

Costs and risks associated with private pensions

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Agenda

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- 2. Pension fund management costs**
- 3. Private pensions and financial market risks**
 - Various types of risk, including inflation risk**
 - Information asymmetry of and conflict of interest**
 - Financial crises**
 - Allocation of assets**
- 4. Long-term risks related to private pensions – the impact of population aging on the rate of return on pension fund assets**

1. Private pensions costs for public finances

- **Mandatory second pension pillar:**

Costs: growing public debt as a result of diverting a part of pension contributions from the public PAYG system to the capital pillar

- **Voluntary occupational and individual pension schemes:**

Costs: fiscal incentives to pension savings – tax preferences and state subsidies, and in addition, the cost of pension contributions from public sector employees

Conclusion:

Private pensions are heavily subsidized by the state, which in fact means supporting the financial sector with public money

2. Pension fund management costs

- **The fee structures** that pension providers apply vary across countries.
- **Fees** can be charged on contributions or on salaries directly, on assets, on performance, or a combination.
- In addition to **regular fees**, members in some countries can be charged fees when they **join, switch or leave** a pension provider.
- Most OECD countries **cap** some of the fees that pension providers can charge to members. Most of them **cap fees on assets**, which is one of the most widespread way for pension providers to charge members.

2. Pension fund management costs cont`d

20 years ago Orszag and Stiglitz (2001) wrote that “various fees and costs consume between **40 and 45 percent** of the value of an individual account for the typical worker in the United Kingdom.”

This high percentage took into account the **interaction effects** of the total costs related to:

- (i) ***the accumulation*** (fund management and administrative costs for a worker contributing funds to a single financial provider throughout the working career),
- (ii) ***the alteration*** (any costs from switching from one financial provider to another or from stopping contributions altogether),
- (iii) ***the annuitization*** (costs of converting an account to a lifetime annuity upon retirement).

Orszag, P.R., and Stiglitz, J.E. (2001). Rethinking Pension Reform: Ten Myths About Social Security Systems. In *New Ideas About Old Age Security*, ed. R. Holzmann and J. E. Stiglitz. Washington, DC: World Bank, pp. 17-56.

2. Pension fund management costs cont`d

The impact of the total charges on the pension pool accumulated in a defined contribution (DC) account (under certain assumptions, OECD, 2018):

- An annual fee of **1.5% of** assets leads to a reduction of almost **30%** of the final pool available in retirement, relative to a situation of no charges.
- The cumulative impact of fees may be greater the sooner a person joins a given pension scheme. For example, in the case of a person who becomes its participant at the age of 25, and withdraws the entire pension pool at the age of 65, the annual fees for the first contribution will be **paid 40 times** during the professional career.
- The process of deducting fees from assets accumulated in the pension fund is continued if, after reaching retirement age, a person does not immediately withdraw all accumulated savings, but draws them gradually, e.g. in the form of an annuity over the next many years

3. Financial markets risks

Among the main types of risk associated with investing in the financial market are:

- **market risk or systematic risk** – as the 'undiversifiable' risk associated with investing in the market and affecting all securities,
- **interest rate risk** - e.g. the risk associated with a decrease in the bond's equity value caused by an increase in interest rates,
- **credit risk** – the risk of suffering a loss on an investment as a result of a counterparty's failure to meet its obligations - for example, when a borrower defaults on a bond,
- **currency risk** - resulting from the change in the price of one currency in relation to another and affecting the value of foreign assets held,
- **trading liquidity risk** - the risk of not being able to buy or sell assets in sufficient quantities and without unnecessary haircuts when the need arises, and it turns out that the market opportunities are limited,
- **reinvestment risk** - investing your future investment income may bring you a lower return than originally assumed,
- **inflation risk** - the risk that the value of the asset, or the income derived from it, will decline over time due to inflation,
- **other risks** - for example, the risk of changes in regulations regarding the type of assets allowed for investment or in tax-exempt status

(Hue and al (2019). Hue and al (2019), Investment risk for long-term investors: risk measurement approaches. Considerations for pension funds and insurers, British Actuarial Journal (2019), Vol. 24, e16, pp. 1–52

3. Financial markets risks - Inflation risk

- Inflation is one of the key sources of risk for the real purchasing power of retirement savings during **working life** and for the value of the pension fund to be used during **retirement**.
- Inflation risk and longevity risk are related. The longer the retirement age, the greater the risk of inflation. Even a fairly mild rate of inflation can significantly undermine the purchasing power of steady income in retirement.
- When inflation is high, banks tend to pay higher interest rates, but often, even for fixed-term deposits, they are not high enough to fully offset the depreciation of deposits caused by inflation.
- Investments in fixed income securities, such as ordinary government bonds, are also exposed to the negative effects of inflation. When the real rate of return is negative, it also reduces the value of the entire investment.
- Governments are limited in their ability to issue inflation-linked debt because it means higher overall debt financing costs.
- Pensions from the public PAYG system generally are protected against loss of purchasing power, at least in developed countries. In general, indexation is applied that considers not only the increase in prices, but also at least a part of the increase in wages in the economy

3. Financial markets risks - **Asymmetry of information**

- **Information asymmetry** means a situation where one party to the transaction has more information about the subject of the contract than the other, which may lead to adverse selection and moral hazard.
- **Financial institutions** and their clients have unequal access to information on the services provided by these institutions.
- **Clients** do not have enough information and knowledge to evaluate the quality of these services.
- **Many financial products are long-term**, which further increases the associated uncertainty and limits the ability to estimate the final effect of the purchased product.
- The problem of information asymmetry may be greater the more complicated the financial product is.
- Difficulties in understanding and evaluating products offered by financial institutions enable them to generate additional profits by overcharging the **fees** for the services provided and the use of **provisions unfavorable** to customers in contracts.

3. Financial markets risks - Conflicts of interest

- Information asymmetry, to the detriment of clients of financial institutions, fosters frequent **conflicts of interest** in the activities of these institutions.
- In financial services, the **principal-agent problem** creates an incentive for the product provider to take or even manufacture risk, as the resulting costs are almost entirely borne by the customer.
- Where there is information asymmetry, it is relatively easy for managers to implement solutions that bring **high returns** to customers (and high bonuses) **in the short term**, while imposing serious risks that may materialize over the years.
- In practice, pension fund managers and entities associated with them may carry out **any transaction** that is beneficial for themselves, but unfavorable for a fund participant, e.g., granting a loan to a related company even though it is at risk of bankruptcy
- However, they are not subject to **purposeful control** regarding actions taken on the fund's assets. When losses are made to the disadvantage of a participant, they can always say that this is the market.
- In practice, these actions, unfavorable for future pensioners, generally go unpunished

Various examples (including the collapse of the Enron Corporation in the USA in 2002) confirmed the limited effectiveness of state regulation of private pensions, even after repeated scandals, investigations and attempts to tighten controls.

3. Financial markets risks – **Financial crises**

Financial crises of various kinds occur relatively frequently in capitalism

- Laeven and Valencia (2018) identified a total of **151 banking crises, 236 currency crises and 74 sovereign crises** (understood as sovereign default to private creditors and/or restructuring) that had occurred in the years **1970-2017**.

The global financial crisis brought about sovereign debt crises in high-income countries: Greece with its 2012 restructuring and the 2015 default to the IMF, and Cyprus with the 2013 debt exchange.

Laeven, L., Valencia, F. (2018), Systemic Banking Crises Revisited, IMF Working Paper WP/18/206, 18 September, pp.1-48.

3. Financial markets risks – Financial crises

- **The financial 2008 crisis** reduced the value of pension fund assets by around **20-25% on average (over 30% in Ireland and the United States)**. This variability is explained in part by differences in portfolio compositions, as well as the regulatory environment. (Antolin and Stewart 2009).
- The financial crisis of 2008 happened **just a few years after the massive stock market crash that began in 2000**, it was global in nature, affecting many countries. Significant drops in share prices took place in the period from the beginning of **2000 to March 2003**. Compared to the maximum level achieved (in 2000 or at the end of the 1990s), **general stock market indices in the world's major economies fell by several dozen percent during this period**. The largest decline in stock prices was recorded in Japan, where the NIKKEI225 index **fell by 79%**, in Germany, where the DAX30 index **fell by 68%**, and the index DJ Euro Stoxx for the entire euro zone **fell by 59%**. (OECD, 2004).
- OECD (2004), Financial Market Trends, No. 86, March, p. 12
- Antolin, P. and Stewart, F. (2009), Private Pensions and Policy Responses to the Financial and Economic Crisis. Financial Market Trends, Vol. 2009/1, pp. 1-15.

3. Financial markets risks – **Financial crises**

- Between February **19** and March **23, 2020** the Dow Jones Industrial Average **plunged by 37%**, the Standard & Poor's 500 Index by **34%**, and the broadest measure of market activity – the Dow Jones Wilshire 5000 Index – by **35%**.
- **Such large drops in a short time confirm how unstable financial assets can be. So even if the markets have rebounded since then, they are still unpredictable.**
- This stock market turmoil proves that modern financial markets have almost nothing to do with financing new, **productive investments**, but **focus on speculating** with existing stocks.
- **So we have to call this speculation for what it really is: a socially useless gamble that ultimately does more harm than good.**

3. Financial markets risks – Allocation of pension fund assets

- Most countries have **quantified investment limits** that pension providers must comply with. **Only a few countries do not impose any specific ceilings.**
(Australia, Austria, Belgium, Canada, the Netherlands, New Zealand, Norway, Great Britain, the United States. (OECD, 2020),
- Most countries regulating investments of pension providers **restrict investment in equities**, particularly unlisted equities. In 19 out of 37 OECD countries an upper limit on equities is applied.
- In countries regulating **investment in bonds**, the limits are less strict for government bonds than for other types of bonds, including corporate ones.
- Some countries have restrictions on or prohibit **investment in real estate** altogether, but in general, only direct investment is prohibited, and indirect investments in the form of the acquisition of bonds and shares of real estate companies or real estate trusts may be allowed.
- Some countries require that the asset structure of pension funds changes over time as their **members age**, on the principle that the older the member, **the smaller the share of stocks and the greater the share of government bonds**, and other assets seen **as safer**, in the investment portfolio.
- OECD (2020), Annual Survey of Investment Regulations of Pension Funds and Other Pension Providers 2020.

3. Financial markets risks – Treasury bonds – risk free assets?

- For a long time, the prevailing opinion: **sovereign debt was free from the risk of repayment**, in nominal terms. In other words, all future promised currency amounts for coupons and principal are considered to be certain cash flows.
- The **absence of nominal risk** was justified by two arguments:
 - **first**, the government has tax and confiscation powers
 - **second**, the government can ask the central bank to provide funding.

A central bank has unlimited resources because it can always create money. The latter argument has been significantly weakened by the establishment of safeguards in many countries to ensure the independence of the central bank from the government (Giovannini, 2013).

- **Low interest rates** in most advanced economies have helped to lower the cost of borrowing by governments. On the other hand, they have become a major challenge for asset management in defined benefit (**DB**) pension plans.

Giovannini, A. (2013), Risk-free assets in financial markets, in: BIS (2013), Sovereign risk: a world without risk-free assets?, July.

3. Financial markets risks – Treasury bonds – risk free assets?

- From 1997 to July 2020, there were **42 sovereign bond defaults**, 21 of which occurred since 2010 (Moody`s, 2020).

- **Debt restructuring, being a result of sovereign defaults, may cause significant losses to investors.**

- **Sovereign debt exchanges** typically involve three debt transformations:

i) **extension of the maturity** of the debt instruments,

ii) **reduction in the coupon**,

iii) **nominal haircut of the principal.**

Maturity extensions are a much more common feature of sovereign bond exchanges than reductions in the face value of bonds.

- For example, from 1997 to March 2012, **the average loss** (measured by trading prices and net present value of cash flows) **was 47%**.

- The largest nominal haircuts were introduced for the **Argentinean debt exchange** in **February 2005 (66%)** and the **Greek debt exchange** in March 2012 (53.5%). (Moody`s, 2012)

3. Financial markets risks – Corporate bonds

- **Global corporate defaults** - 226 rated issuers defaulted in 2020, compared to 118 in 2019. The **total number of defaults in 2020 was the highest number of defaults since 2009** (when 266 cases were recorded). Most cases were in the United States: 146, up from 78 in 2019 (192 in 2009). In Europe, in 2020 the number of defaults hit a record 42, compared with 15 in 2019, and almost doubling the previous all-time high of 22 defaults in 2009 (Bacani, 2021, based on S&P Global Ratings data).
- **Institutional investors, including pension funds, in general are required to follow rules and internal investment procedures that restrict ownership of non-investment grade bonds.** If the bonds are downgraded to a non-investment grade, these investors, forced to sell these bonds, may have serious difficulties in finding potential buyers. Such “**fire sales**” by existing investors may lead to a significant **decrease in the market value of the bonds**, and consequently to investors incurring losses.

3. Financial markets risks – **Alternative investments**

In search of higher rates of return, **pension funds** in some countries are increasingly investing in **alternatives** to traditional financial assets (bonds and equities):

- **Private equity** - can be broadly understood as a financing of companies operating on the over-the-counter (non-public) market, and therefore not subject to special financial regulations. Private equity funds specialize in buying and restructuring companies, with the intention of selling them at a significant profit.
- **Hedge funds** - “pooled investment funds, structured as private partnerships which charge performance related fees
- **Real estate and economic and social infrastructure** (roads, water distribution,)

In general, these are very risky, non-transparent and high-cost investments.

4. Long-term risks related to private pensions - impact of population aging on the rate of return on pension fund assets

- Long-term decline in the profitability of financial assets as a result of the progressive aging of the population is a fundamental **threat to private pensions**.
- When a large generation of employees retire, the financial assets they have collected are liquidated in order to convert the accumulated savings into pensions.
- **The growing number of retirees in relation to employees contributes to a lower demand for financial assets and to an increase in the supply of these assets, putting pressure on the reduction of returns on investment and, consequently, private pensions.**
- Avoiding the decline in the profitability of the financial assets underlying private pensions due to an aging population requires **a continuous and sufficiently large influx of new contributions to the market.**
- This perspective prompts some authors to treat the private pension systems as the so-called **Ponzi schemes** or pyramid schemes. The name comes from the name of Charles Ponzi, who organized financial fraud on a massive scale in the United States in the 1920s.