

Check against delivery

Mark Machin on Investing for Generations amid Uncertain Times

Paraphrasing my fellow countryman Charles Dickens, it is the best of times, it is the worst of times.

We're in the 11th year of a bull market, the longest in history.

Yet...a New York Times headline reads, *Global Trade is Deteriorating Fast, Sapping the World's Economy.*

A Financial Times headline reads, *Brexit uncertainty hitting manufacturing profit levels in U.K.*

The Globe and Mail reports *Hong Kong slips into recession.*

Interest rates have been so low, for so long, they've become the new normal. The phrase, 'the inverted yield curve', which meant nothing to the general public, has become a popular search on Google.

World news, significant events, scientific breakthroughs, which used to pop up on our mobile phones every month or so, now seem to hit every hour, sometimes every minute.

I would not for a moment minimize the challenges and changes facing the world today, but at the same time, I don't get too alarmed either.

I can't tell you what is around the corner, but I can tell you two things.

The first is, that as the head of an organization responsible for helping to ensure the sustainability of Canada's pension system...our investment horizon isn't next year, it's the next 75 years.

Because only by taking such a long view can we at CPPIB help ensure that Canadian retirees will have financial security next year and every year thereafter.

The second thing I want to say is, challenging times definitely challenge us collectively...but let's not forget they also produce some of the most extraordinary ideas and enterprises, that accelerate recovery and growth. And they often create new pillars of growth for future economies.

This is especially true for sectors and companies that are firmly focused on the future. At CPPIB, we are convinced that innovation will emerge_during challenging times.

Our investment philosophy is focused on seeking out prudent opportunities that ensure strong returns for generations to come.

Economic historian Alexander Fields found that in the midst of the Great Depression, when the stock market lost almost 90%, and when 1 out of 4 people in the US was out of work, the 1930's was the most technologically progressive decade of the 20th century.

Radar, nylon, the world's first programmable computer - the Z1, and even pablum, the first ready-to-use vitamin and mineral-enriched cereal created here in Toronto at Sick Kid's Hospital, were all created during the 1930s.

These innovative products emerged during the great depression and they fundamentally improved lives.

Just because the economy slows, it doesn't necessarily follow that innovation stops.

Some more examples...World War II cryptography and its code and cipher systems attracted commercial attention post-war. This ultimately led to the advances in computing and mobile communications that define so much of how we live today.

Let's not forget that in the tech crash of the early 2000's, the world became even more globalized, or in Thomas Friedman's words, "more flat".

In fact, we saw at that time, an accurate GPS previously only available to the military, was now released to the public. Today, we can hardly imagine our lives without GPS in our cars, our phones, and our watches.

During this time also, the Human Genome Project was completed.

It was the largest collaboration ever undertaken in biology and involved thousands of scientists around the world working to unlock the genetic code that defines our unique make-up.

Just as revolutionary for the time, was that the participants all agreed that any discoveries they made should be made freely available within 24 hours. Not only did these scientists get it right, and get it out, they got it done two years earlier than anticipated.

The connection between the Human Genome Project and today's era of personalized diagnosis and healthcare is direct and profound.

Without it, medicine would largely be treating all of us as if we were the same.

And undoubtedly, the best place to learn about challenging times would be by studying the global financial crisis of 2008.

Research from Bain Consulting revealed that downturns can actually present opportunities for businesses to grow and outpace competitors. Their work indicated that companies who were performing well going into the financial crisis, continued to perform well.

In fact, their average enterprise value grew three times more than the companies who weren't performing before the crisis. The strongest companies were playing offence early on in the downturn.

They kept the end in sight, cut their costs, trimmed their balance sheets, and created new niches to nurture growth in markets that didn't exist before.

And at a time when their rivals were all cutting back on marketing, they doubled down on it. Their voice was heard much louder because fewer others were talking.

Economist Joseph Schumpeter argued that crises were seedbeds of innovation and entrepreneurship. I quote, "they remake existing industries and give birth to entire new ones."

One of the best examples I know, that emerged from challenging times, was the creation of CPPIB 20 years ago.

This country came together to address the challenge with incredible foresight and innovation.

In 1966, when the Canada Pension Plan was created workers were able to pay for the pensions of retirees. There were almost 7 workers for each retiree. But by the late '60s you could already see the demographic changes that would make that structure unsustainable.

Throughout the 70s, 80s and 90s, the Plan's sustainability was clearly in question, as the tri-annual reports from the Chief Actuary continued to predict. But it took the Chief Actuary's Report of 1995 to turn talk into action.

The Report made it crystal clear. If you carry on like this, there would be zero money in the fund by the end of 2015. In 1996, the plan paid out \$17 billion while only receiving \$11 billion in contributions.

The CPP was relying purely on low-return domestic bonds and either more money needed to come in, or less money had to go out.

It could no longer be ignored. Finance Ministers from both federal and provincial levels of government came together to address the challenges.

They reduced benefits, they increased contribution rates, and they created CPPIB.

We were set up to invest Canadians' pension contributions, maximize returns without undue risk, and to gain exposure to global capital markets.

We were set up to be arms-length from governments, and importantly, with an independent board of directors. This innovative approach put the Canada Pension Plan back on a sound financial footing.

Today, we should all be proud that Canada's Pension Plan is recognised as the pension fund model of choice.

Canada's diverse and skilled workers, and its comparatively open immigration policy, have positioned the country as one of the more progressive and innovative places to work in the world.

Between 2017 and 2018 investments in technology companies boosted Canada's information and communication technology industries by 21%.

Early investments in artificial intelligence and machine-learning have also put Canada and its world-leading researchers, including Turing Award winners Geoffrey Hinton and Yoshua Bengio, on the global stage.

Canada is attracting some of the world's brightest minds and the world is benefiting.

The links between San Francisco and Toronto have grown so tight that airlines added 139 flights between the cities in the past two years, even as flights between Canada and the US have fallen.

But Toronto's true competitive advantage is that it is so globally interconnected.

With more than 51 percent of our people born outside of Canada, and speaking over 180 languages and dialects, we have a large diverse and highly educated workforce that is the envy of the world.

We at CPPIB have seized on this as well.

Headquartered out of Toronto, our people collectively speak over 60 different languages, work across 9 different offices, and 8 different time zones.

We are convinced that our future success depends on our capacity for innovation. That means engaging all backgrounds, skillsets and mindsets in this pursuit.

Let me know now talk about the challenges we face today. One such challenge is climate change.

The Bank of England predicts that \$20 trillion of assets could disappear if climate change risks are not addressed properly.

Former Governor of the Bank of Canada, and now Bank of England Governor Mark Carney said, that great fortunes could be made by those working to end greenhouse gas emissions.

I quote, "There will be industries, sectors and firms that do very well during this process because they will be part of the solution."

At CPPIB, we aim to be a leader in understanding the risks and opportunities that Climate change presents.

We have accelerated our Climate Change Program and our investment teams perform bottom-up analyses of climate change risks and opportunities on every material investment that we have made.

This analysis is a continuous process that involves transition and adaptation risks as well.

I encourage you to read our Sustainable Investing Report released tomorrow and available on our website.

We are also investing in energy transition, in particular, the renewable energy sector, where our size, expertise and exceptionally long investment horizon make us an ideal partner.

Just yesterday we announced our \$6.1 billion-dollar acquisition of Pattern Energy, alongside Riverstone Holdings.

Pattern Energy is one of the most experienced renewables developers in North America and Japan.

This past year alone our Power and Renewables group committed more than \$3.41 billion directly in renewable energy projects in wind, solar and hydro assets around the world.

Another example of our investment in the energy transition is Chargepoint, the leading electric vehicle charging network in the world with a growing global presence in North America, Europe and beyond.

Chargepoint has more than 57,000 places to charge your electric vehicle and by 2025 the company is committed to providing 2.5 million charging spots globally.

With our long-term lens, we are also closely watching Canada's leadership in geoengineering and carbon capture.

This is why we invested with Wolf Infrastructure in Alberta on the construction of the Alberta Carbon Trunk Line.

A pipeline that will collect and transport carbon dioxide. This Trunk Line will gather, compress, transport and safely store up to 15 million tonnes of CO₂ per year at full capacity.

That's the equivalent of removing 20% of the carbon dioxide from the oil sands industry or removing more than 300,000 cars from the roads in Alberta.

And because of the Human Genome Projects I mentioned earlier CPPIB is investing in Illumina, a leading developer of large-scale analysis of how our genes vary, with work in fields ranging from cancer research to agriculture.

Genomics are changing lives today and will save and improve millions, possibly billions, in the years to come.

We are also investing in Moderna, the global leader in a new class of drugs called RNA therapeutics. Every cell in the body uses mRNA as a 'messenger' to provide instructions to make the proteins necessary to drive every aspect of our bodies. Moderna is creating entirely new kinds of transformative medicines and vaccines for patients around the world.

So yes, these are challenging times in many ways. But the global investment opportunities are endless.

Let me now share how CPPIB is performing. Our first quarter this fiscal year was strong.

We surpassed \$400 billion in assets and we continue to earn 10.5% returns, over both the past five years and the past 10.

This kind of return means that Canadians will be paid their Canada Pension Plan benefits not just now or even 25 or 50 years from now. But according to Canada's Chief Actuary, 75 years from now.

Given this, you would think that our 20 million contributors and beneficiaries would believe that.

But more than 60% of people don't believe the CPP will be there when they retire.

So we're working to better inform Canadians about who we are and how we invest on their behalf.

Perhaps part of the disbelief comes from the fact that almost 70% of Canadians believe they won't have enough savings to last them through their retirement. The other surprising and very disturbing reality is that 39%, that's 4 in 10 of Canadian working adults, have no savings at all for retirement. None. Except their Canada Pension Plan.

It appears the single-biggest financial risk Canadians face is outliving their savings.

So, as we begin financial literacy month, I can't think of a better investment in tomorrow than educating ourselves on what is needed to save for retirement. I encourage you as business owners and leaders to have these discussions with your employees.

If we all do this more...and do it wisely, we will be much better prepared for the future.

To conclude, I urge everyone here to look beyond the headlines.

Remain focused on having a healthy balance sheet, creating growth in new markets. Markets that might not even exist today.

Continue to drive creativity and innovation.

It is timely that I finish with the words of Margaret Atwood, who only 11 days ago, received a rare honor from the Queen.

She said, "Optimism means better than reality. Pessimism means worse than reality. I'm a realist."

At CPPIB we agree.

Thank you.