VOLUNTARY PRIVATE PENSIONS IN UKRAINE: ASSESSMENT AND RECOMMENDATIONS

July 2019
Kyiv, Ukraine
VOLUNTARY PRIVATE PENSIONS IN UKRAINE: ASSESSMENT AND RECOMMENDATIONS

July 2019
Kyiv, Ukraine

This report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of USAID Financial Sector Transformation Project, being implemented by DAI Global LLC. The opinions expressed do not necessarily reflect the views of USAID or the United States Government.

© USAID Financial Sector Transformation Project, July 2019
What we measure affects what we do. If we measure the wrong thing, we will do the wrong thing. If we don’t measure something, it becomes neglected, as if the problem didn’t exist.

Beyond GDP: Measuring What Counts for Economic and Social Performance, 
Joseph E. Stiglitz, Nobel Laureate, Professor, Columbia University, 
Jean-Paul Fitoussi, Professor, Sciences-Po, Paris and Luiss University, Rome, 
Martine Durand, Chief Statistician, OECD, 
OECD, published on November 27, 2018 

Our approach to saving is all wrong: we need to think about monthly income, not net worth.

The Crisis in Retirement Planning, 
Harvard Business Review, July-August 2014, 
Robert C. Merton, Nobel Laureate, MIT Sloan School of Management 
CONTENTS

Executive Summary.................................................................8

Introduction..................................................................................12

1. Regulatory Framework and Institutions.................................14

2. Coverage and the Gender Gap...............................................21

3. The Economic and Financial Context....................................24

4. Pension Fund Investment Returns.........................................28

5. Non-State Pension Fund Costs and Fees.................................31


7. Key Policy Recommendations to Promote Retirement Savings .......41

ANNEXES.........................................................................................43

1) Key Facts about Top Pillar 3 Non-State Pension Funds in Ukraine.....43

2) Ukrainian Stock Market Data for 2018.....................................44

3) Pension System Objectives and Design Features (OECD 2018).......45

4) Countries with Automatic Enrollment Retirement Individual or Corporate Plans and Those Planning Auto-Enrollment Over Next Few Years ....46

5) EU Principles for Reporting of Cost and Past Performance ..........49

6) Ukraine’s Global Economic Rankings and Credit Ratings.............50

7) List of Pillar 3 Market Representatives Interviewed by the USAID FST Team...52
ABBREVIATIONS

AMC  Asset management company
ANPF  Administrator of the Non-state Pension Fund
AUM  Assets under management
DB  Defined benefit
DC  Defined contribution
EU  European Union
FSR  Financial Services Regulator
FST  Financial Sector Transformation Project
GDP  Gross Domestic Product
GOU  Government of Ukraine
CPI  Consumer price index
IRA  Individual retirement account
NBU  National Bank of Ukraine
NPF  Non-state Pension Fund (Ukraine)
NSSMC  National Securities and Stock Market Commission
OECD  Organization for Economic Cooperation and Development
PAYG  Pay-As-You-Go
PFTS  PFTS Stock Exchange (First Stock Trading System)
PFU  Pension Fund of Ukraine
TER  Total expense ratio
UAIB  Ukrainian Association of Investment Business
UCITS  Undertakings for Collective Investment in Transferable Securities
UX  Ukrainian Exchange
The primary purpose of a pension system is to make sure that people have income security after retirement. This includes poverty relief, consumption smoothing and insurance against risks during working life and in old age. It is important to have a combination of diversified retirement income streams: the state social security (solidarity) pension system, financed on a pay-as-you-go (PAYG) basis (Pillar 1), and a fully funded defined contribution (DC) private provision system – either a mandatory (Pillar 2) and/or voluntary (Pillar 3) accumulation system.

The main source of retirement income for 11.4 million Ukrainian pensioners, of whom 63% are women, is the state Pillar 1 solidarity pension system administered by the Pension Fund of Ukraine (PFU). As of January 1, 2019, the average monthly Pillar 1 pension benefit was 2,646 hryvnia, around $95 or 42% of the average net insured wage of 6,288 hryvnia in the previous year. This is not enough to provide an adequate living standard after retirement.

Retirement income in Ukraine mainly depends on the sustainability of the PAYG scheme. However, since the replacement rate of the state Pillar 1 pension system is projected to decline after 2030 due to demographic and labor market trends, the proportion of retirement income provided by supplementary voluntary/mandatory private pensions will become increasingly important. Future Ukrainian pensioners may have no alternative but to work longer, spend less and save more.

Ukraine needs to rethink its Pillar 3 system of voluntary pension savings

Voluntary DC non-state pension funds (NPFs) were introduced in Ukraine in 2005. However, after 14 years of operation, the non-state pension system is a failure. As of December 31, 2018, the total accumulated pension capital is ₴2,745.2 million or $100 million, for an average amount per NPF member of ₴3,210 or $115. The NPF market is dominated in terms of assets by the corporate NPF (CNPF) of the National Bank of Ukraine (NBU), which holds almost half of the total of ₴1,326 million. The voluntary non-state pension system has 855,300 participants, or just about 5% of the Ukrainian labor force. A majority of 54% of Pillar 3 participants

1 For details, see Key Issues in Pension System Reform in Ukraine, USAID Financial Sector Transformation Project, August 2018.
2 According to PFU, the average monthly wage before tax was UAH 7,810.88 in 2018.
are concentrated in only two NPFs: the professional Magistral NPF (PNPF) of Ukrzaliznytsia, the State Administration of Railway Transport of Ukraine with 38% or 326,467 of all participants at the end of 2018, and the Europe open NPF with 16% or 133,790 of all participants. The average account per participant in the Magistral NPF was just UAH 118 and in the Europe NPF UAH 215 on December 31, 2018.

The overall performance of Pillar 3 NPFs has been weak. Over the five-year period (12/2013 – 12/2018), NPFs produced an average annualized nominal net investment return (net of fees and charges) of 9.6%. Over the same period, the inflation rate averaged an annual 19.2%. Thus, NPF participants received on average a negative net real investment return (net of fees/charges and inflation) of -8.1% annually. Contributing more and for a longer period is not enough if a crucial ingredient is missing: a positive and decent long-term real net return, after inflation and expenses (fees and charges).

High costs and overall poor performance require better disclosure, pricing regulations and structural solutions for the entire market

The reasons for the poor performance of NPFs in Ukraine are multiple. They include poor macroeconomic performance, the lack of developed capital markets and financial instruments, low incomes and a propensity not to save for retirement, and poor promotion of the importance — indeed, the very existence — of private pension schemes. However, no small part of the problem is the NPFs themselves.

Providing private pension services involves costs such as administration of individual accounts, investment activities, custodian and other services that are paid for by participants. The potential impact of costs and charges on the value of retirement savings can be large.

The compounding impact of high fees on the value of retirement savings is very detrimental over the long-term accumulation period in an asset-based charging structure, such as in Ukraine. If an individual joins a defined contribution (DC) retirement savings system at 30 and withdraws the accumulated pension capital at 60, charges will be paid on the first contribution 30 times. Charges will also be paid each year on the prior years' investment returns.

Ukraine’s voluntary NPFs are very expensive for participants, charging on average more than 4% annually of accumulated pension capital. By comparison, big mutual funds in the United States like Fidelity and Vanguard are now offering equity funds to investors at zero fees. In addition, in Ukraine these costs are not disclosed properly to consumers in a comprehensible form. Fees are invisible to consumers.

---


5 There is no information available about Pillar 3 NPFs nominal net investment return (net of fees and charges) before 09/30/2013 (https://www.nfp.gov.ua/ua/Informatsiya-pro-serednozvazhennyi-pokaznyk-zminy-chystoi-vartosti-odnytst-pensiinykh-aktyviv.html).
There are few financial investment instruments available in the Ukrainian market. Thus, pension funds are primarily invested in government bonds and bank deposits. As of 12.31.2018, 46% of pension assets or ₴1,264 million were invested in government securities and 36% or ₴986 million in bank deposits. In fact, Ukraine’s 62 NPFs have similar investment portfolio structures but widely varying fees.

**Investment in such simple, conservative money market instruments could be made directly, without the costly intermediation of pension fund administrators, asset managers and custodians.** Even in the former Soviet Union, workers could save for retirement directly by depositing money or buying government securities in the Savings Bank of the USSR, a.k.a. Employment Savings Bank or Oschadbank. Today, upper income earners in Ukraine can legally save for retirement by investing up to €50,000 a year abroad at a reasonable cost (< 1.5%) in numerous passively managed but diverse international index funds.

**Automatic enrollment and auto escalation may be a way to solve the problem of low coverage and low contribution density in retirement savings**

The low coverage of Ukrainians by supplemental pension systems needs to be reversed. Current proposals to build a mandatory contribution system (Pillar 2) based on the participation of NPFs are misguided. Ukrainian NPFs are too costly, too distrusted, and too unknown to the average Ukrainian to serve as a solid foundation for Pillar 2. A more pressing need is to reform and revive the capital market generally and provide financial instruments appropriate to a longer-term investment horizon.

Assuming Ukraine can adopt new legislation that will facilitate financial market development through Bills #2413a (Split), #6303 (NSSMC powers), and #9035 (Derivatives market), and within 3-5 years introduce appropriate financial instruments for pension fund investment, **what kind of supplemental DC system should it choose?**

A growing number of countries are encouraging individuals to provide for their own retirement through **automatic enrollment in a voluntary or quasi-mandatory, private DC system**. In these countries, employers, employees or both are required to make retirement contributions. These plans typically feature matching provisions, such as 2% employer/2% employee, and/or a direct contribution from the state or through tax deductions. The level of contributions varies and, in most countries, the mandated contributions increase periodically from relatively low levels to those high enough to provide a meaningful retirement fund. Importantly, there are typically opt-out provisions for workers in most plans. Automatic enrollment is often paired with automatic contribution escalation (**automatically raises employee contribution rates a little each year until each employee reaches their target savings rate**) to help the employee meet retirement income goals.
Such a system, with elements of choice and incentives to participate, would be an improvement over the existing Bill #6677 in the Rada which mandates participation by all in a decentralized system with NPFs allowed to charge annual fees of 3.5% of pension assets. Likewise, a new quasi-voluntary system has certain advantages over the recent mandatory pillar 2 law proposed by the Securities Commission, which envisions the continued participation of NPFs in the system, albeit at reduced fees, with a cap of 0.6%. However, the draft law allows NPFs participating in Pillar 2 to charge annual fees up to 3.5% of assets under management.
INTRODUCTION

The context for pension reform in Ukraine is well known: an ageing population, a significant shadow economy, a large-scale outflow of labor abroad, and fiscal limits that put pressure on the state-funded PAYG (Pillar 1) social security pension system. The pension reform law enacted in October 2017 probably buys the government of Ukraine 10 to 15 years of space in which to design a fair, balanced and fiscally sustainable pension system. After that, demography will take over and Ukraine will face very hard choices.

In 2003, the Verkhovna Rada of Ukraine adopted two major pension reform bills: (1) the Law on Compulsory State Pension Insurance (#1058-IV), and (2) the Law on Non-State Pensions (#1057-IV). Since then, there have been many major and minor changes to both laws. In the solidarity system, benefits were increased on an ad hoc basis on several occasions and contribution rates were adjusted, often for political purposes.

Significant parametric changes to the solidarity pension system were enacted: a gradual retirement age increase for women from 55 to 60 in 2011, a reduction in the mandatory social insurance contribution rate from 40% to 22% in 2015, and tightened eligibility criteria, a flexible retirement age ‘corridor’ of 60/63/65, and regular implicit annual indexation of pension benefits in 2017.

The PAYG system is the main source of income for most Ukrainian pensioners, but it is not sufficient to provide a decent living at retirement: UAH 2,646 or $95 on average as of 01.01.2019, or 42% of the average insured net wage in 2018.

The Law of Ukraine “On Non-State Pensions,” that is, private voluntary pensions, came into force in 2004 to provide supplementary retirement benefits through non-state pension funds and banking institutions. As of December 31, 2018, there were 62 NPFs and 22 pension fund administrators. The total accumulated pension assets were $2,754.2 million hryvnia or $100 million, or a tiny average amount per NPF participant - $3,210 hryvnia or $115.

A mandatory DC individual retirement savings system (Pillar 2) was legislated in 2003 but never introduced in Ukraine. The idea of adding a mandatory retirement savings system to Ukraine’s pension system resurfaced in 2016-17, and, in July 2017, Bill #6677 was introduced by 59 MPs. It provides for decentralized administration of pension accounts through existing Pillar 3 (private) institutions. In March 2019, the National Securities and Stock Market Commission (NSSMC) submitted a different Pillar 2 Bill to the Cabinet of Ministers. This bill features centralized administration and a cap on administrative and management fees, but allows existing NPFs to participate in the system.

This report provides a brief overview of the voluntary Pillar 3 non-state pension system in Ukraine and its development challenges. The report stresses the importance of key drivers of private pension system outcomes: contributions payment density, contribution rates, investment returns, and operating costs. It also

---

6 The Law of Ukraine “On Measures for Legislative Support of the Pension System Reform,” #3668-VI.
emphasizes the importance of major prerequisites for positive individual retirement savings outcomes:

(a) Political and macroeconomic stability;
(b) Continued support for the entire pension system reform;
(c) Adequate regulatory and supervisory capacity; and
(d) Sound financial infrastructure and reliable financial instruments.
Voluntary non-state pension funds (NPF) were introduced in Ukraine in 2004 under the Law of Ukraine [On Non-State Pension Provision](https://zakon2.rada.gov.ua/laws/show/1057-15) #1057-IV, adopted by the Rada on July 9, 2003. Table 1 provides an overview of the main Pillar 3 pension system institutions and their functional responsibilities. Figure 1 demonstrates visually how these institutions interact.

### Table 1. Functional responsibilities of voluntary Pillar 3 institutions in Ukraine

<table>
<thead>
<tr>
<th>Legal entities</th>
<th>Attributes/Responsibilities</th>
</tr>
</thead>
</table>
| Non-State Pension Fund (NPF)                 | - established by the founders as a non-profit organization;  
- registered by the National Commission for Regulation of Financial Services Markets of Ukraine (or Financial Services Regulator - FSR);  
- managed and controlled by the NPF Board;  
- acts according to the NPF Statute, approved by the founders;  
- operates and carries out activities solely for the purpose of accumulating assets and providing benefits to NPF members;  
- may have several pension schemes that specify the conditions and procedures of private pension provision. |
| Pension Fund Administrator                   | - licensed and supervised by the FSR;  
- enters into pension contracts with NPF participants;  
- keeps personalized records of contributions, returns and accumulated assets;  
- communicates and provides agency services to NPF participants;  
- calculates benefits and provides pension payments;  
- requests the custodian to pay for NPF expenses (fees and charges imposed upon pension assets);  
- reports to regulators, fund participants, NPF Board and other entities. |
| Assets Management Company (AMC)              | - licensed and supervised by the National Securities and Stock Market Commission (NSSMC);  
- invests pension assets in accordance with the terms of its agreement with the NPF Board, investment declaration and legislation;  
- carries out accounting and reporting about net asset value (NAV), assets allocation and investment returns. |
| Custodian Bank                               | - NBU or commercial bank licensed by the NSSMC;  
- provides clearing and settlement services on NPF current account(s);  
- provides depositary operations with NPF securities;  
- monitors investment transactions of AMC and its compliance with the law and the investment declaration of NPF;  
- verifies the calculation of net asset value and net asset value per unit. |

The non-state pension funds are organized as separate *legal entities* and *financial institutions* with the status of *non-profit institutions*. They are registered by the National Commission for State Regulation of Financial Services Markets in Ukraine (FSR). An NPF may not change the type or the name indicated in its charter once it has been registered by the FSR.

An integral part of the NPF charter is a Pension Scheme — a document that specifies the conditions and procedure of private pension provision to the participants.

**Figure 1. Voluntary Pillar 3 pension system institutions**

The NPF Board must conclude contracts:

- for pension fund administration with an administrator of NPF (ANPF) licensed by the FSR to administer the pension funds;
- for pension fund asset management with an asset management company (AMC) licensed by the NSSMC;
- for custodian services with a custodian (commercial bank).

In Ukraine, the Law allows three categories of voluntary NPFs – *open*, *corporate* and *occupational*, depending on who the participants are:
**Open pension fund**: Any individual may participate regardless of place or occupation. One or more legal entities may establish such an NPF.

**Corporate pension fund**: May be founded by one or more employers. Any employer that is not a founder may also join a corporate pension fund, based on a participation agreement with the Board of the fund. Participants are employees working for the founder(s) and for employers that have agreements with the fund. Examples of these types of funds are the corporate NPFs of the NBU, Ukreximbank and Ukrposhta, Ukraine’s postal service.

**Occupational pension fund**: May be founded by several legal entities, including employers and/or associations of individuals, including trade unions or individuals who are related by professional activity or occupation. Only individuals with the same type of professional activity or occupation may participate in such a pension fund, as defined in the NPF statute. The Ukrzaliznytsia Trade Union’s and Transport Builders’ Magistral is an example of such an NPF.

As with any pension system, there are detailed rules regarding contributions, withdrawals, administration of accounts, asset management, financial reporting, and related matters.

**Asset Investment Classes**

The Law of Ukraine “On Non-State Pensions” provides general quantitative restrictions on investment activities with NPF assets — the share of particular types of assets. The most severe limits are on real estate, banking metals, and non-traded shares (Table 2).

**Table 2. Pillar 3 pension investment restrictions**

<table>
<thead>
<tr>
<th>Type of assets</th>
<th>Quantitative restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government securities</td>
<td>50%</td>
</tr>
<tr>
<td>Bank deposits and certificate of deposits</td>
<td>50%</td>
</tr>
<tr>
<td>Local governments securities</td>
<td>20%</td>
</tr>
<tr>
<td>Ukrainian corporate bonds</td>
<td>40%</td>
</tr>
<tr>
<td>Ukrainian shares</td>
<td>40%</td>
</tr>
<tr>
<td>Mortgage bonds</td>
<td>40%</td>
</tr>
<tr>
<td>Foreign securities</td>
<td>20%</td>
</tr>
<tr>
<td>Real estate</td>
<td>10%</td>
</tr>
<tr>
<td>Banking metals</td>
<td>10%</td>
</tr>
<tr>
<td>Non-traded shares</td>
<td>10%</td>
</tr>
<tr>
<td>Liabilities of one legal entity</td>
<td>10%</td>
</tr>
<tr>
<td>Securities of one issuer</td>
<td>5%</td>
</tr>
<tr>
<td>Other securities</td>
<td>5%</td>
</tr>
</tbody>
</table>
Social tax allowance (exemption) for individual contributors

Incentives such as tax exemptions and matching contributions are typically part of voluntary private retirement savings plans to promote participation. Another characteristic is that full or partial withdrawals or distribution from voluntary pension savings are only possible after the occurrence of a specific event, such as the loss of health or the purchase of housing, or reaching eligible retirement age. Otherwise, a penalty is generally imposed.

Ukraine uses the Exempt-Exempt-Taxed (EET) tax regime for voluntary Pillar 3 pensions, with limited tax-exempted contributions and investment returns, and taxed pension benefits upon withdrawal. Apparently, this tax deduction incentive is insufficient to attract more than a small number of Ukrainian participants to open pension fund accounts.

The NPF member can request a tax refund or tax rebate called a ‘social tax allowance’ for income tax paid from the amount that does not exceed the monthly subsistence minimum for an able-bodied person as of January 1 of the reporting tax year — ₴1,921 in 2019\(^{10}\) and ₴1,762 in 2018) multiplied by a 1.4 coefficient and rounded to the nearest ₴10:

\[
₴1,921 \times 1.4 = ₴2,690 \text{ (per month)}
\]

Thus, ₴2,690 will be the maximum monthly tax-exempt income for a member’s contributions to the NPF in 2019. The total annual tax-deductible contribution or social tax allowance for the 2019 tax year will be ₴5,810.40:

\[
₴2,690 \times 12 \text{ months} \times 18\% \text{ (income tax)} = ₴5,810.40 \text{ (per year)}
\]

In 2018, the social tax allowance was ₴5,335.20, and in 2017, ₴4,838.40, or 5.7% and 6.4% of the average annual insurable wage, according to individual record-keeping data at the Pension Fund of Ukraine.

Tax exemption for employer contributions

Employer payroll contributions to NPFs are tax-exempt to a limited amount, and can reduce taxable profits and the wage base for the unified social contribution.

According to the Tax Code of Ukraine, Article 164.2.16., the employer’s tax-exempt contribution to the NPF for 2019 shall not exceed 15% of the amount of wages paid to employees during each reporting tax month for which the non-state pension contribution is paid, but no more than 250% of the minimum wage set in the State Budget law for that year.

For 2019, the maximum tax-exempt employer monthly contribution to NPF per employee is limited to ₴10,432.50 per month: ₴4,173 * 250%. In 2018, it was ₴9,307.50 hryvnia and in 2017, it was ₴8,000.00 per month).

**Taxation of pension payments**

According to the [Tax Code of Ukraine, Article 170.8.2](http://zakon.rada.gov.ua/laws/show/2755-17), the NPF Administrator as a tax agent must withhold income tax from pension payments and transfer it to the budget as specified in Table 3.

Some beneficiaries and payments are exempted from personal income tax, the zero income tax rate under Article 170.8.3 of the Tax Code of Ukraine:

- any pension payouts for participants with a Group 1 disability;\(^\text{13}\)
- lump sum payments or periodic withdrawals for participants 70 and older, and beneficiary survivors under 18;
- any payments to survivors such as spouses and dependents who are nuclear family members of the NPF member.

**Table 3. Taxation of Pillar 3 pension benefits and lump sum payments**

<table>
<thead>
<tr>
<th>Type of pension payment</th>
<th>Taxable amount</th>
<th>Tax rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension benefit for a defined period (but no less than 10 years), or lifetime annuities</td>
<td>60% of periodic withdrawal amount</td>
<td>19.5%:</td>
</tr>
<tr>
<td>Lump sum payment, including due to early termination of the contract with NPF on non-state pension provision in cases provided by law</td>
<td>100% of the lump sum amount</td>
<td>18% income tax + 1.5% military fee</td>
</tr>
<tr>
<td>A lump-sum payment to a successor</td>
<td>100% of the lump sum amount</td>
<td>In accordance with the inheritance taxation rules</td>
</tr>
</tbody>
</table>

**Payment of Pension Benefits**

Members in voluntary pension funds can use three types of pension payouts:

- life annuities, when a participant buys an annuity from a life insurance company;
- pension benefits for a defined period, but no less than 10 years;
- lump-sum payment, as an exception, for example: disability or death, and so on.

Due to the short history of private pensions — since 2005 —, there has not been enough time to accumulate sufficient capital to buy a lifetime annuity. As a result,

---


\(^{13}\) Unable to serve themselves or to move independently and fully dependent on others, unable to work, unable to orient (disoriented), unable to communicate, unable to control their behavior.
among 80,800 Pillar 3 beneficiaries (Table 4), the overwhelming majority, 95%, have received small lump-sum payments averaging ₴7,000 or about $250.

At the end of 2018, only the CNPF of the NBU and two open NPFs — Ukrainian Pension Fund and Pharmaceutical— had average accumulated assets per participant exceeding the minimum amount necessary for a life annuity (UAH 89,820) and, therefore, made regular payments to participants. The NBU corporate pension fund provided periodic benefit withdrawals for 2,850 members, 69% of Pillar 3 periodic withdrawals recipients, for an average amount of ₴1,825 or $65 per month.

Table 4. Distribution of pension benefits as of Dec. 31, 2018 (since Pillar 3 inception)

<table>
<thead>
<tr>
<th>Types of pension payouts</th>
<th>Beneficiaries (since inception)</th>
<th>Distributions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>persons</td>
<td>%</td>
</tr>
<tr>
<td>Lump-sum payments</td>
<td>77,130</td>
<td>94.5%</td>
</tr>
<tr>
<td>Periodic withdrawals17</td>
<td>4,170</td>
<td>5.5%</td>
</tr>
<tr>
<td>Total</td>
<td>81,300</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Because of weak regulation, poor disclosure, and lax supervision (enforcement), fraud has damaged public trust and acceptance of NPFs. In 2015, the CNPF of the NBU, whose assets exceed 50% of the total NPF market, was the victim of fraudulent activities. Two former investment managers of the fund allegedly invested in bank deposits of failed banks and corporate bonds of companies that went bankrupt, in return for illicit payments. Agreements were entered into, according to which CNPF of the NBU assumed responsibility for the risks of non-repayment of loans issued at the expense of pension assets of the Fund placed on deposits with banks. The CNPF of the NBU lost 900 million hryvnia of pension assets, then equal to about 40% of the total Pillar 3 NPF assets.

Other fraudulent practices included deposit-credit schemes, manipulations of share prices among related companies, and the assignment of baseless investment ratings to corporate bonds, all taking advantage of a ‘profound knowledge’ of Ukrainian criminal law.

15 https://knpf.bank.gov.ua/.
17 The Law on Non-State Pensions requires that periodic withdrawals should be not less than 10 years from the beginning of the first payment.
In 2013-2016, several life insurers with pension insurance policies disappeared along with hundreds of millions of hryvnia in assets. In 2016 alone, the FSR received over 2000 complaints from Ukrainian customers about insurers. The regulator could not find the Garant-Life life insurance company at the address indicated in the registration documents, and nine thousand customers lost more than 200 million hryvnia.

20 [https://finclub.net/ua/analytics/harantlaif-ne-dozhyla-do-vyplat.html](https://finclub.net/ua/analytics/harantlaif-ne-dozhyla-do-vyplat.html).
2. COVERAGE AND THE GENDER GAP

The voluntary non-state pension system has 855,300 participants, or just about 5 percent of the Ukrainian labor force. The majority (54%) of Pillar 3 participants are concentrated only in two NPFs: professional NPF (PNPF) ‘Magistral’\(^{21}\) (Railway Line) of the State Administration of Railway Transport of Ukraine “Ukrzaliznytsia” (Ukrainian Railroad Administration) had 38% (326,467) of all participants at the end of 2018, and open NPF ‘Europe’ - 16% of all participants (133,790). The average individual amount in these pension accounts is a mere ₴118 in NPF Magistral and ₴215 in NPF Europe (as of 12.31.2018).

The private pension system has failed to attract significant numbers of participants. The majority of current NPF members are employees in plans sponsored by their employers, and they generally do not attach much importance to their pension account or pay attention to the operation or performance of the NPF.

As of 12.31.2018, of the total cumulative amount of pension contributions, employers paid 91% (₴1,827.7 mn), with the remaining 9% (₴172.8 mn) paid by workers and the self-employed.

According to USAID FST Project’s 2017 public opinion survey (POS)** on pension reform, and attitudes toward retirement in Ukraine, only about 6% of respondents considered themselves to be well aware of the operation of Pillar 3 voluntary pension funds, and 34% were slightly aware. The majority, 53%, were generally unaware of this system. This lack of awareness of the private retirement savings was consistent across survey respondents. It reflects both the disinterest of Ukrainians in saving for retirement, and the lack of successful promotion/advertising by NPFs.

Due to low disposable income, most respondents (57%) stated that they were unable to save for retirement, including 62% of female respondents and 52% of male respondents. Keeping cash in hryvnia is the most popular way of saving (80% of respondents) while saving in foreign currency ranks second (71% of respondents). At the same time, 39% of respondents considered keeping cash in foreign currency as the most attractive way of saving, while hryvnia savings ranked second in terms of attractiveness (32% of respondents).

Only 24% of respondents reported having savings. Keeping cash in hryvnia is the most popular way of saving (80% of respondents) while saving cash in foreign currency ranks second (71%).


In general, Ukrainians are skeptical about voluntary NPFs as a vehicle for retirement savings (Figure 2). More than half (54%) of 2017 pension POS respondents\(^ {23}\) would not like to become participants in any pension fund. Only 8% of respondents would be interested in making contributions to private pension funds, if they were provided with a tax preference on contributions. Furthermore, only 18% of all respondents would agree to contribute to an NPF if the employer also made contributions for the benefit of the employee.

\(^{21}\) Data from the Administrator of PNPF Magistral


\(^{23}\) ibid, p. 24.
Figure 2. Willingness to save money in NPFs (% of respondents in the relevant group)

<table>
<thead>
<tr>
<th>All respondents</th>
<th>8%</th>
<th>18%</th>
<th>54%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29 y. o.</td>
<td>9%</td>
<td>23%</td>
<td>41%</td>
<td>26%</td>
</tr>
<tr>
<td>30-39 y. o.</td>
<td>11%</td>
<td>20%</td>
<td>44%</td>
<td>24%</td>
</tr>
<tr>
<td>40-49 y. o.</td>
<td>8%</td>
<td>22%</td>
<td>52%</td>
<td>18%</td>
</tr>
<tr>
<td>50-59 y. o.</td>
<td>8%</td>
<td>19%</td>
<td>54%</td>
<td>18%</td>
</tr>
<tr>
<td>60-69 y. o.</td>
<td>7%</td>
<td>9%</td>
<td>68%</td>
<td>16%</td>
</tr>
<tr>
<td>Over 70 years</td>
<td>4%</td>
<td>6%</td>
<td>74%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Yes, I would accept making contributions if I get a tax preference for contributions
Yes, if my employer also pays contributions for me
No, I would not want it
Unable to respond

The low interest in voluntary retirement savings is the result of low disposable income, low financial awareness, general distrust in financial institutions, the lack of reliable financial assets for NPF investment, and just the lack of necessary information.

According to the National Commission for the Regulation of Financial Services Markets (FSR) data, in each age group the majority of NPF participants are men - an average of 58% of the total number of participants, while women account for 42%. Moreover, among NPF beneficiaries 60 years and older, the proportion of women is just 32%.

The FSR’s regular quarterly and annual Pillar 3 reports do not include any data about the average and median NPF retirement account balances by demographics (age groups and gender), income or contribution density. This information is also unavailable in NPF reports and on ANPF websites.

International experience, however, suggests that the gender gap problem is very real. For example, in the Australian superannuation system that has existed since 1992, the average retirement account balance for women at pre-retirement age (60-64 years) in 2015-2016 was 42% lower ($157,050) than for men of the same age ($270,710)\(^24\). Australian men accounted for 61% of the total retirement savings, compared with 39% for women. More than 80% of Australian women have insufficient retirement savings for “comfortable retirement.” Moreover, single retired women are “at greater risk of poverty, housing stress and homelessness in retirement”\(^25\).

In the United States, women also face a much greater challenge than men do when it comes to retiring with lifetime financial security. According to a Prudential Insurance Company report\textsuperscript{26}, lower annual and lifetime average earnings during working years have resulted in women earning Social Security benefits that are 23\% lower than those of men. This is a key contributor to the retirement income gender gap. Currently, the median annual total income of women age 65 and older is 42\% lower than men\textsuperscript{27}, while median retirement savings gap is 32\%.

\textsuperscript{26} Closing the Retirement Income Gender Gap, Prudential Financial Inc., 2017

3. THE ECONOMIC AND FINANCIAL CONTEXT

Ukraine’s historically weak economic performance largely reflects an incomplete transition to a full-fledged market economy and the poor business, economic and political environment that has prevailed since independence. The oligarch-dominated economy had already slowed before Russia’s 2014 annexation of Crimea and proxy war in the eastern Donbas.

Since 2016, Ukraine’s economy has recorded growth for 13 quarters in a row. However, it was among the slowest performing economies in Europe in 2017, and it needs huge investments and new jobs to accelerate growth, which currently ranges around an unimpressive 2.5-3.5%.

The NBU periodically raised its prime rate from 12.5% in May 2017 to 18% in September 2018 (reduced to 17.5% from April 26, 2019). A large volume of non-performing loans remains a drag on the banking system. The capital markets sector in Ukraine is underdeveloped and poorly regulated, and market capitalization is only 20.3% of GDP, compared to 38% of GDP in neighboring Poland.

The state faces high borrowing costs to cover its fiscal deficit: the average weighted yield from domestic government bonds placed on the primary market was 17.12% in 2018, which is higher than in 2017, when it was 15.02%, and 2016, when it was 14.86%. Ukraine will need $7.7 billion or 5.8% of GDP in 2019 to service public debt in foreign and domestic currency, with another $2.9 billion or 2.3% of GDP needed to cover the projected fiscal deficit. According to the NBU, in 2019 the government, NBU, businesses and commercial banks will have to pay $15.655 billion, of which $11.952 billion as the principal amount of debt, and $3.703 billion as are interest payments.

The total volume of trades at the registered stock exchanges fell from 40% of GDP in 2014 to a very low 7% in 2017 and 92% of trading volume was with government securities. Currently, there are five stock exchanges registered with the NSSMC, of which three make up 99.98% of the organized securities market: the PFTS Stock Exchange or First Stock Trading System, established in 1996; the Perspektiva Stock Exchange established in 2006; and the Ukrainian Exchange or UX, established in 2008. Table 10 (see Annex 2) provides information about 2018 annual trading volumes and the number of trades at the three leading Ukrainian exchanges.
The PFTS Index is a benchmark stock market index that tracks the performance of major companies listed on the PFTS Stock Exchange. It is a capitalization-weighted index. The PFTS index has a base value of one (1.0) as of October 1, 1997. Table 5 also provides information on PFTS and UX indices since Pillar 3 pension system inception in 2005.

Table 5. PFTS and UX index values

<table>
<thead>
<tr>
<th></th>
<th>PFTS (data from 01.01.2005)</th>
<th>Ukrainian Exchange (data from 01.08.2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Date</td>
</tr>
<tr>
<td>Max close</td>
<td>1,208.61</td>
<td>01.15.2008</td>
</tr>
<tr>
<td>Min close</td>
<td>199.12</td>
<td>03.06.2009</td>
</tr>
<tr>
<td>12.28.2017 close</td>
<td>315.06</td>
<td></td>
</tr>
<tr>
<td>12.28.2018 close</td>
<td>559.36</td>
<td></td>
</tr>
<tr>
<td>Annual change (2018), %</td>
<td>77.5%</td>
<td></td>
</tr>
<tr>
<td>5-year average annual change, %</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td>10-year average annual change, %</td>
<td>6.4%</td>
<td></td>
</tr>
<tr>
<td>10-year average annual CPI, %</td>
<td>12.7%</td>
<td></td>
</tr>
<tr>
<td>12.28.2018 to max close, %</td>
<td>-53.72%</td>
<td></td>
</tr>
<tr>
<td>Number of issuers in index (end-2018)</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>


The value of DC-funded pensions can depend critically on the funds’ investment performance. In order to protect participants’ savings, governments often regulate pension funds strictly.
Due to Ukraine’s overall weak economic performance, underdeveloped capital markets, and the lack of adequate and safe investment opportunities, Pillar 3 pension funds are predominantly invested in two types of instruments: government securities drew ₴1,264mn or 46.0% as of 12.31.2018 and bank deposits drew ₴985.5mn or 35.9%. Investment in corporate bonds was only ₴298.6mn or 10.9%, real estate was ₴47.3mn or 1.7%, and shares were ₴47.5mn or 1.7% (Figure 3).

In 2017, investments in government securities and bank deposits exceeded 90% in four of the largest NPFs. Internationally, these kind of conservative assets — government securities and bank deposits — are associated with the accounts of individuals who are about to retire, not those who are still in the accumulation phase of their careers.

It should be noted that the available financial instruments for investment in Ukraine severely limit (1) options for returns that will beat inflation and (2) options for risk diversification. Moreover, the high percentage of assets in government bonds and bank deposits calls into question the validity of very high fees charged by NPFs.

In fact, Ukraine’s Pillar 3 system is one with multiple NPFs that all have similar conservative investment portfolio structures, albeit with varying fees. Investment in such conservative money market instruments could be made directly, without costly intermediation of pension fund administrators, asset managers and custodians. Even in the former Soviet Union workers could save for retirement directly depositing money or buying government securities in the Savings Bank of the USSR, today Ukraine’s Oschadbank.
In the United States, simple self-directed traditional or simple Individual Retirement Accounts34 or IRAs, often through banks, accomplished the same purpose. A traditional IRA is a retirement account towards which individuals can typically make pre-tax contributions up to a specified maximum dollar amount, not including any employer matching contributions. Account holders can begin to withdraw the funds, without incurring a 10% early withdrawal fee, when they turn 59.5, and they must begin taking distributions from the IRA when they turn 70.5.

IRAs are often referred to as “tax-advantaged investment vehicles:”

- Making retirement savings contributions can lower personal annual taxable income. In 2019 in the US, total IRA contributions cannot be more than $6,000 or $7,000 for those 50 or older.

- Investment return is tax-deferred.

- Participants must pay taxes only when they begin to receive distributions.

Today, upper income earners in Ukraine can legally save for retirement by investing up to €50,000 a year in numerous passively managed international index funds at a cost that is less than half of what Ukraine’s NPFs charge. The total expense ratio will depend on the invested amount, that is, lower fee rates for larger volumes, investment portfolio, and the choice of assets/managers, and can be in the range of about 0.1%-1.5% a year (Box 1).

Box 1. Example* of total expense ratio (TER) for foreign investment in passive moderate risk portfolio:

<table>
<thead>
<tr>
<th>50% Vanguard S&amp;P 500 ETF (VOO) / 50% iShares, 20+ Year US Treasury Bond ETF (TLT)</th>
<th>Invested amount (one time)</th>
<th>Average annual TER** in percent of AUM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$10,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>$10,000</td>
<td>1.20%</td>
<td>0.31%</td>
</tr>
</tbody>
</table>

* Information from the InteractiveBrokers site (www.interactivebrokers.co.uk/) was used for calculations.

** Includes annual management and brokerage fees.

Thus, for an investment of $10,000 in foreign index funds for 20 years and more, the fee will be only 1.2%, and for an investment of $100,000 – just 0.09%.

4. PENSION FUND INVESTMENT RETURNS

Pension investment returns can be calculated using one of two methods: (1) money weighted or (2) time-weighted. The money-weighted rate of return method is the most accurate from the standpoint of participants. It accounts for all cash inflows — contributions and investment return — and outflows — mainly benefits distribution — as well as the fees charged by financial intermediaries: NPF administrators, asset management companies, custodian banks, auditors, and others.

The money-weighted rate of return does not measure the ability or the skill of the investment management team, but it does give the most realistic outcome for Pillar 3 participants, the majority of whom are still largely in the accumulation phase and experience sizable cash inflows relative to total assets under management. The money-weighted rate of return is used by the OECD to calculate pension fund returns on a comparable basis among countries.

The time-weighted rate of return is a measure of the compound growth rate in a portfolio. This measure is also called the geometric mean return, as the reinvestment of returns (interest) is captured by using a compound interest through multiplication, rather than the arithmetic total and mean, and shows annual average growth over a certain period of time.

The time-weighted return is indicative of the skill — or luck — of the pension fund’s portfolio manager and is often used to compare the returns of investment managers because it eliminates the distorting effects on growth rates created by inflows and outflows of money.

Per FSR regulation the NPF Administrator should take into account the change in the net asset value of a unit of pension assets for the reporting period, by quarter and year. The FSR uses NPF reported data to calculate the weighted average change in the net value of a unit of pension assets every quarter, on an annual basis (except for corporate NPFs with a sole founder and NPFs who did not fulfill the mandatory requirements for the start of activities).

Unfortunately, with the exception of a few NPFs, such as the PrivatFund or OTP Pension open NPFs, there is no information available about the average annualized money-weighted and time-weighted nominal and net — after expenses and inflation — investment returns. No data has been available on NPF websites, in NPF or FSR reports, brochures or leaflets for several years, meaning for the last 1, 3, 5 and 10 years nor since inception.

As shown in Table 9 in the Annex, only 5 of the top 13 voluntary pension funds had nominal investment returns that fully compensated for administrative fees/charges plus inflation in 2017. Over the five-year period (12/2013 – 12/2018), NPFs produced an average annualized nominal net investment return, meaning net of fees and charges, of 9.6%, which did not cover inflation for the same period — 19.22% average annual. Thus, from 12/2013 to 12/2018, NPF participants received on average a negative net real investment return of -8.1 % annually (Table 6).

Table 6. Pillar 3 NPFs net nominal and real annualized time-weighted returns (net of fees)

<table>
<thead>
<tr>
<th>Period</th>
<th>Net nominal return (av. annual)</th>
<th>CPI (av. annual)</th>
<th>Net real return (av. annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year (as of 12/2018)</td>
<td>8.36%</td>
<td>10.90%</td>
<td>-2.29%</td>
</tr>
<tr>
<td>3 years (12/2015-12/2018)</td>
<td>9.09%</td>
<td>13.06%</td>
<td>-3.51%</td>
</tr>
<tr>
<td>5 years (12/2013-12/2018)</td>
<td>9.58%</td>
<td>19.22%</td>
<td>-8.09%</td>
</tr>
</tbody>
</table>


According to best international practice, real rates of return should be calculated by the time-weighted method for 1, 3, 5, 10 years, and since the inception of the pension fund.

In October 2017, the European Commission issued a Request to the European Supervisory Authorities to Report on the Cost and Past Performance of the Main Categories of Retail Investment, Insurance and Pension Products.38 The EU document highlights six key principles for providing “clear, accurate, comprehensive and comparable information” for retail investors:

- Indicators should be comparable for investors to make informed decisions.
- Indicators should be computed and presented at the appropriate level of granularity with categories comprising products with broadly homogenous characteristics.
- Work on net return should imply giving equal importance to returns and diverse costs that impact net returns.
- All fees impacting the net performance of retail investment products should be reported.
- The impact of inflation should be taken into account.

The reporting on cost and performance should present the net return for varied periods of time. The time horizon should preferably cover cost and performance over the last 1, 3, 7 and 10 years, subject to data availability.

It is worth noting here that information about costs and past performance should also be provided since the inception of pension fund or pension product, if available.
5. NON-STATE PENSION FUND COSTS AND FEES

The Pillar 3 asset pool consists of contributions from members, employers and sponsors, and the returns earned through investing those contributions. Non-state pension funds and other financial intermediaries — NPF administrators, assets managers (AMCs) and custodians (banks) — carry out administration and investment activities of pension assets and charge fees. All other things being equal, the higher the cost of administering/managing/investing the pension fund, the lower the volume of assets available to earn returns and eventually pay benefits.

In mandatory, quasi-mandatory, and voluntary defined contribution private pension systems, providers cover their operating costs through fees charged to plan members. The value of the pension account at retirement is reduced by the fees and charges deducted over the years. That is why fees charged by NPFs are subject to statutory regulatory requirements in many countries. Simply stated, excessive fees and charges have a direct impact on future benefits. The impact on smaller amounts accumulated in pension accounts, such as those of lower-income workers and women, can be particularly high.

One measure of the efficiency of Pillar 3 NPFs is the total expense ratio (TER) in relation to assets managed. The total expense ratio of private retirement savings includes all costs of marketing the plan to potential participants, collecting contributions, keeping records of accounts, sending contributions to investment fund managers, investing the assets, converting account balances to annuities and paying annuities, carrying out planned audits of NPFs, and sending reports to participants.

Table 7. Comparison of fee levels and impact on accumulated pension capital

<table>
<thead>
<tr>
<th>Charges as % assets</th>
<th>Reduction of accumulated pension capital over 40 years %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>1.2</td>
</tr>
<tr>
<td>0.15</td>
<td>3.6</td>
</tr>
<tr>
<td>0.25</td>
<td>5.9</td>
</tr>
<tr>
<td>0.50</td>
<td>11.4</td>
</tr>
<tr>
<td>0.75</td>
<td>16.5</td>
</tr>
<tr>
<td>1.00</td>
<td>21.3</td>
</tr>
<tr>
<td>1.50</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Assumptions: contributions are 10% of wages; annual wage growth is 3.8% — 2% inflation and 1.8% productivity growth; the contribution period is 40 years; portfolio investment returns are 7%. Lower returns would reduce the impact of charges on the pension pot, for example, the impact of a 1.5% charge drops by almost 3 pp if portfolio investment returns are 5% rather than 7%.

Table 7 shows the potential impact of total charges on the accumulated balance in a theoretical DC account under certain assumptions. Charges of 1.5% of assets would lead to a reduction of nearly 30% of the final amount available upon retirement, relative to a situation of no charges; halving the charges to 0.75% of assets brings the reduction down to less than 17%.

The effect of compounding is likely to be significant in an asset-based fee structure such as the one in Ukraine. If an individual joins a DC pension fund at 30 and withdraws the entire pension amount at 60, charges will be paid on the first contribution 30 times. Charges (fees) will also be paid each year on the prior years’ investment returns.

Ukraine’s Financial Services Regulator has established the annual maximum amount of fees that can be collected directly from the accounts of NPF members at 7.0% of the net value of pension fund assets. This is an extremely high, extortionate cap. As a result of this high cap on administrative costs, most NPFs in practice legally charge very high fees. During several USAID FST project meetings with industry representatives, most of them conceded that a cap on fees “should not exceed 3%.” However, even 3% is excessive. By contrast, the NSSMC proposed Pillar 2 bill would cap fees at 0.6%. However, for NPFs that will participate in Pillar 2 system, the maximum expense ratio will remain very high - 3.5% of net AUM.

Table 8 shows the fees charged by the top 10 NPFs by assets under management (AUM) as of 12.31.2017. The two largest corporate pension funds, NBU and Ukreximbank, subsidize administrative costs. Of the remaining funds, the highest fees were charged by the open pension fund “ALL” (VSI) — 6.3% of AUM, followed by the professional NPF of the energy sector trade unions, with charges of 5.7%, and the Ukraine open NPF at 5%.

Table 8. Fees charged by the largest non-state pension funds in Ukraine

<table>
<thead>
<tr>
<th>Pension fund</th>
<th>Total fees in 2017</th>
<th>including (% of AUM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in % of AUM</td>
<td>per participant, hryvnia</td>
</tr>
<tr>
<td>1 NBU Corporate NPF</td>
<td>0.24%</td>
<td>215</td>
</tr>
<tr>
<td>2 Ukreximbank Corporate NPF</td>
<td>0.94%</td>
<td>314</td>
</tr>
<tr>
<td>3 Emerit-Ukraine Open NPF</td>
<td>3.99%</td>
<td>79</td>
</tr>
<tr>
<td>4 PrivatFund Open NPF</td>
<td>4.30%</td>
<td>95</td>
</tr>
<tr>
<td>5 OTP Pension Open NPF</td>
<td>4.91%</td>
<td>147</td>
</tr>
<tr>
<td>6 Pharmaceutical Open NPF</td>
<td>4.44%</td>
<td>3,075</td>
</tr>
<tr>
<td>7 Energy Sector Trade Unions of Ukraine Professional NPF</td>
<td>5.66%</td>
<td>262</td>
</tr>
<tr>
<td>8 VSI [ALL] Open NPF</td>
<td>6.28%</td>
<td>67</td>
</tr>
<tr>
<td>9 Dynasty Open NPF</td>
<td>2.89%</td>
<td>28</td>
</tr>
<tr>
<td>10 Ukraine Open NPF</td>
<td>5.04%</td>
<td>568</td>
</tr>
<tr>
<td>11 Ukrainian Pension Fund Open NPF</td>
<td>4.77%</td>
<td>4,171</td>
</tr>
<tr>
<td>12 Social Standard Open NPF</td>
<td>4.41%</td>
<td>339</td>
</tr>
</tbody>
</table>

Source: NPFs 2017 Annual reports, author’s calculations.

A typical response about high fees from the NPFs is “costs do not matter, look at investment returns.” This ignores the fact that real rates of return are negative. The reality is that no one wants pension fund participants to know the actual costs. Unfortunately, the regulator does not require the NPFs to provide cost information or ‘price tags’ about the charges for their services in a consumer-understandable format. Fees are invisible.

It is difficult to understand the wide differences in fees charged by the NPFs for essentially the same service. For example, administrative fees range from 0.36% to 3.46%, a tenfold difference. Equally, it is hard to understand or justify high asset management fees for an essentially simple portfolio of government securities and bank deposits.

According to 2017 NPF annual reports, among the top 10 pension funds, excluding the NBU CNPF, 90% of fees were charged by NPF administrators and AMCs. The breakdown of the average share of administrative costs was as follows: 53%, investment management costs; 37%, administrative costs; 6%, custodian services; and other costs, 4%.
The official sites of NPFs mainly provide information about total and cumulative expenses for various financial services, in hryvnia. This is analogous to supermarkets providing buyers general information on the total amount spent on bread, meat and dairy products, instead of showing price tags for each product unit.

The destructive power of compounding costs is best explained by a simple example (Figure 4). Imagine that a person decided to invest ₴10,000 for 40 years. If the average annual rate of return is 10%, then ₴10,000 will increase to ₴67,275 in 20 years and up to ₴452,593 in 40 years.

**Figure 4. The effect of compounding returns and the destructive power of compounding costs: growth of ₴10,000 UAH over 40 years**

Now let us reduce the 10% rate of return by two administrative costs associated with Ukraine’s NPFs: 4.93% (average costs charged by Ukrainian NPFs in 2017) and 7.0% of pension assets (maximum cap on fees for NPF set by the FSR). Result: net investment return will be only 5.07% and 3.0% — a nominal return that does not exclude inflation.

In the first 10 years, the two lower lines that show rates of return of 5.07% and 3.0% are not much different from the upper line. However, at the end of the 40-year period, the accumulated pension capital totals just a mere ₴72,302 after charging annual costs 4.93% of assets, and only ₴32,620 after annual administrative costs of 7.0%. Where did the astounding shortfall of ₴380,291 (-84%) and ₴419,973 (-93%) disappear? This is the destructive power of compounding costs. The value of the ₴10,000 hryvnia invested for 40 years was eroded by high administrative fees, by each passing year.

International experience also shows that pension fund fees and charges are often opaque, hidden and incomprehensible to ordinary investors. Even in developed countries many investors do not understand how much of their pension is
disappearing in charges. For example, the 2016 Transparency Task Force\textsuperscript{41} study in the UK showed that pension funds may have more than 100 different types of charges and fees that are regularly applied to pensions and investments, many of which are hidden from consumers.

As John ‘Jack’ Bogle, a legendary American investor and entrepreneur highlighted in his ‘Little Book of Common Sense Investing’, “in the investment field, time doesn’t heal all wounds. It makes them worse. Where returns are concerned, time is your friend. But where costs are concerned, time is your enemy.”\textsuperscript{42}

High administrative fees charged by NPFs and double-digit inflation significantly erode real pension assets of NPF members, especially if invested in a conservative portfolio comprised mainly of just two money market instruments: government securities and bank deposits.

**Figure 5. Growth of UAH 1,000 invested in USD, 50% government securities + 50% bank deposits, and Pillar 3 NPFs on 01.01.2014 (60-month period)**

Figure 5 demonstrates what would have happened on January 1, 2019 with UAH 1,000 invested in January 2014 in: (1) USD (equivalent of $125 on January 1, 2014), (2) individual investment portfolio consisting of 50% government securities and 50% bank deposits (0% fees/charges), and (3) Pillar 3 NPFs as of 01.01.2019.\textsuperscript{43} The accumulated real net losses for Pillar 3 NPF participant would be -34.4% over a 60-month period (or -8.1% average annual). For a hypothetical individual investor in government securities (50%) and bank deposits (another 50%) real net accumulated losses would be -9.5% or -2.0% annualized, and investment in USD could have provided real cumulative return 43.8% or 7.5% average annualized real returns.


\textsuperscript{43} Latest data is available on the website of the National Commission on State Regulation of Financial Services Markets (FSR): https://www.nfp.gov.ua/Rynok-nakopychuvalnoho-pensiinoho-zabezpechennia.html.
return during the same period.

The direct administrative fees charged by the NPF administrators, AMCs, custodian banks, auditors, and so on described above are not all the costs borne by Pillar 3 participants. For example, the Ukrainian [Administrator of the Pension Fund Center for Personified Recordkeeping](https://www.acpo.com.ua/index.php?option=com_content&view=article&id=945&Itemid=387) (ANPF CPR), which manages 16 NPFs, informs participants on its web site that for the on-line deposit of contributions to their NPF accounts, PrivatBank, the bank that serves ANPF CPR, will charge a 2.75% commission. This will lead to an additional loss of 2.75% of accumulated pension capital over the long-term period.

---

After 14 years, Ukraine’s voluntary Pillar 3 non-state pension system is a failed experiment. It is a failure in terms of coverage, total accumulated assets, costs and real performance and, most importantly, outcomes, that is, future benefits. Most Ukrainians do not or cannot save for retirement, know little or nothing about voluntary pension funds, are poorly informed about finance in general and investment in particular, and distrustful of financial institutions. In addition, those few Ukrainians with savings to invest for retirement would be best advised to invest them in diversified assets abroad rather than in the limited asset classes of NPFs with high administrative fees and charges.

Ukrainian NPFs support a mandatory accumulation system (Pillar 2) constructed based on the existing private pension industry, one that would allow them to continue to charge high fees — the cap in Bill #6677 is 3.5%. The usual justification for this bill, voiced in public by the industry and by some MPs, is that it will “develop capital markets.” This ignores the fact that the purpose of Pillar 2 is to provide supplementary income to retirees, not to subsidize the capital markets. Moreover, the clear attraction of Bill #6677 for NPFs is the capture of mandatory employee contributions and the ability to charge high fees.

In recent years, automatic enrollment pension plans with an “opt out” clause have gained in popularity in many countries (see Table 12 in the Annex). Such plans typically feature signing people up automatically to a pension plan or fund, while giving them the chance to opt out within specified timeframes and conditions, and providing incentives, such as employer matching and/or government contributions.

In these countries, employers, employees or both have been required to make retirement contributions. The level of contributions varies and, in most countries, the mandated contributions increase periodically from relatively low levels to those that are intended to provide a meaningful retirement fund.

Auto-enrollment retirement savings plans are not a new concept. They were adopted beginning in the 1990s by several governments, including Australia and the US with its 401(k) plans sponsored by employers. Italy, New Zealand, and the UK started them in the 2000s. A 401(k) pension plan is the tax-qualified, defined-contribution pension account defined in subsection 401(k) of the U.S. Internal Revenue Code (https://www.irs.gov/retirement-plans/plan-sponsor/401k-plan-overview).

Behavioral economics argues and international experience confirms that most individuals who are auto-enrolled in retirement savings plans do not elect to opt out or reduce their contribution, particularly when contributions are matched by the employer or the state. In the UK, this is supported by statistical evidence that automatic enrollment has reversed the decline in retirement savings: workplace pension participation increased from 47% of eligible employees in 2012, the inception year, to 76% in 2018.

In the United States, ‘Save More Tomorrow’ is a program that features a choice-architecture system designed to make saving for retirement as easy and painless as possible. It consists of three central components: (1) employees are automatically enrolled into the 401(k) retirement savings program and remain there unless they choose to opt-out; (2) people are asked to commit now to saving more in the future; and (3) planned increases in savings rates are linked to future pay raises — auto escalation.

The US ‘Save More for Tomorrow’ Program is a behavioral intervention pioneered by Richard Thaler, the winner of the 2017 Nobel Prize in Economics, and Shlomo Benartzi, and designed to make saving for retirement as easy and painless as possible. The intervention consists of three central components. First, people are asked to commit now to saving more in the future. This helps them avoid present bias. Second, planned increases in savings rates are linked to future pay raises. This minimizes the influence of loss aversion since take-home pay never decreases. Third, once employees are enrolled in the program, they remain in the program unless they opt out. This makes good use of inertia.


The idea for introducing an opt-out provision is justified by the fact that not everyone has the disposable income to save for retirement and an opt-out may stop individuals being driven into debt. Similarly, some people simply do not feel compelled to save. The opt-out design is popular in many countries, and results in a higher rate of participation in programs than the standard opt-in design. Automatic enrollment is often paired with automatic escalation (automatically raises employee contribution rates a little each year until each employee reaches their target savings rate) to help the employee meet retirement income goals.

Neighboring Turkey and Georgia have recently introduced automatic enrollment, but not without problems. In Turkey, despite generous state incentives in the auto-enrollment system, opt-out rates are high: 54% of those who were brought into the system during the first year exited the system during the two-month opt-out period (see Box 2).

The most common reasons for opting out were: high cost of living or debts, lack of affordability and lack of confidence in long-term investment. One other important reason is if there is no incentive provided, such as a government or employer matching contribution.

Georgia’s quasi-mandatory Pillar 2 auto-enrollment accumulative pension system came into effect in January 2019, but has been challenged in the constitutional court. Under the Law of Georgia on Funded Pensions, adopted by the legislature on July 21, 2018, employers and employees each are to pay a contribution of 2% of pre-tax wages. The self-employed must pay a 4% contribution of annual income. The state adds a further 2% of taxable income for those earning less than GEL 24,000 or $9,140 a year, and 1% for those on GEL 24,000-60,000 or $9,140–$22,860. The auto-enrollment Pillar 2 system is mandatory for those under 40, but the possibility to opt-out will be introduced in June 2019.

Box 2. Turkey is rethinking auto-enrollment

Introduced in 2017, auto-enrollment reform in Turkey aimed to boost accumulated savings in private pension plans, which are currently about 2.5% of the country’s GDP. It increased the total number of pension savers in the individual savings system from 6.6 million in 2016 to 11.9 million in 2018.

All employees, but not the self-employed, below the age of 45 were automatically enrolled into private pension schemes by their employers and required to contribute a minimum 3% of their gross salaries. Employers are not obliged to make an additional contribution on behalf of workers. Despite a stated two-month opt-out period in the system, participants can cancel their membership at any time without any penalties.

Unfortunately, some 54% of those brought into the system during the first year exited the system during the two-month opt-out period. The three most common reasons given were high costs or debts (71%), lack of affordability (56%), and lack of confidence in long-term investment (35%).

The Turkish government has since updated the rules for its auto-enrollment pensions system in an attempt to reduce the high rate of workers opting out of retirement savings. Employees who have used their right to exit from the auto-enrollment system would be automatically re-enrolled into it within three years. In addition, Turkey’s finance ministry reserves the right to either reduce the period before re-enrollment to one year, or extend it to five years. The measure aimed to maintain and grow the membership of the country’s private pensions system, which currently covers only 11.9 million of Turkey’s 32 million labor force.

Source: Investment and Pensions Europe (IPE); https://www.ipe.com

In January 2019, the human rights organization Georgian Democracy Initiative (GDI) challenged the pension scheme in the country’s constitutional court, because it breaches Article 11 “The Right to Equality” and Article 19 “The Right to Property” of the Georgian Constitution. GDI argued that the system’s mandatory nature interfered with citizens’ property rights. It also challenged the 2% employer levy, which, unlike the employee portion, would not be returned to the contributor.47

Armenia faced a similar challenge in 2014. Critics of the new mandatory Pillar 2 system challenged the law, which took effect in January 2014, in the constitutional court, arguing that people should be able to decide for themselves what happens to their savings. Amendments were passed to the law in the summer of 2014, and Armenians were given a one-time chance to withdraw money from accumulative pension funds. The Pillar 2 system was reintroduced in 2017 and the end result was a much weaker version of the initial law.

Poland’s radical pension reform, including the overhaul of the Pillar 2 OFE funds in 2013-14, continued in 2019 with the auto-enrolled employee pension plan called Pracownicze Plany Kapitałowe (PPK) or Employee Capital Plan, scheduled to start on July 1, 2019. Participants of the new quasi-mandatory PPK system will be all employees under 55. They will automatically be enrolled with the right to opt out every four years. Employees between 55 and 69 will be able to join the program voluntarily. The employee’s contribution will be 2.0% of the employee’s earnings, with the option of an additional voluntary contribution of 2.0%.

For employers, the system is mandatory, unless they have already set up an employee pension program or PPE with a contribution rate of at least 3.5% and 25% coverage. The employer is to provide a mandatory 1.5% and a possible voluntary “match” of the employee contribution of 2.5%. There are stiff penalties for employers who fail to comply. Thus, the maximum contribution rate will be 8%: (2% + 2% from the employee) + (1.5% + 2.5% from the employer).

The PPK market is open to insurers, and to investment and pension fund asset managers. The existing Polish mandatory Pillar 2 individual retirement accounts system will be dismantled in mid-2019.

In the UK, the auto-enrollment policy is ambitious. It was developed and introduced in 2012 to resolve the problem of low coverage of employees by pension plans and inadequate retirement savings. The UK studied the experience of other countries and drew some key lessons:

- Successfully implementing a radical and ambitious pension reform policy takes time.
- The best way to increase coverage is to use ‘nudge economics’ automatic enrollment into a DC scheme with the option to opt out.
- Countries implementing auto-enrollment should consult all stakeholders and ensure gradual implementation.
- There should be clarity about contributions needed to achieve the desired replacement rate.
- The market structure should utilize economies of scale and allow cost-effective innovations, including modern pensions technology.
- Administrative and management fees must be contained.
- Design the best possible default option or fund.
- Communication is very important to build trust and engage the membership.

48 https://www.ipe.com/reports/special-reports/dc-markets/uk-learning-from-the-lab-rat/10028803.article
7. KEY POLICY RECOMMENDATIONS TO PROMOTE RETIREMENT SAVINGS

The concept of a three-pillar pension system for Ukraine was designed 15 years ago. The world and Ukraine have changed significantly since then and the time has come for the government to seriously analyze and revise the structure of the current pension system. Ukrainians need to focus now on retirement savings to avoid a looming pension crisis.

The purpose of a private retirement savings system is to complement the compulsory state solidarity Pillar 1, and thereby contribute to a comfortable standard of living for the elderly. In Ukraine, the Pillar 1 net replacement rate of net insured average wage after taxes was an inadequate 42% in 2018 — up from 40% in 2017 — and it is likely to decline over the next 10–15 years due to demographic changes already well underway. Therefore, the Government should promote well-designed incentives for people to save for retirement while simultaneously taking steps to eliminate existing deficiencies and provide macroeconomic stability and growth.

Individual retirement savings have specific sector prerequisites. First, there needs to be adequate public understanding of, and trust in, private financial institution and instruments. Second, there have to be financial assets and financial markets to stimulate domestic investment and employment. Third, private sector administrative capacity is essential, given the considerable administrative requirements of funded pensions.

Currently, the private, voluntary Pillar 3 pension system in Ukraine is an impediment to saving for retirement. It is too costly and fails to deliver real rates of return. Its coverage of the population is miniscule and its acceptance by most Ukrainians minimal.

In the short term, given the time required to develop capital markets and suitable financial instruments for pension investment, the government should consider tax-deductible, voluntary, self-directed individual retirement savings accounts. These could be modeled on the simple IRA system of the United States. Legislation could be adopted to provide reasonable and limited financial incentives or tax advantages for IRA-type savings in bank deposits and sovereign bonds. Banks should be allowed to offer these financial products to small investors/savers at low fees. Withdrawals from voluntary pension savings such as IRAs should be allowed either after a certain age is reached, or a certain life event occurs, such as health problems or buying a home.

The Cabinet of Ministers could also establish new government inflation-protected financial instruments (GIPFI), with the principal adjusted according to the Consumer Price Index (CPI). GIPS could be issued in electronic form for terms of 5, 10 and 20 years, and offered in multiples of ₴1,000. Any individual can then purchase, manage and redeem electronic sovereign bonds directly through a web browser, available 24/7.

IRA funds removed before full retirement eligibility, which is currently 60, should incur a 10% penalty on the amount withdrawn and be taxed at the standard rate, currently 18%. There should be exceptions to these penalties for certain life events or situation, including:
• Purchase of a first primary residence for the individual or an eligible family member, and limited to ₴200,000 per lifetime.

• The individual becomes disabled before distribution occurs.

• A beneficiary receives the asset after the IRA owner dies.

• Retirement savings were used for medical expenses that were not reimbursed, such as by an insurance company, or after the individual lost their job.

• The amount distributed is a return on non-deductible IRA contributions.

Over the longer term, the government should consider a quasi-mandatory Pillar 2 system with auto-enrollment, once it reforms the capital market. International experience suggests five elements that should drive the design of retirement savings systems:

1. Soft compulsion in the form of **automatic enrollment** and **automatic escalation of contributions** can make funded DC pension systems more inclusive and help participants reach an adequate contribution level. They harness the power of inertia to keep people saving for retirement.

2. Well-designed **default options** help people who are unable or unwilling to choose a contribution rate, a pension provider, an investment strategy, or a post-retirement product.

3. **Simplified information and choice** can help people make better choices. Easy-to-use web applications, a smaller set of options, better disclosure of information, and ease of comparison of options can achieve this.

4. **Financial incentives** are widely used to promote private pension arrangements as they exploit individuals’ tendency to respond to immediate gratification. Auto-enrollment should be combined with individual incentives such as employer and/or government contributions (see experience of UK, New Zealand, Georgia, Poland, and other countries in Table 12 in the Annex).

5. **Focus on costs that erode real returns of pension investments.** As John Bogle so elegantly said, “Time is not your friend when it comes to the costs of investing.” Retirement plans for quasi-voluntary and mandatory systems should focus on controlling fees, meaning investment in various international index funds that track prominent indexes like the S&P 500, the Dow Jones Industrial Average, or other stock market indexes for developed countries (hence the name – index funds).

The Government should pay more attention to the critical need to empower citizens through appropriate **financial information and education**, to ensure that people are adequately informed about their retirement savings and the options they have to improve their financial well-being after retirement. This education should begin in secondary school and aim at modifying attitudes and behavior regarding savings.
Table 9. Key Facts about Pillar 3 NPFs in Ukraine, as of 12.31.2017

<table>
<thead>
<tr>
<th>#</th>
<th>NPF</th>
<th>Number of participants</th>
<th>Assets under management (AUM), mn UAH</th>
<th>% of investment in GOU securities and bank deposits</th>
<th>Fees, % of AUM in 2017</th>
<th>Nominal net investment return (net of fees), %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>number of participants</td>
<td>total, mn UAH</td>
<td>share %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>persons</td>
<td>market share, %</td>
<td>market share, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>total, mn UAH</td>
<td>market share, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12,323</td>
<td>1.5%</td>
<td>1,210.00</td>
<td>49.1%</td>
<td>98,187</td>
</tr>
<tr>
<td></td>
<td>NBU Corporate NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,553</td>
<td>0.7%</td>
<td>201.09</td>
<td>8.2%</td>
<td>36,214</td>
</tr>
<tr>
<td></td>
<td>Ukreximbank Corporate NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>71,445</td>
<td>8.5%</td>
<td>148.18</td>
<td>6.0%</td>
<td>2,074</td>
</tr>
<tr>
<td></td>
<td>Emerit-Ukraine Open NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>47,810</td>
<td>5.7%</td>
<td>114.26</td>
<td>4.6%</td>
<td>2,390</td>
</tr>
<tr>
<td></td>
<td>PrivatFund Open NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>33,065</td>
<td>3.9%</td>
<td>108.28</td>
<td>4.4%</td>
<td>3,275</td>
</tr>
<tr>
<td></td>
<td>OTP Pension Open NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,242</td>
<td>0.1%</td>
<td>95.47</td>
<td>3.9%</td>
<td>76,868</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Open NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>18,028</td>
<td>2.1%</td>
<td>83.04</td>
<td>3.4%</td>
<td>4,606</td>
</tr>
<tr>
<td></td>
<td>Energy Sector Trade Unions of Ukraine Professional NPF</td>
<td>54,988</td>
<td>6.5%</td>
<td>63.29</td>
<td>2.6%</td>
<td>1,151</td>
</tr>
<tr>
<td></td>
<td>VSI [ALL] Open NPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dynasty Open NPF</td>
<td>39,799</td>
<td>4.7%</td>
<td>56.33</td>
<td>2.3%</td>
<td>1,415</td>
</tr>
<tr>
<td></td>
<td>Ukraine Open NPF</td>
<td>4,655</td>
<td>0.6%</td>
<td>54.19</td>
<td>2.2%</td>
<td>11,654</td>
</tr>
<tr>
<td></td>
<td>Ukrainian Pension Fund Open NPF</td>
<td>422</td>
<td>0.1%</td>
<td>39.50</td>
<td>1.6%</td>
<td>93,591</td>
</tr>
<tr>
<td></td>
<td>12 Social Standard Open NPF</td>
<td>4,387</td>
<td>0.5%</td>
<td>36.17</td>
<td>1.5%</td>
<td>8,245</td>
</tr>
<tr>
<td></td>
<td>Magistral PNPF</td>
<td>326,477</td>
<td>38.8%</td>
<td>35.70</td>
<td>1.4%</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>51 other NPFs</td>
<td>220,606</td>
<td>26.2%</td>
<td>220.14</td>
<td>8.9%</td>
<td>998</td>
</tr>
<tr>
<td></td>
<td>Total for 64 NPFs</td>
<td>840,800</td>
<td>100.0%</td>
<td>2,465.6</td>
<td>100.0%</td>
<td>2,932</td>
</tr>
</tbody>
</table>

Source: FSR Annual Report for 2017; official NPF annual reports for 2017 with required information on the results of NPF activity.
*Average administrative fees for top 42 NPFs, excluding the NBU corporate NPF; average 4.59% for NPFs No. 3-12 in Table 9.
For the same five-year period, the average annualized net real return of the NPF system was **-8.09%.**
## Table 10. Ukraine Stock Market Data for 2018: PFTS Stock Exchange (PFTS), Perspektiva Stock Exchange and Ukrainian Exchange (UX)

<table>
<thead>
<tr>
<th>Securities</th>
<th>PFTS, Kyiv</th>
<th>Perspektiva Stock Exchange, Dnipro</th>
<th>Ukrainian Exchange (UX), Kyiv</th>
<th>PFTS/Perspektiva/UX consolidated data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual trading volume in 2018</td>
<td>Trades</td>
<td>Annual trading volume in 2018</td>
<td>Trades</td>
</tr>
<tr>
<td></td>
<td>mn UAH</td>
<td>share</td>
<td>number</td>
<td>share</td>
</tr>
<tr>
<td>Government Domestic Loan Bonds (OVDP)</td>
<td>108,753.3</td>
<td>95.3%</td>
<td>8,947</td>
<td>58.6%</td>
</tr>
<tr>
<td>Municipal Bonds</td>
<td>741.4</td>
<td>0.6%</td>
<td>5</td>
<td>0.0%</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>3,834.3</td>
<td>3.4%</td>
<td>260</td>
<td>1.7%</td>
</tr>
<tr>
<td>Shares</td>
<td>374.1</td>
<td>0.3%</td>
<td>5,821</td>
<td>38.2%</td>
</tr>
<tr>
<td>Investment Certificates</td>
<td>202.0</td>
<td>0.2%</td>
<td>141</td>
<td>0.9%</td>
</tr>
<tr>
<td>Government Foreign Loan Bonds</td>
<td>193.1</td>
<td>0.2%</td>
<td>83</td>
<td>0.5%</td>
</tr>
<tr>
<td>Derivatives</td>
<td>0.4</td>
<td>0.0%</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>114,098.7</td>
<td>100%</td>
<td>15,258</td>
<td>100%</td>
</tr>
<tr>
<td>Share of total</td>
<td>43%</td>
<td>27%</td>
<td>49%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Table 11. Pension System Objectives and Design Features (OECD 2018)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Public pension Non-contributory</th>
<th>Public pension Contributory PAYG</th>
<th>Public pension Contributory funded (NDC)</th>
<th>Private funded pension Mandatory DB</th>
<th>Private funded pension Mandatory DC</th>
<th>Private funded pension Voluntary DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty relief</td>
<td>Most efficient method</td>
<td>Some, through lifelong benefit</td>
<td>Some through lifelong benefit</td>
<td>Some through lifelong benefit</td>
<td>Not if exhausts resources</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption smoothing</td>
<td>No</td>
<td>Some, may be targeted to specific groups</td>
<td>Some, according to parameters</td>
<td>Inherent through lower wages</td>
<td>Most direct link to savings/benefits</td>
<td>May divert other savings</td>
</tr>
<tr>
<td>Financially sustainable</td>
<td>n/a</td>
<td>Depends on parameters</td>
<td>Depends on link between benefits and contributions</td>
<td>Sponsor responsible</td>
<td>Individual responsible</td>
<td>Yes (DC schemes are always fully-funded)</td>
</tr>
<tr>
<td>Redistribution</td>
<td>Yes, via tax system</td>
<td>Yes, depends on parameters</td>
<td>Possible within the plan but not a goal. Tax incentives can be redistributive</td>
<td>Not possible in individual DC. Tax incentives can be redistributive</td>
<td>Not possible in individual DC</td>
<td>Not possible in individual DC</td>
</tr>
<tr>
<td>Inter-generational equity</td>
<td>Within tax system</td>
<td>In legacy systems, may mean lower guarantees for individuals</td>
<td>In legacy systems, may mean lower guarantees for individuals</td>
<td>Yes</td>
<td>Not possible in individual DC</td>
<td>Not possible in individual DC</td>
</tr>
<tr>
<td>Intra-generational equity</td>
<td>n/a</td>
<td>Possible</td>
<td>Possible</td>
<td>Possible</td>
<td>Not possible in individual DC</td>
<td>Not possible in individual DC</td>
</tr>
<tr>
<td>Benefit adequacy/ replacement rate</td>
<td>Depends on policy/ fiscal implications</td>
<td>Depends on target (sustainability issues could arise)</td>
<td>Depends on target</td>
<td>Depends on parameters</td>
<td>Only non-binding target can be set</td>
<td>n/a</td>
</tr>
<tr>
<td>Labor force participation</td>
<td>n/a</td>
<td>May weaken incentives if DB</td>
<td>Depends on link between benefits and contributions</td>
<td>May be less suited to future labor market</td>
<td>Strong incentive</td>
<td>Limited incentive</td>
</tr>
<tr>
<td>Coverage</td>
<td>Universal</td>
<td>Only if participated in formal economy</td>
<td>Only if participated in formal economy</td>
<td>Tend to exclude lower paid</td>
<td>Tend to exclude lower paid</td>
<td>Usually for higher earners</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Auto-enrollment launch date</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1992</td>
<td>When it was first implemented in 1992, all employers had to contribute a minimum of 3% of annual salary to their employees’ superannuation accounts. Under legislation passed in 2012, this is set to rise to 12% by 2025. In 2019, employers should be paying at least 9.5% of an employee’s earnings towards their superannuation accounts. There is no required employee contribution. If a participant is a low or middle-income earner (earns less than $52,697 in the fiscal year of 2018/19) and makes a personal (after-tax) contribution to his Superannuation fund, the Government will also make a contribution (called a co-contribution) from a minimum of $20 up to a maximum of $500. The amount of the Government co-contribution a person will receive depends on his income and personal, rather than the employer’s, contribution.</td>
</tr>
</tbody>
</table>
| United States | 2006                        | The Pension Protection Act (PPA) of 2006 introduced fiduciary and tax incentives to encourage broader adoption of automatic enrollment in individual retirement plans, automatic savings increases, and balanced investment approaches. 
PPA brings about the most significant changes that have been made for pension plans since the Employee Retirement Income Security Act of 1974 (ERISA). |
<p>| Italy         | 2007                        | All workers employed in the private sector in the first half of 2007 must be enrolled, subsequently, all new employees. Opting out is possible within a window of 6 months. Employer contribution: 6.91% of gross salary to be paid into the pension funds, replacing the obligation to pay the same amount at the end of the employment relationship as severance pay. |
| New Zealand   | 2007                        | Employees aged 18–64 are auto-enrolled into their employer’s “KiwiSaver” pension scheme, with the option to opt out within four weeks. Membership is not compulsory but, where employees contribute, employers have to make compulsory contributions of 3%. Employees can choose to contribute either 3%, 4% or 8% of pre-tax pay. If they don’t choose an amount, the default is 3%. After the first 12 months of membership, automatically enrolled workers can stop contributing for a minimum of 3 months, up to 5 years at a time for any reason. |
| United Kingdom| 2012                        | Under the National Employment Savings Trust (NEST), the workplace default pension plan is set up by government. The minimum contribution was introduced in 2012 at 2% of a worker’s pay, raised to 5% in 2018 with employee contributions of 2.5%, employer contributions of 2%, and state tax relief of 0.5%. As of April 2019, the total contribution was increased to 8%: employee 4%, employer 3% and 1% limited tax relief. |</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Auto-enrollment launch date</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>2017</td>
<td>All employees, but not the self-employed, up to age 45 are automatically enrolled by their employers and required to contribute a minimum 3% of their gross salaries. Employers are not obliged to make an additional contribution on behalf of workers. Despite a stated two-month opt-out period in the system, participants can cancel their membership at any time without any penalties on their contributions.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>January 2019</td>
<td>Auto-enrollment for employees under 40, with the right to opt-out until June 30, 2019; afterwards, with the right to opt-out once every three years until the person reaches the age of 40. Participants over 40 can contribute to Pillar 2 system voluntarily. Future new participants under 40 will have the right to opt-out before June 30 during the year of the auto-enrollment. If a person does not opt-out within the deadline, then he becomes a participant in the accumulation system. Contributions: employees - 4% of earnings, plus 2% of the average wage from the Government (state budget). In the future, if nominal earnings increase, the contribution rates may be changed to: 3% from participant + 1.5% from the Government (budget).</td>
</tr>
</tbody>
</table>

### Countries that announced auto-enrollment over next few years

<table>
<thead>
<tr>
<th>Country</th>
<th>Auto-enrollment launch date</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>January 2018 (deferred)</td>
<td>Employee contributions only 0.25% of qualifying salary, rising to 2% by 2015</td>
</tr>
<tr>
<td>Georgia</td>
<td>January 2019 (implementation suspended due to suit in the constitutional court(^{49}))</td>
<td>The auto-enrollment system is mandatory for all employees up to the age of 40 as of August 2018, and voluntary for men over 60 and women over 55. Those who reached the age of 40 before the accumulation law took effect can opt out within five months of enrollment as a participant (receiving the first salary after the law takes effect), but no earlier than three months. Participation is also voluntary for the self-employed, more than half of Georgia’s workforce, who pay in 4% of their earnings. Employees and employers each pay a contribution of 2% of pre-tax wages. The state adds a further 2% for those earning less than GEL24,000 (€8,130) a year, and 1% for those on GEL24,000-60,000, leading to a combined rate of 6%.</td>
</tr>
</tbody>
</table>

\(^{49}\) Georgia’s second-pillar auto-enrollment pension system, which came into effect at the start of 2019, has been challenged in the country’s constitutional court by the human rights organization Georgian Democracy Initiative (GDI). GDI argues that the system’s mandatory nature interfered with citizens’ property rights. It has also challenged the 2% employer levy, which, unlike the employee portion, would not be returned in any way to the contributor. Source: Georgia’s auto-enrollment pension law faces constitutional challenge, IPE, 22 January 2019, [https://www.ipe.com/countries/cee/georias-auto-enrolment-pension-law-faces-constitutional-challenge/10029079.article](https://www.ipe.com/countries/cee/georias-auto-enrolment-pension-law-faces-constitutional-challenge/10029079.article).
<table>
<thead>
<tr>
<th>Country</th>
<th>Auto-enrollment launch date</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>2020</td>
<td>Final design still under consultation. Under current proposals, employees would start by contributing 1%, increasing to 6% by 2028; employers would match these contributions. The state will add €1 for every €3 put into the pension by employees.</td>
</tr>
<tr>
<td>Poland</td>
<td>July 2019</td>
<td>The basic contribution rate is 3.5%, with a minimum 2% from employees and 1.5% from employers. Minimum contribution has been reduced to 0.5% for the low-wage earners, meaning those earning below 120% of the minimum wage. Employees can increase their contribution rate by a further 2% up to 4% total, and employers by 2.5%, also up to 4% total. In addition, the state will provide an annual PLN240 (€56) subsidy and a “welcome” bonus of PLN250 (€58).</td>
</tr>
<tr>
<td>Thailand</td>
<td>Originally scheduled for 2018 but delayed</td>
<td>Contributions start at 3% for both the employer and employee. Expected to increase gradually over a 10-year period to 10% for both employer and employee.</td>
</tr>
</tbody>
</table>

Sources:
3. Auto-enrollment grows globally, IPE Magazine, February 2019; [www.ipe.com](http://www.ipe.com);
4. UK NEST website: [https://www.nestpensions.org.uk/schemeweb/nest/aboutnest/pensions-are-changing/auto-enrolment.html](https://www.nestpensions.org.uk/schemeweb/nest/aboutnest/pensions-are-changing/auto-enrolment.html);
EU Principles for Reporting of Cost and Past Performance

- **Member State by Member State analysis:** Recent studies show strong disparities in terms of performance, and level of costs and fees of retail investment products across the European Union. Product features and market size also differ, notably in the pension area. Performing a country-by-country analysis should make it possible to highlight these differences and adjust for national specificities.

- **Comparability of indicators:** For investors to make informed decisions, it is important that they be able to compare the various products offered by financial providers within categories of products. The type of entity (e.g. asset managers, insurance undertakings) that offers the various products or the legal nature of those products is often less significant to investors. Whenever possible, the indicators should be reported in a comparable manner for all retail products with similar features.

- **Level of aggregation:** Indicators should be computed and presented at the appropriate level of granularity, with categories comprising products with broadly similar characteristics. Whenever possible, actively and passively managed products should be reported separately.

- **Net return and impact of costs:** Work on net return should imply giving equal importance to returns and diverse costs that affect net returns. Whenever appropriate, the results should be presented against relevant indices or other indicators.

- **All fees impacting the net performance** of retail investment products should be reported, notably investment costs such as asset management and custodian fees, possible transaction costs, performance fees, administration costs, fees and commissions charged by financial intermediaries, initial charges such as subscription fees, and exit charges or redemption fees.

- **Time horizon:** Reporting on cost and performance should present the net return for varied periods of time. These intervals should be the same for all categories of investments products. They should preferably cover cost and performance over the last 1, 3, 7 and 10 years, subject to data availability. Different factors should be taken into account when determining the holding periods over which the performance indicators are calculated, such as the availability of historic data, the impact of the holding period on the depreciation of one-off fees such as entry and exit fees and, where relevant, the liquidity/redeemability pattern of the investment products.

- **Inflation:** The impact of inflation should be taken into account. This principle is particularly relevant for insurance and pension products with long investment horizons and for considerations around purchasing power, old age retirement, and so on.

The qualitative and quantitative comparison of the costs and performance indicators of different categories of products should be provided at both Member State and EU levels, and should include: comparison of net returns among different categories of products; proportion of cost impact on the net return; comparisons with benchmarks, when available, to establish qualitative reference points for gross return; and any other specific conclusions that can be drawn from the indicators.

---

UKRAINE’S GLOBAL ECONOMIC RANKINGS AND CREDIT RATINGS

Significant progress has been made on reforms to make the country more prosperous, democratic, and transparent, but more improvements are needed, including fighting corruption, developing capital markets, privatizing state-owned enterprises, and improving the legislative framework and rule of law.

This will require mobilizing substantial domestic and external financing in an increasingly challenging environment for financing emerging markets. This will also require affordable implementation of recent reforms in pensions, health, education, public administration, utility rates and residential subsidies, while avoiding measures that could undermine revenues.

For many years, Ukraine has been showing weak positions in leading global economic rankings and scores: WEF’s Global Competitiveness Index 2018 (83rd out of 140)\(^\text{51}\), World Bank’s Ease of Doing Business (71st out of 190)\(^\text{52}\), Transparency International’s Economic Freedom (150th out of 186)\(^\text{53}\), and The Heritage Foundation’s Corruption Perceptions Index 2018 (120th out of 180)\(^\text{54}\). All of Ukraine’s neighbors apart from Moldova have demonstrated better scores in these rankings.

For example, the World Economic Forum (WEF) ranks Ukraine based on 12 categories and dozens of subcategories. Ukraine has been placed closer to the lower end for such categories as macroeconomic stability (131st), financial system (117th), and institutions (110th).

Among the worst scores Ukraine received were for these subcategories: non-performing loans (136th out of 140), soundness of banks (135th), inflation (130th), property rights (129th), insolvency recovery rate (129th), strength of auditing and reporting standards (120th), financing of SMEs (118th), judicial independence (117th), distortive effect of taxes and subsidies on competition (114th), growth of innovative companies (112th), and efficiency of legal framework in challenging regulations (107th).

The Transparency International characterized Ukraine’s investment and financial freedoms as “repressed,” and The Heritage Foundation highlighted in its Corruption Perceptions Index (CPI) for 2018 that the country was making very little progress in ending widespread corruption.

Although Ukraine improved its CPI score by two points, moving from 30 in 2017 to 32 in 2018,\(^\text{55}\) the enforcement of anti-corruption reforms launched in 2014 remains incomplete, leaving Ukraine well below the average global score of 43. Four years since anti-corruption legal and institutional frameworks were introduced, progress is too slow. Newly established anti-corruption bodies have not succeeded in bringing to account any corrupt high-level official, even though a number of proceedings have been initiated.

---


\(^\text{53}\) 2018 Index of Economic Freedom [https://www.heritage.org/index/ranking](https://www.heritage.org/index/ranking).

\(^\text{54}\) Corruption Perceptions Index 2018 [https://www.transparency.org/cpi2018#results](https://www.transparency.org/cpi2018#results).

Standard & Poor’s (S&P) credit rating for Ukraine stands at B- with a stable outlook. Moody’s credit rating for Ukraine was recently updated to Caa1 with a stable outlook. Fitch’s credit rating for Ukraine was last set at B- with a stable outlook. In general, a credit rating is used by international and domestic investors to gauge the credit worthiness of Ukraine, taking into account political risk, thus having a big impact on the country’s borrowing costs (Box 3).

Box 3. Current Ukraine’s sovereign long-term credit ratings

<table>
<thead>
<tr>
<th>Rating agency</th>
<th>Current ratings</th>
<th>Outlook</th>
<th>Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard &amp; Poor’s (S&amp;P)</td>
<td>B-\textsuperscript{56} (highly speculative)</td>
<td>Stable</td>
<td>October 19, 2018</td>
</tr>
<tr>
<td>Moody’s</td>
<td>Caa1\textsuperscript{57} (substantial risks)</td>
<td>Stable</td>
<td>December 21, 2018</td>
</tr>
<tr>
<td>Fitch Ratings (Fitch)</td>
<td>B-\textsuperscript{58} (highly speculative)</td>
<td>Stable</td>
<td>October 26, 2018</td>
</tr>
</tbody>
</table>


What is a credit rating?

A credit rating is an assessment of the borrower’s (obligor’s) ability to pay financial obligations, referred to as creditworthiness. Credit ratings apply to debt securities like bonds, notes and other debt instruments.

The sovereign credit rating indicates the risk level of the investing environment of a country and is used by investors when looking to invest in particular jurisdictions.

The presence of a credit rating is an essential condition for an open financial market and is used internationally, including the process of conducting negotiations with investors and attracting funds both through public placement, as well as in the form of syndicated or private placements.

There are three major rating agencies: (S&P), Moody’s and Fitch Ratings. The rating assessment by an international rating agency is based on the scale adopted by such an agency.

A loan is essentially a promise, and a credit rating determines the likelihood that the borrower (obligor) will pay back a loan within the confines of the loan agreement, without defaulting. A credit rating does not reflect other types of risk, such as market or liquidity risks, which can also affect the value of a security. A credit rating is not a guarantee that a financial obligation will be repaid.

\textsuperscript{56} The obligor rated B- currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor’s capacity or willingness to meet financial commitments on the obligation.

\textsuperscript{57} Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.

\textsuperscript{58} Material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, the capacity for continued payment is vulnerable to deterioration in the business and economic environment.
ANNEX 7

List of Pillar 3 Market Representatives Interviewed by the USAID FST Team

1. Maryna Abramova, Secretary of the Board, Magistral Professional NPF.
2. Serhiy Biryuk, Associate Professor at Department of International Finance, Kyiv National Economic University and former Commissioner at NSSMC.
3. Iryna Burmistrova, Member of the Board, NBU Corporate NPF.
4. Olha Gurbych, Commissioner, National Commission on State Regulation of Financial Services Markets (FSR).
5. Serhiy Kozachenko, Secretary and Member of the Board, NBU Corporate NPF.
6. Maksym Kuprin, Advisor to the NSSMC Commissioner.
7. Oleh Kurinniy, Advisor to the NSSMC Chair of NSSMC and former director of NBU Corporate Pension Fund Department.
8. Oleh Makarenko, Member of the Board, National Association of Non-State Pension Funds and Non-State Pension Fund Administrators of Ukraine (NAPFA).
9. Oleksandr Nazarenko, Member of the Board, NAPFA.
10. Hryhoriy Ovcharenko, Member of UAIB Board, Director of Local Assets Management at ICU.
11. Andriy Rybalchenko, Director General, Ukrainian Association of Investment Business (UAIB); Chair of the Board of NAPFA.
12. Tetiana Salnykova, Chair of the Board, Ukrainian Association of Pension Fund Administrators; Director of the All-Ukrainian Pension Fund Administrator (VSEAPF).
13. Tetiana Shevkun, Director, NAPFA.
14. Olena Sotskova, Deputy Director, VSEAPF.
15. Oleksandr Tkach, Advisor, Magistral PNPF.