TD Wealth

You are here

A modern approach to navigating the ever-changing financial landscape

Monthly Perspectives // Portfolio Advice & Investment Research

Special Edition, Autumn 2018

“What we’ve created is a digital map for investors, one that combines behavioural analysis and considers how that individual investor is likely to succeed in a world that is ever-changing.”

If only investing were simple. If only there were inviolable truths, timeless and universal, that could lead us to the promised land with minimal hand-wringing or head-scratching. If there were, those investing commandments would no doubt be found in some dusty tome that we could return to time and again to guide us. But this, as we all know, is just not the case.

Despite every attempt to reduce economics to mechanical cause and effect, markets remain unpredictable because humans remain unpredictable — and not just investors, but consumers and voters and political leaders, all of us.

Financial markets, rather, are best described as “complex adaptive systems,” more akin to biological ecosystems where individual agents adapt to the environment while the environment adapts to them, leading to phenomena that seem explainable in hindsight but are nearly impossible to predict.

This complexity is at the heart of our investing philosophy at TD Wealth. It’s a philosophy we call “Risk Priority Management,” and it’s more than just another innovative predictive model. Instead of looking backward for an indication of how to move forward, Risk Priority Management (RPM) combines behavioural analysis (who you are) with current macroeconomic analysis (where you are) in order to manage risks that are both internal and external.

The world evolves, as does our ability to understand it. Consider one of the most indispensable, yet often overlooked, innovations of our time: the blue dot. What am I talking about? Pull your phone out of your pocket, tap the map icon, and there it is — a blue dot telling you exactly where you are in relation to your surrounding environment.

The implications of the blue dot, which has only been around for about a decade, are profound. Think about it: no one is ever lost anymore. No matter where you are, no matter how unfamiliar the terrain or how much it changes, that little blue dot is designed to tell you one thing: “You are here,” which seems simple but is actually a pretty complex bit of algebra.

you are here

After all, "you" are always changing: your location, your orientation, the area of your focus. And while we're at it, "here" is a concept that's also always changing. The time of day, the weather, traffic patterns, road conditions, accidents — all these "here and now" variables are in continuous flux and will have a significant impact on your journey.

This is why digital maps are so much better than the paper maps of yesteryear. Paper maps may give you a detailed picture of what "here" might have looked like whenever the map was printed, but they tell you little about the current landscape. Paper maps, in other words, provide an objective frame of reference, whereas digital maps provide a subjective frame of reference that connects the user's location and preferences to the current landscape.

With Risk Priority Management, what we've created is a digital map for investors, one that combines behavioural analysis to uncover personality traits — blind spots, if you will — and then moves on to consider how that individual investor, in all his or her complexity, is likely to succeed in a world that is ever-changing.

Contemporary asset allocation and risk-factor diversification offer a more advanced way to navigate the terrain. All investments — active or passive, traditional or alternative — are simply applications to help get you to where you want to be.

We're not offering the same "tried and true" models and we're not offering innovative new models either, because any model that's stuck in time is bound to fail over the course of time. Rather, RPM offers a philosophy that is adaptive, and always refers back to "you" and "here" in order to get you "there."

Brad Simpson,
Chief Wealth Strategist, TD Wealth

How has this strategy done in the past?

Money Talk: **We're here with Brad Simpson, chief wealth strategist at TD Wealth. Two years ago, he introduced a revolutionary investment philosophy to the bank that has come to be known as "Risk Priority Management." Brad, can you tell us a little about this investment philosophy and where it came from?**

My pleasure. In the spring of 2016, I joined TD Wealth. As you can imagine, it was a tremendous honour, and an even bigger responsibility. To join an organization such as this, with a legacy going back 150 years, one of the most respected financial companies in the world — let's face it, TD is a Canadian icon, and the task I was presented with in my new role was formidable: to oversee investment strategy for roughly $140 billion dollars of human money.

I stress the human aspect of it because my job, when it really comes down to it, is to assist our advisors in crafting investment portfolios for people. These are living and breathing people with aspirations, hopes, dreams and fears. The money they invest with us is a means to an end, not an end unto itself, and after 27 years of doing this, I have gained a deep appreciation of the impact that a wealth manager can have on people's lives. A poorly structured investment portfolio can compromise the financial well-being of individuals, and their families, for generations.

Now, clearly I wasn't going into this alone. If anything, I was walking into an embarrassment of riches. First, I became a member of TD Bank Financial Group's Wealth Asset Allocation Committee, which is a group of the firm's thought leaders who meet monthly to consider the direction of the global economy, financial markets and geopolitical stuff. I also was given access to the full resources of TD Economics, TD Securities, TD Bank Financial Group and my colleagues at TD Wealth, not to mention all our third-party providers, including some of the most respected global financial services firms.

MT: **Sounds like an enviable spot to be in.**

It really is, but there's also a downside to having so many resources at one's disposal, that being the very real danger of information overload. So I was getting all this stuff internally, and externally I faced the same hurdles that all investors do — the ever expanding and mind-bending complexity of the financial markets, the threat of escalating geopolitical tensions, and a prevailing social anxiety derived from the mass of unfiltered opinions swirling around in social media.

Take all those opinions, all those facts and data, and throw in an overwhelming number of financial products — all packaged by brilliant marketing people who insist that their product is the financial pill to cure all that ails you — consider all of that, and you can start to imagine the challenge I had built up in my head.

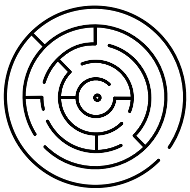
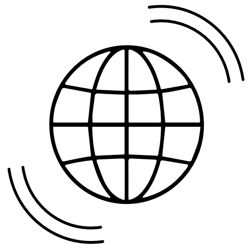
MT: **So what did you do?**

Well, the first thing I did was declare to our advisors and their clients that we are in a once-in-a-lifetime generational shift for financial markets, and that almost everything you thought you knew about asset allocation might not work so well going forwards.

Now, I know that might sound like a bold thing to say, but let's just see what has transpired since then. In the summer of 2016, Barack Obama was still in the White House — a liberal, yes, but more importantly a proponent of free markets — and most people were expecting Hillary Clinton to keep the party going. Global leaders were all going to hold hands and sing Kum Ba Yah.

What many pollsters failed to appreciate is that, in the U.S. and in many Western nations, attitudes towards globalization had reached a tipping point. Despite tremendous economic gains, a whole segment of the population had been unable to take part in the prosperity. Pockets of resentment were building up, and a new message was starting to resonate — that

Increasing complexity, tension and the explosion of digital communications are a recipe for poor decisions

Market Complexity	Geopolitical Tension	Social Anxiety
		
Hard to understand	World seems to be on a collision course	Fearmongering and tribalism

globalization wasn't working — and it turns out that message was powerful enough, barely, to swing the election in favour of a protectionist.

Same thing with Brexit in the U.K., same thing in Italy, same thing in Hungary, and it almost happened in France. Two years ago, we were luxuriating in the afterglow of a decades-long binge of cheap manufacturing and cheap imports, but all that has turned around now. Today, we're in the early innings of a trade war — with tariffs rising, alliances fracturing, and essentially the whole global symbiosis coming undone.

MT: **But isn't that just politics?**

Politics didn't cause this. The political environment is a symptom of something much more fundamental. Look at interest rates. Two years ago, the U.S. central bank's policy-setting range was near record lows, at 0.25% to 0.5%. In the late 1980s, they were 20 times higher, at around nine per cent, but they've been trending downwards for 30 years, along with inflation.

What we've seen over the past two years is a complete reversal. For the first time in a very long time, the U.S. economy is experiencing a touch of inflation, and the Federal Reserve Board is responding — seven hikes since it began raising rates in late 2015, with another two expected by the end of 2018. The targeted range is now 1.75% to 2%, and it's still rising.

This represents a historic shift in monetary policy. For as long as we can remember, interest rates have been falling, international trade has been expanding, consumers have borrowed freely, leaning on cheap credit and rising home prices. The S&P 500 Index has returned an average of around 10% over the past decade, even though GDP growth in the U.S. has averaged only 1.4%. Now, I don't have a crystal ball. I don't know what's going to happen, but I do know that this is not sustainable. Interest rates won't always fall, home prices won't always rise, and gold rushes do eventually come to an end.

We all have to ask ourselves, what happens to consumer spending when the value of your home falls, even as the cost of your mortgage and lines of credit rise? This is already the case. The average price of a home in Toronto is down 10% from its peak in the spring of 2017. What happens to the cost of labour and manufacturing when lawmakers raise tariffs and pressure companies to spend more money to "reshore" their operations, as GM and Apple have already announced?

If we look at the interest-rate environment, the political environment, housing prices and consumer debt, we know that, historically speaking, these are strange days. And yet somehow we've gotten it into our heads that the performance of equity markets has been perfectly normal — that we should expect double-digit returns even as the economy coasts along at 2%.

The bottom line is that equity has been riding a wave of stimulus for decades. In that kind of stimulated environment, the traditional 60/40 model with its equity-risk-heavy asset allocation may work really well. But we have to start asking ourselves, what happens to that investment model when all that stimulus is withdrawn? That's what I mean when I say we've entered a generational shift.

MT: **OK, so we are now in this environmental shift. Where do we go from here?**

Boiled down to its essence, investment is about making decisions. Far too often, however, investors are put in a position where they have to make these decisions without any formal process, so those decisions end up being inconsistent. And consistency is absolutely essential — it's not what you think, but how you think on consistent basis. Anyone can make one or two bad decisions with a good result, but you can't make a series of bad decisions over the long term and not have it end badly.

Our solution? Create an investment philosophy, a guiding set of principles that will work in a world that is in a state of constant change, often with dramatic impact on financial markets. Risk Priority Management is what we call it, and it is the philosophy that provides the foundation for how we make decisions. More importantly, it provides our clients with the knowledge, and the comfort, of knowing how we are going to make decisions with certainty, particularly when uncertain things occur.

Money Talk: **So it's about decisions. Can you give me an example of how this works?**

Let's consider the first principle: *Innovate and look forward*.

A mistake that so many investors make is, they go to the bookstore to find a book that provides a foolproof methodology for investment success. By following the recommended strategy, they are comforted by the belief that they'll succeed. The problem is that it's neither the strategy nor style that matters; it's the circumstances — what's going on around them — and the kind of strategy you'll find in a book, if it works at all, is only likely to work under specific circumstances. Almost all successful strategies are circumstance-based, not attribute-based. Simply, all strategies need the benefit of a certain environment in order to succeed.

So let's see how this plays out. The vast majority of investors follow a strategy that starts by looking to the immediate past for validation. In my area, we do a lot of portfolio reviews and proposals. At the solution stage of those proposals — after we've constructed a portfolio based on the client's goals and priorities, along with an assessment of behavioural factors — we get the same frustrating question almost every time: "How has this strategy done in the past?"

A whole industry has been created to answer this question, with consultants, advisors and portfolio managers extrapolating past returns, typically the preceding five to 10 years, to validate an investment approach — and it's the kind of validation that I vehemently resist. As the old Maritime expression goes, "You don't steer a ship by following the wake."

Around the globe, this way of building and managing portfolios plays out in investment offices, foundation boardrooms and kitchen tables every day. It is really quite maddening because it is one of those accepted practices that makes sense in theory but fails at the point of execution.

Learn More:

Risk Priority Management

The core of the problem is found in traditional finance itself. The founders of modern finance envisioned an economic system that followed laws, similar to the ones that apply to machines or closed systems. This way of thinking is deeply flawed. Our world is made up of humans who learn and adapt as they live their lives. In scientific terms, we are agents in a complex adaptive system. We alter the environment with our actions, and these new environments prompt us to adapt by altering our actions, which create new environments, and so on and so forth.

The traditional way of reviewing, constructing and managing portfolios has another serious flaw. It exposes two of our more common blind spots: recency bias and confirmation bias.

There's a comfort in familiar things, and when these biases are reinforced by compelling, though circumstantial, near-term performance, that level of comfort grows and can lead to an entrenched mindset.

As the great economist John Maynard Keynes said: "Economics is a science of thinking in terms of models joined to the art of choosing models which are relevant to the

6

DEFINITIONS

CLOSED SYSTEM:
This system, also known as an "isolated" system, is one that operates without interaction or influence from outside factors. Typically, closed systems are physical or mechanical in nature. They are often used in experiments to block out external factors that can interfere with findings.

OPEN COMPLEX SYSTEM:
This system can be defined as a network of systems that interact with each other as well as outside factors: cities, for example, comprise multiple systems internally, but can also interact with outside forces and elements. These systems can be physical, sociological or biological in nature.

RECENCY BIAS:
This is the tendency of investors to base their expectations for portfolio performance on recent results or perceptions. Because markets are influenced by changing economic conditions and other unpredictable factors, these expectations can prove false.

CONFIRMATION BIAS:
This is the tendency of investors to seek out information that confirms their own view of the world. Investors will subconsciously filter out facts and opinions that may be useful, but fail to correspond with preconceived notions. This bias can lead to poor investment decisions.

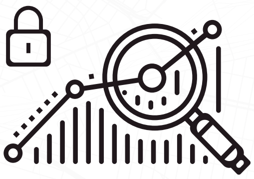
contemporary world. It is compelled to be this, because, unlike the typical natural science, the material to which it is applied is, in too many respects, not homogenous through time."

So, if you're a backward-looking traditionalist, you consider the market to be almost like a machine, and when you're doing a tune-up you look at the parts that made it function in the recent past and conclude that the same ones are needed to make it run in the future.

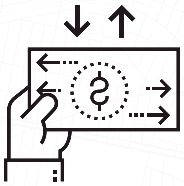
Let's go back in time

Way back, like about 40 years, to a different time and economic environment — to consider how this kind of faulty logic can impact portfolio management.

Investor



Grow and Protect



Volatile Era

Imagine an advisor who sits down with an investor during a volatile era, amidst a major shift in the global economy. A good example of this would be January 1980. The economic environment at the time was miserable. The U.S. economy was reeling from the 1979 revolution in Iran, which sent oil prices skyrocketing. Inflation was out of control, and to thwart it the U.S. Federal Reserve Board was dramatically raising interest rates. Home sales were freefalling, unemployment and crime were high, and the American industrial decline was in full steam, with the term "Rust Belt" first emerging. Perhaps worst of all, the Rolling Stones had just released their disco-influenced Emotional Rescue album. Clearly the world was coming to an end.

Using data between

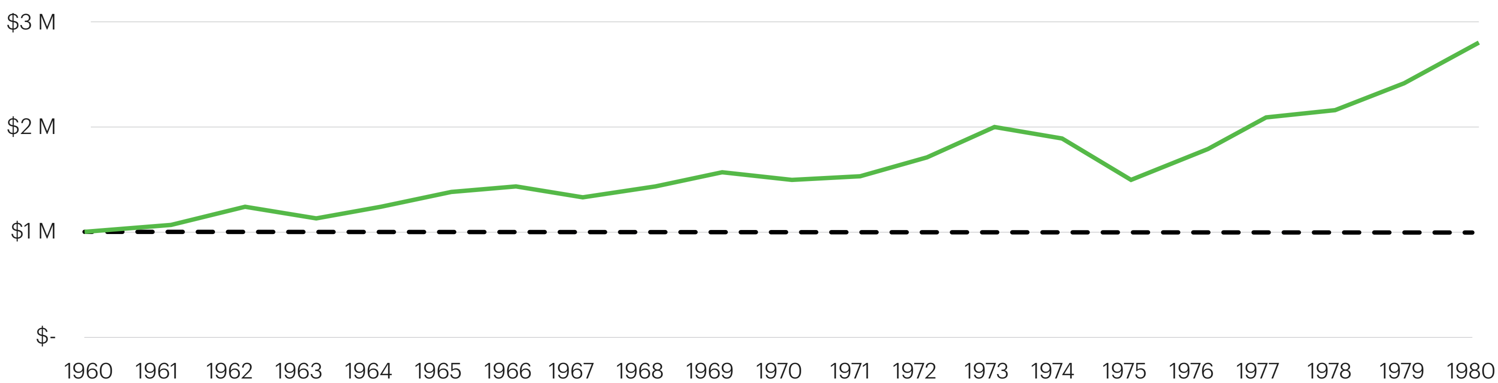
Dec. 31, 1959, and

Dec. 31,1979

To meet the investor's return and risk profile, an advisor constructs a portfolio based on the traditional 60/40 model portfolio. Using data between December 31, 1959, and December 31, 1979, the advisor shares with the investor the risk and return profile, which equals a 20-year return of 5.4% before factoring in inflation with a Sharpe ratio of 0 and standard deviation of 9.5 (Figure 3). The advisor also, being transparent, shares the fact that this portfolio went down 19.6% in 1974. The advisor also highlights that the investor essentially made no money after inflation, as the portfolio's real rate of return was close to flat at 0.3%, and with a negative Sharpe ratio.

Decades of doldrums

Figure 1: Traditional 60% Equity/40% Fixed Income Portfolio - Growth of $1,000,000 from 1960 to 1980µ(Nominal)



Inflation Adjusted

Figure 2: Traditional 60% Equity/40% Fixed Income Portfolio - Growth of $1,000,000 from 1960 to 1980µ(Real)

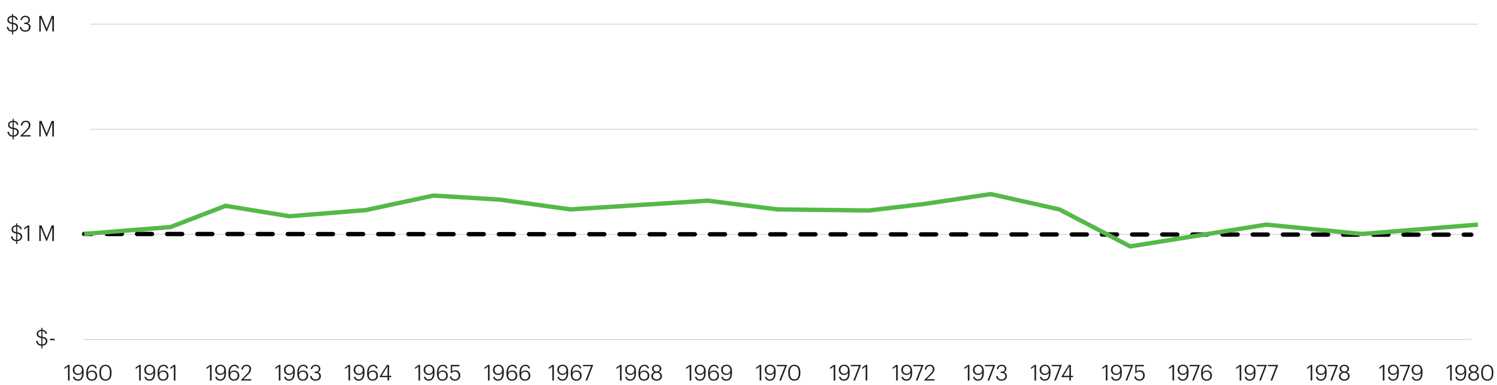


Figure 3: Traditional 60% Equity/40% Fixed Income Portfolio - Growth of $1,000,000 from 1960 to 1980µ(Nominal vs. Real)

Traditional 60/40 Portfolio (Nominal)	
Return:	5.4%
Standard Deviation:	9.5%
Sharpe Ratio:	0.0

Annualized data December 31, 1959 - December 31, 1979

Traditional 60/40 Portfolio (Real)	
Return:	0.3%
Standard Deviation:	10.1%
Sharpe Ratio:	-0.5

Annualized data December 31, 1959 - December 31, 1979

Traditional 60% Equity/40% Fixed Income Portfolio consists of a 30% allocation to the S&P/TSX Composite Index PR, 30% S&P 500 PR Index, and 40% FTSE TMX Canada Universe TR Index. Source: Bloomberg, PIMCO, Financial Planning Standards Council (FPSC), Morningstar, Bank of Canada

“Then that moment happens”

Now put yourself in the shoes of the investor, a woman let’s say. On the way to the meeting, she had to wait in line to fill up her gas-guzzling, 4,881-pound, 5.73-metres-long 1978 Ford Country Squire Wagon. While waiting, she listened to Bruce Springsteen’s just released The River album on eight-track. The album’s dark tales of blue-collar angst makes her think about her brother-in-law, who just lost his job in Allentown, Pennsylvania, and the fight she’s having with her spouse about helping him out financially.

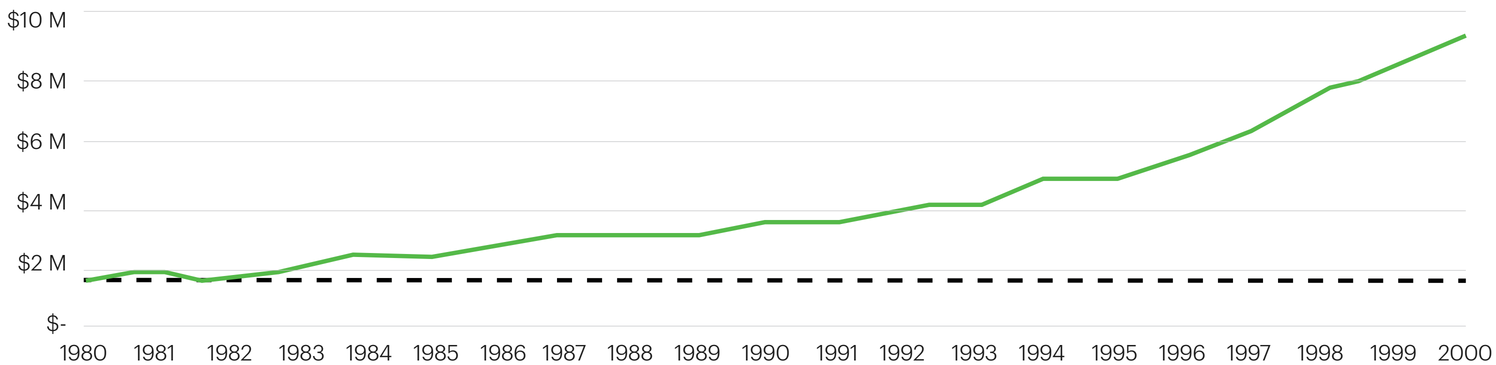
Soon she’s waiting in the investment firm’s office and flipping through the August 1979 issue of Business Week with a cover story entitled “The Death of Equities.” The feature was about the performance of equities, suggesting that they had performed so badly for so long that, as an investment class, they may have become obsolete.

The investor walks into the advisor’s office, taking note of the high number of empty offices along the way, and they sit down to review a proposal of a traditional 60/40 model portfolio. Then that moment happens when the investor asks that age-old question: “How has this strategy done in the past?”

If she had looked at the performance of equities, using the validation tools of today, her amygdala would have kicked in, igniting a fight-or-flight response that probably would have sent her running for the exits. In reality, if she had fought her behavioural blind spots and followed the advisor’s recommendation, ignoring 20 years of past data, she would have had a great risk-adjusted return for the next two decades even after factoring in the inflation rate (Figure 5).

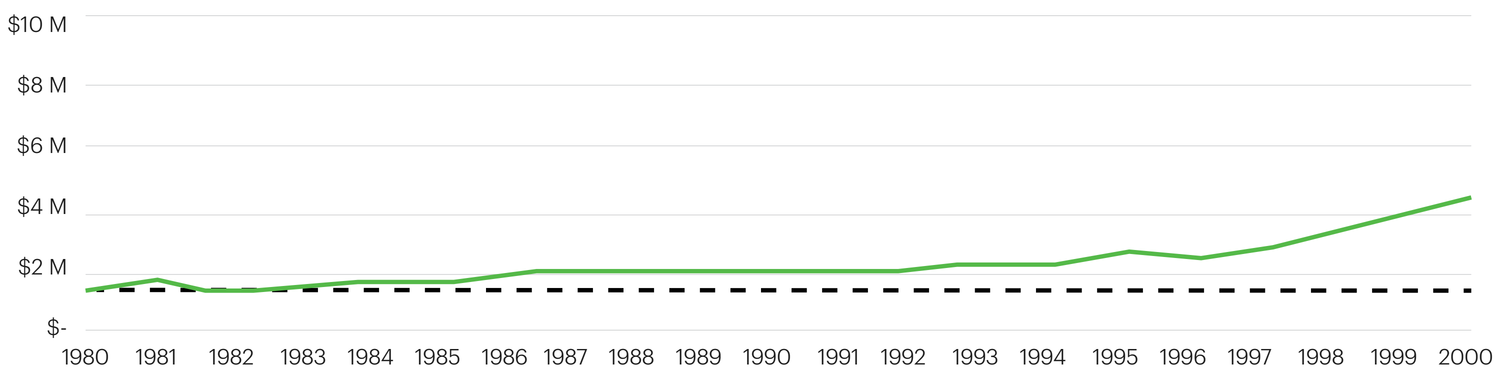
Decades of drive

Figure 4: Traditional 60% Equity/40% Fixed Income Portfolio - Growth of $1,000,000 from 1980 to 2000 (Nominal)



Inflation Adjusted

Figure 5: Traditional 60% Equity/40% Fixed Income Portfolio - Growth of $1,000,000 from 1980 to 2000 (Real)



Traditional 60% Equity/40% Fixed Income Portfolio consists of a 30% allocation to the S&P/TSX Composite Index PR, 30% S&P 500 PR Index, and 40% FTSE TMX Canada Universe TR Index. Source: Bloomberg, PIMCO, Financial Planning Standards Council (FPSC), Morningstar, Bank of Canada

This is what happens in a complex adaptive system

Figure 6: Annualized Return Traditional 60% Equity/40% Fixed Income Portfolioµ(Nominal)

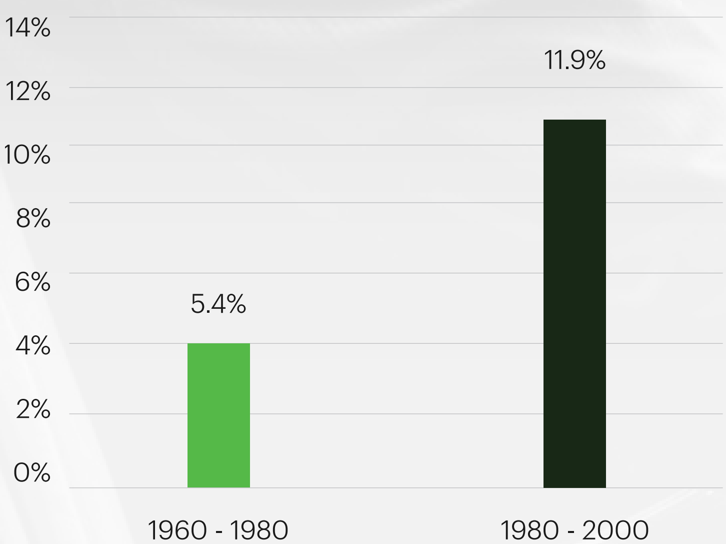
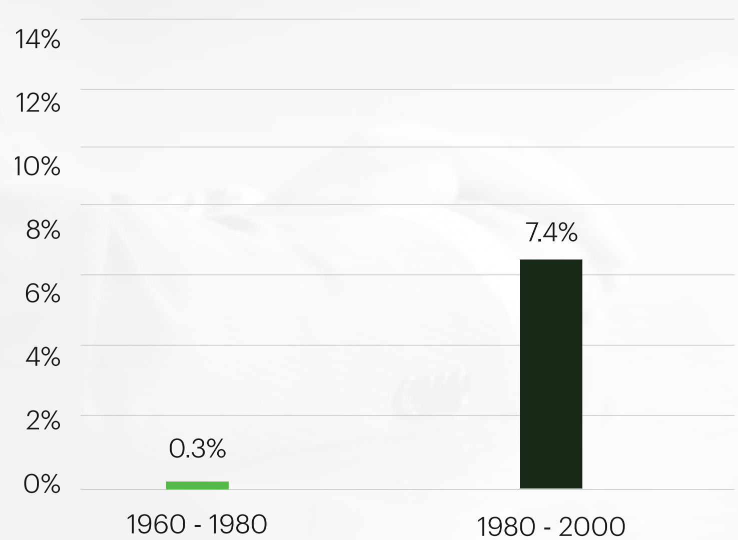


Figure 7: Annualized Return of Traditional 60% Equity/40% Fixed Income Portfoliosµ(Real)

Inflation Adjusted:



Traditional 60% Equity/40% Fixed Income Portfolio consists of a 30% allocation to the S&P/TSX Composite Index PR, 30% S&P 500 PR Index, and 40% FTSE TMX Canada Universe TR Index. Source: Bloomberg, Financial Planning Standards Council (FPSC), Morningstar, Bank of Canada

you guessed it … the fight-or-flight response.

Let's consider another example. Ten years later, in the late 1980s, the same investor from above begins to hear about this new investment called a "hedge fund." While not really new — the first one was created in 1949 — it was not until the 1980s that hedge funds started to enter the popular vernacular and become a mainstream business with a growing list of providers.

Nonetheless, on December 31, 1989, the hedge-fund industry was still rather small and not the juggernaut it is today, with over $3 trillion under management on behalf of both institutional and individual investors. From what the investor has heard, these types of investments do not rely solely on rising equity markets or falling interest rates — the big driver of returns for the traditional 60/40 model — making them potentially excellent diversifiers.

This is becoming increasingly important because, unlike in 1980 when we first met, things for our investor are going quite well. She is older and at the height of her career. She's making good money, and the preservation of wealth is becoming increasingly important to her. She's feeling pretty good about her life in general, and her brother-in-law is doing just fine, having taken a job at this company called Microsoft in Washington State.

The investor has a new BMW, made by a German company that continues to grow market share thanks to changing tastes and increasingly freer global trade policies. It's more fuel efficient than her old Ford wagon, and the sound system is now driven by a CD player that emits the sweet sounds of Milli Vanilli. The investor is yet to discover the lip-syncing scandal, which will be one of her generation's first lessons that, while there are benefits to all the new technology, it does come at a cost.

Clearly the investor continues to evolve alongside the world she lives in. Just as in the early 1980s, there is a big shift underway, particularly for financial services. When the Berlin Wall went down in November 1989, the Cold War came to an end. An odd byproduct of this is that many brilliant mathematicians, who would have plied their trade in the defense sector, began to look elsewhere. Some of them found a home in financial services. This is what happens in a complex adaptive system. A skill set that was useful in one environment becomes even more useful in another, and the agent — in this case a human mathematician — adapts.

It was around this time that people first started using quantified methodologies — what we might today refer to as "big data" — to construct portfolios. So, again, we're sitting with our hypothetical investor, conducting a hypothetical portfolio review, and this leads to a discussion about how the investor might use a cross section of hedge-fund strategies to increase returns and reduce risk. Then the inevitable question arises: "How has this strategy done in the past?"

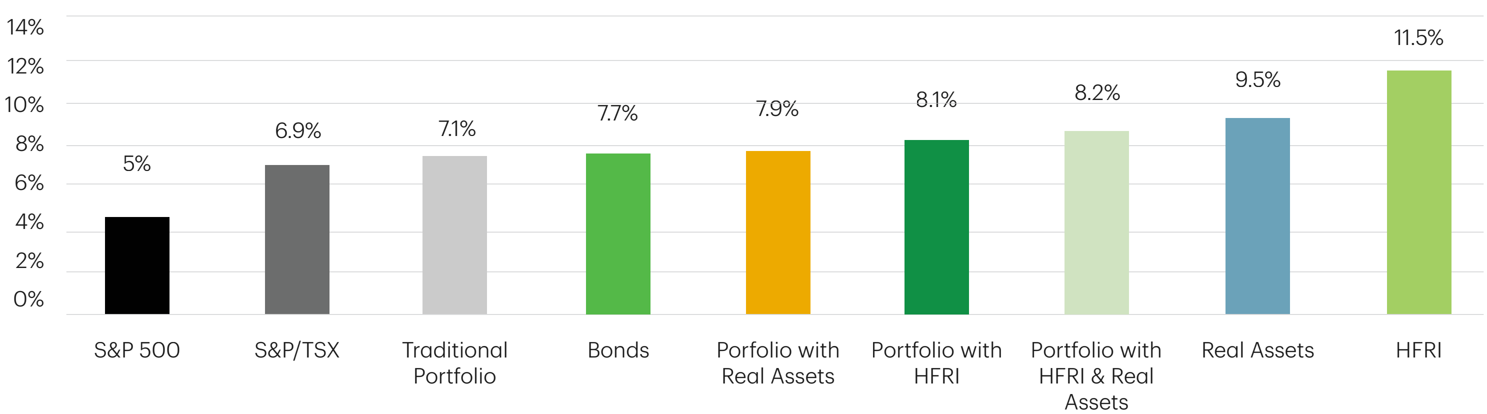
In this case, there is no long-term track record, so the response is predictable: "Wait, no long-term track record? Well, that can't be validated." Recency and confirmation biases kick in, igniting — you guessed it — the fight-or-flight response. Once again, the investor declines.

Twenty years later

Twenty years later, in 2009, we have another review. And when the index returns of this strategy are compared individually to the stock and bond components of the traditional portfolio, it turns out that they've performed really well (Figure 8). The second-strongest performing asset class was real assets, and perhaps even more interesting, the performance of the portfolios — which include both hedge funds and real assets, together or individually — have had a significant impact on increasing returns and reducing volatility when comparing the returns to the traditional portfolio and the individual stock part of the portfolio. Real assets are physical assets valued for their intrinsic worth, such as real estate, infrastructure, commodities and timber and farmland. They provide portfolio diversification in the form of low volatility and attractive risk-adjusted returns, with the added benefit of inflation protection as their cash flows tend to increase in an inflationary environment.

Where's the money?

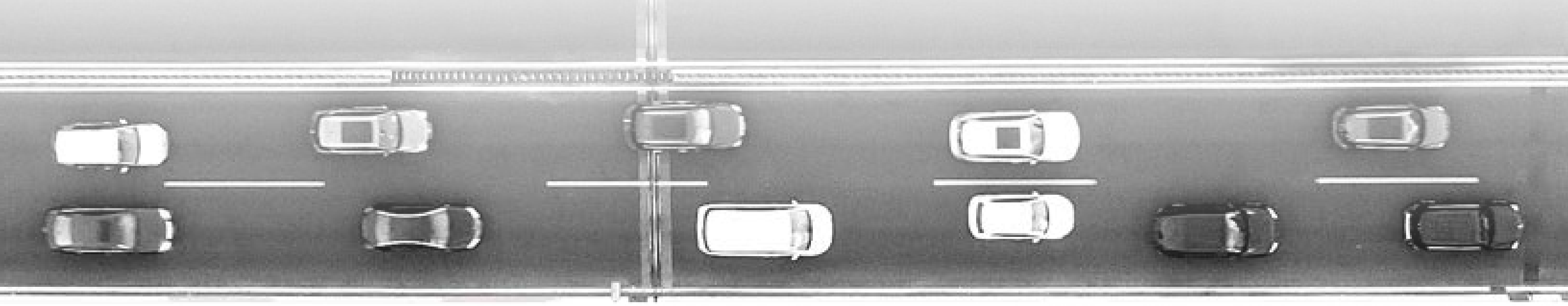
Figure 8: Annualized Return 1992 to 2009



HFRI: HFRI Fund Weighted Composite Index (Hedge Fund Index)

Portfolio with HFRI consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% HFRI Fund Weighted Composite Index. Bonds consist of an allocation to the FTSE TMX Canada Universe Bond Index. Stocks consist of 50% S&P/TSX Composite Index TR and 50% S&P 500 TR Index. Portfolio without HFRI consists of a 30% allocation to the S&P/TSX Composite Index TR, 30% S&P 500 TR Index and 40% FTSE TMX Canada Universe TR Index. Portfolio with Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% Morningstar US Real Asset TR Index. Portfolio with HFRI & Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 35% FTSE TMX Canada Universe TR Index, 15% HFRI Fund Weighted Composite Index and 10% Morningstar US Real Asset TR Index. Prior to June, 2000, the Dow Jones US Real Estate Index has been used as a proxy for the Morningstar US Real Asset TR Index. Source: Bloomberg, Morningstar, PIMCO

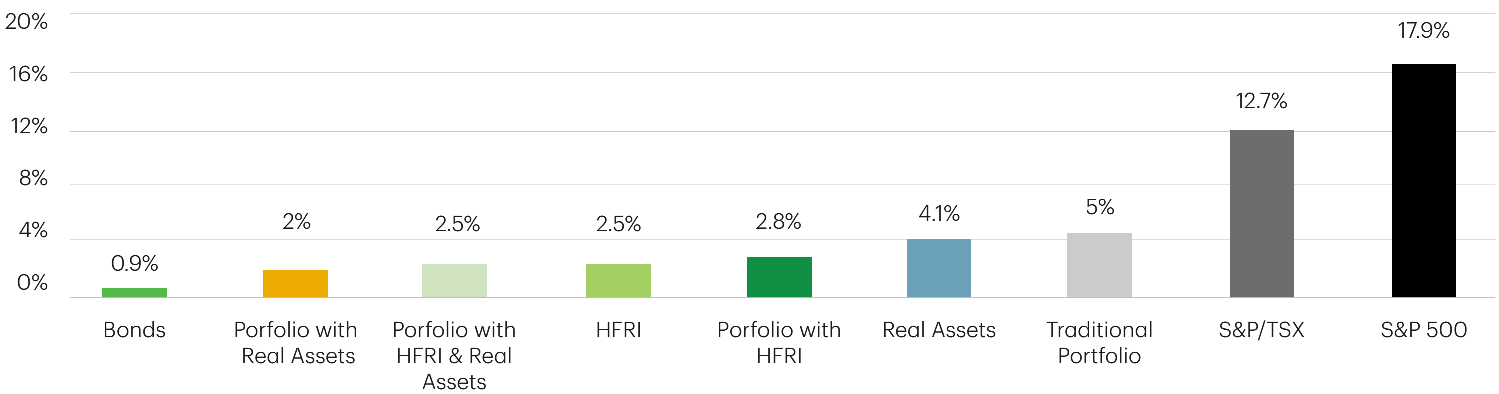
Innovate and look forward



While investment returns are important, we also considered the Pain Index (Figure 9), which measures the depth, duration and frequency of losses of an investment. In this case, the type of risk being measured is capital-preservation risk. The lower the value, the better: a value of zero indicates that an investment has never lost money. Among the individual asset classes, hedge funds and real assets had the second and third lowest Pain Index returns respectively, after Canadian bonds, and each of the portfolios that incorporate hedge funds and real assets had a lower Pain Index return than the traditional 60/40 portfolio. This in itself is a big positive, but it's only half the story. One of the key attributes of our Risk Priority Management philosophy at TD Wealth is to innovate and look forward. With interest rates at near all-time lows, the future Pain Index returns for Canadian bonds are likely going to change. This contrasts significantly with real assets, where performance, based on supply and demand, could be considerable as we move into an era where governments around the world have a need to renew essential infrastructure. In 2016, McKinsey Global Institute estimated that there would be US$42 trillion spent on infrastructure projects, like ports, airports, rail, water, telecom, roads and power, over the next 15 years. These past positive return attributes, combined with future prospects are a big reason behind why this asset has become a new standard.

Where's the pain?

Figure 9: Pain Index from 1992 to 2009



HFRI: HFRI Fund Weighted Composite Index (Hedge Fund Index)

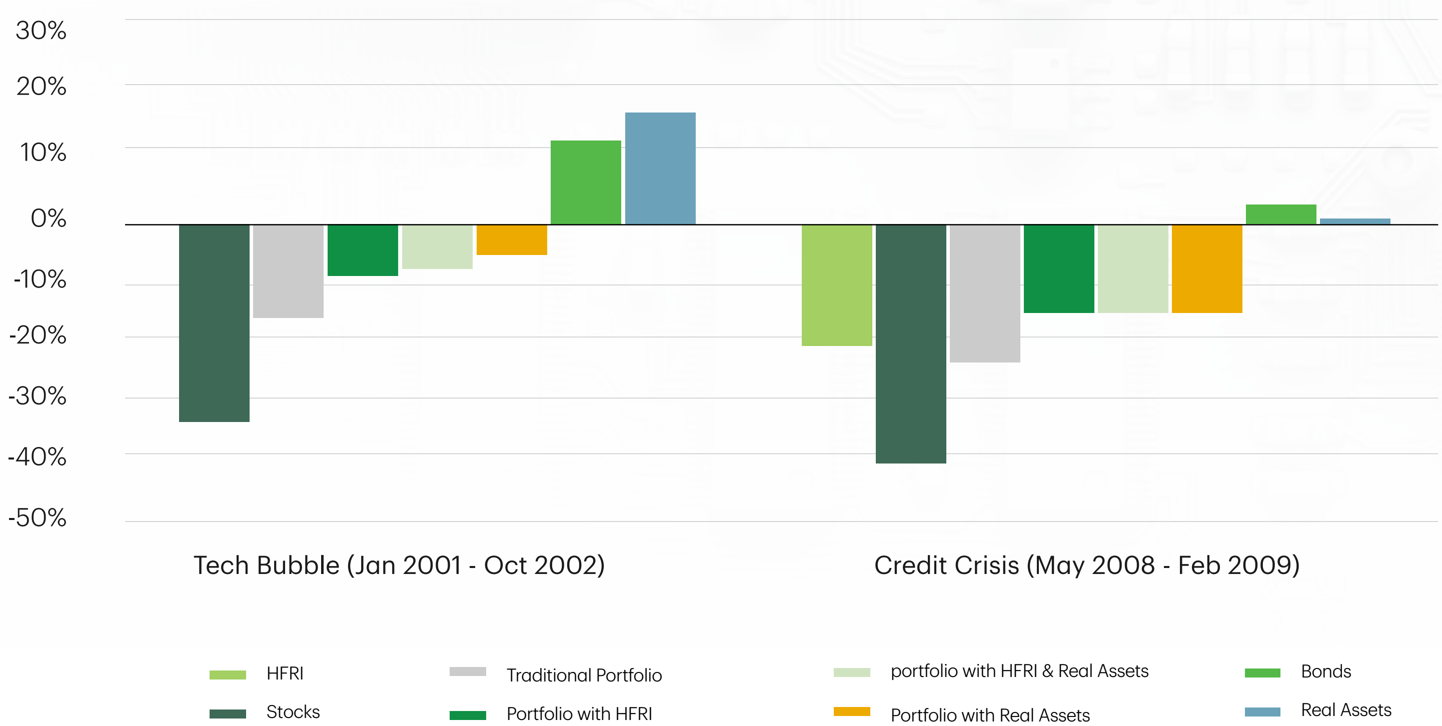
Portfolio with HFRI consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% HFRI Fund Weighted Composite Index. Bonds consist of an allocation to the FTSE TMX Canada Universe Bond Index. Stocks consist of 50% S&P/TSX Composite Index TR and 50% S&P 500 TR Index. Portfolio without HFRI consists of a 30% allocation to the S&P/TSX Composite Index TR, 30% S&P 500 TR Index and 40% FTSE TMX Canada Universe TR Index. Portfolio with Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% Morningstar US Real Asset TR Index. Portfolio with HFRI & Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 35% FTSE TMX Canada Universe TR Index, 15% HFRI Fund Weighted Composite Index and 10% Morningstar US Real Asset TR Index. Prior to June, 2000, the Dow Jones US Real Estate Index has been used as a proxy for the Morningstar US Real Asset TR Index.
Source: Bloomberg, Morningstar, PIMCO

Technology Crash – Credit Crisis

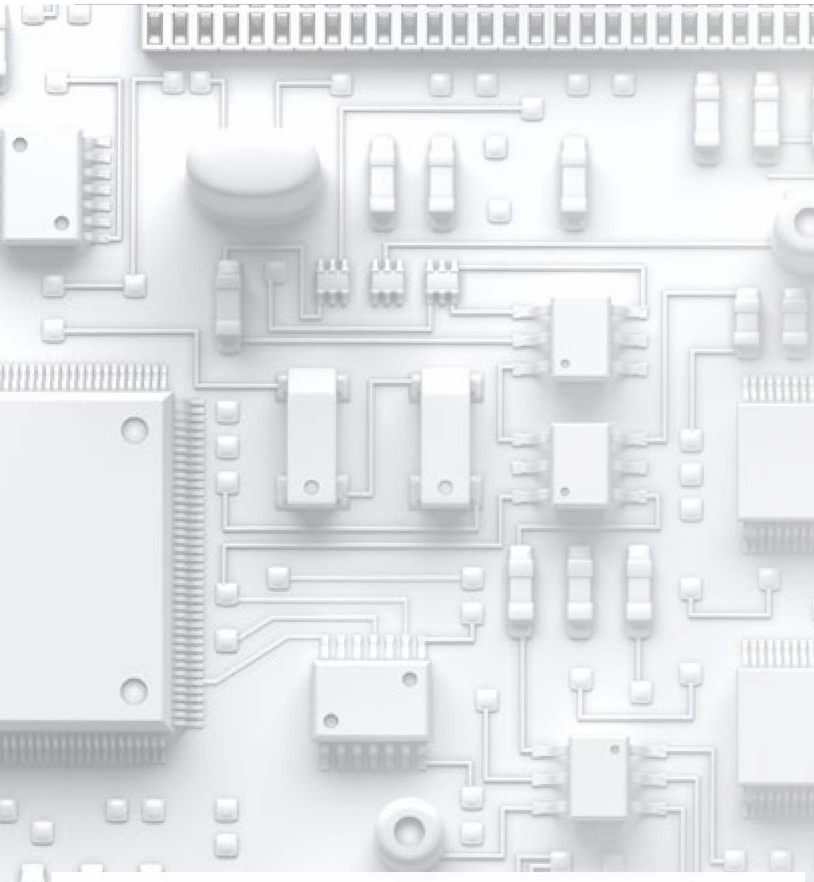
Again, to be transparent, the advisor shares the returns of the portfolio during the seminal surprise events in the period: the technology crash of the early 2000s and the Great Debt Crisis of 2008. In both of these periods, the portfolios that incorporate hedge funds and real assets provided a greater level of protection that the traditional portfolio and stocks individually (Figure 10).

Ports in a storm

Figure 10: Loss Experience During “Tech Bubble” and “Credit Crisis”



Portfolio with HFRI consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% HFRI Fund Weighted Composite Index. Bonds consist of an allocation to the FTSE TMX Canada Universe Bond Index. Stocks consist of 50% S&P/TSX Composite Index TR and 50% S&P 500 TR Index. Portfolio without HFRI consists of a 30% allocation to the S&P/TSX Composite Index TR, 30% S&P 500 TR Index and 40% FTSE TMX Canada Universe TR Index. Portfolio with Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 40% FTSE TMX Canada Universe TR Index, and 20% Morningstar US Real Asset TR Index. Portfolio with HFRI & Real Assets consists of a 20% allocation to the S&P/TSX Composite Index TR, 20% S&P 500 TR Index, 35% FTSE TMX Canada Universe TR Index, 15% HFRI Fund Weighted Composite Index and 10% Morningstar US Real Asset TR Index. Prior to June, 2000, the Dow Jones US Real Estate Index has been used as a proxy for the Morningstar US Real Asset TR Index. Source: Bloomberg, Morningstar, PIMCO



Money Talk: So clearly there is more to this than taking the immediate experience and learning from it. What do you do today?

OK, we have come full circle. We believe that, similar to 1980, we are in the midst of a generational shift. This means that taking the past 10 years of data to guide strategic decision-making may be a really bad idea.

Here's what happened with the Great Credit Crisis when the world economy stalled in 2008: First, there was an action by central banks in the form of monetary easing, but this policy on its own was unable to revive the global economy. So there was a secondary action in the form of an untested policy known as "quantitative easing," which was used as an emergency measure to create even more stimulus.

The result? Rates were driven down, propelling bond-market returns higher. Credit markets levelled off to a place where all bonds were essentially equal in terms of risk, propelling non-government bond returns higher. Savers were punished and risk assets were lavishly rewarded, propelling equity-market returns higher. Valuations were distorted, volatility was suspended, and a financial market driven by the state was created wherein participants learned that they can never lose.

In short, we created the perfect environment for the traditional 60/40 model portfolio.

MT: So where do you go from here?

We stick to our investment philosophy, of course. For the sake of simplicity, let's highlight three of the underlying principles. One: Innovate and look forward. Two: Embrace human behaviour. And three: Mitigate inside and outside risks.

Let's start with "Innovate and look forward." In the late spring, we published a piece called "A requiem for the new era?" where we conclude that, amidst the four "Ts" — Trump, trade, taxes and technology

> **"it's hard not to feel like the 'new era' of investment strategy has come to an end"**

We then write that there "is still compelling evidence to suggest that the genie is out of the bottle: Globalization continues, interconnectedness is alive and well, and technology will continue to have a dramatic impact on our lives. However, we have not achieved perfection. In a world that is open and complex, the only thing you can be certain of is that uncertain things will occur. Higher inflation along with significantly higher interest rates, while unlikely, are possible. Credit can restrict and spreads can widen when you least expect it. Rapid advances in technology will continue to provide ethical challenges and, despite our preference for linear returns, companies will fail, countries will teeter and volatility in financial markets will be the result."

The days of relying on monetary policy to drive portfolio returns are coming to an end. Correspondingly, reliance on the traditional 60/40 model as the sole strategy is drawing to a close as well because the success of this strategy is based on the circumstances of the environment, not on the attributes of the strategy itself.

We must embrace human nature and, in doing so, we have to challenge our blind spots. Two of these we've already discussed: recency bias and confirmation bias. A third blind spot will likely be overconfidence bias. Ten years of great returns can lead investors to overestimate their own abilities to deliver, but financial markets are cyclical — they have boom and bust cycles.

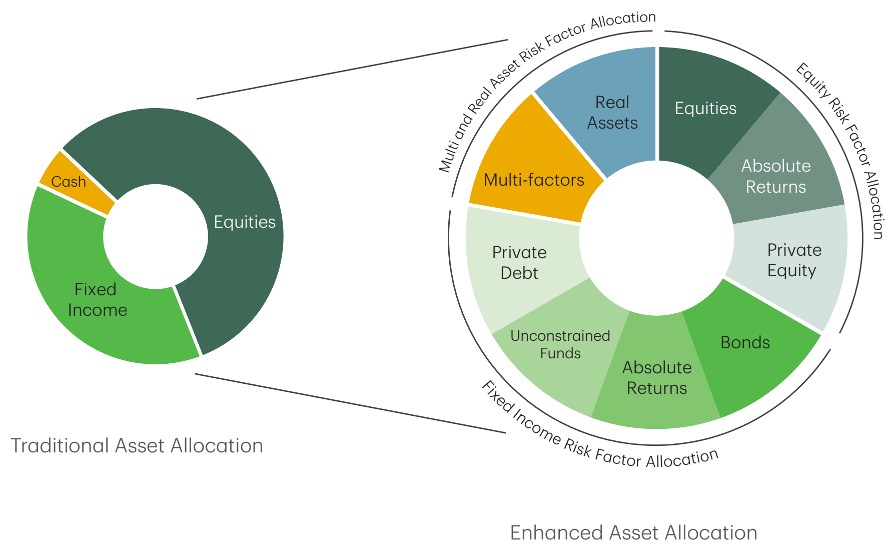
“How do I mitigate pain?”

Professionally, we are led by a whole generation of portfolio managers who have never operated in a volatile market. There are fewer and fewer of us left who can really remember how managing money in a different environment is done. Our solution to this is to shift gears and build portfolios for what we believe may be ahead. This is where our third principle comes into play: Mitigate inside and outside risks.

The way we mitigate outside risk is to incorporate a greater number of strategies into our investment portfolios (Figure 11). First, where appropriate, we use hedge fund strategies. That's going to present some challenges because the past 10 years of data aren't that good. We believe, however, that we're moving into the kind of environment that's ideal for many of these strategies, particularly equity market neutral, long/short and credit long/short, which is similar to the environment experienced during the 10-year period ending in 2008 (Figure 13).

Enhanced Asset Allocation

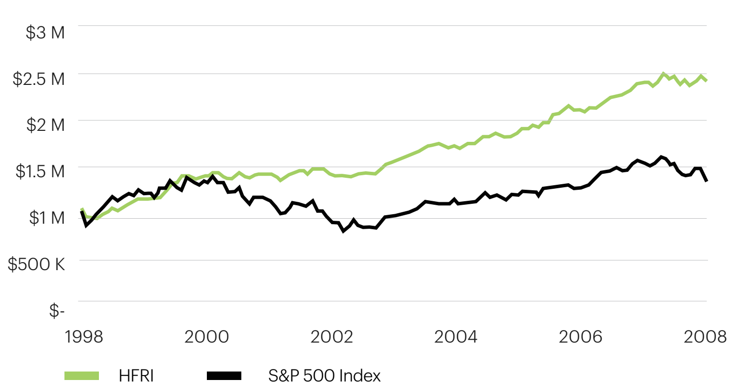
Figure 11: Risk Priority Management Allocations (On the surface)



S&P 500 Index vs. hedge fund strategies

Figure 12: Outperformance of HFRI and Underperformance of S&P 500 Index

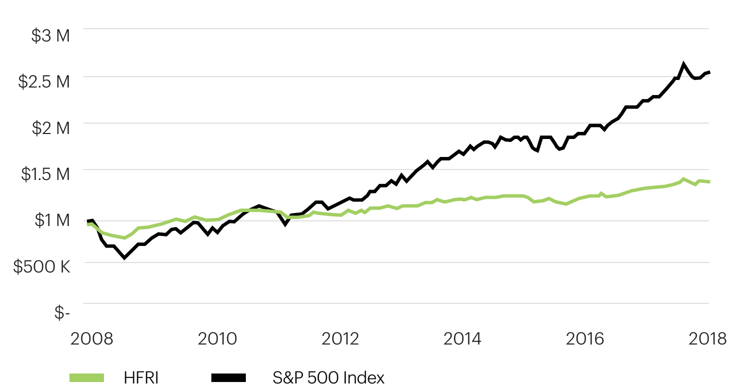
Prior to 2008



Source: Bloomberg Finance L.P.

Figure 13: Underperformance of HFRI and Outperformance of S&P 500 Index

Since 2008



Source: Bloomberg Finance L.P.

"Where do I put my money that generates a return?"

We are also going to be growing our investment focus on real assets. Real assets tend to have a complementary return profile to equities and bonds. They have a number of compelling attributes. They're highly stable, with steady cash flow streams supported by regulated or contractual revenue and attractive operating margins. They tend to enjoy reliable current income with long-term capital appreciation. They are leveraged to economic growth, and therefore have meaningful upside potential. They are being carried by positive growth momentum led by significant fundamental trends. And they offer inflation protection, with cash flows tending to increase in an inflationary environment.

As an organization, moreover, we are really putting our money where our mouth is. In July 2018, TD Bank announced the purchase of Saskatchewan-based Greystone Managed Investments Inc. for roughly $792 million in stock and cash. Acquiring the institutional money manager will add another $36 billion in Canadian assets under management and expertise in alternative investments including real estate, mortgage and infrastructure.

My colleague over at TD Asset Management, CEO and CIO Bruce Cooper, really said it all when he pointed out that, in the big picture, "we think interest rates are going to remain relatively low, and for savers, that's going to create a challenge: Where do I put my money that generates a return? ... We think that investments in real estate or infrastructure — which can generate solid returns and solid income yields above what you can get on, say, a Government of Canada bond — will remain an attractive proposition."

Risk Factor Diversification

Figure 14: Risk Priority Management Allocations (Below the surface)

“Where should investors start?”

In terms of mitigating inside risk factors, we will focus on the six big ones: equity, real asset, volatility, income, liquidity and foreign-exchange risk.

For more background on these different strategies and risk factors, I highly recommend investors read our white paper, “The New Standard.” It delves into many of the themes we talked about here and relates to how we manage risks and returns with a careful eye on what we call the “Pain Ratio,” which tracks depth of losses, frequency and duration of losses.

MT: I think we covered an awful lot of territory. Where should investors start?

I know we covered a lot today. I think the most important element to investment success going forward is to be really clear with who you are, where you are in the world and how you make decisions. Be a lifelong learner. We think many answers are found in our Risk Priority Management document. Request a copy and see what, and how, you think.

Learn More:

The New Standard

Important information

This report is for informational purposes only and is not an offer or solicitation with respect to the purchase or sale of any investment fund, security or other product. Particular investment, trading, or tax strategies should be evaluated relative to each individual's objectives. [Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance.]This document does not provide individual financial, legal, investment or tax advice. Please consult your own legal, investment and/or tax advisor.

TD Waterhouse Canada Inc. and/or its affiliated persons or companies may hold a position in the securities mentioned, including options, futures and other derivative instruments thereon, and may, as principal or agent, buy or sell such securities. Affiliated persons or companies may also make a market in and participate in an underwriting of such securities.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

Full disclosures for all companies covered by TD Securities Inc. can be viewed at https://www.tdsresearch.com/equities/welcome.important.disclosure.action

Company	Ticker	Disclosures
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

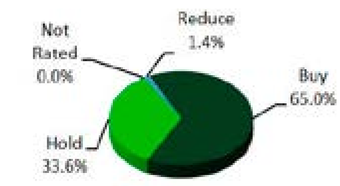
1. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has managed or co-managed a public offering of securities within the last 12 months with respect to the subject company. 2. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has received compensation for investment banking services within the last 12 months with respect to the subject company. 3. TD Securities Inc., TD Securities (USA) LLC or an affiliated company expects to receive compensation for investment banking services within the next three months with respect to the subject company. 4. TD Securities Inc. or TD Securities (USA) LLC has provided investment banking services within the last 12 months with respect to the subject company. 5. A long position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control. 6. A short position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control. 7. A long position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control. 8. A short position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control. 9. TD Securities Inc. and/or an affiliated company is a market maker, or is associated with the specialist that makes a market, in the securities of the subject company. 10. TD Securities Inc. and/or affiliated companies own 1% or more of the equity securities of the subject company. 11. A partner, director or officer of TD Securities Inc. or TD Securities (USA) LLC, or a research analyst involved in the preparation of this report has, during the preceding 12 months, provided services to the subject company for remuneration. 12. Subordinate voting shares. 13. Restricted voting shares. 14. Non-voting shares. 15. Common/variable voting shares. 16. Limited voting shares.

Research Ratings

Action List BUY: The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months and it is a top pick in the Analyst's sector.

BUY: The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months. SPECULATIVE BUY: The stock's total return is expected to exceed 30% over the next 12 months; however, there is material event risk associated with the investment that could result in significant loss. HOLD: The stock's total return is expected to be between 0% and 15%, on a risk-adjusted basis, over the next 12 months. TENDER: Investors are advised to tender their shares to a specific offer for the company's securities. REDUCE: The stock's total return is expected to be negative over the next 12 months.

Distribution of Research Ratings



Percentage of subject companies under each rating category—BUY (covering Action List BUY, BUY and Spec. BUY ratings), HOLD and REDUCE (covering TENDER and REDUCE ratings).
As at September 4, 2018.

Investment Services Provided

Percentage of subject companies within each of the three categories (BUY, HOLD and REDUCE) for which TD Securities Inc. has provided investment banking services within the last 12 months.
As at September 4, 2018.

Overall Risk Rating in order of increasing risk: Low (6.3% of coverage universe), Medium (37.8%), High (47.0%), Speculative (8.9%)

TD Waterhouse Canada Inc. makes its research products available in electronic format. These research products are posted to our proprietary websites for all eligible clients to access by password and we distribute the information to our sales personnel who then may distribute it to their retail clients under the appropriate circumstances either by email, fax or regular mail. No recipient may pass on to any other person, or reproduce by any means, the information contained in this report without our prior written consent.

The Portfolio Advice and Investment Research analyst(s) responsible for this report hereby certify that (i) the recommendations and technical opinions expressed in the research report accurately reflect the personal views of the analyst(s) about any and all of the securities or issuers discussed herein, and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the provision of specific recommendations or views expressed by the research analyst in the research report.

The Portfolio Advice & Investment Research analyst(s) responsible for this report may own securities of the issuer(s) discussed in this report. As with most other employees, the analyst(s) who prepared this report are compensated based upon (among other factors) the overall profitability of TD Waterhouse Canada Inc. and its affiliates, which includes the overall profitability of investment banking services, however TD Waterhouse Canada Inc. does not compensate its analysts based on specific investment banking transactions.

TD Wealth represents the products and services offered by TD Waterhouse Canada Inc. (Member – Canadian Investor Protection Fund), TD Waterhouse Private Investment Counsel Inc., TD Wealth Private Banking (offered by The Toronto-Dominion Bank) and TD Wealth Private Trust (offered by The Canada Trust Company).

The Portfolio Advice and Investment Research team is part of TD Waterhouse Canada Inc., a subsidiary of The Toronto-Dominion Bank.