HOOPP
Healthcare of Ontario
Pension Plan

***A note from HOOPP:** HOOPP has long been an advocate for improved retirement security outcomes in Canada, and we conduct research to help inform and drive a national dialogue on this critical issue. We are always pleased to discover like-minded thinkers who have their own perspective to add to that dialogue. Stephen Poloz, former Governor of the Bank of Canada, has written a discussion paper about how pensions will become more and more essential in an increasingly uncertain world. In fact, Poloz foresees the potential for "a natural renaissance of the DB pension plan" in the years ahead. We believe this paper is an excellent contribution to the dialogue about the future of retirement security in Canada. We are pleased to share his ideas as presented in this paper with Canadian workers, businesses and decision makers. Please take a few minutes to read it.*

Pensions in the Next Age of Uncertainty

Stephen Poloz
Special Advisor, Osler, Hoskin & Harcourt
November 2023

Executive summary

Life consists of childhood, education, work, and retirement. Ensuring it all goes well financially requires saving during work to provide adequate income for retirement. It is very hard for a typical household to guess how much to save during their working years, since they can only guess how long they will live, what cumulative income they will earn, or what investment returns they can count on.

I will argue below that these uncertainties will continue to rise in the years ahead, laying a heavy risk burden on a majority of Canadians. People will respond to rising risk by carrying larger financial cushions during their working lives and continuing to do so through retirement. Rising macroeconomic uncertainty will therefore mean a lower path for household spending, slower economic growth, and lower government tax revenues, relative to the past.

A more efficient, more prosperous, and more societally desirable path is possible – a path where a more robust pension system helps people manage their rising retirement risk. If income, investment and even longevity risks continue to rise through time, then the societal value of stronger pension coverage will also rise through time. In other words, all sides of the equation – whether individuals, companies, or governments – will be increasingly willing to pay for pension coverage. The more individuals so covered, the higher will be our consumption spending path and our overall economic growth rate. Government tax revenues will track higher, too, a fact often lost in the conversation about Canada's pension system.

In this paper I will elaborate on these arguments, and will conclude with a discussion of the steps governments might take to encourage more pension coverage for Canadians.

Pensions in Canada

Pension coverage in Canada has been relatively steady at around 40% of workers for nearly 50 years[i]. Within that figure, private sector coverage has been falling, most recently to around 24%, while public sector coverage has been rising, to around 90%. There has been a gradual shift away from defined benefit (DB) plans in favour of defined contribution (DC) plans, especially in the private sector, as companies have attempted to mitigate rising investment risk, essentially by shifting those risks back onto their employees.

The other 60% of Canadians rely on a government-sponsored registered retirement savings plan system, which allows them to divert pre-tax income to their retirement years, up to a maximum percentage. Over 20% of Canadians participate in this arrangement. This channel of retirement savings of course is affected by the same rising trend in investment risk that has led many DB plan employers to switch to DC plans.

After that, the Canada Pension Plan (and the companion Quebec Pension Plan), mandated and managed by governments, stand as the final retirement financial backstop. This plan puts a floor under retiree living standards, but a modest one.

And then there is the true Canadian nest egg, the family home. Canadians own something like $6 trillion in real estate, against which there is approximately $2 trillion in mortgages outstanding. To put this in context, net household wealth in real estate of about $4 trillion is about double the size of Canada's total economy. Of course, that wealth is very unequally distributed among individuals. But people who manage to pay off their mortgage during their working lives are sitting on a significant pension plan and many behave accordingly.

About two-thirds of Canadian adults own their home, and according to the Healthcare of Ontario Pension Plan's (HOOPP) latest Canadian Retirement Survey, about one third of those households are planning to sell their home to help fund retirement[ii]. This can involve more than one path: they can downsize when the nest is empty, sell and become renters or enter a multi-generational living arrangement, or simply use a reverse mortgage or a simple home equity line of credit to tap into the equity stored in the family home. Even so, rising income and interest rate volatility are working to erode this end-of-life flexibility. First, home ownership accessibility is clearly declining. The tax exemption of capital gains on the primary residence makes it significantly easier for homeowners to save for retirement as opposed to renters, and this avenue is becoming less open as housing prices rise. Second, interest rate volatility and the implied volatility of home valuations are making this retirement backstop far less reliable than in the past.

To sum up, not much has happened in Canada's retirement space for a long time, and it is not because a majority of Canadians already enjoy a high level of lifetime income security.

Retirement risks are rising…

Many Canadians are feeling less secure about their future. For the first time since Confederation, many Canadian adults fear that their children will be less well off than they are.

These concerns have many drivers, including Canada's relatively poor productivity performance and the perceived impact of the global energy transition on our resource-based economy. But these concerns are also founded on the rising trend in economic and financial volatility we have been experiencing, which is not unique to Canada. A major source of adverse volatility was the so-called Third Industrial Revolution, which saw the proliferation of the computer chip and the wave of globalization that it enabled. People lost their jobs in the process. As occurred during the First (steam engine) and Second (electricity) Industrial Revolutions, spreading deployment of the computer chip led to falling prices in many parts of the economy; central banks kept interest rates "low for long"; financial imbalances grew, and the Global Financial Crisis of 2008 was thrust upon us. In the background, the level of productivity in major economies rose significantly – by at least 10 percentage points during 1995-2005 in the US, for example. Also, consumer purchasing power rose as globalization and rising productivity pushed the prices of many ordinary goods lower. This is how the benefits of technology and globalization were shared beyond the inventors and deployers of computers. However, the path followed has been anything but easy, and not everyone has benefited equally.

An era of mediocre economic progress followed the Global Financial Crisis. Recessions were followed by jobless recoveries. Wall Street was bailed out, while Main Street paid the bill, and since that time the world seems to have stumbled from one difficult situation to another, never seeing clear skies ahead. If the global pandemic of 2020 was seen as the worst things could possibly get, people were to be disappointed, for the post-pandemic world has been punctuated by other kinds of outbreak: a surge in inflation, aggressive interest rate hikes, an emergent cold war with China, an actual shooting war with Russia, a spate of bank failures.

Some would say that we have had a run of bad luck and are due for some good luck. But what if this is not all bad luck, but the product of identifiable forces acting beneath the surface of the global economy? Forces that are very slow-moving and yet incredibly powerful, but rarely figure into economists' forecasting models? And what if these forces are all likely to continue growing in strength during the next 10-20 years? That would mean we are facing a rising trend in economic and financial volatility, and what we have been experiencing is not just a blip or a run of bad luck, but something destined to continue, and something we should prepare ourselves for.

This is the proposition I lay out in my book, *The Next Age of Uncertainty*[iii]. I identify five tectonic forces that are shaping our future: population aging, technological progress, growing inequality, rising debt, and climate change, and consider their implications for the future.

Population aging is producing a major retirement wave, a shortage of workers and falling productivity. Digitization of business and emergent artificial intelligence – the so-called Fourth Industrial Revolution – are expected to disrupt 20-30% of all jobs while boosting productivity substantially. Some 70% of global citizens have lived through a deterioration in income inequality during the past ten years, a trend that can be ascribed to the Third Industrial Revolution, and the rapid pace of technological change implies that this will only worsen in the next 10-20 years as the Fourth Industrial Revolution unfolds. Debt has exploded everywhere, and now that interest rates have moved higher, every shock to the economy is magnified as it interacts with debt. And climate change? A theoretical concept measured in fractions of a degree spread over 3-4 generations has suddenly become real, with raging forest fires and growing water stress. A forced transition to net-zero carbon emissions is one consequence, but the path society will take toward that goal remains highly uncertain and will cause significant structural change in the economy.

Each of these tectonic forces can disrupt our future all on its own. But it is the potential interactions between them that raises the most concern, because they can magnify one another in unpredictable chain reactions. There is a branch of mathematics that analyzes the interactions between nonlinear processes like these, called chaos theory. The name says it all. The economic and financial episodes that can emerge from this complex combination of forces are the equivalent of earthquakes – we all know that the earth's tectonic forces bear the potential of a major seismic event, "a big one", but we never know when it will actually occur.

I conclude that our future will be more volatile in general, verging on the unforecastable. Rather than one recession/recovery cycle every decade or so, there may be three. Job losses will become more frequent, usually for shorter intervals, but there will be an ongoing tug-of-war between a growing shortage of workers and a major labor-saving technological wave. Lifetime cumulative income will become far less certain for individuals. There will be bigger and more frequent interest rate and financial market fluctuations, a very challenging environment for investors and, by extension, for those saving for retirement. In short, retirement risk is on the rise.

…Creating a growing role for pensions

A majority of Canadians probably believe that governments will somehow protect them from this predicted rising tide of risk, as they did during the COVID-19 pandemic. However, a massive amount of government fiscal capacity was expended during 2020-23. Globally, governments are more indebted today than they were at the end of World War II, and there are few signs that they are attempting to rebuild that capacity. Indeed, in many countries the stock of government debt continues to grow despite the full recovery of economies from the pandemic.

Back in 1945-64, a major surge in global population (the Post-War Baby Boom) offered the prospect of a growing base of taxpayers to pay down the wartime government debt. This could not be less true today. The global population is aging rapidly as the baby-boomers work their way through their life cycle. The fiscal drag from the health care needs of this generation will grow for the next 10-20 years. In this respect, we should note in particular the growing incidence of dementia among the baby boom generation, which is even more costly than most other late-life diseases. Further, the peace dividend that the world has been enjoying since the fall of the Berlin Wall has evaporated in the post-pandemic period. Most governments will find it necessary to increase public spending on military readiness, not to mention cyber defence and terrorism.

Therefore, I am skeptical that governments will be capable of protecting citizens from rising economic and financial risk, if only because their fiscal capacity is so limited. On top of this, governments are finding it increasingly difficult to get things done except in the midst of a crisis, even when there are no financial costs involved. Politics has simply become too hard to do, proposed policies have all become too contentious and polarizing, regardless of how well thought out they may be. At the root of this polarization is rising income inequality, and the unfolding Fourth Industrial Revolution suggests that this trend will continue to worsen in the years ahead.

At a minimum, the basic mathematics of government finances suggest that governments will need to focus on developing new policies that are essentially self-financing – either by raising taxes specifically to pay for a policy shift (say, a special tax to finance increased military spending), or by focusing on policies that enable economic growth to rise and thereby generate more tax revenues automatically. An example of the latter would be to streamline project permitting processes so that less productivity evaporates while major investment decisions are delayed. A recent policy success was the development of a low-cost childcare program, which has allowed many young parents to join the workforce and expand Canada's economic potential while generating new tax revenues.

In light of these constraints on governments, I expect that rising economic volatility and risk will land directly on the doorsteps of companies and households. This is where most of the adaptation to a riskier world will happen, with the two parties often working together with a shared objective.
Given our demographic outlook, companies will be working in a world that is relatively short of workers. This is in sharp contrast to the past 50 years, where the world had a surplus of workers coming from the baby boom of post-World War II. Companies will be looking for ways to improve the lives of their employees, beyond just raising wages. I think of this as investing in the “S” of “ESG”.

If a firm places extra value on an employee, then it will be in the best interests of the firm to help address any angst that the employee is feeling. Today, this angst appears to be coming from high levels of volatility in the economy – more recessions, more periods of unemployment, inflation volatility, large fluctuations in interest rates and financial markets, and so on. As a precursor to this predicted shift in company behaviour, consider the current debates around working from home versus being present in the office, which are clearly falling toward employees; consider also the sudden increase in work stoppages and strikes in the wake of the global inflation shock of 2022-23.

This brings us to pensions. The pension concept has nearly unlimited potential as a tool to manage rising retirement risk. If Canadians are worried about their future – wondering what their cumulative lifetime income will be, how much they must save for retirement, what their investment returns will be, what their family home will be worth – then a well-structured and reliable pension would be just the ticket to reassure people and allow them to go about their lives with confidence. In this sense, a solid pension acts like an automatic stabilizer of the economy, allowing people to forge ahead when a shock throws the economy off course and can be a direct substitute for many government income stabilization programs.

Naturally, the idea is mostly simple arithmetic – in theory, any citizen can develop a life plan with sufficient savings in the front half to support them in the second half. There are financial products that help them to do this. And if their employer wished to help their employees with this top concern in life, they could do so by contributing some of the costs involved. Indeed, many employees appear willing to accept less take-home pay in exchange for more retirement security[iv]. This is entirely rational given the uncertainties involved, and the value of such an arrangement is rising as uncertainty rises. And yet, the level of pension coverage in Canada has remained static for many years.

Individuals who must manage their own investment risk on their pool of savings, and also must manage their own longevity risk, will save too much, almost by definition. In other words, they will die with leftover savings. In the next age of uncertainty, they will save even more, carrying larger financial buffers and dying with a rising trend in leftover savings. Saving too much is the same as spending too little; this implies a less satisfactory life overall, less dignity in retirement, and raises the odds of a stagnant economy as our population ages.

Some have argued that population aging over the next 20-30 years will lead to a major shift from saving to consumption spending, and even prove to be inflationary. This might be true for individuals who have certainty about the future, including the future value of the stock of savings they have accumulated, and the length of time that those savings need to support. Individuals cannot possibly internalize their longevity risk, except by over-saving or by pushing their retirement date, and investment risks will rise along with employment risk through time. With some 60% of Canada’s population dealing with all these risks by themselves, I believe the balance of risks tilts in the direction of a lackluster, potentially deflationary track for the economy as our population ages.

Of course, rising macroeconomic risk needs to land somewhere. If a much larger share of the population were to be covered by a DB pension plan, households would operate with much more certainty, they would probably stop saving altogether (beyond the demands of their pension plan), and the economy would have a much stronger growth trajectory. But who would be managing the risks that enabled all this? Almost certainly not individual firms, particularly since some 80% of Canada's total employment is at small and medium-sized enterprises that undoubtedly believe they could never come to grips with the costs and risks involved in providing a pension with defined benefits.

The benefits of retirement risk pooling

Firms and individuals alike will willingly pay for protection from risk, and the rising tide of risk we can expect in the future will make them willing to pay more and more. This line of reasoning points strongly toward a natural renaissance of the DB pension plan in the years ahead, or at least something with a majority of those characteristics. A DB pension protects the beneficiary from unexpected inflation, from financial market volatility (investment risk), from longevity risk (outliving one's savings), as well as from the risk of prematurely losing one's breadwinning partner.

The macroeconomic benefits of such a risk reduction are obvious. People who are not worried about the future live better, spend more and create more economic growth than a worried economy. That same economic growth generates company and government tax revenues, and reduces the need for other stabilization policies from governments. In other words, risk mitigation can, in large part, pay for itself, viewed through a macroeconomic lens.

Of course, a DB plan manages all these risks by shifting them to the employer. Historically, this has often proved to be too much for an individual employer. For example, the steady decline of interest rates for much of the past 40 years caused an explosion of DB pension liabilities as implied discount rates fell. No less important is the growing longevity of individuals. Plans parameterized around lifespans of 75 years can be blown up as people live to 80 or 90. Moreover, some 80% of Canadians are either self-employed or work for small or medium-sized businesses, for which sponsoring a DB plan is simply out of reach.

These shortcomings of DB plans are fundamentally market failures. In a perfect capital market, those shortcomings would not arise. Risks can be minimized through pooling, making pension provision a business that benefits tremendously from scale. Clearly, imperfections in the marketplace are somehow preventing the appropriate agglomerations that would create a stable and self-sustaining system.

Often this brings the conversation around to strengthening the government-provided pension system (Canada Pension Plan, Quebec Pension Plan). A significant increase in the benefit levels of that system, which is what might be needed to manage the risks that we face going forward, would almost certainly flounder given the fiscal and political stresses we face already. Such conversations inevitably ignore the macroeconomic benefits, not to mention the mental health benefits, of reduced lifetime income risk. The discussions of the future of the Canada Pension Plan back in 2018-19 appeared to take no account of the potential for higher economic growth and therefore higher government tax revenues that might result from increased retirement security. The extremely gradual pension plan enhancement eventually agreed upon was the product of negotiations around how much the plan would cost, and how much employee and firm contributions would need to rise, rather than these wider macroeconomic and fiscal benefits.

This suggests that the clearest avenue forward is for government to promote more pooling of pension schemes in the private sector. The biggest risk faced by an individual is longevity risk. Even if life expectancy is easy to track and to predict at the aggregate level, for an individual it is nearly impossible. Entering a pool with a large number of other individuals essentially eliminates this longevity risk, making pooling extremely helpful on these grounds alone. These benefits accrue not only to individuals, but of course to their employers, who may be very reluctant to sponsor a pension plan based on longevity risk alone. Even firms with 100-200 employees could be highly exposed to this risk; firms of 100 or fewer employees prohibitively so.

Pension pooling also creates scale that reduces average fixed costs associated with fund management, while at the same time enabling sufficient depth and diversification to bring investment risk to a theoretical minimum. These benefits are considerable: HOOPP (2018) calculates that replicating a 70% income replacement rate in retirement by an individual costs nearly $900,000 more over a lifetime than it does to participate in a Canada-model DB plan[v]. Of course, investment risk cannot be made to disappear at any point in time, but by aggregating many individuals not just across the same age group but through the entire age spectrum, a pension pool creates significant timewise averaging. In effect, younger contributors can help support retirees during adverse financial market events, simply because they have a long horizon in front of them. For example, workers who planned to retire at the end of 2008 who were not participants in a plan faced a significant loss of retirement wealth, and many were forced to delay retirement until markets had recovered. This risk is vastly reduced when pooled with younger workers.

A diminished role for housing?

Wider participation in DB pension plans in Canada could have a significant impact on the housing market, but it is not obvious in which direction.

In effect, the incentive to save for retirement through housing would be diminished if more people were covered by pension plans. If housing services were seen more as a consumable rather than a core investment vehicle, greater indifference between renting and owning could emerge, thereby reducing the propensity to own a home. At the same time, rising economic and financial volatility will mean that home ownership will be riskier and potentially less valuable as a lifetime savings vehicle, perhaps leading to a structural shift toward renting beyond that being forced by declining housing affordability.

Of course, it is also possible that higher lifetime income security due to participation in a DB pension plan would make individuals even more willing than now to take on a large mortgage to own their home. At the same time, it is possible that rising retirement income security would make it feasible for financial institutions to offer much longer mortgage amortization schedules than they do now, or offer housing finance schemes that support shared ownership or shared-equity mortgages. Therefore, it is possible that wider pension coverage could lead toward even higher rates of home ownership, all things considered.

Either way, wider pension coverage would serve to reduce the vulnerability of the typical household to big fluctuations in the housing market. Since greater volatility in housing would be an inevitable consequence of rising macroeconomic risk, wider pension coverage would again serve to stabilize the economy.

The path forward

The gist of this analysis is that Canadians are less prepared for retirement than they should be. And given the rising tide of economic and financial volatility that is on its way, they are less prepared than they think they are.

I believe that there are natural forces in motion that should foster a renaissance of the DB pension plan. The biggest risk that companies will face is of not retaining the human resources they need to execute their business, and enhancing lifetime security through DB pension plans is one tool they will turn to. Governments would be well advised to find innovative ways to promote this renaissance, and to bring forward policies that will make it happen more easily.

In this respect, the retirement system needs to be thought about along with all the other things governments do for people throughout their lives. Among other things, this would mean ensuring that there are no barriers to participation in existing pension plans, whether by individuals acting alone, by individuals acting along with contributions from their private-sector employers. Indeed, it may make fiscal sense for governments to create even richer tax incentives to encourage such pension participation, because tax revenues would rise and the use of other fiscal stabilization channels would decline. Such tools should be explicitly designed with small companies, part-time workers, gig workers, and self-employed individuals in mind. A fulsome review of both Federal and Provincial pension regulations with a view to expanding DB plan participation in these ways should be undertaken. Plans that have been set up for a specific constituency are fine, provided that they are sufficiently large to maximize pooling benefits. Allowing such plans to broaden their constituencies or to merge with others, or promoting the creation of new pension umbrellas to create more scale, seem like the right way forward. Throughout, governments need to be mindful that the internationally acclaimed Canada pension model is founded on operational independence, a valuable characteristic worth maintaining.

Today, governments are ill-prepared to act as a fiscal backstop should a retirement crisis emerge. Even so, a more aggressive enhancement of our foundational government-provided pension plans (CPP, QPP) should still be considered. A fulsome cost-benefit analysis of such an enhancement needs to take into account the potential tax revenue benefits that would come from higher average economic growth in a setting with higher retirement security, as well as the savings in health care costs (both physical and mental) and other fiscal stabilization expenditures that would be likely to accrue in a world with broader robust pension coverage.

Housing undoubtedly will remain core to the retirement plans of many Canadians, even though home ownership is becoming less attainable through time. Governments are in a position to foster more lifetime flexibility on this front, too. Housing finance today is locked in a very old model grounded in 25- or 30-year amortizations and specific requirements around down payments. A more flexible approach would allow households to aspire to varying levels of partial home ownership, shared equity mortgages, or longer amortization periods, provided there is an investor or pool of investors on the other side of the trade. Such reforms would help preserve housing as a channel of retirement security, while also improving housing accessibility today.

Another potential mitigant of rising retirement risks is for governments to encourage individuals to work longer, even if on a part-time or occasional basis. This would include keeping pensions highly flexible so that people can choose from many different paths forward in the later years of life, without compromising their income security.

Retirement is becoming a bigger share of everyone's total lifetime as longevity rises. Canadians used to work most of their lives, retiring at 65 and dying 7 years later. Now they may work for only 70% or even 60% of their lives. Yet life has become riskier, and many signs suggest that it will become even more so, reducing the quality of life for a large cohort of our society. The arithmetic of lifetime income risk has been altered significantly. The social benefits of a more robust pension system could be unmeasurably large, and we need to bring a more holistic lens to the conversation.

---

[i] These and related statistics are drawn from Statistics Canada.

[ii] HOOPP (2023), "2023 Canadian Retirement Survey".

[iii] Stephen Poloz (2022), "*The Next Age of Uncertainty: How the World Can Adapt to a Riskier Future*", Allen Lane/Penguin Random House. Many of the arguments and data points in this paper are offered in much more detail in the book.

[iv] HOOPP (2023), "2023 Canadian Retirement Survey".

[v] HOOPP commissioned report by Commonwealth (2018), "The Value of a Good Pension: How to Improve the Efficiency of Retirement Savings in Canada"