

### ANNUAL LETTER

MAKENA CAPITAL MANAGEMENT



Dear Makena Community,

Every April, we gather our thoughts and write our Annual Letter for the prior calendar year. We always take the opportunity to use case studies – current and historical – to help illustrate our investment philosophy and approach to investing. This letter follows the same script but given the magnitude of the crisis unfolding in 2020, we have expanded the write-up to include an update on recent market events. Please note that 2019 portfolio and performance information has been redacted.

The modest 16 bps gain on global equities the final day of 2019 concluded an otherwise exuberant year in risk assets. A phase-one China trade deal, a positive U.K. election result, three Federal Reserve rate cuts, lower bond yields and a growing belief that the global economy would not roll over into a recession all helped fuel the market surge. A lot has changed since the end of the year. Although the market continued to reach new all-time highs in February, the highly contagious coronavirus (COVID-19) that first arose in China spread around the world, leading to wide-spread stay-athome orders and the collapse of global economic activity. The economic and earnings news is bleak, with economists and analysts trying to outdo each other with gloomy predictions of unemployment, GDP contraction, and corporate profits. The 11-year bull-market and economic boom is over. We are likely already in a recession with some commentators worrying about the risk of another depression. The IMF said it will be the worst global recession since the Great Depression of the 1930s. The S&P 500 reached its all-time closing high of 3,386 on February 19, but quickly collapsed under the weight of the pandemic's uncertainty, losing nearly 34% over the following 33 days. It was the quickest bear market in history, coming on the heels of the longest bull market in history. Since this near-term March 23 low, the S&P 500 rebounded an astounding 27% over the following 32 days!

Should we buy the dip or sell the rip? Did the market put in a bottom in mid-March or will the market retest these lows in May or the succeeding months when the economic and earnings damage from COVID-19 become clearer? Will recovery from the COVID-19 induced lockdown and economic crisis be V-shaped, U-shaped, W-shaped or L-shaped? Investors ask these questions as they seek guidance on how to respond to the unprecedented harm inflicted by the virus and the accompanying cessation in global economic activity. How do we respond to these questions? By many measures, March was one of the most volatile months on record. The market volatility is testing many investors' core principles and discipline. We have written before about the importance of maintaining a long-term investment focus and avoiding the temptation of overreacting to short-term news and market moves. Does that principle still hold or are we facing a generational event which requires a new playbook? A respected investment fiduciary commented to me recently that in his 50-year investment career he has never seen anything like this before and that maybe this time it really is different.

"History doesn't repeat itself, but it often rhymes." - Mark Twain

Although there is no historic precedent or prior playbook for investing through a global pandemic and economic lockdown, this letter examines lessons from history to provide some guidance for us during these challenging times.

#### Same Objective, Approach and Philosophy

As we laid out in our 2017 Annual Letter and have reiterated in Annual Letters since, our investment objective, approach and philosophy remain unchanged:

Our investment objective is to provide long-term returns which will support a 5% annual payout while preserving and growing the real value of the portfolio over a long horizon. Reaching these long-term goals requires being compensated for taking certain risks, which include market, liquidity and idiosyncratic risks.

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Our edge is being a long-term partner with extraordinary investment managers, and maintaining the discipline needed to be a long-term investor in a macro and short-term-focused market environment. Our philosophy revolves around six core beliefs set forth and described in detail in our year-end 2017 letter:

- Maintain a Long-Term Focus
- Play to our Strength
- Understand that Most Markets are Efficient: Focus Time, Effort and Capital on Less Efficient Markets
- Maintain Balanced Diversification
- Maintain a Value Discipline: Price Matters
- People Matter

Everything we do remains consistent with these core beliefs. Crises should challenge our investment theses and assumptions, but not our process or our core beliefs.

### Market Environment: COVID-19 and Q1 2020 Update

Equity markets remained strong in early 2020. The S&P 500 reached an all-time high on February 19, 2020, after a nearly 11-year bull market. On February 19<sup>th</sup> there were also 75,700 confirmed cases of COVID-19 globally, only 1,124 of which were outside of China. There were only 15 cases in the United States. For the vast majority of the world's 7.8 billion people, life still felt normal.<sup>1</sup>

And then, very quickly, life changed. It changed for the entire world. The rapid spread of COVID-19 across the globe has halted daily life and commerce while shelter-in-place and mandatory quarantine orders kept people isolated in their homes to limit the spread of this deadly virus. There are now (as of April 30) 3.3 million cases globally, a stunning increase in two months. The U.S. now has over 1 million cases and over 60,000 deaths, surpassing the worst locations in Asia and Europe. There is a glimmer of good news. Our isolation orders appear to be flattening the curve; fewer people are dying and becoming ill each day. Governments have begun debating and planning for the gradual reopening of their economies.

The market reaction to a COVID-19-induced economic coma has been severe. Markets quickly entered bear market territory in mid-March, just weeks after posting all-time highs. There was meaningful panic and forced selling in mid to late March. Global equities (MSCI ACWI) pulled back 32% at their low, and finished Q1-21.4%. The 10-year Treasury dropped from 1.87% in early January to an all-time low of 0.57% on March 9th, and it currently stands at 0.63% (as of April 30). S&P 500 implied volatility surpassed its GFC peak, as the VIX closed at 82.7 on March 16, edging out the prior all-time closing high of 80.9 on November 20, 2008. Investment grade bond spreads widened to ~400 bps from just 100 bps in January, which contrasts to the 480 bps spreads reached during the GFC. Even municipal bond spreads widened to nearly 200 bps as investors feared state and local governments would feel the pressure of COVID-19's impact; muni bonds were in line with the 10-year Treasury in January. Economic data are now telling us what the markets foresaw in late February and early March. Jobless claims over the past six weeks (as of April 30) have soared to over 30 million, with economists predicting the unemployment rate could hit 20% on the back of February's 3.5%, a 50-year low. A Q2 U.S. GDP forecasts hover around -30% while JP Morgan is a slight outlier with a -40% estimate, and

<sup>&</sup>lt;sup>1</sup> https://www.worldometers.info/

<sup>&</sup>lt;sup>2</sup> Source: Bloomberg

https://www.wsj.com/articles/u-s-surge-in-unemployment-claims-expected-to-continue-11586424605

<sup>&</sup>lt;sup>4</sup> https://www.wsj.com/articles/a-second-round-of-coronavirus-layoffs-has-begun-no-one-is-safe-11586872387

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PIMCO projects a 5% contraction in 2020 GDP.<sup>5</sup> Even more telling, the International Monetary Fund projects the global economy will shrink by 3% in 2020, an unprecedented figure as the global economy shrunk by only 0.1% in 2009.<sup>6</sup>

The macroeconomic picture is dire, potentially the worst since the Great Depression. Focusing on certain industries paints an even dimmer picture. For example, airline and hotels indexes shed 51% and 59% of their value, respectively! TSA screenings were down 93% in March, and both Boeing and Airbus have been closing factories to protect workers and pare costs. The decline in airline travel is orders of magnitude greater than the decline in air travel during the GFC; pre-GFC levels of travel were not regained until 2013. Industry experts forecast a loss of up to 750,000 airline jobs from the COVID-19 pandemic.<sup>8</sup>

A particularly unlucky victim of COVID-19 is the global energy industry. Just as oil demand started to freefall (global demand is down approximately 30%), OPEC+ discussions to curb supply failed. Rational markets match supply with demand. The oil industry experienced higher supply and lower demand. The result is that a barrel of oil (WTI) traded for \$61/bbl. at the beginning of 2020, but today, oil is now trading below \$20/bbl. Attempting to remedy the supply side of the equation, the U.S. and OPEC+ agreed on April 12th to cut global supply by 9.7 million barrels per day.9 However, with demand down 30% (from a starting point of roughly 100 million barrels per day of consumption), the math still doesn't work; the market will still be oversupplied by 20 million barrels of oil per day. On April 20th, the oversupply caused the WTI May contract to trade into negative territory for the first time in history, closing the trading day at -\$37.63/bbl. Investors who were long the May contract were fearful that if they took delivery when the contract expired (the May contract expired on Tuesday, April 21st), there would be nowhere to store the oil with storage facilities at maximum capacity; the negative price implied May contract holders were "paying" to avoid taking delivery of oil. This supply/demand mismatch will likely cause extreme volatility in oil prices for the foreseeable future. In response, companies - many of which are approaching bankruptcy - are taking drastic measures. Large producers have announced spending cuts totaling \$50 billion. The number of rigs in the U.S. has declined from 800 a month ago to 600. Several producers are plugging wells since they are simply not profitable at these prices. <sup>10</sup> In an industry that directly and indirectly employs 10 million people in the U.S., layoffs will be painfully high. Those jobs will only return when demand returns; production cuts may prevent insolvency for some companies, but jobs will still be lost.

Competing with the extraordinary impact of the pandemic has been the response from governments and central banks to support their economies and their constituents' livelihoods. The speed and size of the policy responses across the globe have been unprecedented relative to other past economic crises (including the Great Depression and the GFC). For example, actions taken within the U.S. include:

- Federal Reserve package worth \$2.3 trillion<sup>11</sup>
  - Supplying liquidity to the Small Business Administration's Paycheck Protection Program: \$349 billion
  - Municipal liquidity facility for short-term state and local government debt: \$500 billion
  - o Main Street lending program for companies up to 10 thousand employees or \$2.5 billion in annual revenue: \$600 billion
  - Corporate credit facilities: \$850 billion
  - Two emergency rate cuts: target rate now stands at 0%
  - Lowering reserve requirement of banks to 0%
- Federal Government Economic Relief package worth \$2 trillion signed on March 27<sup>12</sup>
  - Direct deposit checks to people with <\$75 thousand annual income</li>

 $<sup>^{5} \, \</sup>underline{\text{https://www.forbes.com/sites/sergeiklebnikov/2020/04/10/jpmorgan-forecasts-20-unemployment-and-40-hit-to-second-quarter-gdp/<math>\#2675b2344489$ }

<sup>6</sup> https://www.wsj.com/articles/coronavirus-afflicted-global-economy-is-almost-certainly-in-recession-11586867402

<sup>&</sup>lt;sup>7</sup> Measured by S&P Airlines and S&P Hotels indexes during Q1 2020.

<sup>8</sup> https://www.cnn.com/2020/04/01/business/airline-industry-outlook/index.html

<sup>&</sup>lt;sup>9</sup> https://www.nytimes.com/2020/04/13/business/economy/coronavirus-oil-opec-trump.html

<sup>10</sup> https://www.wsj.com/articles/north-americas-oil-industry-is-shutting-off-the-spigot-11586770200?mod=hp\_lead\_pos5

<sup>11</sup> https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm

<sup>12</sup> http://www.crfb.org/blogs/whats-2-trillion-coronavirus-relief-package

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- \$1,200/adult and \$500/child
- Increase unemployment benefits (now including "gig" workers)
- Suspended interest on student loans
- o Hospitals: \$100 billion
- o Airlines: \$62 billion
- o State and local governments: \$150 billion
- National security firms: \$17 billion
- No cash for oil industry or cruise lines
- A follow-up \$484 billion COVID relief bill signed on April 24, provides additional support for small businesses, hospitals and virus testing.

Additional legislation to provide financial support for state and local governments and possibly infrastructure spending is being debated as this letter is being written. Markets have responded well to these packages, in addition to the reports of countries and states successfully flattening the curve. The S&P 500 is -11.7% year-to-date through April  $24^{th}$ , off its year-to-date low of -30.4% on March  $23^{rd}$ . How effective will these packages be? How smoothly will they be implemented? What "shape" recovery should we expect? We still do not know. Uncertainty around both the duration and severity of this economic crisis looms. However, governments have signaled to investors that they are willing to do whatever it takes to prevent the worst outcomes.

#### Makena Response to COVID-19

How has Makena responded to these extraordinary events? The short answer: we have remained calm, focused, and disciplined, and we have maintained our investment process despite the challenges of working remotely. Aside from replacing in-person conversations with video conferencing and phone calls, our team has seamlessly transitioned to a work-from-home environment; we are in constant communication with our managers and investors; our Investment and Risk Committees have been meeting on a weekly basis; investment and business processes are uninterrupted. The game plan for any market drawdown is for the team to spend even more time than usual talking to our managers to determine what is happening at the underlying portfolio company level.

Given the unprecedented and unpredictable nature of the current crisis we will maintain enough dry powder to add more capital to managers should we see sustained bouts of market volatility. Although other investors debate whether March was the market low or if there is another leg down, we understand that we do not have an edge at predicting market bottoms.

### History Rhymes?

A common refrain for investors during this pandemic is, "There is no playbook." How do we get comfortable rebalancing back into risk assets? Don't we worry that it will take longer than expected to reopen economies around the world or that a second more deadly wave of the virus will return in the fall like it did during the Spanish Flu in 1918, or that a vaccine and treatment will take longer than expected? YES! We also worry that the pandemic could help fuel: the end of globalization, the escalation of tensions between China and the U.S., the growth of populism, the growth of government intrusion in economies, the politization of the Federal Reserve, short-term deflation and depression risk, and long-term inflation risk. We are also concerned when one highly regarded investor, Paul Singer, is calling for a further 50% market decline and that another, Warren Buffett, has been conspicuously silent during this crisis, in contrast to other downturns. How does history help us? As we wrote in March: "although every 'black swan' event is different, the market reactions are often similar." The market panic in March felt like the panic at the height of the GFC on October 15, 2008. Although the market declined another 25% from that date through the March 9, 2009 low, the return for long-term investors was exceptional. The S&P 500 returned over 20% for the one-year period following the October 15, 2008 close.

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To help address the question of whether we can find a better entry point to "time" our rebalancing, let's circle back to fundamental definitions of risk. At its most basic level, risk is a random undesirable outcome. For investors, this means achieving returns that fail to meet their objectives. We define market risk as the short-term volatility of a portfolio introduced by our exposure to equities and other risk assets. This is an important risk for investors with a short time horizon, who are concerned about short-term losses. We can reduce this risk through diversification, but we would still have an exposure or Beta to equities' short-term volatility. We are willing to bear market risk if we are compensated in the form of higher returns from owning equities rather than less volatile cash and bonds. In addition to bearing and managing these short-term risks introduced by market volatility, we define long-term risk as the probability that the real value of the portfolio declines in the long run. There is a tension between short and long-term risk. For example, we could eliminate short-term market risk by investing 100% of the portfolio in treasury bills. However, this allocation would increase the portfolio's long-term risk given the high probability that the real value of the portfolio will be lower in the long run (e.g., after 10 years), especially today when the current real return on cash and bonds is negative.

Long-term risk of a portfolio should be a more important concern than short-term market risk for a long-term-focused investor. Trying to time our rebalancing, when we have little edge at predicting negative market-moving news, would substantially increase our long-term risk over time. It would lead to being perennially under-invested in equities, while we wait on the sidelines to get the all-clear signal about the virus, economy or any other negative news that will roil markets. Market drawdowns or volatility are always associated with scary news events, which include wars, terrorist attacks, pandemics, political instability, financial panics, and economic downturns. These shocks all harm corporate profits and investor sentiment. These negative events are what create market risk or volatility, which allows investors to earn higher long-term returns or an "equity risk premium" (ERP) from owning equities instead of cash or bonds. The ERP is not constant over time. There are times when investors receive relatively more compensation for bearing market risk and other times when the compensation is low or nonexistent. Although we don't use this as a market-timing tool, it is useful to complement our bottom-up feedback from managers about underlying companies with our estimate of forward long-term ERP when we approach rebalancing decisions.

The ERP is not directly observed in the market but can be inferred from stock valuations and real bond yields. We described how we estimate the ERP in our 2018 Annual Letter, by subtracting the real bond yield (10-year treasury yield less expected inflation) from the stock market's earnings yield (E/P), using the inverse of the conservative Shiller CAPE (cyclically adjusted P/E ratio). CAPE overcomes the weakness of one-year forward or trailing P/E multiples, especially in this environment when many companies will have little to no earnings over the next year. CAPE is a trailing 10-year inflation adjusted average, which smooths earnings over a full business cycle. Doing short-term market predictions using such a valuation-based tool is not useful for market timing, but its accuracy improves over long-term horizons, like 10 years. Although there are still many other factors that impact returns over a 10-year time frame, we have found this CAPE-based ERP prediction tool to be the most accurate. The projected ERP at the beginning of April was +5%, increasing from a year-end 2019 level of over +3%, partly due to the lower stock prices, but also driven by the dramatic decrease in real bond yields, which are currently negative. This was an above average ERP. Looking at data from 1910, rolling realized 10-year ERPs ranged from a low of -8.6% to a high of +18.5% per annum, with a median of +4.4% per annum. 13 To test the accuracy of projected ERPs for U.S. stocks using our approach, we compared projections to the realized ERPs over rolling 10-years for 100 years of monthly data. There is a positive statistically significant relationship between the projected ERP and the subsequent realized 10-year ERP (more detail on these results are shown in Appendix 2).14

In addition to our statistical analysis of the entire data set, it is useful to look at specific case studies. We examine the three largest economic declines over the last century. We already mentioned the example of October 2008, during the most volatile phase of the GFC. It turns out the projected ERP at that time was over +6%, and that the realized ERP over the following 10 years was over +9%. Although the market declined much further from October through March 2009, it was a prudent time to rebalance for a long-term investor. The second case study is the biggest market drawdown, which was during the Great Depression. After a nine-year bull market, U.S. stocks hit an all-time high on September 16, 1929. The projected ERP at the market peak was -1%. Equity valuations were stretched relative to the returns available

<sup>13</sup> Online Data Robert Shiller: http://www.econ.vale.edu/~shiller/data.htm

<sup>&</sup>lt;sup>14</sup> Actual ERP = 2.1% +0.5\*Projected ERP with a T-stat of 25.9, which is 2.4 after an adjustment for the overlapping data.

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on bonds. The equity market bubble burst in October, with the largest drawdowns being on Black Monday and Tuesday, October 28 and 29. Market volatility continued during the fall, reaching an interim low on November 13, which was a 45% decline from the prior all-time high. Should an investor have rebalanced at this time? Although the market drop created better valuations, the ERP only increased to +1%. This meager extra return for taking risk should have given an investor pause. The S&P fell another 75% until hitting its Great Depression low in July of 1932, a full eight months prior to the Depression's trough. The final example from history is the 1981 to 1982 recession that was brought on by Paul Volcker's aggressive policy actions to rein in double-digit inflation. The Federal Funds rate was increased to over 20% by the end of 1980. This led to the deepest recession since the 1930s, with unemployment hitting 10.8% at the end of 1982, exceeding the highest rate reached during the GFC. The S&P 500 lost 28% from November 1980 to August 1982. Goldman Sachs recently noted the parallels between this "Volcker Recession" and the current crisis as they both were man-made economic contractions, with policy makers inflicting short-term pain to cure the disease of inflation or a virus. Using the projected ERP as a guide, it was +10% in August 1982. The actual ERP over the following 10 years was +5% per annum, during a period when bond returns were quite strong. It would have been a good time to rebalance.

The projected ERP would have been a useful tool for investors during these three distressed markets in the past. It is above the median ERP over the past 100 years, and the predictive ability of the projected ERP suggests we are being well compensated for bearing risk. It is never easy to rebalance when the news is dire and other investors are panicking, but combining this top down valuation tool with bottom-up insights from our managers help improve the decision-making process. The current risk of a severe and lingering economic contraction has been offset by powerful policy responses. The tug of war between these two forces will lead to continued volatility over the succeeding months. It is quite possible the recovery is a W or several W's being strung together.

#### **Makena Foundation**

Giving back to the community is always a Makena priority, in ordinary times as well as the current extraordinary environment. Makena employees regularly volunteer with organizations that make a material impact on the lives of our local community members in need, while the firm matches employee charitable donations dollar for dollar. To further these efforts, in 2019, we established the Makena Foundation for the purposes of directing charitable giving on behalf of the firm and to direct firm resources, including volunteerism, toward charitable organizations serving the San Francisco Bay Area and beyond. Considering the extraordinary hardship being inflicted by the pandemic, Makena has pledged to help support a variety of causes, including Samaritan House of San Mateo and Second Harvest Food Bank.

### **Concluding Thought**

I want to conclude with an additional comment about risk. Some of the largest risk management mistakes stem from having too much confidence in risk estimates and tools that are based on historical data. University of Chicago economist Frank Knight noted the difference between risk and uncertainty in his 1921 book Risk Uncertainty and Profit. He argued that "risk" is the behavior of a random variable that has a known and measurable probability distribution. Alternatively, "uncertainty" is an unpredictable event with an unknown probability distribution, which cannot be estimated. It is Donald Rumsfeld's "unknown unknown." Too much of what we try to estimate as risk - random future investment returns, especially tail events - are actually random events (i.e., uncertainty) that cannot be predicted or modeled. However, this does not mean all attempts to measure variability in returns are completely futile. Instead, we should be sensitive to the degree of precision we ascribe to future risk estimates based on historical financial data and not build models that make too many assumptions. The current pandemic and man-made economic lockdown/contraction are examples of uncertainty. Scientists are still trying to learn about the virus and economists are trying to figure out a roadmap for navigating this lockdown. Backward looking data are of limited value and will not provide a probability distribution of future outcomes. It is important to acknowledge these limitations when we think about investing our portfolio and managing risk. Therefore, our Risk Committee discussions involve a lot of qualitative inputs where we marry the bottom-up with the more top-down quantitative tools. For example, we would

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not solely rely on our ERP model for making rebalancing decisions and we certainly would not use it as a market timing tool.

Another example of managing uncertainty comes from the world of tennis. The Championships, Wimbledon, is the oldest and most prestigious tennis tournament in the world, dating back to 1877. The tournament has been cancelled only 10 times in its history, four years during WWI and six years during WWII. On April 1, the All England Club announced that the 2020 tournament would be cancelled for the first time since 1945, to protect the fans and players from COVID-19. After the announcement, eight-time Wimbledon champion Roger Federer tweeted "Devastated". For the last 17 years, the All England Lawn Tennis Association invested \$2 million each year on pandemic insurance. The insurance policy paid out \$141 million this year to the All England Lawn Tennis Association due to the COVID-19 pandemic, nearly half of the projected \$310 million of revenue from this year's tournament. This "hedge" has allowed the Association to maintain operations and staff during this difficult time. The All England Lawn Tennis Association maintained their long-term discipline, keeping this insurance policy over many years despite the \$2 million annual expense. As a tennis fan, I take comfort in sharing a long-term philosophy with an esteemed institution like Wimbledon, which is 143 years old!

We hope you stay safe and healthy through this health crisis. As always, we are thankful for your trust and support.

Larry Kochard, CIO on behalf of The Partners of Makena Capital Management

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 $<sup>\</sup>frac{15}{\rm https://www.forbes.com/sites/isabeltogoh/2020/04/09/report-wimbledons-organizers-set-for-a-141-million-payout-after-taking-out-pandemic-insurance/\#894b8b329f6f}$ 

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### **Appendix**

Using 1200 monthly data points starting in January 1910, rolling realized 10-year ERPs ranged from a low of -8.6% to a high of +18.5% per annum, with a median of +4.4% per annum. <sup>16</sup> To test the accuracy of using projected ERPs to predict future long-term ERPs of U.S. stocks, we compared projections to the realized ERPs over rolling 10-years for the 100 years of monthly data. There is a positive statistically significant relationship between the projected ERP and the subsequent realized 10-year ERP. We regressed future annualized 10-year ERPs on the projected ERP for every month from January 1910 through December 2009. Results are as follows:

Actual ERP = 2.1% +0.5\* Projected ERP with a T-stat of 25.9, which adjusts down to 2.4 after accounting for the overlapping data.

The correlation between projected and realized ERP is 0.6. The following table also helps show the positive correlation. We split the projected ERPs into quintiles from low to high and compare the medians within each quintile of projected ERPs with the medians for the corresponding actual ERPs. The continuous increase in actual ERPs with rising quintiles of projected ERPs supports this positive relationship. If there were no relationship, the median future ERPs would vary up and down as the projected ERPs increase. The recent projected ERP of +5% annum in March, is within the  $3^{rd}$  quintile, which, combined with the regression suggests the future ERP is also close to +5% per annum.

### **Predictive Ability of Projected ERP**

<b>Quintiles of Projected ERP</b>	Median Projected ERP by Quintile	Median Actual 10-yr. ERP by Quintile
1 – Low	-0.20%	-0.19%
2	+2.07%	+3.36%
3	+3.52%	+4.55%
4	+7.39%	+6.23%
5 – High	+13.24%	+10.15%

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<sup>&</sup>lt;sup>16</sup> Online Data Robert Shiller: <a href="http://www.econ.yale.edu/~shiller/data.htm">http://www.econ.yale.edu/~shiller/data.htm</a>

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