow. This global growth will serve as a long term tailwind enabling JP Morgan and others to grow over time, although not in a straight line. As just one example, total global financial assets of consumers and businesses are expected to grow nearly 7% per year from \$248 trillion in 2013 to \$453 trillion in 2023.

And in our increasingly global economy, scale will matter. Size has become a four letter word in the banking world. The large banks are targets based on size alone and they have been demonized by the public, politicians and regulators in addition to investors. In reality however, banking is a scale business and scale will be increasingly important as the same politicians and regulators create added complexity to the business of banking.

The costs of being a bank are going higher on a consistent basis and it is likely that scale will be an increasingly differentiating factor as more cost burdens need to be spread across a bigger base of business to remain competitive. Additionally, large, global customers increasingly demand a full suite of services across geographies. In short, the scale that JP Morgan brings to bear can make them more cost efficient while also enabling them to better serve large, global customers.

The cost and regulatory burdens in banking are higher than ever, their customers demand a larger and broader presence and it is now harder to become a larger presence in the banking world all of which serve to enhance the moat around large and existing banking franchises.

## **How is Value Protected?**

Beyond an ability to generate earnings, a bank must protect its franchise from unforeseen events. Strong capital and liquidity serve to protect a bank in difficult times.

The capital levels of the broader banking system certainly did not allow for prudent risk management leading up to the recent financial crisis. The relative short term rearview mirror of many investors have caused that pain to be an ever present dynamic in their views on financial institutions and their value as productive long term investments.

The reality of today however paints a very different picture than those days leading up to the financial crisis. The banking system is better capitalized and more liquid than it has been in the past 60 years. Relating to capital levels, the average amount of equity to assets was 11.1% at yearend 2013 which is the highest amount since 1950.

In addition to historically strong capital levels, the banking system is also incredibly liquid. At the end of 2007, the banking system had \$6.7 trillion of deposits, \$6.8 trillion of loans and roughly \$21 billion on deposit at the Fed. Today, the banking system has \$10 trillion of deposits, \$7.6 trillion of loans and \$2.6 *trillion* on deposit at the Fed. Bank balance sheets are incredibly liquid and in many ways underutilized.

While the above figures paint a strong story in regards to the capital levels and liquidity of the banking system, this summary is specifically about JP Morgan. The broader banking system remains important however as weaknesses can transmit through the banking system from the bad apples to the good apples in certain adverse circumstances.

JP Morgan itself has experienced dramatic growth in its capital levels and liquidity in recent years just as with the banking system broadly. By way of example, JP Morgan's risk weighted capital levels as calculated by the new Basel III standards have increased from 5% in 2007 to 9.5% at year-end 2013. There are countless nuances when calculating Basel III capital but looking at comparably calculated levels gives a sense for the dramatic buildup in capital levels in recent years (a near doubling in the Basel III figures described).

In addition to having much higher levels of capital, JP Morgan is full of liquidity. The company had \$356 billion in cash at year-end mostly on deposit at the Fed. JP Morgan had another \$244 billion in High Quality Liquid Assets (those that count for liquid assets under the regulators' definition of liquidity). This *\$600 billion* comprises safe and highly liquid assets should the company need cash in a crisis situation. That is an incredibly large amount of liquidity relative to the total size of the balance sheet and, when combined with the higher capital levels of the company, bolsters the fortress balance sheet to withstand times of great financial stress. Beyond the \$600 billion, JP Morgan has another \$141 billion in unencumbered marketable securities with an average duration of 2.2 years and a AA+ rating.

While this topic will be covered in greater detail when talking about the earnings power of the business, part of this liquidity is in place to manage the asset sensitivity of the company. The asset base of the company is short in duration so as to not take undue interest rate risk. In fact, the company is positively levered to rising rates and has purposely not taken on as many longer term assets as it would in a more normalized rate environment. Another way of saying the same thing is JP Morgan is purposely making less money today so as not to be exposed to the risk of higher rates.

In short, JP Morgan has substantially more capital per dollar of assets and substantially more amounts of short available liquidity. All of this enhanced capital and liquidity has caused many to believe that the large banks including JP Morgan are now too safe to grow in any material way. They would argue they have regulated into utility-like businesses. Such an argument about the enhanced levels of risk management that pervade these companies including JP

Morgan is entirely correct. The enhanced risk management does not in and of itself preclude growth however. And valuations questions are raised if the large banks are truly becoming more “utility” like. Both of these issues will be addressed in later sections.

### **How Much Can JPM Earn Per Share?**

The earnings of JP Morgan and most other large banks have been a mess for several years. There has been a litany of charges negatively impacting net income along with the effects of a subpar banking environment as low interest rates have served to drag down net income.

In the medium term, JP Morgan has expressed a belief they can earn roughly 15% through the cycle returns on tangible common equity. Tangible book value per share at the end of 2013 was \$40.81 implying through the cycle earnings power at that time of \$6.12 per share.

What actually happened in 2013? As above, the earnings picture at JP Morgan and other banks has been muddy at best. JP Morgan’s reported 2013 earnings per share was \$4.35. Those earnings however were subject to several unusual items, some negative and some positive. By JP Morgan’s assessment, the net of all those items yielded adjusted earnings per share of \$5.70, or just over \$23 billion in total.

To arrive at the \$5.70 number, JP Morgan subtracted gains on the sale of VISA shares and the One Chase Manhattan Plaza building along with reserve releases in the real estate and credit card businesses. In essence, they viewed those as non-recurring gains. Reserves for bad loans cannot be released indefinitely but more reserves remain that will get released over time, partly a reflection of over reserving in prior years for losses that did not materialize. Selling the Plaza certainly feels like a onetime gain (there is only one after all). Like reserve releases, there will be more gains on the sale of assets (likely to include gains on the sale of VISA shares) going forward but those sales and their related gains are lumpy and episodic. Allowing some portion of these gains to be viewed as recurring would further increase the \$5.70 per share figure.

The company added back heightened legal expenses largely the result of litigation that still surrounds JP Morgan and the other large banks from the financial crisis. Heightened legal expenses are clearly an issue for JP Morgan and the other large banks and the costs of controls (not added back to the EPS number) and other regulatory costs will continue to remain elevated. I do find it reasonable that legal expenses from the financial crisis will subside over time (I cannot say when) and thus are reasonable to exclude when thinking about longer term earnings power. The company also added back charges to net income associated with changes in FVA and DVA which is quite reasonable to me.

In short, there are countless iterations to how 2013 should be viewed from an earnings perspective. Adding back just the heightened legal costs (but keeping added controls and regulatory costs) and adding the FVA and DVA charges would bring 2013 earnings to \$6.85 per share. I would characterize that as the high end of the reasonable range of 2013 earnings with reported earnings of \$4.35 being the low end.

As you can see, we are talking EPS from \$4.35 to \$6.85, a pretty wide range. With my view that there were unusually large legal costs and settlements in 2013 I am comfortable assessing 2013 earnings around \$5.70 per share as described by management. So with that as a backdrop, where does JP Morgan go from here? Are those earnings normalized?

One important consideration is the banking environment and what backdrop did it provide in 2013. In effect, is this a normal banking environment? I believe the answer to that is clearly no. We talked earlier about the impact of low rates on the portion of income generation (about half) known as net interest income. Low rates have in effect caused roughly half of the bank's earnings power to significantly underperform. As above, returning net interest margins to roughly 2.7% which is below the average of 2005 through 2010 (a period reflecting different rate environments but all reasonably low by historic standards) would yield another roughly \$6 billion after tax which is about \$1.60 per share at yearend current share count. Put another way, the increased net interest income would move 2013 EPS from \$5.70 to \$7.30.

*Before moving on to fee income, I want to talk briefly about the value of strong deposit franchises. Banks funded by low cost deposits have a distinct cost advantage to those institutions funded by other means. Deposits tend to be low cost and very sticky in relation to other short and long term sources of funding. In today's low rate environment however, this funding advantage is masked by the relative low cost of funding across the spectrum. As rates rise however, the real value of a low cost deposit franchise will shine through. In effect, the most important advantage of successful deposit gathering franchises is covered up or not seen in today's environment. The enduring long term competitive advantage of a strong deposit franchise still exists however, even if it cannot be "seen" as well today.*

Net interest income does not impact JP Morgan in isolation. There are numerous factors affecting the earnings power of the franchise. As mentioned, fee income comprises the other major driver of earnings. We can reasonably expect that fee income to grow over time although not in a straight line. As discussed above, the need for financial services will continue to grow and JP Morgan can be expected to maintain a share of that growth. Judging the pace of that growth is challenging based on the lumpiness of many of the fee drivers (investment banking being maybe the most obvious sources of lumpiness). Fee income growth would add to any net interest income growth but for the moment we will avoid pegging a number or growth target. I do believe it is fair to say that many of the drivers of fee income are operating below normal given the subdued economic environment.

How else can we think about growth and earnings? As previously discussed, the bank has set for itself targets for return of tangible common equity (which we can translate to tangible book value per share) of 15%. Is that target reasonable? Looking back over 2010, 2011, 2012 and 2013 the company did indeed post roughly 15% returns on tangible common equity, and again, in a suboptimal banking and lending environment. (It is important to note that the 2012 and 2013 results were adjusted for litigation, one-time gains, CVA/DVA, etc. as we have discussed above. For a complete rundown of those adjustments you can refer to the Investor Day presentations from February of this year.)

How has book value changed over the years? Both book value and tangible book value have grown consistently through the years. Focusing on tangible book value per share, from 2005 to 2013 tangible book value per share grew roughly 12% annualized and, over a more recent period of time, growth from 2009 to 2013 was 11% annualized.

Putting those pieces together and looking out to the end of 2018 assuming tangible book per share grows at the lesser rate of 10% annualized would yield tangible book value per share of roughly \$65. A 15% return on tangible equity would equate to earnings per share of \$9.75.



Assuming 8% annualized growth would bring tangible book value per share of roughly \$60 yield earnings per share of \$9 at a 15% return on tangible common equity.

To put someone else's perspective on the earnings power of JP Morgan, a sell side research analyst put forth a case for 2018 normalized earnings power of \$29 billion which would equate to roughly \$7.75 per share at today's share count. However, that earnings per share number could increase to \$9 per share assuming there is a 15% reduction in share count between now and 2018 which is not at all unrealistic given the likely dramatic capital build that will occur through those years given JP Morgan's earnings power. It is not likely they will be allowed to dividend the majority of that earnings/capital build based on the Fed's desire to keep dividend payouts low relative to historic norms. That capital must however go somewhere and it will either stay on the balance sheet or more likely be returned at least in part through share repurchases. Beyond the share repurchase assumptions, the business growth assumptions leading to \$29 billion detailed in the report are not at all unrealistic. In fact, you could pick apart the assumptions leading to \$29 billion and argue they are conservative.

Thought of in a different but related way, you could take the \$23 billion in 2013 net income and simply add the previously discussed \$6 billion in after tax net interest income with NIM moving up from 2.2% to 2.7% and get to \$29 billion. This is without any other aspect of the business growing (no growth in card, no growth in asset management, etc.).

So, we can reasonably discuss earnings today for JP Morgan in the neighborhood of \$6 per share going to \$9 or potentially higher on the assumption that rates return to more normalized levels and general economic conditions continue to improve.

All of this is not to say the path to reaching the higher normalized earnings power of the business is easy and straightforward. Rather, attaining these higher levels of normalized earnings power are possible and arguably probable. There are most certainly risks with any large financial institution. And many of these risks (trading books, derivative exposures, etc.) can be hard to grasp, but there comes a time when the downside risks are priced in without much appreciation for what can go right. JP Morgan trades for less than 10x current earnings in an environment where they are under earning, arguably significantly, their potential.

There are risks in the business but they also have tremendous liquidity to mitigate such risks. They also have a breadth of businesses that are not all investment banking risk profiles. They have a steady asset management and private wealth management business which should carry higher valuations. They have a largely consumer bank in Chase. You could value the business on a sum of the parts basis to a much higher value because today the entire business is being valued as a trading parlor.

You will notice we have not discussed a singular number for normalized EPS. That level of precision is not realistic when assessing any business let alone a large financial institution. We should however recognize that most large banks are under earning their potential largely due to the low rate environment. The low rate environment obscures the true earnings power of their assets while also obscuring the enormous value embedded in those banks with strong deposit franchises at great scale.

If we can pay a low to reasonable price on today's lowered earnings with the potential for greater earnings in a normalized scenario, then our risk reward dynamic is strong enough to warrant investment.

## How Should JPM Be Valued?

Part of the challenge in valuing and in some ways understanding JP Morgan stems from its breadth of businesses. Is JP Morgan a traditional bank? An investment bank? An asset manager? The short answer is all of the above and therein lies part of the complication.

As above, JP Morgan earned an adjusted \$5.70 per share in 2013. Tangible book value at the end of 2013 was \$40.81 and if we assume it can earn 15% on that tangible equity it would earn roughly \$6.12 per share this year. Recent quarterly earnings support annualized earnings in the neighborhood of \$6 per share. JP Morgan trades in the neighborhood of \$56 as of this writing.

What is a fair multiple or earnings to pay? The multitude of businesses inside JP Morgan makes this already difficult question even more difficult than usual. To paint the extremes of its business from a valuation perspective, we should be willing to pay a much higher multiple of earnings for the recurring and reasonably steady earnings from asset management when compared to the more volatile investment banking business. We must start somewhere however so ascribing a 12x multiple to the entire franchise seems a reasonable start and a discount to historic norms. Ascribing that 12x multiple to a \$6 per share earnings figure implies value of **\$72** per share. If we assume the business is now boring and “utility” like then a fair multiple would be much higher. I do not share that opinion but you cannot call a business boring and utility like and then value it at 10x or 12x earnings, particularly when large plants and equipment are not required for growth.

While \$72 seems reasonable for the earnings being generated today, I still believe it misses some of the underlying value that exists in the business. As discussed several times above, JP Morgan is not earning to its potential today largely due to the current low rate environment. Net interest margin moving from 2.2% to 2.7% (still below historic averages) alone brings earnings to about \$7.60 on today's share count. That net interest margin potential is on the balance sheet today but again is largely obscured by low rates. A 12x multiple of \$7.60 brings value to over \$90. Interest rates will not rise to make that possible in the short term however, so some discount to that value is warranted to determine value today.

So, how can we think about growth and value going forward? As above, tangible book value per share has grown around 12% on average per year since 2005. Growing by a lesser 10% per year would bring tangible book value per share to roughly \$65 in 2018. A return of 15% on tangible common equity would thus yield earnings of roughly \$9.75 for 2018. If during 2018 that \$9.75 is valued at 12x it would bring a share price of roughly \$117.

How should we discount that price back to today? Assuming that \$117 is four years from now (assuming 12x current year 2018 earnings roughly midway through 2018) we can ascribe different discount rates to bring us back to today. At a 10% discount rate, a today value would be around **\$80**. At a 7.5% discount rate, a today value would be about **\$88**.

Thinking of value another way, what is a fair multiple of tangible book value to pay? Tangible book value was \$40.81 at the end of 2013 and increased to \$44.13 in the third quarter of 2014. With returns on tangible equity of 15%, to earn a 7.5% return today (a return that will grow relative to original cost as tangible book value and thus dollar returns grow over time) you could pay up to 2.0x tangible book value, or **\$88**. Investors are obviously not inclined today to pay 2.0x tangible book for a large bank but through history there has been strong willingness to do so.

During Investor Day, JP Morgan's CFO Marianne Lake seemed to imply the company was good value up to 2.0x tangible book. The weight of this must be small given the lack of depth behind the statement but it does serve as a small dose of support for the other values discussed above.

As can be seen, there are many paths to determining a fair price for JP Morgan and none can be done with perfect precision so that is why we have spoken of a number of different methods and outcomes. With that in mind however, all of the above valuation scenarios allow for a wide margin of safety with significant upside given today's \$56 price.

And while JP Morgan has significant earnings power, those earnings will be lumpy and thus difficult for more short sighted investors. For those with a long term perspective however, the opportunity to buy JP Morgan at today's prices remains unique.

### **Questions and Risks:**

The questions and risks with a large money center bank can be miles long. In that regard, I would point you to their filings which detail and capture many of the risks inherent in their business (importantly, you should not invest without fully studying their business and SEC filings including Risk Factors, footnotes, etc.). Interestingly, you can also capture some of the risks in the banks simply by reading the paper as they are often in the headlines for legal issues, regulatory issues, trading losses, and on and on. My more substantive point is that a bank is a highly leveraged business (even if less so today than in recent memory) and thus is much more prone to blow up risk than buying a stable cash generator like a Coca Cola or Proctor and Gamble. Banks require a truly deep dive and a larger margin of safety before investing.

Beyond what is generally discussed above, I did want to point out risks not generally discussed in regards to the large money center banks including JP Morgan.

**Cybersecurity Risk:** It is hard to imagine what would happen if we collectively and the banking system in particular could not access all the information that is stored electronically. A truly disruptive cyber-attack that would stop banks, companies and individuals from getting their money would create real panic and it is hard to imagine the knock on effects from such an event. We "see" our assets electronically and not being able to "see" them would affect the psyche of the world in untold and unknown ways. Most banks have systems and backups in place but the risk remains. This risk would not be isolated to the banking industry but the long term effects could be enormous.

**Master Netting Agreements:** A master netting agreement is an agreement between two counterparties who have multiple derivative contracts with each that provides for the net settlements of all contracts, as well as cash collateral, through single payment, in a single currency, in the event of default or termination of any one contract. JP Morgan has trillions of dollars of notional derivatives outstanding which get netted down through master netting agreements and collateral agreements. The netting and collateral agreements help manage the notional derivative exposure in a significant manner but such agreements have not been materially tested in times of great market turmoil.

**Conclusion:**

Many investors have continued to avoid the large money center banks and their valuations reflect such avoidance with JP Morgan even more so than the others. Do these low valuations reflect the turbulences of yesterday, or tomorrow? I would argue a rear view mirror assessment of the headline inducing challenges facing JP Morgan is too prevalent and does not properly account for the earnings power of the franchise.

JP Morgan currently generates a tremendous level of earnings set against a heavily discounted valuation with significant upside earnings potential as the lending environment normalizes. JP Morgan is great value today and even greater as we look forward.

**World class company. World class management. Discounted valuation.**

***Disclaimer: The opinions in this document are for informational and educational purposes only and should not be construed as a recommendation to buy or sell the stocks mentioned or to solicit transactions or clients. Past performance of the companies discussed may not continue and the companies may not achieve the earnings growth as predicted. The information in this document is believed to be accurate, but under no circumstances should a person act upon the information contained within. We do not recommend that anyone act upon any investment information without first consulting an investment adviser as to the suitability of such investments for his specific situation. A comprehensive due diligence effort is recommended.***

## **Full Summary on Bank of America and Their TARP Warrants**

**Each dollar invested in a Class A warrant today has the potential to become roughly \$3.36 equating to an annualized IRR over the three and a half years exceeding 40%.**

Below you will find a full summary on Bank of America and their Class A and Class B TARP warrants written in March of this year. It is important to fully understand Bank of America including its businesses, valuation and return potential before assessing the investment viability of its warrants. The following summary fully describes Bank of America and how that translates into the potential returns associated with their TARP warrants.

### **Three Ways to Capitalize on Bank of America, Two of Which I Like**

***March 2015***

To set the perspective of our approach to investing, we aim to acquire stakes in world class companies at a discount to an increasing intrinsic value, allowing for strong future returns with limited risk of permanent capital loss.

Bank of America is one of the leading global financial services firms with businesses including Consumer and Business Banking, Global Wealth and Investment Management, Global Banking, Global Markets and Consumer Real Estate Services. Bank of America has been a large holding since URI Capital Partners opened in August 2012 and continues to be a large holding today.

Bank of America has risen in price from around \$8 at our initial purchase to roughly \$16 today. While we continue to view the common shares of Bank of America as compelling enough to warrant a top position in the fund, I want to talk about a three pronged approach to investing in Bank of America.

This summary of Bank of America and their two classes of TARP warrants necessarily contains a full discussion of Bank of America itself including the business, valuation and return potential of investing in Bank of America at today's prices along with a discussion of how its long term value is protected with substantially bolstered capital and liquidity. As covered in detail below, the broader summary of Bank of America describes current normalized earnings power of \$2 per share which at a 12x valuation would yield a share price of \$24. The work behind current normalized earnings serves as the foundation for our investment and thus should be understood before moving forward.

It is important not just to create value through the earnings power of the franchise but also to protect the franchise with strong levels of capital and liquidity. The balance sheet of Bank of America has undergone a radical transformation since its acquisition of Merrill Lynch. Since that acquisition, the bank's liquidity has more than doubled to almost \$440 billion while the total value of the balance sheet has shrunk from \$2.7 trillion to \$2.1 trillion. Also since the acquisition, tangible common equity has more than doubled from \$70 billion to over \$150 billion. These substantially bolstered levels of capital and liquidity serve to protect the Bank of America franchise.

We will also discuss the related opportunity associated with Bank of America's two classes of TARP warrants which mature in October 2018 and January 2019. With those dates in mind, we need to assess how earnings power can change over the next three to five years and the strength of the bank's foundation in its capital and liquidity levels.

This summary also describes tangible book value per share growing to \$19.63 by 2018 (roughly 8% annualized growth). The current earnings power as summarized below equates to a return on tangible equity around 12%. Moving towards 2018 and making a few reasonable assumptions shared by management, we can see return on tangible equity moving to 14%. This would imply 2018 earnings power of \$2.75. We can value 2018 earnings power at 12x which would yield a share price of \$33. Thought of in a different way, it is not out of line with historic norms for a bank to trade at or above 2x tangible book value which would imply a share price above \$39 in 2018.

*Note: It is actually not out of line for banks to trade at or above 2x book value rather than tangible book value. In fact, Bank of America's average price to book value from 1996 to 2007 (12 years before the financial crisis) was roughly 2.2x. We however will discuss tangible book most often for purposes of conservatism.*

*Part of the reason to use tangible book for purposes of valuation today beyond conservatism is that current regulatory constraints on leverage, and thus the ability to generate higher returns on equity, are tied to measures more closely aligned with tangible book value.*

For now, and with the above metrics in mind, let's use \$33 as our 2018 target valuation. With the stock recently trading around \$16.50, a medium term valuation of \$33 allows for a doubling of your money over the next four years.

Most of the major banks, including Bank of America, remain much maligned by the investing public thus allowing for the possibility of these strong future returns. Much of the disdain felt for the banking sector came from the 2008-2009 financial crisis but that same crisis created a unique investment opportunity in the form of TARP warrants. These warrants were issued for many of the institutions that took TARP dollars, including Bank of America. The Bank of America TARP warrants are long dated with dividend protection allowing for magnified returns to the underlying thesis of Bank of America returning to normalized earnings and valuations. There are two classes of Bank of America TARP warrants, Series A and Series B.

The general terms of the Series A warrants are as follows:

- Original Strike Price: \$13.30 (currently \$13.171)
- Warrant Price (recent): \$6.25
- Maturity: January 16, 2019
- Original Conversion Factor: One Share per Warrant

The general terms of the Series B warrants are as follows:

- Original Strike Price: \$30.79
- Warrant Price (recent): \$0.35
- Maturity: October 28, 2018
- Original Conversion Factor: One Share per Warrant

## What is the Potential?

The common shares of Bank of America offer significant opportunity with a wide margin of safety. Our current \$24 estimate of intrinsic value represents substantial upside over today's stock price of \$16. The high levels of capital and liquidity along with its latent earnings power add to our margin of safety and provide the foundation of a strong investment opportunity.

And as we assume that our estimate of the 2018 per share intrinsic value for Bank of America is \$33, it becomes immediately obvious the return potential with the warrants is quite high. Using a recent Class A warrant price of roughly \$6.25 and assuming a slightly declining strike price (potential changes to the strike price and conversion factor to be discussed later), the Class A warrants should move in value towards \$21 as maturity approaches in January 2019.

**Each dollar invested in a Class A warrant today has the potential to become roughly \$3.36 equating to an annualized IRR over the three and a half years exceeding 40%.**

We now know at a high level that a unique opportunity exists with Bank of America common shares and their Class A TARP warrants. Before a deeper dive into understanding the business of Bank of America and what that can mean for these investments, I want to share what we own of the three today. As stated above, the common shares are a top holding of URI Capital Partners. We also the Class A warrants and find them highly attractive. We do not own any of the Class B warrants. As you read further, you will better understand why we have made such decisions.

## The Business of Bank of America

### How is Value Created?

There are two primary sources of revenue for Bank of America: fee income and net interest income. Fee income includes lending and deposit related fees, investment banking fees, asset management fees, card fees and market making fees, amongst others. Net interest income is simply the spread revenue generated from lending money at higher rates than what BAC pays for that money (largely in the form of deposits but also short and longer term borrowings and equity capital). Net interest income (traditional banking) comprised roughly 47% of total revenue in 2014 while fee income represented the other 53% (by way of comparison, in 2014 Wells Fargo's net interest income was 52% of revenue while fee income was 48% of revenue).

Bank of America operates across five main businesses: Consumer and Business Banking, Global Wealth and Investment Management, Global Banking, Global Markets, and Consumer Real Estate Services.

Consumer and Business Banking provides banking, credit and investment products and services to consumers and small and medium sized businesses. In more general terms, this is your neighborhood bank with a national footprint. Global Wealth and Investment Management

predominately comprises the Merrill Lynch Global Wealth Management and US Trust businesses, both first class advisory and wealth management businesses. Global Banking provides a global platform of banking and investment banking services to large multinational firms. Global Markets provides sales and trading services to institutional clients across all asset classes. Consumer Real Estate Services comprises the mortgage related businesses of the bank including mortgage servicing and legacy exposures.

Segment net income for each of the businesses is detailed in the chart below:

<b>Segment Net Income</b>			
<i>net income (in millions)</i>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>Consumer and Business Banking</b>	\$7,096	\$6,647	\$5,546
<b>Global Wealth and Investment Management</b>	\$2,974	\$2,977	\$2,245
<b>Global Banking</b>	\$5,435	\$4,973	\$5,344
<b>Global Markets</b>	\$2,719	\$1,153	\$1,229
<b>Consumer Real Estate Services</b>	(\$13,395)	(\$5,031)	(\$6,439)

## How is Value Protected?

Beyond an ability to generate earnings, a bank must protect its franchise from unforeseen events. Strong capital and liquidity serve to protect a bank in difficult times.

The capital and liquidity levels of the broader financial system certainly did not allow for prudent risk management leading up to the financial crisis. And the relative short term rearview of many investors has caused that pain from the crisis to be an ever present dynamic in their views on financial institutions and their value as productive long term investments.

The reality of today however paints a very different picture than those days leading up to the financial crisis. The banking system is better capitalized and more liquid than it has been in the past 60 years. Relating to capital levels, the average amount of equity to assets was 11.1% at yearend 2013 which is the highest amount since 1950.

In addition to historically strong capital levels, the banking system is also incredibly liquid. At the end of 2007, the banking system had \$6.7 trillion of deposits, \$6.8 trillion of loans and roughly \$21 billion on deposit at the Fed. Today, the banking system has \$10 trillion of deposits, \$7.6 trillion of loans and \$2.6 *trillion* on deposit at the Fed. Bank balance sheets are incredibly liquid and in many ways substantially underutilized.

While the above figures paint a strong story in regards to the capital levels and liquidity of the banking system, this summary is specifically about Bank of America. The broader banking system remains important however as weaknesses can transmit through the banking system from the bad apples to the good apples in certain adverse circumstances.

Bank of America itself has experienced dramatic growth in its capital levels and liquidity in recent years just as with the banking system broadly. As described earlier, since the acquisition of Merrill Lynch, tangible common equity has more than doubled from \$70 billion to over \$150 billion today while the total balance has shrunk from \$2.7 trillion to \$2.1 trillion over that same period of time.



Additionally, global excess liquidity has roughly doubled since the Merrill Lynch acquisition. The company had almost \$440 billion in global excess liquidity moving its time to required funding to 39 months. This *\$440 billion* comprises safe and highly liquid assets should the company need cash in a crisis situation while time to required funding indicates the number of months the parent company can continue to meet its unsecured obligations using only its global excess liquidity, without issuing any new debt or accessing any additional liquidity sources. That is an incredibly large amount of liquidity relative to the total size of the balance sheet and, when combined with the higher capital levels of the company, bolsters the fortress balance sheet to withstand times of great financial stress.

While this topic will be covered in greater detail when talking about the earnings power of the business, part of this liquidity is in place to manage the asset sensitivity of the company. The asset base of the company is short in duration so as to not take undue interest rate risk. In fact, the company is positively levered to rising rates and has purposely not taken on as many longer term assets as it would in a more normalized rate environment. Another way of saying the same thing is that Bank of America is intentionally making less money today so as not to be exposed to the risk of higher rates.

In an attempt to measure a bank's ability to withstand severe economic downturns, the Federal Reserve conducts annual stress tests. These tests comprise depression like scenarios (GDP declines over 6%, unemployment above 10%, equity market declines near 60% and home price declines of almost 26%). The Federal Reserve's stress test results were just released and in the dire scenario painted, Bank of America maintained a Basel III Tier I Common Equity Ratio of 7.8% at its minimum point which is well above required minimum ratios. Tier I leverage ratios also exceeded required minimums by a healthy margin in the severely adverse scenario. Additional stress test information is contained in Appendix A.

In short, Bank of America has substantially more capital per dollar of assets along with significant amounts of available liquidity which serve to protect the franchise in even the most dire scenarios. All of this enhanced capital and liquidity has caused many to believe that the large banks including Bank of America are now too safe to grow in any material way. They would argue they have regulated into utility-like businesses. Such an argument about the enhanced levels of risk management that pervade these companies including Bank of America is entirely correct. The enhanced risk management does not in and of itself preclude growth however. And valuation questions are raised if the large banks are truly becoming more "utility" like. Both of these issues will be addressed in later sections.

## **How Much Can BAC Earn Per Share?**

Determining the earnings power of Bank of America can be a challenge today with the litany of unusual items flowing through their business and their financials. Taking another look at the business segment net income alone yields many questions with the major losses from Consumer Real Estate Services dragging down the company's current earnings. The losses from the segment are largely litigation and related expenses from the financial crisis largely although not entirely from the actions of the acquired subprime lender Countrywide.

Over the longer term, Consumer Real Estate Services should at a minimum be marginally profitable. Let's assume however that the business can only be a breakeven business once the largely legacy issues from the financial crisis have been overcome. Adding back the roughly \$13.4 billion loss from CRES to reported net income would allow for net income of roughly \$17.2 billion.

With a similar mindset, we can also start with 2014 pretax income and factor in the effects of the large litigation expenses and some portion of the Legacy Asset Servicing (LAS) expenses. Litigation expenses were \$16.4 billion in 2014 and LAS expenses were \$5.4 billion. The litigation expense came primarily from Bank of America's settlement with the Department of Justice and others, again from actions preceding and during the financial crisis. Legacy Asset Servicing expenses comprise the costs to service the troubled loans and related assets largely from the acquired subprime lender Countrywide. The \$5.4 billion in LAS is down from \$11 billion in 2012 and will continue to come down in 2015 and beyond.

LAS expenses were \$1.1 billion in Q4 2014 and are expected to be less than \$800 million by Q4 2015. Running a simple straight line quarterly reduction would show 2015 LAS expenses around \$3.6 billion. Management recently stated LAS expenses should be \$2 billion or less on a longer term basis (there remains a need for some level of servicing expenses as the bank does continue to service its much healthier current mortgage business).

Pretax income without adjustments was \$6.8 billion for 2014. If we remove all the litigation expense and run LAS expenses down to the \$2.0 billion run rate described above we could see pretax company earnings of nearly \$27 billion. Applying a 30% tax rate and accounting for the roughly \$1 billion in annual preferred dividends would yield net income of roughly \$17.7 billion.

Bank of America ended 2014 with just over \$150 billion in tangible common equity. When factoring for litigation and the elevated portion of the LAS expenses, \$17.7 billion in net income yields an adjusted return on tangible common equity of 11.75% and an adjusted return on assets of 0.84%. So while we have adjusted results to accommodate for ultimate resolution of their legacy issues, these levels of return still remain below what the bank has talked about for its medium term return target of 14% (and a corresponding 1% return on assets).

These lower, even when adjusted, rates of return paint a picture of a very challenging environment for the banking business. There are significant headwinds in nearly all aspects of its business. Think first about their mortgage business. Beyond the legacy issues we have discussed above, the mortgage business has been near cyclical lows for some time with the housing market and in particular the home mortgage business still struggling with historically low volumes.

This however is not nearly the biggest challenge Bank of America and other banks are facing today. As described earlier, roughly half of Bank of America's revenue comes from net interest income. Generating net interest income is a spread business and the spread of what BAC pays for its money relative to the rate at which it lends (called net interest margin, or NIM for short) is at historic lows. This holds true for all banks; not just Bank of America, but it is certainly painful for Bank of America. With half of their revenue generating subpar returns, it is difficult to post the returns management and investors expect. To paint just one example of how rates can act like a coiled spring for a bank with a large and strong deposit (ie. low cost) franchise, we can look to their disclosures on their interest rate sensitivity. As of yearend 2014, a 100 basis point parallel shift in the interest rate curve (long and short rates going up by 1%) would yield \$3.7 billion in additional net interest income. There would be little to no incremental expense

associated with this higher level of revenue and thus the after tax benefit would be around \$2.5 billion. To put such a move in perspective, short rates moving from near zero to around 1% would still leave them well below historic norms. And using the 10 year Treasury as a proxy for longer rates, a move from today's near 2% to around 3% would still leave long term rates well below historic norms as well.

*Before moving on, I want to talk briefly about the value of strong deposit franchises. Banks funded by low cost deposits have a distinct cost advantage to those institutions funded by other means. Deposits tend to be low cost and very sticky in relation to other short and long term sources of funding. In today's low rate environment, this funding advantage is masked by the relative low cost of funding across the spectrum. As rates rise, the real value of a low cost deposit franchise will shine through. In effect, the most important advantage of successful deposit gathering franchises is covered up or not seen in today's environment. The enduring long term competitive advantage of a strong deposit franchise still exists, even if it cannot be "seen" as well today.*

We can think about the bank's interest rate sensitivity (often called asset sensitivity) in another way. We talked above about the enormous liquidity that Bank of America has built in recent years. Beyond the purpose of providing a buffer against a liquidity crisis, the large amounts of liquidity is also serving to manage the bank's interest rate exposure. Much of the liquidity is low duration and thus earning low rates of return. The bank has intentionally invested in low rates of return to not take the significant risk of loss if and when rates rise from today's historically low levels. They could be investing in longer dated, higher current returning assets but have chosen not to take the associated risk of higher losses with those assets as rates rise. Put more simply, Bank of America is purposefully making less money today by maintaining their strong asset sensitivity.

As this example illustrates, Bank of America is positively levered to higher interest rates. The example also understates the longer term impact of a more normalized rate environment. As mentioned, this 100 basis point parallel shift example still leaves rates well below historic norms. While not discussed as often as with other businesses, there is tremendous operating leverage inside a bank. The vast majority of any revenue benefit resulting from higher rates is likely to fall to the bottom line. It takes just as many bankers to loan money at 4% versus 6%. So an eventual return to more normalized rates should portend substantially higher earnings power and rates of return on equity and tangible equity (we will return to a discussion on returns shortly).

There is also operating leverage in the makeup of the individual business units. The operating leverage of the Global Markets was highlighted on a recent earnings call. As many are aware, the Markets business has been in a slump not just for Bank of America but for the industry in general. The low levels of sales and trading activity makes it difficult to earn reasonable returns on the unit's allocated capital and adds to the challenges posed by low rates, low mortgage volumes and the generally highly subdued banking environment. As described by Brian Moynihan, the Markets business has a certain level of fixed costs and he detailed that the business can generate quarterly earnings of around \$300 million on \$2.5 billion in quarterly revenue. Beyond \$2.5 billion in revenue the fixed costs have largely been overcome and the incremental cost of revenue is ultimately driven down to about 20% which accounts for the variable compensation costs. While this is obviously an overly simplified version of the business, it paints a clear picture of operating leverage and the dramatically positive results that can come with higher activity levels in the Markets business.

As described in part above, in almost every business line, Bank of America is a coiled spring poised for much greater levels of profitability going forward. Legacy and core expenses are declining. We spent time above on declining legacy expenses, but the bank has also worked to reduce core expenses. Expenses exclusive of litigation and LAS expenses have declined from \$55.8 billion in 2012 to \$53.3 billion in 2014. The challenging banking environment has forced a rethink of their expense base so the bank can return to better rates of return even if the difficult environment continues. In effect, the bank is working on self-help measures not wanting to wait for a return to higher rates, higher markets volumes, higher mortgage volumes and other factors that will ultimately help the bank post higher earnings. While this difficult environment can be frustrating for investors, this time of rationalizing the business will serve long term investors well. There will come a time when the revenue environment for Bank of America improves and the more efficient businesses will be able to post higher returns than if today's challenging environment had not caused a significant rationalization of the underlying expense base. ***Today's belt tightening and tough earnings environment plant the seed for eventual higher levels of profitability.***

To paint the whole picture more succinctly, Bank of America is not firing on any of its cylinders largely due to legacy and environment related factors. And while the same can be said for much of the banking industry, the large legacy issues pervading Bank of America further cloud the underlying earnings power of the franchise.

As described above, we can show current returns on tangible equity of 11.75% for 2014 when adjusting for the legacy expenses. Applying that 11.75% to year end tangible book value of \$14.43 would imply earnings per share around \$1.70. As also discussed above, management believes a medium term target for return on tangible equity is 14% and I hope the discussion of the coiled spring embedded in most of BAC's businesses give credence to the franchise's ability to post such returns. In fact, the earnings power embedded in each business should ultimately post returns higher than 14% (which equates to roughly 1% return on assets). As just one of many levers, remember that a 100 basis point parallel shift by itself would drive such returns, let alone all the other sources of embedded profitability in the other businesses described above. For now however, let's consider the impact of 14% returns on tangible equity. Applying 14% returns to 2014 yearend tangible book value per share of \$14.43 yields earnings of \$2.02. While not expecting that level of earnings in 2015, it is more than reasonable to assume there is at least \$2.00 per share in underlying earnings power given the significant operating leverage that exists in the GWIM business, the Markets business and all rate related revenue streams.

The next question comes down to what is the earnings power as we move out over the next several years into 2018. While for the reasons described above, it seems plausible that returns on tangible equity could exceed 14% in a better operating environment, let's continue to use that return level in thinking about 2018 earnings power.

Looking back to yearend 2010, tangible book value per share was \$11.31. Tangible book value per share was \$14.43 at yearend 2014 equating to annualized growth of just over 6%. Reported net income over those four years of 2011, 2012, 2013 and 2014 were \$85 million, \$2.76 billion, \$10.1 billion and \$3.8 billion. We should note the comparatively low net income in 2011 came largely a result of a write down in goodwill, which did not effect tangible common equity (the primary offset between regular and tangible book value for Bank of America is goodwill). Looking forward, we can expect that tangible book value has the potential to grow faster than it has in the past as reported net income returns to more normalized levels. Capital return in the form of dividends and share repurchases can slow the build in tangible equity but

capital returns are likely to remain modest in the relative short term as it is being restricted by the annual CCAR process governed by the Fed.

For now let's assume tangible book value grows at the same rate for the next four years as it has in the preceding four years. Growing tangible book value per share at this same 6.3% would yield tangible book value per share at yearend 2018 of \$18.41. Applying our 14% return on tangible common equity to 2018 yearend tangible book value per share would yield 2018 earnings per share of \$2.58 per share. If tangible book value per share were to grow at a higher 8% annualized rate, we would see tangible book value per share of \$19.63 and \$2.75 per share in earnings applying that same 14% return on tangible common equity.

To add outside credence to our thinking, Bruce Berkowitz is a well-known deep value investor who runs a highly concentrated portfolio. Bank of America is his second largest holding and in 2014 he pegged their earnings power between \$20 and \$30 billion which puts our above estimates squarely in line with his thoughts.

All of this is not to say the path to reaching the higher normalized earnings power of the business is easy and straightforward. But, attaining these higher levels of normalized earnings power are more than possible. There are most certainly risks with any large financial institution. And many of these risks (trading books, derivative exposures, etc.) can be hard to grasp, but there comes a time when the downside risks are priced in without much appreciation for what can go right. Bank of America trades for well less than 10x current normalized earnings in an environment where they are significantly under earning their potential.

There are many risks in a leveraged business but, importantly, the bank also has tremendous liquidity to mitigate such risks. They also have a breadth of businesses that do not carry investment banking risk profiles. They have a steady asset management and private wealth management business which should carry higher valuations. They have a largely consumer bank. In fact, you could value the business on a sum of the parts basis at a much higher value than even what we have described.

You also will notice we have not discussed a singular number for normalized EPS. That level of precision is not realistic when assessing any business let alone a large financial institution. We should however recognize that most large banks are substantially under earning their potential. The current environment obscures the true earnings power of their assets while also obscuring the enormous value embedded in those banks with strong deposit franchises at great scale.

If we can pay a low to reasonable price on today's lowered earnings with the potential for greater earnings in a normalized scenario, then our risk reward dynamic is strong enough to warrant investment.

### **How Should Bank of America Be Valued?**

Part of the challenge in valuing and in some ways understanding Bank of America stems from its breadth of businesses. Is Bank of America a traditional bank? An investment bank? An asset manager? Merrill Lynch Wealth Management? The short answer is all of the above and therein lies part of the complication.

What is a fair multiple or earnings to pay? The multitude of businesses inside Bank of America makes this already difficult question even more difficult than usual. To paint the extremes of its

business from a valuation perspective, we should be willing to pay a much higher multiple of earnings for the recurring and reasonably steady earnings from asset management when compared to the more volatile investment banking business. We must start somewhere however and ascribing a 12x multiple to the entire franchise seems a reasonable start and a discount to historic norms.

Using the 12x multiple of earnings brings a current intrinsic value of \$24 assuming \$2 per share in current normalized earnings and a \$33 share price in 2018 as normalized earnings move to \$2.75 per share.

#### Range of Projected 2018 Per Share Earnings Power

		Assumed Growth in Tangible Book Value Per Share					
		5.0%	6.0%	7.0%	8.0%	9.0%	10.0%
<b>Returns on Tangible Common Equity</b>	<b>12.0%</b>	\$2.10	\$2.19	\$2.27	\$2.36	\$2.44	\$2.54
	<b>13.0%</b>	\$2.28	\$2.37	\$2.46	\$2.55	\$2.65	\$2.75
	<b>14.0%</b>	\$2.46	\$2.55	\$2.65	\$2.75	\$2.85	\$2.96
	<b>15.0%</b>	\$2.63	\$2.73	\$2.84	\$2.94	\$3.06	\$3.17
	<b>16.0%</b>	\$2.81	\$2.91	\$3.03	\$3.14	\$3.26	\$3.38

#### Range of Projected 2018 Per Share Franchise Values

		Projected 2018 Per Share Earnings Power					
		\$ 2.00	\$ 2.25	\$ 2.50	\$ 2.75	\$ 3.00	\$ 3.25
<b>Range of 2018 P/E Multiples</b>	<b>10.0x</b>	\$ 20.00	\$ 22.50	\$ 25.00	\$ 27.50	\$ 30.00	\$ 32.50
	<b>11.0x</b>	\$ 22.00	\$ 24.75	\$ 27.50	\$ 30.25	\$ 33.00	\$ 35.75
	<b>12.0x</b>	\$ 24.00	\$ 27.00	\$ 30.00	\$ 33.00	\$ 36.00	\$ 39.00
	<b>13.0x</b>	\$ 26.00	\$ 29.25	\$ 32.50	\$ 35.75	\$ 39.00	\$ 42.25
	<b>14.0x</b>	\$ 28.00	\$ 31.50	\$ 35.00	\$ 38.50	\$ 42.00	\$ 45.50

Another interesting way to think about Bank of America is as a collection of individually great franchises. The most obvious example is the private wealth and asset management business of Merrill Lynch. There is a Consumer and Business Banking business in addition to the Global Banking and Global Markets businesses. We have talked about a normalized 12x earnings multiple for Bank of America. But when thinking about the individual businesses, several would likely be valued higher on a standalone basis. The most obvious example would be the largely recurring revenue streams from the private wealth and asset management businesses which would likely carry a much higher value than the whole if it was a standalone business. The point is not to create a traditional sum of the parts valuation as there is value in the breadth and scope of what the full Bank of America can offer. It is rather to point that the entirety of the business is not a volatile trading business. In fact, most of the business and revenue streams would be better described as largely recurring and even mundane. This is not so apparent today with the surrounding clouds of large litigation charges, low rates, increased regulation and mortgage headwinds but these sources of higher value will eventually be seen. And they may be seen when all the earnings headwinds we have discussed have turned to tailwinds yielding even more upside than we have described.

## **Who's Playing the Long Game?**

What dynamics can give rise to the above average return potential we see? Our driving advantage is an ability to look years rather than quarters into the future. Many view the banks as stuck in a low activity, hyper regulated, hyper litigated, ultra-low rate environment. And while that certainly holds true today, we must ask what the longer term holds. Is it reasonable to assume when thinking out three to five years or even longer that many of the headwinds in the business will abate and that there may actually be tailwinds in parts of the business? Will the banking business be forever stuck in low gear?

Most choose not to look this far forward and remain stuck in what the business has been in recent years since the financial crisis. This creates our opportunity.

I do not expect a return to the 30+% returns on equity that were generated by many large financial institutions but I also find it reasonable to consider that the management teams and shareholders will demand higher levels of returns than are being posted today. An improving environment may come to the collective aid and forestall dramatic changes to the business, but over time, shareholders will demand appropriate levels of return so either the environment or the business will have to change.

What remains in any range of scenarios is a foundation of value in a strong deposit franchise that generates ultra-low cost and highly competitive funding (a must for long term success in the banking business), substantially higher levels of capital and liquidity and franchises that have historically proven to generate substantial earnings. It is impossible to know when those factors will coalesce into higher stock prices but I don't find it reasonable to believe that Bank of America will trade substantially below book value forever. It does however take a willingness to look beyond the next few quarters to see greater value.

As has been shown, there are many paths to determining a fair price for Bank of America and none can be done with perfect precision which is why we have spoken of a number of different methods and outcomes. With that in mind, all of the above valuation scenarios allow for a wide margin of safety with significant upside given today's \$16 price.

And while Bank of America has significant earnings power, those earnings will be lumpy and thus difficult for more short sighted investors. For those with a long term perspective however, the opportunity to buy Bank of America at today's prices remains unique.

## **What is the Potential?**

The common shares of Bank of America offer significant opportunity with a wide margin of safety. Our current \$24 estimate of intrinsic value represents substantial upside over today's stock price of \$16. The high levels of capital and liquidity along with its latent earnings power add to our margin of safety and provide for the foundation of a strong investment opportunity.

And as we assume that our above estimate of the 2018 per share intrinsic value for Bank of America is \$33, it becomes immediately obvious the return potential with the warrants is quite high. As I mentioned earlier, I prefer the Class A warrants over the Class B warrants. The bulk

of what follows describes the opportunity with the Class A warrants but I will then briefly explain my rationale for not investing in the Class B warrants.

Using a recent Class A warrant price of roughly \$6.25 and assuming a slightly declining strike price (potential changes to the strike price and conversion factor to be discussed later), the warrants should move in value towards \$21 as maturity approaches in January 2019.

**Each dollar invested in a warrant today has the potential to become roughly \$3.36 equating to an annualized IRR over the three and a half years exceeding 40%.**

The dividend protection is not a straightforward calculation and is covered in detail below. There are two components to changes associated with dividend payments: (1) a change to the strike price and (2) a change to the conversion factor. The dividend adjustments will not occur until the quarterly dividend exceeds \$0.01 per share.

Beyond that \$0.01 quarterly amount, the strike price will lower and the conversion factor will increase by amounts dependent upon the stock price at the time. The general direction allows that higher stock prices yield lesser changes and lower stock prices yield greater changes.

The actual formula and related terms for any changes to the strike price and conversion are summarized below. These and other terms related to the warrants are also covered in the prospectus of the warrants which should also be read before considering any investment.

*Under the terms of the warrants, the Exercise Price of the warrants (as defined in the warrants) may be reduced as of the record date for each quarterly dividend declared in an amount above \$0.01 per share. The new Exercise Price will be calculated by multiplying the current Exercise Price by the quotient of:*

- the last reported sale price of the Firm's common stock on the New York Stock Exchange on a determination date (which is expected to be three business days before the record date), minus the difference between the amount of the declared dividend and \$0.01 per share; divided by*
- the same last reported sale price of the Firm's common stock.*

*In addition, the Warrant Share Number of each warrant (as defined in the warrants) may be increased as of the record date for each quarterly dividend declared in an amount above \$0.01 per share. The new Warrant Share Number will be calculated by multiplying the current Warrant Share Number by the quotient of:*

- the current Exercise Price of the warrants; divided by*
- the new Exercise Price determined as described above.*

*The above calculations will be made with respect to the Exercise Price and the Warrant Share Number for each quarter for which a quarterly dividend is declared in an amount above \$0.01 per share. The calculations will be made to the nearest 1/10th of a cent or to the nearest 1/100th of a share. No adjustment of less than \$0.01 will be made to the Exercise Price, and no adjustment of less than 1/10th of a share will be made to the Warrant Share Number, but certain amounts below these adjustment thresholds will be carried forward into any subsequent adjustments, or upon the exercise of a warrant if that occurs earlier.*

Bank of America has thus far paid two quarterly dividends in excess of \$0.01 per share causing two downward revisions to the strike price. In each case, the quarterly dividend was \$0.05 per share, \$0.04 above the threshold. For the dividend with a record date of 9/5/14, the strike price was lowered by \$0.033 to \$13.267 as calculated by the formula described above. For the dividend with a record date of 12/5/14, the strike price was further lowered by \$0.031 to



\$13.236. We should expect the strike price to continue to move lower between now and maturity in January 2019, increasing the return potential investing in the warrants.

There has not yet been an upward revision in the Warrant Share Number.

As described earlier, the Class B warrants have a strike price of \$30.79 and mature in October 2018. They are currently priced around \$0.35. At an expected end of 2018 share price of \$33, there is not a material return advantage for the Class B warrants relative to the Class A Warrants and the downside is much more significant as any share price in late 2018 below \$31.44 (strike of \$30.79 plus current warrant price of \$0.35) would result in a permanent loss of capital. In contrast, the breakeven price on the Class A warrants is roughly \$19.23 and will move down through time as the strike price decreases. Given our estimate of current Bank of America value of \$24 per share moving to \$33 by the end of 2018, we have confidence in the risk reward ratio for the Class A warrants as they extend out to January 2019.

While not believing there is enough margin of safety to make the Class B warrants worthy of investment, I will paint a scenario that could make them attractive. Earlier, we talked about a tangible book value per share at year end 2018 of \$19.63 assuming an 8% growth rate from year end 2014. There have been many periods through time where large banks have traded in excess of 2x tangible book value. At 2x tangible book value, Bank of America's share price would be \$39.26. This level of share price towards the end of 2018 would yield substantial returns for the common shares and the Class A warrants. The Class B warrants however would yield astronomical returns in that scenario. I would also point out as mentioned earlier that large banks have not just traded above 2x tangible book but actually above 2x book value. With 2014 year end book value at \$21.32 that would imply a current share price above \$40. Now, those times of trading in excess of 2x book or tangible book value were times of much higher returns on equity than today. Could those times return? It is possible but many things would have to change for the positive in what is a reasonably short period of time (a little less than four years at this point). All of which is to say the Class B warrants do not fit our investment parameters. Too many things have to go right in too short a period of time.

## **Downside Scenarios**

The most extreme downside scenario for any company but particularly for a leveraged institution is losses that exceed accumulated equity levels causing a permanent loss of capital. While this has occurred for large and small financial institutions (many small lenders, Lehman Brothers, etc.), the conditions leading to those problems are much less prevalent today. Most importantly, the substantially higher levels of both capital and liquidity provide a much wider margin of safety for the business than has existed in the past.

In addition to the much higher levels of capital and liquidity, Bank of America and other large financial institutions are much less reliant on short term funding. Given how problems can quickly move from one institution to another in the financial services industry, the added capital and liquidity and reduction in short term funding on a system wide basis serve to better protect Bank of America along with the financial system more broadly.

Bank of America (and all other large banks and financial institutions) are much more heavily regulated than in recent memory. While this has certainly slowed their path to higher returns, it also serves as another check on overly aggressive behavior. Large banks are incredibly complex and it is impossible for an outsider to know the nuances of each loan that is made but

the heightened scrutiny of bank balance sheets and the more conservative lending practices bring greater confidence in the durability of these businesses, including Bank of America.

It is hard to know exactly when Bank of America will return to a more normalized level of earnings relative to the size of its franchises. A much longer path to normalization may be hard for investors to stomach. We however have as much patience as is needed assuming the value of the franchise (as distinct from current reported earnings) continues to expand. So while the long path may not be appropriate for some, the long path works just fine for us. It is important to note however that the warrants do not have the benefit of indefinite time and more value needs to be realized inside of the maturity window ending in January 2019.

It is also important to note the share price of Bank of America remains well below book value and not that much higher than tangible book value. These more conservative measures of worth, which for the most part do not account for the enduring value of the company's various franchises, serve as a floor to value.

### **Questions and Risks:**

The questions and risks with a large money center bank can be miles long. In that regard, I would point you to their filings which detail and capture many of the risks inherent in their business (importantly, you should not invest without fully studying their business and SEC filings including Risk Factors, footnotes, etc.). Interestingly, you can also capture some of the risks in the banks simply by reading the paper as they are often in the headlines for legal issues, regulatory issues, trading losses, and on and on. My more substantive point is that a bank is a highly leveraged business (even if less so today than in recent memory) and thus is much more prone to risk than buying a stable cash generator like a Coca Cola or Proctor and Gamble. Banks require a truly deep dive and a larger margin of safety before investing.

Beyond what is generally discussed above, I do want to point out risks not generally discussed in regards to the large money center banks including Bank of America.

**Cybersecurity Risk:** It is hard to imagine what would happen if we collectively, and the banking system in particular, could not access all the information that is stored electronically. A truly disruptive cyber-attack that would stop banks, companies and individuals from getting their money would create real panic and it is hard to imagine the knock on effects from such an event. We "see" our assets electronically and not being able to "see" them would affect the psyche of the world in untold and unknown ways. Most banks have systems and backups in place but the risk remains. This risk would not be isolated to the banking industry but the long term effects could be enormous.

**Master Netting Agreements:** A master netting agreement is an agreement between two counterparties who have multiple derivative contracts with each other that provides for the net settlements of all contracts, as well as cash collateral, through single payment, in a single currency, in the event of default or termination of any one contract. Bank of America has trillions of dollars of notional derivatives outstanding which get netted down through master netting agreements and collateral agreements. The netting and collateral agreements help manage the notional derivative exposure in a significant manner but such agreements have not been materially tested in times of great market turmoil.

**Incremental Risks Specific to the Warrants:** There are two predominant sources of risk associated with the BAC warrants: (1) risks inherent to Bank of America and (2) timing risk. The risks inherent to Bank of America are discussed throughout their SEC filings. There is however an added risk with the warrants. As described above, the Class A warrants mature in January 2019. So, the underlying thesis on the company Bank of America must be correct but importantly the growth and revaluation must come to fruition before maturity or the warrants will not capture the return potential described above and could in fact impart permanent losses at maturity. In effect, the dynamics described pertaining to the common shares of BAC could end up being correct but if the revaluation does not occur until after the warrant maturity, the warrants will expire and an investment in those warrants will be lost. By way of example, if BAC trades at or near \$16 per share through 2018 only to rocket higher in mid 2019 well above \$30 per share, the warrants could expire with a realized loss (while the thesis of an undervalued Bank of America would hold true assuming common shares are held through this theoretical 2019 move).

### **Conclusion:**

Many investors have continued to avoid the large money center banks and their valuations reflect such avoidance, with Bank of America even more so than the others. Do these low valuations reflect the turbulences of yesterday, or tomorrow? I would argue rear view mirror assessment on the headline inducing challenges facing Bank of America is too prevalent and does not properly account for the earnings power of the franchise.

Bank of America currently generates a tremendous level of core earnings power largely masked by legacy issues and a subpar operating environment set against a heavily discounted valuation all with significant upside earnings potential as the banking environment normalizes. Bank of America is great value today and even greater as we look forward.

**World class company. World class management. Discounted valuation.**

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## **Appendix A – Summary of March 2015 Dodd-Frank Act Stress Test (DFAST) Results**

On March 5, 2015, the Federal Reserve released the results of its most recent annual stress test for 31 of the largest US banks. The test aims to ensure the largest banks have enough capital and liquidity to withstand severe recessions. A summary of the key assumptions for this year's test are below:

- Maximum quarterly (annualized) rate of GDP decline of 6.1%
- Peak unemployment rate of 10.1%
- Maximum home price decline of 25.7%
- Maximum equity market decline of 57.9%
- Trough ten year US Treasury yield of 0.9%

Additionally, severe instantaneous global market shocks were included and focused on four key areas: government and sovereign yield curves, emerging markets sovereigns and corporates, Euro-area credit-themed crisis, and other asset classes.

The stress test measures changes in capital and leverage levels over the course of a nine quarter period experiencing the ranges of stresses above. In the severely adverse scenarios contemplated for the test, Bank of America maintains capital above required regulatory minimums in all baseline and stress scenarios under both Basel I and Basel III rules.

The two metrics most focused upon in the testing are: Common Equity Tier I Capital Ratio (often called CET1) and Tier I Leverage Ratio.

For the Common Equity Tier I Capital Ratio, the bank began the hypothetical test period using its actual ratio at 9/30/14 of 12.0%. At the end of the hypothetical nine quarter stress on 12/31/16, Bank of America has a CET1 ratio of 8.1%, well above the required 5% minimum. The CET1 ratio hits a minimum ratio of 7.8% during the nine quarter period.

For the Tier I Leverage, ratio, the bank began 9/30/14 at a ratio of 7.9%. The ratio moved down to 6.1% at the end of the nine quarter period on 12/13/16 while hitting a minimum ratio of 5.9% during the hypothetical test period. As can be seen, the ratio stayed well above the Federal Reserve's minimum ratio of 4% throughout the duration of the stress period.

It should be noted the ratios above are derived from internal Bank of America testing. The Federal Reserve also conducts their own stress testing using the same assumptions and arrives at different ratio levels. The Federal Reserve's testing shows Bank of America's CET1 ratio hitting a minimum of 7.1% which is above the 7.8% as calculated by BAC but still well above required minimum levels. Similarly, the Federal Reserve calculated a minimum leverage ratio of 5.1%, which is lower compared to BAC's internal calculation of 5.9% but still well above required levels. Each of the 31 banks tested by the Fed saw discrepancies between Federal Reserve and internal calculations with internal calculations generally showing better results. Of the five

largest banks (BAC, JPM, C, GS, MS), Bank of America's calculations were closest to those of the Federal Reserve.

As described in the investment summary, problems with one or more banks can migrate and affect others in times of stress. It is thus important for not only Bank of America to perform well under stress scenarios, but also for the other large banks to successfully withstand a stressed environment. The nation's largest banks covered by the stress test performed very well. In aggregate, the 31 banks showed a minimum CET1 ratio of 8.2% through the hypothetical stress period which was well above the aggregate ratio of 5.5% measured in early 2009 (another period of high stress) and well above the Fed's 5% required minimum. ***In short, the banking system broadly, and Bank of America specifically, are well positioned with much higher levels of capital and liquidity to withstand future severe recessions and economic shocks.***

The Comprehensive Capital Analysis and Review (CCAR) comprises the second step of the stress tests and those results are released the week following the release of the quantitative measures discussed above. CCAR has two main components: (1) an assessment of the qualitative measures a bank has in place for risk management and (2) an approval or rejection of a bank's capital plan. While the Federal Reserve is requesting improvements in certain of Bank of America's capital planning processes, the Federal Reserve conditionally approved the bank's capital request which includes a continued \$0.05 dividend per quarter along with a \$4 billion share repurchase program. The dividend level remains the same from the prior year's process while the repurchase is an increase in capital return as Bank of America was not previously permitted to buy back shares. An improvement plan to accommodate the Fed's concerns must be submitted and approved by September 30, 2015 in order to continue with its conditionally approved capital plan.

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