



The AMBACHTSHEER Letter

Sustainable Pension Design • Effective Pension Management

July 2023

WILL ARTIFICIAL INTELLIGENCE REPLACE ME?

WHAT CHATGPT KNOWS ABOUT PENSION DESIGN, GOVERNANCE, AND INVESTING

Artificial Intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

The Oxford Dictionary

“Advances in AI will enable the creation of a personal agent. It will see your emails, know about the meetings you attend, read what you read, and read the things you don’t want to bother with. This will both improve your work on the tasks you want to do and free you from the ones you don’t want to do.”

Bill Gates

Much Ado About AI

As I write this *Letter*, over 40,000 people from around the world have gathered at the *COLLISION* event in the heart of Toronto to discuss the wide-ranging implications of “computer systems able to perform tasks normally requiring human intelligence”. One of those wide-ranging implications is job losses, as AI programs begin to do jobs historically performed by humans. Taking this threat personally, I decided to have a conversation with *OpenAI’s CHATGPT* on its views on my turf: pension design, governance, and investing. This *Letter* reports on the insightful conversation that unfolded.

A logical place to start was to introduce myself to *CHATGPT* and pose a crucial question: “*I am a financial economist specializing in pension design, governance, and investing. Are you going to take over my job?*” Almost immediately, *CHATGPT* provided this friendly response (edited somewhat for clarity and brevity): “*I complement human capabilities rather than replace them. Five areas where I can help you are research and analysis, scenario modeling, risk management, regulatory compliance, and idea generation.*” After breathing a sigh of relief, I took my new best friend up on its offer to help write this *Letter*.

Pension Design

The first question I posed was: “*What are your suggestions for improving the design of retirement income systems?*”

The answer came back in 6 parts:

- 1. Assure savings adequacy through education, incentives, and autoenrollment into retirement savings plans. The latter action can significantly enhance retirement savings rates.*
- 2. Provide diversified investment options (including target date funds) that allow appropriately-aligned member choices.*

3. *Provide flexibility and customization in accessing retirement savings through options such as lump sums, periodic withdrawals, and annuitization.*
4. *Design a social safety net that provides a base pension for all, and potentially additional retirement income support for those in need.*
5. *Conduct regular retirement income system reviews to address changing circumstances, for example, related to demographics and longevity.*
6. *The design of retirement income systems varies from country to country. It will be important to align my suggestions to specific national contexts and regulatory environments.*

Looking back at the titles of the 42 *Letters* published over the 2020-to-date period, 9 were on pension design topics, all providing in-depth analyses of one (or some combination) of the 6 pension design improvement opportunities suggested by *CHATGPT*. For example, the title of the [December 2022 Letter](#) was “Pension Plan Design and Management: Why and How We Need to Change the Conversation about Pension Reform”. While I don’t believe that *CHATGPT* could have written that *Letter*, its 6 pension design improvement suggestions were very much in line with the *Letter*’s recommendations.

So far so good.....

Pension Governance

Here the question posed was: “*What are your suggestions for improving the governance of pension organizations?*”

CHATGPT responded by observing that “*Implementing effective governance practices helps ensure a robust and sustainable pension system for retirees.*” It went on to make 7 specific suggestions to that end:

1. *Transparent Structures: promote greater transparency in the governance structure by providing clear information on decision-making processes, investment strategies, and executive compensation. Enhanced transparency builds accountability and trust among stakeholders.*
2. *Diverse Skill Sets: pension organization boards should comprise of members with differing professional backgrounds, including finance, law, risk management, and pension expertise. This brings a range of perspectives to decision-making, and helps mitigate potential biases.*
3. *Strong Risk Management: needed to identify, assess, and mitigate risks associated with investing pension assets. Regular stress testing can help anticipate potential market downturns and devise responses to them.*
4. *Independent Audit and Oversight: these mechanisms ensure compliance with regulations and monitor organizational performance. They help identify weaknesses and irregularities in the governance structure.*
5. *Stakeholder Engagement: active engagement (e.g., through townhall gatherings) with beneficiaries and other stakeholders helps boards understand their needs and concerns. This fosters trust and allows for inclusion of diverse perspectives.*
6. *Long-Term Perspective: emphasizes the importance of intergenerational issues in plan design and sustainability in investing rather than short-term market gains and losses.*
7. *Continuous Education: this should be a priority for both board members and senior management in a dynamic world of pensions and investments. Important topics include fiduciary duty, risk management, and emerging trends in financial markets.*

CHATGPT should be congratulated for coming up with these 7 on-the-mark governance improvement suggestions. Looking back at my 18 *Letters* on pension governance-related topics since the start of 2020, I once again found a strong affinity between CHATGPT's broad suggestions and my more specific recommendations. A good example is the link between its broad 'Continuous Education' recommendation above, and a specific recommendation I made in the [January 2023 Letter](#) titled "Governance in the New *Interdependent Instability Era*: Is It Up to the Task?" It was for pension board members to attend the next offering of the *Rotman-ICPM Pension Governance Education Program (PGEP)* at the *Rotman School of Management*, September 25-28.ⁱ

Pension Investing

My final question to CHATGPT was: "What are your suggestions for improving the investment of pension assets?"

CHATGPT responded with 8 suggestions:

1. Diversification: spreading risk exposure across different asset classes and markets. It is important to control risk by not relying a single investment source.
2. Risk Assessment: the key is to assess and be guided by the risk tolerance of the risk bearers.
3. Active Management: engage experienced investment professionals or firms. They can keep up with market trends, adjust strategies, and potentially achieve better returns.
4. Long-term Focus: long investment horizons permit long-term return compounding rather than focusing on short-term gains.
5. Consider ESG Factors: integrating environment, social, and governance elements into investing creates a balance between profits and societal considerations.
6. Regular Performance Evaluation: this permits identifying underperforming assets quickly and assessing whether remedial action is required.
7. Cost Awareness: investment expenses that do not create value reduce investment performance over time, and should be eliminated.ⁱⁱ
8. Periodic Reviews of Investment Program: is it still aligned with beneficiary needs/preferences, investment beliefs/expectations, and regulatory requirements?

While useful, CHATGPT's pension investment improvement suggestions lacked some of the 'best practice' insights of its pension design, and especially pension governance suggestions. Regular readers of my *Letters* will know I believe a fundamental change is taking place in the way pension assets should be evaluated and invested. Descriptions of this fundamental change are set out in the [October 2022](#), [November 2022](#), [February 2023](#), and [May 2023 Letters](#). Its essence is the need to assess corporate sustainability (or lack of it) in the transition to a Net-Zero emissions world that is just getting underway.

Is CHATGPT Missing in Action on Climate Change?

This is not the place to rewrite those 4 *Letters*. However, we should recall the mounting scientific evidence pointing to material negative changes in how the natural world will behave in the coming decades. While often in fits and starts, there is a growing global consensus that actions must be taken to mitigate the worst of these material negative changes (e.g., heatwaves, floods, hurricanes, wildfires, crop failures, mass migrations). That is where the transition to a Net-Zero emissions world and its potential impact on corporate sustainability comes in. The point here is that CHATGPT raised none of these realities in answering my 'how to improve pension investing?' question. It simply suggested that ESG factors should be considered in investing pension assets.

So maybe a more direct question is needed. I asked *CHATGPT*: “How should pension funds integrate climate change into their investment policies?” It responded with 5 suggestions:

1. *Climate Risk Assessment*: perform thorough company/industry assessments of their exposures to physical risks (e.g., extreme weather events), transition risks (e.g., policy changes, regulatory shifts), and how those risks might impact company/industry sustainability.
2. *Low Carbon Investments*: actively seek out companies/projects with small carbon footprints. This could be in renewable energy, energy-efficient infrastructure, or sustainable technologies.
3. *Engagement and Voting*: engage investee corporations on positive climate actions through dialogue, shareholder resolutions, and voting on key issues like controlling carbon emissions and improving corporate sustainability prospects.
4. *Collaborative Initiatives*: join collective action initiatives such as PRI, TCFD, and Climate Action 100+. These organizations produce relevant guidelines, frameworks, and opportunities to work together to create positive change.
5. *Reporting and Transparency*: regular reporting on climate-related matters provides transparency to stakeholders. Disclosures should include climate risk assessments, carbon footprints of investment portfolios, and progress towards sustainability goals.

The obvious lesson here is that if you don’t succeed with your first question to *CHATGPT*, pose a follow-on question!

In Conclusion

CHATGPT was true to its word, and very much in line with Bill Gates’ observations on the front page. Once I asked it the right questions, *CHATGPT* provided relevant facts, opinions, and suggestions that complement my *Letters* on pension design, governance, and investing. But fortunately for me, it can’t write them....at least, not yet.

Keith Ambachtsheer

Endnotes:

- i. Visit the [Rotman](#) website for more information on the September 25-28 Rotman-ICPM PGEP offering.
- ii. Hopefully, our Advisory Service passes the ‘creates value’ test!

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