

Some Things We Have Run Across Recently...

The demilitarized zone between North and South Korea has always interested me, not because of the military standoff but because of its ecological history and now, its economic development. The DMZ is not a fence or a Berlin Wall. It is an enormous swath of land, 528 square miles in size. Because there has been virtually no human encroachment for over 60 years, the region is a pristine ecological park with migratory birds and animals flocking to the region. Of course there has to be some tiptoeing going on by the animals since the land is laced with over 800,000 landmines!

Today the region is also becoming an investment hotspot. The asking price for farmland within the zone was \$2 a square foot in February. With just the whiff of peace now, speculators have arrived and the price of land has

doubled or more. No matter the time or the place, Greed and Fear are very much alive in this world, even in the landmined DMZ.

A second news item that caught our attention has to do with Alexa from Amazon (and also Siri, Cortana and Assistant). We use these devices for all sorts of things, to ask about the weather, play music, answer questions. But there is a dark side to all this. Hackers have figured out how to put hidden commands in the music the devices play. The commands are not detectable to the human ear but are detectable to Alexa. So as you are listening to your soft rock or head banging stuff, Alexa is busy transferring money from your account to some Russian bank or opening the front door of your house. Ugh, so much for the joys of Artificial Intelligence.

And a final item deals with serious economics. We are all looking

for the Holy Grail indicator which will predict when economies are going to turn up and when economies are going to turn down. Now *Money Magazine* claims to have come up with the one single simple economic signal - New Home Construction. Home builders are reluctant to begin a project or break ground on a house until they have a buyer. And if they don't have a buyer, this might indicate the economy is in a slowing phase.

So New Housing Starts is what we need to follow. What does the data show today? In February new home construction fell 7% and the most recent figure through April also indicates a decline. So we may be heading towards a slowdown but as they say in life, there are lies, damn lies and statistics. Over the past year new home construction is up 10.5% so perhaps the most recent data is just noise. Caveat emptor, the world is complicated.

Vermont Office: California Office:

431 Pine Street
Ste. 302
Burlington, VT 05402
Ph: 802-658-2668

2225 E. Bayshore Rd.
Ste. 200
Palo Alto, CA 94303
Ph. 650-320-1700



Eric Hanson, Anne Doremus & Julie Won

E-mail:

Eric@hansondoremus.com,
Anne@hansondoremus.com
Julie@hansondoremus.com

www.hansondoremus.com

Hanson & Doremus Investment Management is an investment counsel firm managing portfolios for individuals and institutional clients. The firm also consults with individuals on financial planning and works with self-directed retirement plans on investment options.

©2018 Hanson & Doremus Investment Management

Property Line

Land prices have risen sharply in South Korea's civilian control zone, which runs along the heavily fortified demilitarized zone on the border with North Korea, as relations warm between Seoul and Pyongyang and hopes rise for a broad peace deal.



Source: *The Wall Street Journal*; South Korea Ministry of Environment

Investing is Just Like Gambling With One Big Exception...

If you play long enough in Las Vegas you will eventually lose. The odds are stacked against you. In the stock market the opposite is true. Stock prices are based on corporate earnings and over time corporate earnings go up. Historically they have increased approximately 7% per year over ten-year or more periods. The amount that investors are willing to pay for these earnings (the price-to-earnings ratio) can soar to well over 25 in times of excitement and plummet to under 10 in periods of despair. But if you assume an average P/E of 15 and assume that earnings go up 7% per year, then the long term investor will make money. But there is a big IF here, investors have to stay the course to get this return. This is not as easy as it seems.

This page is based on some observations about gambling from *The Economist* and from Marc Faber's excellent monthly newsletter, *The Gloom, Doom and Boom Report* (June 2018). *The Economist* article notes that although gam-



Source: *The Economist*; Satoshi Kambayashi

bling is a losers bet, experts can make a difference. For instance there is a lot of math involved in gambling which experts use to their advantage. If you roll two dice, there are 36 possible pairs of numbers. There are six ways to get a 7 but only one way to throw either a 2 or a 12. The experts understand this and bet accordingly. But the uneducated can also play smart. They can settle on a basic strategy and then just stick with it. For instance in poker it means choosing in advance which hands you will play and how you will bet them.

As mentioned earlier, investors can take lessons from successful gamblers. All we have to do is adopt a sound basic strategy and

then...stick with it. For instance if you decide that a 60% stock and 40% bond allocation is right for you then just do it, rebalance annually, and stop fretting.

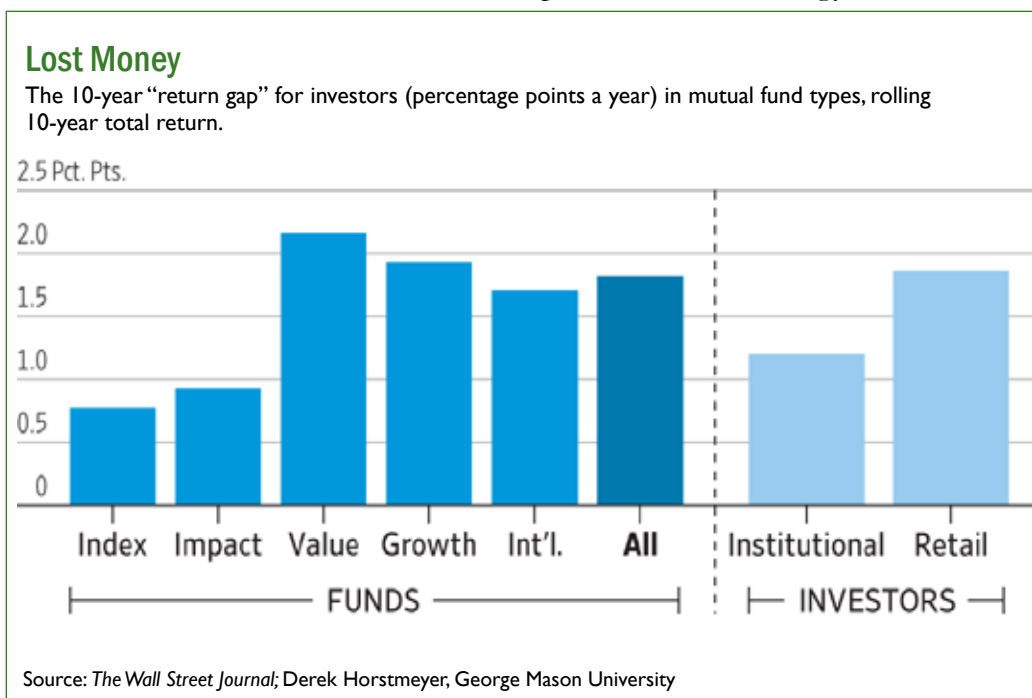
But this takes discipline. In times of rising prices it is easy to get giddy with excitement and boost your stock allocation and vice versa when prices are plummeting it is easy to sell everything to escape the pain.

Marc Faber tells the story of two very successful punters at Hong Kong's Happy Valley Horse Track. Hong Kong is crazy about gambling and in the 1980's and 1990's the bets at the two Hong Kong tracks exceeded all bets placed at all U.S. tracks. Bill Benter and Alan Woods came up with a sophisticated algorithm to determine winners. They were disciplined and stuck to their numbers.

For Faber there are two lessons here. First if you are smart enough (or lucky enough) to come up with a better betting formula your greatest success will be early on. Once others develop their own algorithms the returns get

diluted. Second, you must be disciplined and stick to your strategy.

The chart to the left shows what happens when investors don't stay disciplined. The chart compares the return of mutual funds with the returns that investors in those funds actually earn. Most investors lose between 1½% and 2% per year. Why? Because they fail to stay invested in the fund. They get excited and buy at highs and then turn around and sell at the lows. The moral of this story is to figure out the strategy most appropriate to your needs and then...learn to go sit quietly in your room.



Why we Make Suboptimal Decisions...

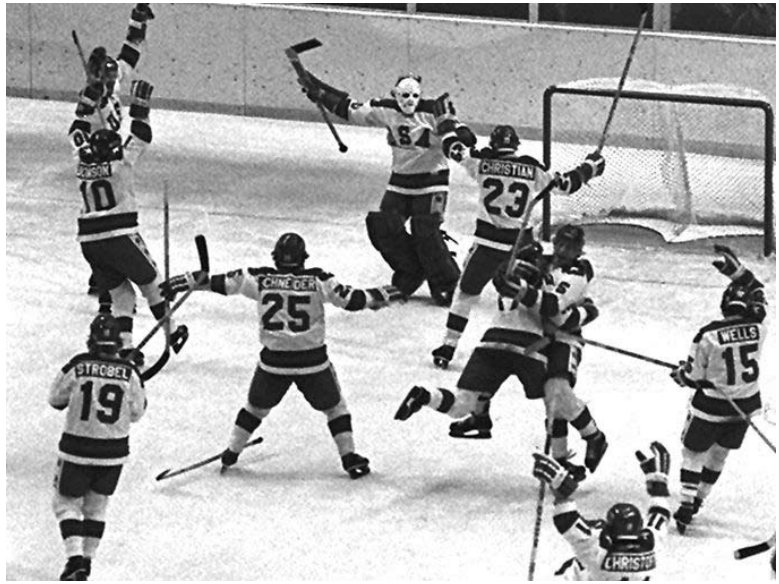
In ice hockey, if you're down by one goal and the clock is ticking down, should you take the chance of pulling your goalie to get a sixth attacker on the ice and increase your chances of scoring? And if you decide to go for it, when is the optimal time to pull the goalie? Is it with a minute left to play? Two minutes? Or three?

Well, hockey coaches and fans, the answers can be found in a recent paper by Clifford Asness of investment firm AQR Capital Management and Aaron Brown, formerly of AQR and now an instructor at NYU's Courant Institute of Mathematical Sciences. After examining a lot of data and doing a little math, the authors found that if you are down by one goal against an evenly matched team and want to go for at least a tie, the optimal time to pull your goalie is with 5:40 of play left in the game.

Five minutes and forty seconds may seem awfully early, since coaches typically don't pull their goalie until the last minute or so – if they decide to do so at all. Perhaps even more surprising is that if you're down by two goals, you should pull your goalie at 11:40 minutes remaining – or less than half way through the third period. Then if you end up scoring, you should put your goalie back in and pull again at 5:40 if you're still behind.

Before going further, let's note a few important things. First, the authors only looked at the objective of maximizing a team's regular season standing points where a loss is worth zero points, a tie is worth 1.5 points, and a win is worth two. That means they focus on tying up the game from behind. If you end up losing, they do not care if it's by a single goal or four. Whether it's a narrow loss or an absolute trouncing, a loss is never worse than zero points.

Second, pulling your goalie does increase your chances of getting



Source: USA Today.com

After the U.S. Olympic hockey team upset the Soviet team in a close 4-3 victory at the 1980 Lake Placid Olympics, Soviet defenseman Sergei Starikov said coach Victor Tikhonov did not pull their goalie because he "just didn't believe in it."

trounced. That's because at the same time goalie-pulling raises your chance of scoring, it also raises the other team's chance of scoring by almost twice as much.

Third, Messrs. Asness and Brown aren't offering advice on specific game situations, where you would consider other factors like what players you have, which team is better, etc. They are only saying what to do *on average over the long term* – and on average, hockey coaches are not pulling their goalies nearly early enough.

The interesting question is, why? The data is out there, and coaches get the benefit of hundreds or thousands of repetitions of game situations -- so why do they keep making a sub-optimal decision?

We're not just picking on hockey coaches here either. Other researchers have shown that football coaches don't go for it on fourth down as much as they should. Basketball coaches resisted taking a lot of three-point shots for far too long. And years ago, Eric wrote in this newsletter that soccer goalies facing a penalty kicker typically dive dramatically to the left or right in their save attempts when statistics clearly show the highest rate of success comes from staying in the middle.

Why we ignore the evidence on the best course of action is a fascinating question. On the one hand, it could be that we think we are different and better than everyone else and don't have to follow the evidence. On the other hand, it might be that we're just afraid of looking bad. Asness and Brown note that "sins of commission are far more obvious than sins of omission" -- so if you pull your goalie and end up losing spectacularly, it could be career suicide. That recalls John Maynard Keynes' famous line that "it is better for reputation to fail conventionally than to succeed unconventionally."

For Asness and Brown, the parallels between goalie-pulling and investing are just too good to ignore because surely there are times when we should embrace unconventional risk but do not. As an example, they point out that cheap stocks have been shown to outperform expensive ones, but also look like "worse" companies. That can make investors who buy expensive stocks look "prudent" while those who buy cheap ones look "rash." But is that right? "Nope," they say, "the data say otherwise."

Go Ahead and Spend a Little!...

Retirement planning is difficult for a very simple reason. In most cases, it requires deferring consumption today in order to fund a goal sometime in the future. This effort requires a well developed sense of self-control. Self-control comes more easily to some people than others, but for most it is emotionally difficult. A wide range of businesses understand and exploit this fact. Credit card companies would not exist without our need for immediate gratification - - and consider for a moment how you feel when starting down a pint of Ben & Jerry's ice cream.

Much has been written about American overspending. *Take a look at the chart below.* In late 2017, household debt levels reached an all time high of just under \$13 trillion. Thanks to a growing economy, debt as a percentage of GDP has fallen from 87% in 2009 to 66% today but the dollar amount outstanding is still a big number.

Not surprisingly, Americans are not particularly good at saving for retirement. The Center for Retirement Research at Boston College recently reported that 43% of surveyed households are at risk of not having enough to maintain

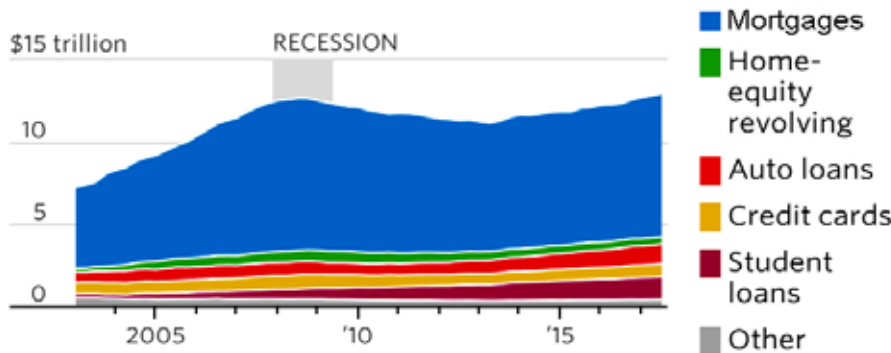
their standard of living in retirement. Our failings are somewhat understandable. The broad shift away from pensions to defined contribution plans over the last 30 years means that retirement funding now lies squarely on the shoulders of employees. And on top of that, we do not know how long we are going to live or, importantly, in what condition.

A recent article by Santa Clara University finance professor Meir Statman got me thinking about the remaining 57%, the "successful savers." This segment of the population appears to have mastered the self-control needed to fund a secure retirement. But for this group, moving from living off a paycheck to living off your savings can be anxiety provoking. Money in the bank provides a tangible sense of security and research has shown that for some people, spending actually creates the same kind of emotional pain that delayed gratification causes for others.

In his work, Statman examines the idea of "financial well being" or the feeling generated when we have as much money as we need. As most of us know, this state is not tied to any specific dollar amount and varies a great deal among individuals. We can all think of people who appear content with little money and those for whom no dollar amount is enough.

The Mountain of Debt

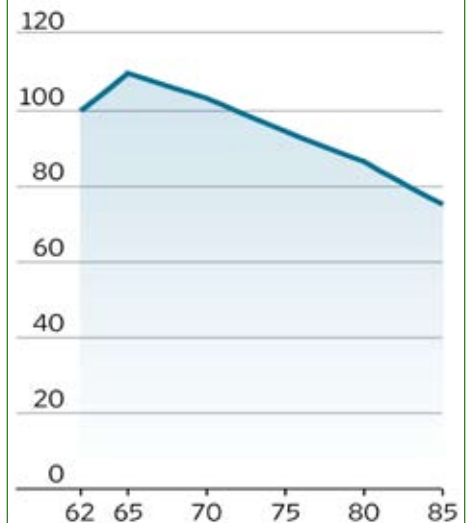
Mortgages account for more than two-thirds of U.S. household debt, even as auto and student loans represent a growing share of the total.



Source: The Wall Street Journal; Federal Reserve Bank of New York

Spending Time

Rates of change in spending for U.S. couples with college degrees



Source: The Wall Street Journal; Michael Hurd, Susann Rohwedder, Rand Corp.; Health and Retirement Study, University of Michigan

Feelings of not "having enough," often developed in early childhood, prevent many people from actually enjoying their savings.

Fortunately, a number of retirement planning tools can help investors define and even embrace a sustainable level of retirement income. Acknowledging a few key facts can also help minimize the anxiety often associated with funding retirement. First, while many financial calculators assume a 30+ year retirement, life spans are typically shorter. According to the Social Security Administration, a man reaching 65 today can expect to live, on average, to just over 84 and a women to just over 86. Second, as the chart above shows, spending levels tend to drop throughout retirement. The point here is to make sure that your expectations around what is needed in retirement are reasonable. The transition to retirement is a big life change but it is one that can be successfully navigated with the right tools, self knowledge and yes, self-control.

Please remember that past performance may not be indicative of future results. Different types of investments involve varying degrees of risks, and there can be no assurance that the future performance of any specific investment or strategy or any non-investment related content, made reference to directly or indirectly in this newsletter will be profitable, equal any corresponding indicated historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Due to various factors, including changing market conditions and/or applicable laws, the content may no longer be reflective of current opinions or positions. Moreover, you should not assume that any discussion or information contained in this newsletter serves as the receipt of, or as a substitute for, personalized investment advice from Hanson & Doremus Investment Management, Inc. (HDIM). To the extent that a reader has any questions regarding the applicability of any specific issue discussed above to his/her individual situation, he/she is encouraged to consult with the professional advisor of his/her choosing. HDIM is neither a law firm nor a certified public accounting firm and no portion of the newsletter content should be construed as legal or accounting advice. A copy of the HDIM's current written disclosure statement discussing our advisory services and fees is available upon request.