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Organization

# Future of the Ukrainian Pension System

Adequacy, Coverage and Sustainability

SOCIAL PROTECTION



DECENT WORK TECHNICAL SUPPORT TEAM AND COUNTRY OFFICE FOR CENTRAL AND EASTERN EUROPE



# Future of the Ukrainian Pension System

Adequacy, Coverage and Sustainability

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# Foreword

Under constantly changing socioeconomic and political conditions, Ukraine is now facing a crucial choice for deciding the future of its pension system.

The ILO has sought to assist the Ukrainian Government and the social partners in this process through the project “Moving out of fragility through effective national social protection floors in times of continuing conflict and austerity,” coordinated by Kenichi Hirose, Senior Social Protection Specialist in the ILO Decent Work Technical Support Team and Country Office for Central and Eastern Europe (ILO DWT/CO-Budapest).

The present report, developed as a part of the aforementioned project, conducts an in-depth analysis of the Ukrainian pension system and identifies major challenges and issues of its future reforms with respect to adequacy, coverage and sustainability. The main findings and recommendations of this report were presented and discussed at the national tripartite meeting in Kyiv in October 2019, where important insights into the situation in Ukraine and the national policy debates were provided by the tripartite partners from the Ukrainian Government and from the employers’ and workers’ organizations. Comments from the Ukrainian tripartite partners have been reflected in this final report.

The report was prepared by Krzysztof Hagemeyer and Michal Polakowski of the International Centre for Research and Analysis. This final report was completed under the supervision of Kenichi Hirose. Technical comments were provided by the Social Protection Department of the ILO Geneva.

The project and the report profited enormously from the assistance of Sergiy Savchuk, the ILO National Coordinator in Ukraine, and Inna Holiuk, the Project Assistant. The background study was prepared by Natalia Poliak of the Institute of Labour and Employment of Population of Ministry of Social Policy and National Academy of Sciences of Ukraine. Athena Bochanis provided English editing and Olena Guz translated this report into Ukrainian.

We trust that the policy recommendations in this report will contribute to the national debate for shaping the future vision of the Ukrainian system which is sustainable in the long run and ensures adequate income security for all.

Budapest, December 2019

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# Summary

In 2016, Ukraine ratified the Social Security Minimum Standards Convention, 1952 (No. 102) and accepted the obligations in respect of all nine branches of social security benefits, thereby committing to maintaining internationally accepted minimum levels of protection. After ratifying Convention No. 102, however, the Government adopted a pension reform in 2017 that aimed to increase the level of pensions in payment but severely restrict future pensions. The Ukrainian social partners have expressed great concern over these reforms, which adversely affect the social protection systems and threaten their ability to ensure basic protections during crises.

This policy study conducts an in-depth analysis of the Ukrainian pension system and develops policy options to safeguard the adequate levels of pensions in line with international labour standards, to extend the coverage particularly to the workers in the informal economy, and to improve the long-term sustainability of the Ukrainian pension system. It also provides comments on the recent proposal to introduce a mandatory funded pension system in view of international experiences.

## Adequacy of old-age benefits

### Benefit formula

Under the current pension formula, each full contribution year provides 1 percent of the reference wage. After 30 years of contributions, the benefit rate is thus 30 percent. If the personal income tax rates are taken into account, the benefit rates are 36.6 percent (with a tax rate of 18 percent) and 37.3 percent (with a tax rate of 19.5 percent), respectively. None of these rates attain 40 percent.

Alternatively, if the accrual rate is 1.35 percent for each contribution year, then the benefit rate after 30 years of contributions is 40.5 percent. If the personal income taxes are taken into account, the benefit rate is 49.4 percent and 50.3 percent, respectively. With such an accrual rate, the benefit rates for both net and gross wages are above 40 percent.

### Benefit indexation

Inclusion of the automatic pension indexation in the current Pension Law is an important step to ensuring better income security over one's whole retirement period. The rate of pension

indexation is the average of the consumer price increases of the previous year and the growth of the average contributory base over the three calendar years preceding retirement.

Applying this indexation method is certainly preferable to the pure price indexation adopted by many other countries, or to a mixed indexation that gives wage increases lower weight. On the other hand, using a three-year moving average for wage growth can cause delays in adjusting the purchasing power of pensions in times when nominal wage growth rates are high and volatile.

### **Minimum pension guarantee**

The minimum pension guarantee is granted only to pensioners who have reached 65 years of age and have completed 30 contribution years for women and 35 years for men. According to international practice, this requirement is extremely restrictive. The minimum pension is set at 40 percent of the minimum wage, and no longer linked directly to the statutory subsistence minimum.

In the future, there will be a growing number of retired workers without rights to the minimum pension guarantee due to very restrictive eligibility conditions. The only protection for those persons is means-tested social assistance, which provides up to the statutory subsistence minimum for persons incapable for work, which will gradually decline in relation to the minimum pension due to different adjustment rules.

### **Comparison of model pensions with poverty benchmarks**

The report analyses the future pensions, calculated according to current and alternative pension formulas, in comparison with three poverty benchmarks: statutory subsistence minimum, estimated subsistence minimum, and relative poverty line.

For persons whose earnings are the national average wage, the current pension formula will produce a pension higher than the relative poverty line and statutory subsistence minimum, but lower than the estimated subsistence minimum. For persons with median earnings, the current formula results in a pension higher than the statutory subsistence minimum, but lower than the relative poverty line and the estimated subsistence minimum. For persons with low earnings—not only at the minimum wage but also at the level of two-thirds of the median earnings—the estimated pensions under the current formula are lower than the statutory subsistence minimum and the minimum pension.

The alternative pension formula with an accrual rate of 1.35% would improve this situation. In particular, the estimated pension for retiring women whose earnings are above average would become higher than the estimated subsistence minimum. For persons with low earnings, the higher accrual rate would guarantee a pension close to or above the statutory subsistence minimum and the minimum pension.

## Recommended measures

To improve the benefit level of the State pension, the following measures should be considered:

- The benefit accrual rate should be increased from 1 percent to at least 1.35 percent, which secures a benefit rate of 40.5 percent after 30 years of contributions.
- The cost of the increase in the accrual rate should be met by an increase in the contribution rate, determined by an actuarial assessment. Further improvements could be considered if additional fiscal space is secured.
- Additional resources allowing more adequate pensions should also be made available through measures to enhance employment rates, formalize employment, extend the coverage, and improve the enforcement and compliance of contribution collection.
- When calculating the average contributory base in the pension formula, one should either use the earnings from previous years or adjust past wages if a three-year average is still used.

To strengthen the minimum guarantees, the following measures should be considered:

- The right to a full minimum pension guarantee should be given to persons who have reached the pensionable age but have shorter contributory periods than 30 years for women and 35 years for men.
- The entitlements to the minimum pension guarantee should be harmonized with the requirements for pensions, ensuring the equal treatment of minimum pension protection before and after 65 years of age.
- If a significant discrepancy between the statutory and estimated subsistence minimums persists, one may have to consider introducing a universal minimum pension guarantee to all older persons, financed by the State budget.
- These recommended measures should be properly costed and presented for policy discussion.

## Coverage and compliance

### Low social security coverage and its implications

Under the current system, the non-payment or underpayment of social security contributions will directly result in less access to benefit entitlement, including the minimum guarantee.

Currently only 36 percent of the working age population aged 15–64 in Ukraine are contributing to the State pension system. When the contributory coverage is at such a low level, applying the

strict contributory principle in terms of eligibility implies that in the long run more than 60 percent of elderly persons would not be entitled to contribution-based pensions.

The main reasons for the low coverage are: relatively low labour force participation and high unemployment (in particular for the youth and women), non-registration due to informality, and underreporting of wages.

### **Measures to extend the social security coverage**

There is an urgent need for Ukraine to take measures to increase labour force participation and the rates of formal employment, increase effective coverage of all types of employment contracts, and increase enforcement and compliance with reporting economic activities and paying contributions.

To increase overall labour force participation and employment, it is important to support youth with the transition from education to work, to facilitate men and women sharing the responsibilities of work and family obligations, and to create a labour market environment where older persons are willing and able to continue employment.

In Ukraine, as in other countries, the informal economy and undeclared work are deep-rooted problems and constitute major obstacles in extending social security coverage. The policies encouraging the transition to formality and the reduction of undeclared work require the long-term commitment and continuous efforts of all stakeholders.

Also in Ukraine, non-standard forms of employment are on the rise and constitute a growing share of labour relations. Ukraine is one of the leading countries with a sizable digital platform economy, but these new types of employment relationships are not adequately protected by labour law.

In view of the recent changes in the labour market, social security schemes should adapt to workers in different types of employment and encourage the formalization of enterprises and their workers. Efforts to extend social security need to take into account the large heterogeneity of workers, especially the variation in their work-related risks, their capacity to build up entitlements, the potential eligibility for social security benefits, and the existence of disguised employment relationships. Social security schemes must also recognize the frequent movement among various forms of employment and ensure the portability of entitlements between schemes while facilitating labour market transitions.

In order to enable these desirable changes, confidence in the social security system should be restored. The aforementioned measures should be supported by efforts to create a social security culture that fosters trust in social security systems. Clearly, such a culture cannot be built overnight. The continuous efforts of all stakeholders involved are essential.

## Financial sustainability

### Current situation

Pension expenditure has declined from 16.4 percent of GDP in 2013 to 10.1 percent in 2018. Since 2016, the revenue to the Fund has decreased significantly due to the substantial reduction in the single social contribution rate. As a result, the Fund's own revenue covers less than 80 percent of the benefit expenditure to be financed by the Fund. More than 40 percent of the total expenditure of the Pension Fund is financed by the State budget. In 2018, the transfer from the State budget to the State Pension Fund amounted to 4.2 percent of GDP, one third of which was spent to cover the deficit of the Fund.

### Long-term actuarial projection

The report critically examines the results of the actuarial valuation conducted by the Pension Fund. The scope of the actuarial evaluation conducted by the Pension Fund of Ukraine is strictly limited to the status quo conditions. It assumes that the contribution rates, benefit entitlement conditions, benefit formula, and the levels of labour force participation, informality, and compliance remain unchanged throughout the future projection period. In addition, the actuarial evaluation concerns only the financing of the Pension Fund and does not consider any future implications, such as the growing number of elderly left behind by the contributory pension system, and the costs of the State budget to ensure at least a basic level of income security for this group.

Despite its limited scope, the key results give rise to several important observations. First, between 2020 and 2050, the average replacement rate of old-age pensions is projected to increase, while the share of old-age pensioners receiving the minimum pension is projected to double. Second, despite the ageing population, the percentage of the elderly receiving old-age pensions declines from 97 percent in 2020 to only 36 percent in 2050. This dramatic decline in the beneficiary coverage results in a favourable system dependency ratio and a decrease in the cost rate of the pension system, but leaves a majority of the elderly unprotected. However, the deficit of the Pension Fund that needs to be covered by the State budget still persists in the long term.

### Need for exploring wider reform options

There is an unquestionable need to increase the contribution rate to the State pension system. However, increasing the contribution rate is not enough. While the decreasing pension cost will contribute to improve the financial sustainability of the Ukrainian pension system, the projection results show the declining role of the pension system, rendering it politically and socially unsustainable. Moreover, the costs of guaranteeing income security in old age will simply shift from the Pension Fund to the State budget on social assistance.

For the contributory State pension system to continuously play a major role in income security in old age, there is a need for major policy debates on the future of the pension system in

Ukraine. One would need to review the recent reforms, which tightened eligibility conditions and changed the pension formula and the pension indexation. One would also need to consider policy measures to enhance economic activity, reduce informal employment and undeclared work, and improve compliance and contribution collection.

To provide crucial information for a rational decision-making in the future pension design, the financial effects of these alternative policy options should be evaluated by actuarial projections under several alternative scenarios, including the effects of non-contributory benefits.

## Cautionary remarks on the mandatory funded pensions

In 2018, the Ukrainian Government developed a draft law to introduce a mandatory funded pension tier (the so-called “second pillar” system) as part of the Ukrainian pension system.

Will introducing a second pillar in the Ukrainian pension system help solve the problems of insufficient coverage and deteriorating adequacy? Concerning the low coverage rates, the second-pillar system could help only if people find this a more attractive option than contributing only to the State system, thus increasing labour force participation and reducing informality and undeclared work. That was actually the hope of many Central and Eastern European countries when they introduced the second-pillar pension systems in the mid-1990s. However, a body of evidence suggests that the introduction of mandatory private pension schemes in these countries has not resulted in their intended macroeconomic impact and has failed to expand population coverage. Moreover, the significant transition costs associated with the introduction of these systems added to the fiscal deficits of those countries. During the global crisis that began in 2008, the weaknesses of the second pillar systems became fully apparent and many countries decided to reverse privatization reforms by scaling down the contributions diverted to the private pension funds or by entirely abolishing the second-pillar system and transferring the private pension fund assets to the State pension system.

With regard to adequacy, it should also be noted that the second pillar systems in Central and Eastern European countries are facing problems related to the payment of benefits, as the private pension funds can provide lower benefits than the State pensions. These countries had to therefore introduce an option for members to opt out of the private pension funds and return entirely to the State pension system, transferring their individual account balance to the State pension system. If the refund transfer option is made widely available and exercised, it will severely strain the State pension financing and create pressure for future cuts in State pensions.

In view of these considerations, Ukraine should act with caution. All stakeholders must learn from the experiences of other countries and avoid making the same mistakes. It is a matter of serious concern that workers are not properly informed of the advantages and disadvantages of the second-pillar system and how it will affect their pensions. International experience shows that privately managed pensions involve the powerful vested interests of the financial services sector and reforms are often shaped by these interests, which are not necessarily in line with those of the majority of employers and employees.



One should also be aware that the creation of the second pillar pension system will not solve the challenges faced by the current State pension system. On the contrary, the second pillar systems in other countries face the same problems of informality, evasion and low coverage. The difference is that in the private system, the consequences of these problems will fully fall on the contributors (the workers and their employers), while the State pension system incorporates a certain redistributive mechanism that mitigates harsh impacts on the individuals.

In conclusion, it is not recommended that Ukraine introduce a second pillar system under the current circumstances. It is recommended that any additional resources should be redirected to the public pension system to reduce the deficit and to improve the adequacy of benefits. At the same time, priority should be placed on taking concerted action along with the social partners to improve social security law enforcement, increase compliance in contribution collection, and reduce informality and undeclared work.

## Conclusion

A key finding in this report is that Ukraine is facing insufficient social security coverage, resulting in the inadequacy of income security for a growing share of the population. In order to move forward and create the perspectives for an adequate and sustainable pension system, there is a need for all key stakeholders – the Government, trade unions and employers – to discuss and decide on the future of the pension system in Ukraine.

For the existing contributory pension system to act as the main provider of income security for the elderly, serious policy efforts are needed to stimulate employment rates, formalize employment, and prevent widespread undeclared work and evasion. At the same time, current provisions should be revised to broaden access to minimum pension guarantees provided by the system.

If this path is not pursued, an alternative is to guarantee basic income security in old age by some types of non-contributory benefits (with or without income-test or means-test). The functions of income replacement and consumption smoothing over lifetime would be left mainly to contributory systems covering workers in formal employment, or to voluntary private pension arrangements and other savings instruments.

The Ukrainian pension system is at a crossroads. Considering the long-term development of the pension system and its surrounding environment, the key stakeholders should discuss a wide range of policy alternatives and make rational decisions in order to deliver a pension system that will meet the needs of income security for future generations.



# Introduction

A number of factors—economic hardship, armed conflict, external pressures to pursue austerity, migration, unemployment, and persistent informality in the labour market—are influencing the future course of the Ukrainian pension system.

The ILO Centenary Declaration for the Future of Work, adopted by the International Labour Conference in June 2019, calls for advancing a human-centred approach for the future of work by strengthening the capacities of all people to benefit from the opportunities of a changing world of work. One way this can be achieved is through universal access to comprehensive and sustainable social protection (International Labour Conference 2019).

In this context, Ukraine has taken crucial steps towards safeguarding the minimum levels of social security benefits. In 2016, Ukraine ratified the Social Security Minimum Standards Convention, 1952 (No. 102) and accepted the obligations in respect of all nine branches of social security benefits, thereby committing to maintaining internationally-accepted minimum levels of protection.

After ratifying Convention No. 102, however, the Government adopted a pension reform in 2017 that aimed to increase the level of pensions in payment but severely restrict future pensions. The Ukrainian social partners have expressed great concern over these reforms, which adversely affect the social protection systems and threaten their ability to ensure basic protections during crises.

Based on an assessment of the reform measures and in consultation with the social partners, the ILO submitted comments on the draft law in 2017. These provided cautionary remarks on the adequacy of the future pensions and emphasized the need to enhance the revenue of the Pension Fund through improved compliance and the collection of contributions (ILO, 2017).

This policy study aims to conduct an in-depth analysis of the Ukrainian pension system and develop policy options to safeguard the adequate levels of old-age pensions in line with international labour standards, to extend the coverage particularly to the workers in the informal economy, and to improve the long-term sustainability of the Ukrainian pension system. This report is a follow-up to the comprehensive review of the Ukrainian social security system carried out by the ILO in 2016 (ILO, 2016b), with a focus on the old-age pension system.

This report is organized as follows. Chapter 1 analyzes the adequacy of the benefit level of the old-age pension system. It examines the reformed pension formula, eligibility conditions,

indexation method, and the minimum pension guarantee in light of international standards. Chapter 2 analyzes the gaps in pension system coverage and the implication of these gaps on the overall adequacy of the system. A particular focus is placed on widespread informal employment and undeclared work, and emerging non-standard forms of employment in the labour market in Ukraine. Chapter 3 reviews the financial situation of the Pension Fund and critically examines the results of the actuarial valuation conducted by the Pension Fund. Chapter 4 provides comments on the recent proposal to introduce a mandatory funded pension system in view of international experiences.

# 1. Adequacy of old-age benefits in the Ukrainian pension system

## 1.1 Adequacy of old-age benefits based on international standards

This chapter focuses on the old-age benefits of the Ukrainian pension system (although the Pension Fund of Ukraine also provides disability and survivors' pensions). In any old-age pension system,<sup>1</sup> irrespective of whether it is contributory or non-contributory, there is an inherent connection between the level of benefits provided, the security of the benefits over time, the age of benefit entitlement, the demographic and labour market situation, the level of contributions or taxes needed to finance the benefits, and the effectiveness of contribution or tax collection. These determinants should be taken into account in assessing the adequacy of the benefit level of the Ukrainian pension system.

Among the internationally accepted benchmarks for social security benefits, those most widely applied are the ones set by the ILO Conventions and Recommendations, the European Code of Social Security (which is closely linked to the ILO standards), and the European Union's "open method of coordination" (European Commission and Social Protection Committee, 2018). Here we summarize the key principles of old-age income security based on the ILO Conventions and Recommendations.

### 1.1.1 Guiding principles of income security in old age – Recommendation No. 67

The Income Security Recommendation, 1944 (No. 67) sets the general guiding principles regarding coverage, benefit adequacy and financing for achieving income security for all. These guiding principles were reconfirmed and further developed by later standards, in particular the Social Security (Minimum Standards) Convention, 1952 (No. 102), the Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128) and its accompanying Recommendation, 1967 (No. 131), as well as the Social Protection Floors Recommendation, 2012 (No. 202).

<sup>1</sup> Here pension systems are understood as all types of income transfer schemes which provide older persons with periodical cash benefits for life.

Recommendation No. 67 states that the general objective of income security schemes should be to “relieve want<sup>2</sup> and prevent destitution by restoring, up to a reasonable level, income which is lost by reason of inability to work (including old-age) or to obtain remunerative work or by reason of the death of a breadwinner” (para. 1).

It also states that “income security should be organised as far as possible on the basis of compulsory social insurance, whereby insured persons fulfilling prescribed qualifying conditions are entitled, in consideration of the contributions they have paid to an insurance institution, to benefits payable at rates, and in contingencies, defined by law” (para. 2). In the Preamble, the Recommendation states that social insurance should be extended gradually “to all workers and their families, including rural populations and the self-employed.”

The Recommendation states that the main objective of the old-age pension is to ensure income security for persons who reach the age at which they “become incapable of efficient work, the incidence of sickness and invalidity becomes heavy, and unemployment, if present, is likely to be permanent” (Annex, para. 12).

Recommendation No. 67 notes that the benefit levels should be adequate in terms of income replacement, but at the same time potential impacts of necessary financing should be taken into account. “Benefits should replace lost earnings, with due regard to family responsibilities,” it reads, “up to as high a level as is practicable without impairing the will to resume work where resumption is a possibility, and without levying charges on the productive groups so heavy that output and employment are checked” (Annex, para. 22).

### 1.1.2 Minimum standards of old-age pensions – Conventions No. 102 and No. 128, and Recommendation No. 131

The Social Security (Minimum Standards) Convention, 1952 (No. 102) sets the minimum standards of adequacy for all branches of social security, including old-age pensions. Convention No. 102 determines benefit adequacy in terms of the replacement rate, namely the ratio between the benefit amount (including any other relevant benefits) and the benchmark earnings. The countries that have ratified and accepted Part V (old-age benefit) of Convention No. 102 are bound to apply its provisions and to provide replacement rates of old-age benefits at least at the level prescribed in the Convention. However, they may decide—depending on the prevailing type of pension—what benchmark earnings to use to verify compliance with the Convention.

For earnings-related contributory old-age pensions, Article 65 of the Convention requires that the amount of pension benefit (including any family allowances due) for a standard beneficiary (a person with a dependent spouse without their own pension entitlements) with a contribution period of at least 30 years should be at least 40 percent of their previous earnings. Convention

<sup>2</sup> That means poverty in the current context.

No. 128 and Recommendation No. 131 set higher standards at 45 percent and 55 percent, respectively. Such replacement rates should be guaranteed to at least all covered persons whose previous earnings were below or at the level of a typical “male skilled manual employee.”<sup>3</sup>

Some countries provide income security in a form of flat-rate (not earnings-related) periodical benefits to the elderly based on residence. Article 66 of the Convention requires that, in this case, the benefit level should not be lower than 40 percent (45 percent and 55 percent in Convention No. 128 and Recommendation No. 131) of the earnings of a typical “ordinary (unskilled) adult male labourer.”<sup>4</sup>

There are also countries that provide pensions only to elderly persons with “small means.” Article 67 of the Convention states that the level of means-tested benefits to elderly persons, together with any other means of the family of the beneficiary, should be “sufficient to maintain the family of the beneficiary in health and decency” and, at the same time, “shall be not less than the corresponding benefit calculated in accordance with the requirements of Article 66” (explained above).

According to the Committee of Experts on the Application of Conventions and Recommendations, the requirements of Article 66 can also be applied to earnings-related pensions if such schemes provide minimum pension guarantees and the benefit for a standard beneficiary with the earnings of a typical male skilled worker does not provide the required replacement rate (ILO, 1961). It thus means that the requirements of Article 66 can be used as a general benchmark for setting the minimum benefit requirement in any type of pension provision, including earnings-related, flat-rate or means-tested benefits.

However, empirical studies show that 40 percent of the “low earnings” is insufficient to prevent poverty entirely in many countries. Eurostat defines low earnings as two-thirds of the median gross earnings of all employees, estimated by surveys of establishments employing 10 employees and more. The relative poverty line is defined as a certain proportion (40, 50 or 60 percent) of the median equivalised household income.<sup>5</sup> An ILO analysis based on Eurostat data shows that in all EU Member States, 40 percent of the low earnings threshold is below the relative poverty line commonly used in the European Union. As the typical earnings of an unskilled worker defined by Convention No 102 belong to the low earnings category according to Eurostat definition, there is a need for additional safeguards of benefit levels. (ILO, 2014, box 4.4).

For these reasons, Article 67 of the Convention sets the additional condition that means-tested pensions should be “sufficient to maintain the family of the beneficiary in health and decency.” It should be noted that Recommendation No. 202 complements Convention No. 102 in this respect and stipulates that everybody in old age should be guaranteed, as part of social protection floors, basic income security at the level allowing “life in dignity.”

<sup>3</sup> Operational definitions on how to identify such benchmark earnings in national statistics are provided by Article 65 of the Convention.

<sup>4</sup> Operational definitions are provided by Article 66 of the Convention.

<sup>5</sup> The median equivalised household income is calculated by converting the median of the total disposable income of all households after taxes from all sources (earnings, economic activity, capital, and social benefits – based on household income and expenditure surveys) into equivalised adults in households (members are equivalised by using the so-called modified OECD equivalence scale according to their age).

When the Government of Ukraine submitted its first report of Convention No. 102 in 2018, it opted to refer to Article 67, which usually applies to the countries where income security in old age is mainly guaranteed by means-tested social assistance. This is an uncommon practice for countries like Ukraine, whose pension system is organized on the basis of contributory earnings-related social insurance pensions and social assistance covers the minority not adequately covered by the social insurance pension system. However, any decision as to the conformity of national legislation and practice with the Convention lies in the first instance with the Government, subject to the views of the supervisory bodies of the ILO.<sup>6</sup>

### 1.1.3 Basic income security and access to essential health care for all – Recommendation No. 202

The Social Protection Floors Recommendation, 2012 (No. 202) includes in its principles, among others, the need for social security benefits to be “adequate, predictable,” designed and implemented “with respect for the rights and dignity of people covered.” It calls for all countries to establish floors of protection as part of their social security systems. The floors are guarantees that “ensure at a minimum that, over the life cycle, all in need have access to essential health care and to basic income security which together secure effective access to goods and services defined as necessary at the national level” (para. 4).

Basic social protection guarantees include basic income security for older persons. Recommendation No. 202 specifies that “basic income security should allow life in dignity.” The monetary level of the minimum income guarantee should be defined by the country, and “may correspond to the monetary value of a set of necessary goods and services, national poverty lines, income thresholds for social assistance or other comparable thresholds established by national law or practice” (para 8(b)).

The Committee of Experts on the Application of Conventions and Recommendations highlights the importance of setting minimum pensions to ensure that a pension system meets its objective of preventing poverty in old age (ILO, 2019b, paras. 552–553). It interprets the combined provisions of Articles 66 and 67 of Convention No. 102 and the provisions of Recommendation No. 202 as benchmarks for setting the minimum pension levels in contributory social security pension schemes. The Committee of Experts clearly spells out that the aforementioned provisions of Recommendation No. 202 should be used to assess a member state’s compliance with Convention No. 102. Thus, in addition to the replacement rate requirements embedded in Convention No. 102, one should verify if the minimum guaranteed benefit levels comply with Convention No. 102 (allowing life in health and decency) and Recommendation No. 202 (securing effective access to goods and services defined as necessary at the national level and allowing life in dignity).

<sup>6</sup> The Committee of Experts on the Application of Conventions and Recommendations is expected to review the Ukrainian report by the end of 2019



The Committee of Experts also recommends that the provisions of Recommendation No. 202, along with the respective provisions of Conventions No. 102 and No. 128, should be taken into account when setting and reviewing minimum benefit levels in both contributory and non-contributory schemes (ILO, 2019b, para. 559).

#### 1.1.4 Ensuring adequacy throughout the life by pension indexation

Achieving income security in old age requires more than just setting adequate benefit levels at retirement. As pointed out by the ILO, in addition to securing an adequate income, there has to be a “reasonable assurance that such an income will continue, a sense that the income is fair, relative to actual and ‘perceived’ needs and relative to income of others, and the assurance of compensation or support in the eventuality of a shock or crisis” affecting income or expenditure needs (ILO, 2004). That is why all ILO social security standards require that old-age pensions are paid for life and that they are regularly adjusted “following substantial changes in the general level of earnings where these result from substantial changes in the cost of living” (Convention No. 102) and “through a transparent procedure that is established by national laws, regulations or practice” ensuring “tripartite participation with representative organizations of employers and workers, as well as consultation with other relevant and representative organizations of persons concerned” (Recommendation No. 202).

Older persons face the risk of relative impoverishment since their income grows more slowly than that of persons who are active in the labour market. This is mainly due to the changes in pension indexation adopted by many countries. Indeed, it is increasingly common to adjust pensions only to changes in the consumer price index (if they are indexed at all). Since the prices of new and innovative goods and services usually increase more than the average rise in prices, new technologies will be less accessible to older persons, whose income only follows the rise in average prices at best. This can result in the gradual impoverishment, marginalization and social exclusion of the elderly (ILO, 2019b, para. 558).

## 1.2 Assessment of the adequacy of old-age pensions in the Ukrainian pension system

As a disclaimer, the assessment of the compliance of national legislation with ILO standards belongs solely to the competencies of the Committee of Experts on the Application of Conventions and Recommendations. It is the Committee of Experts that will also assess the first report submitted by the Government of Ukraine. It should also be noted that the Constitution of the ILO does not confer any authority to the Office to provide interpretations of instruments adopted by the International Labour Conference. In addition, any decision as to the conformity of national legislation and practice with a particular Convention must lie in the first instance with the Government of the country concerned, subject to the views of the supervisory bodies of the ILO in relation to the relevant Convention.

Thus, the purpose of this chapter is not to assess the compliance of the Ukrainian pension system with Convention No. 102 but to analyze the expected benefit levels under the current law reflecting the 2017 pension reform. We will estimate the replacement rates for individuals with different earnings and contribution histories, and compare their expected benefits to various benchmarks such as the subsistence minimum, the poverty line, the minimum wage, and the average earnings. We will also discuss how these benchmarks relate to income levels needed for securing effective access to goods and services, defined as necessary in Ukraine.

### 1.2.1 Pension formula

#### (1) Current provision

The Law of Ukraine “On mandatory national pension insurance” (No. 1058-IV of 2003), as amended in 2017, provides the following formula for old-age pensions:

$$P = AR * CY * IEC * ACB$$

where

- P*: pension amount;
- AR*: accrual rate;
- CY*: number of contribution years;
- IEC*: individual earnings coefficient; and
- ACB*: average contributory base (earnings subject to contributions) of all insured persons for the three years before retirement.

The factors in the aforementioned pension formula are explained as follows:

- The accrual rate is currently 1 percent per contribution year. Prior to 1 January 2018 it was 1.35 percent.
- The number of contribution years is calculated as one-twelfth of the total number of months for which contributions were paid by the employer. It also includes non-contribution periods for which contributions were paid by the State, such as periods of military service and parental leave (up to 3 years). Workers may also choose to retrospectively pay contributions for periods of study.
- The individual coefficient is the average of the ratio of an individual's contributory base to the average of all insured persons over the contribution period. When calculating the individual coefficient, the individual's average earnings are calculated from the whole contribution period after 1 July 2000. However, up to 60 months of an individual's contributory base (provided it does not exceed 10 percent of the total duration of their contribution period) can be excluded from the calculation of the individual coefficient. Earnings before 2000 can also be considered if their inclusion results in a higher individual coefficient.
- The average contributory base is the unadjusted (for wage growth and inflation) average of the gross nominal average contributory base of all insured persons for three calendar years preceding the year of retirement.
- For each full contributory year in excess of 30 years for women and 35 years for men, the pension is increased by 1 percent of the calculated pension, but not more than 1 percent of the minimum pension.

For those who defer retirement beyond the statutory retirement age, their pensions are increased additionally by 0.5 percent per each additional month of contributory service (0.75 percent for each month beyond 5 years over the statutory retirement age).

For state employees, prosecutors, judges, scientists, teachers, healthcare workers, and professionals in other categories, pension calculations are based on general rules and principles.

Pensions are not subject to personal income tax. It should be noted that the 15 percent tax on pensions for working pensioners, introduced in 2014, was repealed.

The pension reform was implemented in the following steps. On 1 October 2017, previously granted pensions were recalculated based on the previous formula (with an accrual rate of 1.35 percent) with a contributory base of 3,764.40 Ukrainian hryvnia (UAH) (the three-year average from 2014 to 2016). When the amendments came into force on 1 January 2018, pensions were recalculated based on the aforementioned formula using the average contributory base of 5,266.76 UAH (the average from 2016 to 2017, taking only a two-year average for this year to

offset the decrease in the accrual rate). As a transition measure, if a pension calculated according to the pre-reform formula with respect to contribution periods prior to 1 January 2018 is higher than the pension under the current law, then the former amount is paid.

These measures affected 10.2 million pensioners, or 87 percent of all pensioners. As a result, the average pension increased by 35.7 percent, from 1,828 UAH in January 2017 to 2,480 UAH in January 2018. The average pension was 2,646 UAH as of 1 January 2019.

As of 1 January 2017, the number of pensioners receiving the minimum pension was 8.0 million pensioners, or 73 percent of all pensioners. Due to the pension recalculation, this number decreased to 4.9 million, or 46 percent of all pensioners, as of 1 January 2018.

## (2) Assessment of the benefit level

### a. Analysis of the benefit rates

Table 1.1 presents the benefit rates for persons with 30 years of contributions based on the current pension formula with a 1 percent accrual rate, and an alternative formula with a 1.35 percent accrual rate. As noted above, pensions are not taxed, but wages, even at the minimum level, are subject to a personal income tax of 18 percent (plus an additional 1.5 percent temporary military tax currently). Therefore, when assessing the effective replacement rates, calculated pension amounts are compared with gross and net wages.

Under the current pension formula, each full contribution year provides 1 percent of the reference wage. After 30 years of contributions, the benefit rate is thus 30 percent. If the personal income tax rates (18 percent and 19.5 percent) are taken into account, the benefit rates are 36.6 percent and 37.3 percent, respectively. None of these rates attain 40 percent.

Alternatively, if the accrual rate is 1.35 percent for each contribution year (as was the case before the 2017 reform), then the benefit rate after 30 years of contributions is 40.5 percent. If the personal income taxes are taken into account, the benefit rate is 49.4 percent (with a tax rate of 18 percent) and 50.3 percent (with a tax rate of 19.5 percent), respectively. With such an accrual rate, the benefit rates for both net and gross wages are above 40 percent.

Table 1.1. Comparison of benefit rates for a pensioner with a 30-year contribution period by different accrual rates

REFERENCE EARNINGS	BENEFIT RATE (ACCRUAL RATE 1%)	BENEFIT RATE (ACCRUAL RATE 1.35%)
Gross wages (before taxes)	30.0%	40.5%
Net wages (personal income tax of 18%)	36.6%	49.4%
Net wages (personal income tax of 18% + temporary military tax of 1.5%)	37.3%	50.3%

Source: Authors' own calculations.

#### b. Incorporating other factors in determining the reference wage

In addition to the accrual rates, one should also consider the specific rules for calculating the reference wage applied in the Ukrainian pension system.

First, certain contribution periods (typically periods when an insured person had lower earnings) can be excluded from the calculation of the individual coefficient. This implies that the actual wage subject to contributions (the contributory base) and the reference wage used for the pension calculation are not strictly the same. Based on Pension Fund data, the reference wage is on average 20 percent higher than the contributory base. The possibility to exclude years with lower earnings in calculating a pension allows for the resulting pension amount to be higher, and thus should be taken into account when assessing the effective replacement rates.

Second, to determine the reference wage, the individual earnings coefficient is multiplied by the average of the contributory base over the previous three years without any adjustment for wage growth and inflation. This implies that if the nominal wage growth over the three years prior to retirement was high, then the reference wage will be lower compared to the actual wage level at the year of retirement.

A detailed analysis of these relationships is presented in Box 1.1. Table 1.2 presents the impacts on replacement rates if, during the three years prior to retirement, wages did not grow at all (wage growth rate of 0 percent) compared to a scenario with a 5 percent wage growth.

When there is no wage growth, one sees only the impact of excluding lower earning years from the contribution period. Based on Pension Fund data, we assume that it increases the individual coefficient by 20 percent and thus the gross replacement rate becomes 36 percent instead of 30 percent. Similarly, the net replacement rates, even with a 1 percent accrual rate, would even exceed the threshold of 40 percent required by Convention No. 102.

Table 1.2. Comparison of replacement rates of a model pension with a 30-year contribution period by different accrual rates and wage growth rates

REFERENCE EARNINGS	REPLACEMENT RATE (ACCRUAL RATE 1%) WAGE GROWTH 0%	REPLACEMENT RATE (ACCRUAL RATE 1%) WAGE GROWTH 5%
Average gross reference earnings (year of retirement)	36.0%	32.4%
Net, after tax reference earnings (with a personal income tax of 18%)	43.9%	39.5%
Net, after tax reference earnings (with a personal income tax of 18% + temporary military tax of 1.5%)	44.7%	40.2%

Source: Authors' own calculations.

However, in periods of rapid wage growth, using an unadjusted average to calculate the average contributory base leads to a reduction in calculated pension amounts and replacement rates. For example, when the average wage of all insured persons grows nominally at 5 percent per year, the resulting replacement rates will be 10 percent lower in comparison to a situation of stable wages and stable inflation.

In addition to individual replacement rates measured at retirement, another important indicator of the adequacy of a pension system is the average replacement rate, calculated as the ratio between the average pension of all pensioners and the average contributory base of all insured persons. According to the Pension Fund data of 2018, the average contributory base of the active contributors was 8,527 UAH, and the average old-age pension was 2,587 UAH. Therefore, the average replacement rate was 30.3 percent. Changes in average replacement rates reflect not only changes in the replacement rates of newly awarded pensions, but also how pensions are adjusted and to what extent these adjustments follow changes in the average earnings. In Ukraine, the average replacement rate for old-age pensions was about 40 percent prior to 2014, but declined substantially afterwards due to the suspension and delay of pension indexation.

## 1.2.2 Retirement age and the required contribution period

### (1) Current provision

An old-age pension is payable to an insured person who has completed at least 15 years of contributions and has reached 65 years of age. Table 1.3 presents the transition measures for the eligibility conditions for old-age pensions.

The pensionable age can be 60 years<sup>7</sup> if an insured person has completed 25 years of contributions by 1 January 2018. Previously, retirement at 60 years required 15 years of contributions.

<sup>7</sup> Women born between 1956 and 1961 have the right to retire between ages 55 and 60.

The contribution period required to retire at 60 will be increased annually by one year until it reaches 35 years on 1 January 2028.

In addition, the pensionable age can be 63 years if an insured person has completed 15 years of contributions by 1 January 2018. The contribution period required to retire at 63 will be increased annually by one year until it reaches 25 years on 1 January 2028.

Starting on 1 January 2028, persons who have completed 40 years of contributions will be able to retire at any age.

**Table 1.3. Eligibility conditions for old-age pensions**

PENSIONABLE AGE	REQUIRED YEARS OF CONTRIBUTION		
	2018	2019–27	2028 onwards
No age limit	-	-	40
60	25	Increased by 1 year	35
63	15	Increased by 1 year	25
65	15	15	15

*Source: The Law of Ukraine “On mandatory national pension insurance” (No. 1058-IV of 2003).*

It should be observed that the schedule set out in Table 1.3 exhibits a rapid increase in the contribution period required for retirement before 65 years of age. The increase of one year per year implies that a worker with less than 15 years of contributions as of 2018 will not be able to meet the conditions for retirement at 60 or 63 years until 2028, unless they opt to purchase a past insurance period of up to two years with a prescribed surcharge.

## (2) Evidence of the reform effect

Table 1.4 presents the number of newly-awarded pensions by sex and contribution years for 2016–18. As seen in Table 1.4, the number of retiring workers with less than 25 years of contributions decreased significantly for both sexes in 2018.

Although the age distribution of pensioners with newly awarded pensions is not available, one can conclude from the obtained data that a substantial number of workers still retire at 60 years of age. However, after the amendments entered into force in 2018, the eligibility condition requiring at least 25 years of contributions to retire at 60 has resulted in a significant reduction in the number of newly-awarded pensions, particularly for men.

It should also be observed that in 2016–17 the number of new female pensioners was significantly smaller than the number of new male pensioners (almost 45 percent less in 2016 and 30 percent less in 2018). This is ascribed to the exceptionally high retirement tendency of women workers before this period, due to earlier reforms that gradually increased the retirement age of women to 60 years. During 2012–13, on average 200,000 women were retiring each year, compared with only 120,000 men. This disproportion should disappear in the long run. In general, more



men than women have pension entitlements due to the higher labour force participation rates of men, but there are more women pensioners since women live longer.

The current Pension Law requires the completion of longer contribution periods for retirement before 65 years of age. This could induce later retirement and gradually help improve the financing of the scheme, thus allowing for measures enhancing the adequacy of the benefits. Generally speaking, there is a trade-off between the age at which people effectively retire and their pension level, and thus its adequacy. Changing the statutory retirement age and building into the pension system incentives to retire later must be accompanied by creating a labour market environment in which there are decent jobs for old persons of both sexes, and where older persons are both willing and able to continue employment.

Table 1.4. Number of newly-awarded pensions by sex and contribution years, 2016–2018

CONTRIBUTION YEARS	MEN			WOMEN		
	2016	2017	2018	2016	2017	2018
Less than 15	120	129	26	387	434	32
15–25	25,195	31,587	6,985	27,850	30,370	8,199
25–30	22,816	26,028	27,275	16,037	16,676	19,083
30–35	26,953	29,013	25,985	11,320	12,028	16,625
35–40	33,128	34,953	30,791	15,232	14,292	21,177
40 or more	40,607	36,597	31,590	13,183	13,322	18,771
Total	149,443	158,307	122,652	84,009	87,122	83,887

Source: *The Pension Fund of Ukraine* ([www.pfu.gov.ua](http://www.pfu.gov.ua)).

### 1.2.3 Pension indexation

#### (1) Current provision

The Pension Law (No. 1058-IV of 2003) provides that, starting in 2019,<sup>8</sup> pensions are to be indexed every year. The rate of pension indexation is the average of the consumer price increases of the previous year and the growth of the average contributory base. This is usually called the Swiss indexation method. The contributory base used for the purpose of indexation is the average over the three calendar years preceding retirement, similar to the average contributory base used in the pension formula. The Pension Law foresees that once the Pension Fund is balanced in the future, pensions will be indexed fully in line with the growth of the average contributory base.

<sup>8</sup> The date for pension indexation will be defined by the Cabinet of Ministers at the beginning of every year. In 2019, the pensions were indexed by 17% on 1 March 2019 by the Resolution of the Cabinet of Ministers of Ukraine No. 124 of 20 February 2019.



## (2) Future implications

Inclusion of the automatic pension indexation in the Pension Law is an important step to ensuring better income security over one's whole retirement period. Applying the Swiss indexation method is certainly preferable to the pure price indexation adopted by many other countries, or to a mixed indexation that gives wage increases lower weight. In Poland, for instance, pensions are indexed in line with 20 percent of real wage growth only. On the other hand, although using a three-year moving average for wage growth has a smoothening effect, it can cause delays in adjusting the purchasing power of pensions in times when nominal wage growth rates are high and volatile (see Box 1.2). It is thus recommended to use the previous calendar year or to calculate the three-year average adjusting the values of the past years with nominal wage growth.

It should be noted that the minimum pension will follow the growth of the average wage and thus will increase faster than the pension indexation rate, which is the average of wage and price growth rates. One should thus carefully monitor future changes in pension distribution.

### 1.2.4 The minimum pension guarantee

#### (1) Current provision

After 1 January 2018, the minimum pension guarantee is granted only to pensioners who have reached 65 years of age and have completed 30 contribution years for women and 35 years for men. This is the only permanent provision in the current Pension Law that grants more favourable treatment to women than men. The minimum pension is set at 40 percent of the minimum wage, therefore no longer linked directly to the statutory subsistence minimum. This provision came into effect immediately with no transition period. Previously, the minimum pension was guaranteed to all pensioners regardless of age at the level of the statutory subsistence minimum for persons incapable for work.

For the pensioners who have reached 65 years but have insufficient contribution periods, their minimum pension is reduced proportionally, but shall not be less than the subsistence minimum for persons incapable for work. No income test or means test is required for the subsistence minimum guarantee. The cost of the minimum pension guarantee (the difference between the minimum pension and the calculated pensions) is financed by the State budget.

Before the attainment of 65 years of age, there is no minimum pension guarantee. Pensioners with low pensions are entitled to State social assistance according to the Law of Ukraine "On state social assistance to low-income families" (No. 1768-III of 2000). This law provides a subsistence minimum guarantee to those with low income, based on the declaration of the income and property of the family members.

The maximum pension is set at ten times the subsistence minimum. There is no ceiling on contributions.

## (2) Eligibility for the minimum pension guarantee

According to international practice, requiring 30 years of contributions for women and 35 years for men to be eligible for the minimum pension is extremely restrictive. For instance, in Poland, the required contribution period for the minimum pension is 20 years for women and 25 for men. It should be noted that Convention No. 102 applies to all who retire after 30 years of contributions and reach the retirement age, which should not be higher than 65 years (unless a higher age is specifically justified).

The current Pension Law allows retirement before 65 years to those who have completed the required contribution period. As seen earlier, it is estimated that many workers currently retire before 65 years of age. However, as Table 1.5 shows, even if all pensioners reach 65 years of age, more than half of them (except for women retiring in 2018) would not have the right to a full minimum pension.

Table 1.5. Number of newly awarded pensions by sex and contribution years, 2016–2018

CONTRIBUTION YEARS	MEN (% OF TOTAL)			WOMEN (% OF TOTAL)		
	2016	2017	2018	2016	2017	2018
Less than 15	0.1	0.1	0.0	0.5	0.5	0.0
Less than 25	17.4	20.0	5.7	33.6	35.4	9.8
Less than 30	32.6	36.5	28.0	52.7	54.5	32.6
Less than 35	50.7	54.8	49.1	66.2	68.3	52.4
Less than 40	72.8	76.9	74.2	84.3	84.7	77.6
Average contribution years	33.6	32.6	34.5	29.8	29.4	33.5
Number of newly awarded pensions	149,443	158,307	122,652	84,009	87,122	83,887

Source: The Pension Fund of Ukraine ([www.pfu.gov.ua](http://www.pfu.gov.ua)).

## (3) Comparison of model pensions with poverty benchmarks

In general, the minimum pension guarantee is a key instrument that effectively prevents poverty among older persons, as part of national social protection floors.

In Ukraine, the subsistence minimum is a key policy parameter that determines the minimum benefit level, called the “State social guarantees.” The Ukrainian legislation defines the subsistence minimum based on the value of a consumption basket of goods and services to which access is recognized as necessary to keep human beings in “health and decency.”

The amounts of the statutory subsistence minimum, which are different for working persons, persons incapable for work, and children, are established every year by the Budget Law. However, the Ministry of Social Policy also estimates the subsistence minimum quarterly, based on the prices of a predefined basket of goods and services and on observed price changes. The latter figure serves for the purposes of regular monitoring of changing costs of living and is not linked with any social benefits.

While the values of the subsistence minimums established by the two different methods were approximately equal until 2013, a significant discrepancy emerged after statutory subsistence minimum levels were frozen during a period of high inflation and austerity in 2014. Thus, the subsistence minimum estimated by the Ministry of Social Policy is now considered to more appropriately reflect the actual minimum level. As Table 1.6 shows, the ratio of the statutory and the estimated subsistence minimums for persons incapable for work decreased from 77.5 percent in January 2015 to 51.4 percent in January 2019.

Table 1.6. Comparison of the statutory and estimated subsistence minimums, 2015–2019

	2015	2016	2017	2018	2019
Statutory subsistence minimums, UAH					
for able-bodied persons	1,218	1,378	1,600	1,762	1,921
for persons incapable for work	949	1,074	1,247	1,373	1,497
Estimated subsistence minimums, UAH					
for able-bodied persons	1,611	2,546	2,815	3,229	3,562
for persons incapable for work	1,224	2,093	2,318	2,637	2,910
Ratio of the statutory and the estimated subsistence minimums, %					
for able-bodied persons	75.6	54.1	56.8	54.6	53.9
for persons incapable for work	77.5	51.3	53.8	52.1	51.4

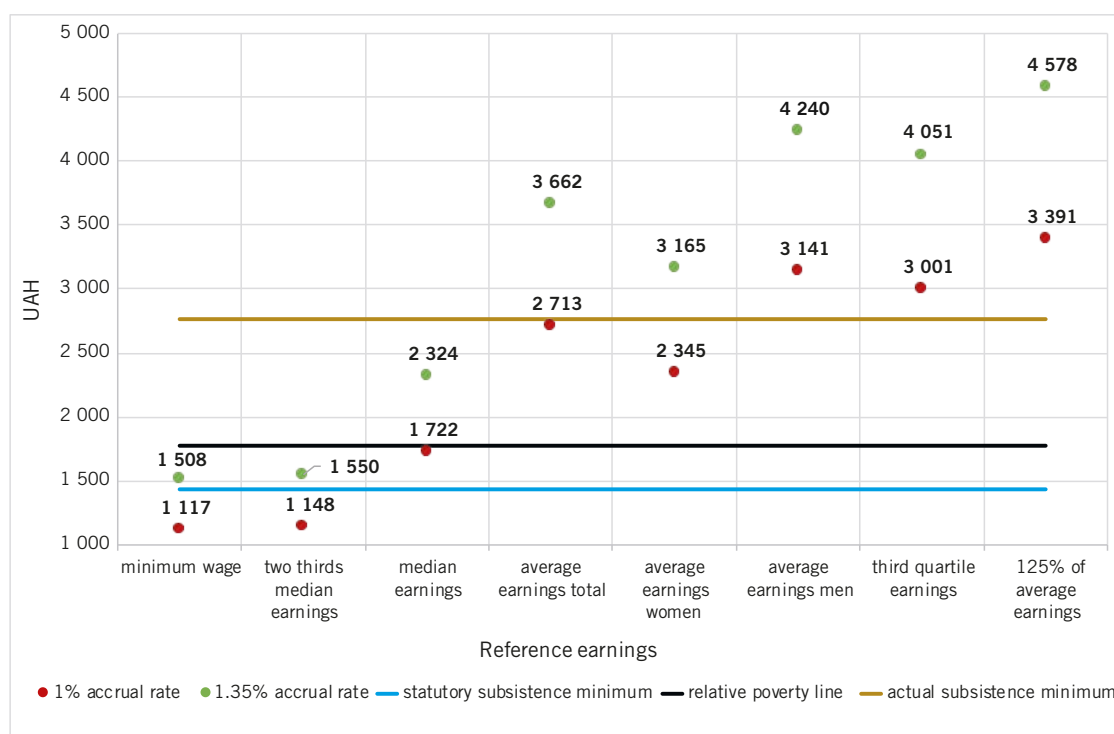
Source: National legislation and the Ministry of Social Policy (<https://www.msp.gov.ua/content/social-ni-standarti.html>).

The pension formula in the Ukrainian pension system provides the same replacement rate for all earning levels. Thus, those with low earnings can have a pension below the agreed subsistence or poverty thresholds.

In Figure 1, the vertical pairs of dots present the pension amounts at retirement, calculated by the current pension formula and by an alternative formula with an accrual rate of 1.35 percent for different income levels. For the purposes of this calculation, we assume workers with 30 years of contribution<sup>9</sup> in conformity with the standard beneficiary defined by Convention No. 102. This means that we compute pensions based on the benefit rates of 30.0 percent and 40.5 percent for different income levels. We then compare them with three poverty benchmarks (depicted as horizontal lines): the statutory and estimated subsistence minimums for persons incapable for work, and the relative poverty line, defined as 50 percent of the median income.

<sup>9</sup> As shown in Table 4, the average contribution period of new pensioners is more than 30 years (except for women who retired before 2018).

Figure 1.1. Comparison of model pensions with a 30-year contribution period with various poverty benchmarks, 2018



Source: Authors' own calculation and estimates based on Ukrainian official information and data from different sources.

As seen in Figure 1.1, for persons whose gross earnings are higher than average, the current pension formula produces pensions higher than all three poverty benchmarks. However, persons with earnings that equal the national average wage will have lower pensions than the estimated subsistence minimum. Since the average wage of women is lower than the national average, the pensions for women with average earnings are below the estimated subsistence minimum, although they are still higher than the relative poverty line and statutory subsistence minimum. The alternative pension formula would improve this situation. In particular, the estimated pension for retiring women whose earnings are above average would become higher than the estimated subsistence minimum.

In Ukraine, the median earnings are about two-thirds of the average earnings. For persons with median earnings, the current formula results in a pension higher than the statutory subsistence minimum,<sup>10</sup> but lower than the relative poverty line and the estimated subsistence minimum. The alternative pension formula would guarantee that persons with median earnings would have pensions above the relative poverty line.

<sup>10</sup> This may not be the case for women. Although sex-disaggregated earnings data are not available, it is estimated that, with this replacement rate, the pensions of women with median earnings could be lower than the statutory subsistence minimum.

For persons with low earnings—not only at the minimum wage but also at the level of two-thirds of the median earnings<sup>11</sup>—the estimated pensions under the current formula are lower than both the statutory subsistence minimum and the minimum pension. However, the alternative pension formula will guarantee low earnings persons a pension close to or above the statutory subsistence minimum and the minimum pension.<sup>12</sup>

#### (4) The relationship between the minimum pension, the subsistence minimum, and the minimum wage

According to Pension Fund data, the average old-age pension was 2,587 UAH in 2018 (pensions were indexed by 17 percent on 1 March 2019). On 1 January 2019, the minimum wage in Ukraine was increased to UAH 4,173, so the minimum pension became 1,669 UAH. According to the Budget Law, the subsistence minimum for persons incapable for work was set at 1,497 UAH on 1 January 2019, 1,564 UAH on 1 July 2019, and 1,638 UAH on 1 December 2019.

Table 1.7 compares the subsistence minimums for able-bodied persons and persons incapable for work with the minimum wage, the average wage and the minimum pension for 2015–2019.

Prior to 2017, the minimum wage in Ukraine was set at the level of the statutory subsistence minimum for able-bodied persons. However, since the minimum wage more than doubled in 2017, these two amounts have been delinked. The ratio between the minimum and the average wage was previously below 30 percent, but has exceeded 40 percent since 2017.

Prior to 2018, the minimum pension was set at the level of the statutory subsistence minimum for persons incapable for work. However, as a result of the 2017 pension reform, the minimum pension is now set at 40 percent of the minimum wage and thus no longer linked to the statutory subsistence minimum. Until 2016, the ratio between the minimum pension and minimum wage was nearly 80 percent. Since 2017 this has declined to 40 percent and is expected to stay at this level.

After the pension recalculations of 2018, the ratio between the minimum and average pensions declined from 68.9 percent in 2017 to 56.8 percent in 2018 and 63.0 percent in 2019. The ratio between the average pension and average wage fell significantly to 25.5 percent in 2017, but increased to 28.8 percent in 2018 and 28.7 percent in 2019.

<sup>11</sup> Following the Eurostat definition of low earnings, median earnings are equal to the median equivalised household income per person for households of employees without children and any other non-employee members whose single source of income is their own earnings.

<sup>12</sup> This will not necessarily be true in the future when the minimum pension follows changes in minimum wages and the difference between the minimum pension and the subsistence minimum increases.

Table 1.7. Comparison of subsistence minimums, the minimum and average wage, and the minimum pension, 2015–2019

(As of 1 January)

	2015	2016	2017	2018	2019
Statutory subsistence minimum for able-bodied persons (UAH)	1,218	1,378	1,600	1,762	1,921
Minimum wage (UAH)	1,218	1,378	3,200	3,723	4,173
Statutory subsistence minimum for persons incapable for work (UAH)	949	1,074	1,247	1,373	1,497
Minimum pension (UAH)	949	1,074	1,247	1,452	1,669
National average gross wage (UAH)	4,195	5,183	7,104	8,865	9,223
Average old-age pension (UAH)	1,573	1,690	1,809	2,557	2,648
The ratio of the minimum wage and the average wage, %	29.0	26.5	45.0	42.0	45.2
The ratio of the minimum pension and the minimum wage, %	78.0	77.9	39.0	39.0	40.0
The ratio of the minimum pension and the average pension, %	60.3	63.6	68.9	56.8	63.0
The ratio of the average pension and the average wage, %	37.5	32.6	25.5	28.8	28.7

Source: National legislation and the State Statistics Service of Ukraine ([www.ukrstat.org](http://www.ukrstat.org)).

Recent reforms have changed the way these amounts will be adjusted in the future. These changes will affect the distribution of old-age pensions, in particular the number of pensioners receiving the minimum pension or social assistance benefits. Therefore, one should carefully monitor the future development of the minimum pension and its relationship with the subsistence minimum and other poverty benchmarks.

According to recent political commitments, the minimum wage will be increased in line with wage growth, and pensions will be indexed by the Swiss indexation method, which takes into account 50 percent of wage growth and 50 percent of consumer price increases. Therefore, as long as wages grow faster than prices (meaning that there is positive real wage growth), the minimum pension will increase faster than the pension indexation. By taking into account potential declines in the replacement rates and tightened entitlement conditions, this may imply that an increasing number of pensioners will have to rely on the minimum pension.

At the same time, there will be a growing number of retired workers without rights to the minimum pension guarantee due to very restrictive eligibility conditions. The only protection for those persons is means-tested social assistance, which provides up to the statutory subsistence minimum for persons incapable for work. However, the subsistence minimum will likely follow changes to the value of the basket of goods and services, thus more or less following the price increases. This implies that social assistance will gradually decline in relation to the minimum pension.

## 1.3 Conclusions and recommendations

### 1.3.1 Options to improve the adequacy of old-age pensions and enhance the minimum guarantees

There are two modifications needed in the current Ukrainian old-age pension system. They are to (a) improve the benefit level of the State pension so that it comfortably meets the requirements of Convention No. 102 applicable for earnings-related pension schemes,<sup>13</sup> and to (b) establish minimum pension guarantees which effectively provide at least basic income security to all older persons, protect them from poverty, and allow for life in health, decency, and dignity, as required by both Convention No. 102 and Recommendation No. 202.

It is recommended that the following measures be considered to improve the adequacy of old-age pensions through the modification of pension formula.

1. The benefit accrual rate should be increased from 1 percent to at least 1.35 percent, which secures a benefit rate of 40.5 percent after 30 years of contributions. This measure should be accompanied by an enhanced minimum pension guarantee to protect persons with low earnings.
2. The cost of the aforementioned increase in the accrual rate should be met by an increase in the contribution rate, determined by an actuarial assessment. Further improvements could be considered if additional fiscal space is secured. One should also consider separating pension contributions from the unified social contributions and allocate necessary resources to the Pension Fund.
3. Additional resources allowing more adequate pensions should also be made available through measures to enhance employment rates, formalize employment, extend the coverage, and improve the enforcement and compliance of contribution collection.
4. When calculating the average contributory base in the pension formula, one should either use the earnings from previous years or adjust past wages if a three year average is still used.

It is recommended that the following measures be considered to strengthen the minimum guarantees.

1. The requirement of a contributory period of 30 years for women and 35 years for men for the minimum pension guarantee is not in line with the social security principles embedded in ILO standards. It leaves many older persons with low earnings and short careers (from long spells of unemployment or inactivity due to childcare, for instance) at risk for old-age poverty. It is thus recommended that the right to a full minimum pension

<sup>13</sup> As mentioned earlier, the Government of Ukraine opted to refer to Article 67 in its report on the compliance of the Ukrainian pension system with Convention No. 102. Article 67 usually applies to pensions organized as means-tested social assistance.



guarantee should be given to persons who have reached the pensionable age but have shorter contributory periods.

2. Since the current law provides for the possibility of retirement before 65 years and many workers still retire before 65, it is unacceptable to restrict the minimum pension guarantee to those who reach that age. There is a need to harmonize the entitlements to the minimum pension guarantee with the requirements for pensions, ensuring the equal treatment of minimum pension protection before and after 65 years of age.
3. The subsistence minimum is the absolute minimum level of social safety in Ukraine. If a significant discrepancy between the statutory and estimated subsistence minimums persists, then one may have to consider introducing a universal minimum pension guarantee to all older persons, financed by the State budget (the conditions on the age threshold or on the conduct of means-test or income test are to be determined).

These recommended measures should be properly costed and presented for policy discussion. The cost estimation requires detailed distributional analysis, so we only provide a description of the methodology in Box. 1.3.<sup>14</sup> A crucial information for the cost estimation is the number of additional pensioners whose pensions will increase by the proposed measures. The expected future evolution between the average pension, the minimum pension and the subsistence minimum will also have to be assessed.

### 1.3.2 Concluding remarks

The benefit level is one of the key aspects of the adequacy of a pension system. For an overall assessment of adequacy, one should also take into account the beneficiary coverage of the pension system. In particular, the pension system should adjust itself in response to complex challenges caused by the persistent prevalence of informal employment and undeclared work, and the emergence of non-standard forms of employment.

At the same time, one should secure the necessary resources for the improvement of benefits. While some increases in the contribution rate are inevitable, one should also make further efforts to expand the tax base. It is crucial for the pension system to extend coverage through improving law compliance among the informally employed population and improving contribution collection in the face of widespread undeclared work.

<sup>14</sup> As a very crude estimate, if we assume that the average pension is 1.75 times the minimum pensions and that 46 percent of pensioners are receiving the minimum pension, then a 35 percent increase in the pension formula will result in a 25.8 percent increase in pension expenditure.



### Box 1.1. Analysis of the old-age pension formula of Ukraine

The current old-age pension formula is:

$$P = \alpha TW$$

where:

$P$  is the monthly pension amount;

$\alpha$  is a benefit accrual rate, currently 1%;

$T$  is the number of contribution years; and

$W$  is the reference wage of an individual pensioner.

The reference wage is calculated by multiplying the 3-year average of the contributory base by the individual coefficient:

$$W = \beta \bar{W}$$

where:

$\beta$  is the individual earnings coefficient; and

$\bar{W}$  is the average contributory base (3-year average of the nominal amounts).

Let  $W_{-i}$  denote the average contributory base of  $i$  year before retirement and assume that the growth rate of wages in  $i$  year before retirement equals  $w_i$  ( $i = 0, 1, 2, 3$ ). Then the 3-year average of the nominal average contributory base is calculated as follows:

$$\begin{aligned}\bar{W} &= \frac{1}{3}(W_{-1} + W_{-2} + W_{-3}) \\ &= \frac{W_0}{3} \left[ \frac{1}{1 + w_0} + \frac{1}{(1 + w_0)(1 + w_1)} + \frac{1}{(1 + w_0)(1 + w_1)(1 + w_2)} \right] \\ &= \frac{W_0}{3} \frac{3 + w_1 + 2w_2 + w_1w_2}{(1 + w_0)(1 + w_1)(1 + w_2)}.\end{aligned}$$

Currently  $\alpha = 1\%$  and, based on the Pension Fund data, it is assumed that  $\beta = 1.2$ . Hence, the gross replacement rate of the model old-age pension with a 30-year contribution period is

$$P/W_0 = 12\% \cdot \frac{3 + w_1 + 2w_2 + w_1w_2}{(1 + w_0)(1 + w_1)(1 + w_2)}.$$

If we assume constant wage increases,  $w_i = w$  (for  $i = 0, 1, 2$ ), it follows that

$$P/W_0 = 12\% \cdot \frac{3 + 3w + w^2}{(1 + w)^3} \approx 36\% \cdot (1 - 2w).$$

Currently the income tax rate is 18% for wages and 0% for pensions. Hence the net replacement rate of the model old-age pension is

$$P/W_0 / 0.82 = 14.63\% \cdot \frac{3 + 3w + w^2}{(1 + w)^3} \approx 43.9\% \cdot (1 - 2w).$$

If the income tax rate is 19.5%, then

$$P/W_0 / 0.805 = 14.91\% \cdot \frac{3 + 3w + w^2}{(1 + w)^3} \approx 44.7\% \cdot (1 - 2w).$$

### Box 1.2. Relation between the year-to-year wage increase and the rate of increase of the 3-year moving average wage

Let  $w_n$  denote the national average wage in year  $n$ . The year-to-year wage increase  $a_n$  and the rate of increase of the 3-year moving average wage  $b_n$  are given as follows:

$$a_n = \frac{w_{n-1}}{w_{n-2}},$$

$$b_n = \frac{(w_{n-1} + w_{n-2} + w_{n-3})/3}{(w_{n-2} + w_{n-3} + w_{n-4})/3}.$$

Between these two variables the following relation holds:

$$b_n = a_{n-1} \frac{a_n + 1 + a_{n-1}^{-1}}{a_{n-1} + 1 + a_{n-2}^{-1}}.$$

Observe that if  $\lim_{n \rightarrow \infty} a_n = w$ , then  $\lim_{n \rightarrow \infty} b_n = w \frac{w + 1 + w^{-1}}{w + 1 + w^{-1}} = w$ . Thus, in the long run  $a_n \approx b_n$ , but the short run the behaviour of  $a_n$  and  $b_n$  can be quite different, particularly in volatile situations.

### Box 1.3. Estimate of the cost of pension increase

Consider a group of pensioners receiving earnings-related pensions with a minimum pension guarantee of  $m$ . When pensions are increased in the following ways, the associated costs can be estimated as follows:

- (1) All pensions (original pensions not subject to the minimum pension) are increased by  $(1+a)$  times, while the minimum pension is unchanged.

Then, the cost associated with this pension increase is estimated as

$$\frac{\Delta p}{p_0} \approx a \left( 1 - \frac{m}{p_0} \cdot \frac{t_0 + t_1}{2} \right)$$

where:

$p_0$  is the pension expenditure before the increase;

$\Delta p$  is the increase in the pension expenditure;

$t_0$  is the number of pensioners receiving the minimum pension before the increase; and

$t_1$  is the number of pensioners receiving the minimum pension after the increase.

It should be observed that if the share of pensioners receiving the minimum pension is higher or if the level of the minimum pension relative to the average pension is higher, then the pension increase will have less financial impact (meaning fewer pensioners will have their pensions increased).

- (2) The minimum pension is increased from  $m$  to  $m + \Delta m$ .

Then, the cost associated with this minimum pension increase is estimated as

$$\frac{\Delta p}{p_0} \approx \frac{\Delta m}{p_0} \cdot \frac{t_0 + t_0'}{2}$$

where:

$p_0$  is the pension expenditure before the increase;

$\Delta p$  is the increase in the pension expenditure;

$t_0$  is the number of pensioners receiving the minimum pension before the increase; and

$t_0'$  is the number of pensioners receiving the minimum pension after the increase.

Contrary to the previous case, if the share of pensioners receiving the minimum pension is higher or if the increase in the minimum pension is greater, then the pension increase will have more financial impact (meaning that more pensioners will have their minimum pensions increased).



## 2. Coverage and compliance: the informal economy and undeclared work

### 2.1 Problem analysis

The issue of coverage is closely related to the adequacy of the pension system. Even if a pension system provides relatively generous benefits, it cannot be called adequate if it covers only a limited part of the population, leaving a large majority behind. In this regard, ILO social security standards set clear guidelines. Both Recommendation No. 67 and Recommendation No. 202 foresee universal coverage as an ultimate goal. Although Convention No. 102 is more flexible in this regard, there is a clear commitment to pursue efforts aimed at universal coverage.<sup>15</sup> The recently adopted Transition from the Informal to the Formal Economy Recommendation No. 204 (2015) also calls for Member States to progressively extend social security (including old-age pensions), maternity protection, decent working conditions and minimum wages to all workers in the informal economy.

Table 2.1. Number of pensioners by type, 2016–2019

	2016	2017	2018	2019
Total	12,296	11,956	11,725	11,470
Old-age	9,408	9,116	8,922	8,693
Disability	1,400	1,395	1,401	1,370
Survivors'	726	694	663	536
Full years of service	660	654	646	..
Social pensions	101	95	90	..
Others	1	2	3	..

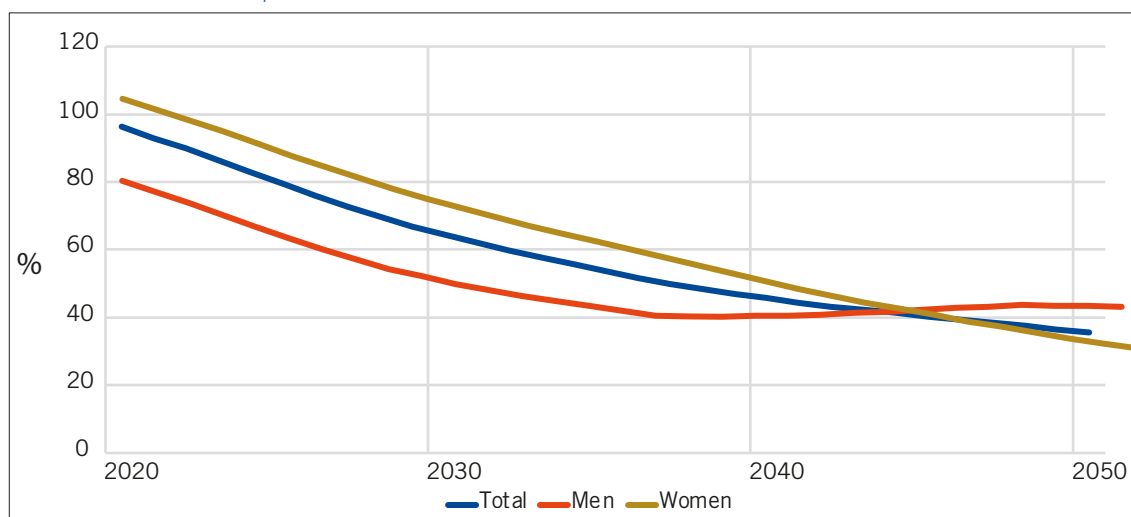
Source: State Statistics Service of Ukraine (<https://ukrstat.org/en>).

As shown in Table 2.1, there were 8.7 million old-age pensioners at the beginning of 2019, while there were 7.0 million residents age 65 and older and 9.7 million residents age 60 and older. Thus, we can conclude that a large majority of the population aged 65 and older are receiving old-age pensions.

<sup>15</sup> Convention No. 102 calls for the coverage of at least 50% of all employees for earnings-related schemes, 20% of all residents for flat-rate schemes, or all residents if the pensions are means-tested benefits. Convention No. 128 requires that earnings-related pensions cover all employees and flat-rate schemes cover at least 75% of all residents. Furthermore, Recommendation No. 131 calls for covering all economically active persons, including those in casual employment.

It should be noted that the number of pensioners has been decreasing in recent years for several reasons, including the recent pension reforms that tightened pension entitlement conditions and a lack of statistical information on the pensioners residing in the areas not controlled by the Government.

Figure 2.1. Projected number of old-age pensioners as a percentage of the population aged 65 and older, 2020–2050



Source: *The Pension Fund of Ukraine, 2018.*

In the long run, however, the beneficiary coverage of the contributory pension system in Ukraine may deteriorate significantly. As depicted in Figure 2.1, results of the actuarial valuation undertaken by the Pension Fund of Ukraine show a dramatic deterioration in beneficiary coverage. It is projected that only 40 percent of the population aged 65 years or older (or 60 percent of those aged 70 years or older) will receive old-age pensions from the State pension system in 2040. This means that, in the future, a majority of elderly persons in Ukraine will have to rely on income from their own private savings and assets, family support, or (most likely) on means-tested social assistance.

The main reason for this trend is the low contributory coverage among the working-age population. This is due to low levels of economic activity and low employment rates, particularly among certain groups of the population, and high levels of informality and widespread undeclared economic activity that result in non-compliance with social insurance legislation. The persistence of low coverage, combined with more restrictive pension entitlement conditions, will result in a significant decline in the proportion of elderly persons entitled to pensions from the State pension system. In the next section, we will look more closely at those persons who are not currently contributing.

## 2.2 Coverage gaps of the Ukrainian pension system

### 2.2.1 Coverage of insured workers

Table 2.2 compares the working age population aged 15–64 with the labour market statistics and Pension Fund data.

Table 2.2. Coverage of the State pension system, 2015–2018

		2015	2016	2017	2018
Population aged 15–64	A	29,635	29,328	29,012	28,719
Economically active population	B	18,098	17,955	17,854	17,940
Employed population	C	16,443	16,277	16,156	16,361
Insured persons	D	12,185	12,863	13,243	12,529
Average number of contributors	E	9,830	10,622	10,940	10,378
Labour force participation rate	B/A	61.1%	61.2%	61.5%	62.5%
Employment rate	C/A	55.5%	55.5%	55.7%	57.0%
Coverage rate	D/C	74.1%	79.0%	82.0%	76.6%
Percentage of contributors among insured persons	E/D	80.7%	82.6%	82.6%	82.8%
As a % of population					
Insured persons	D/A	41.1%	43.9%	45.6%	43.6%
Contributors	E/A	33.2%	36.2%	37.7%	36.1%

Source: Labour Force Survey (<https://ukrstat.org>), Pension Fund of Ukraine ([www.pfu.gov.ua](http://www.pfu.gov.ua)) and ILO calculations.

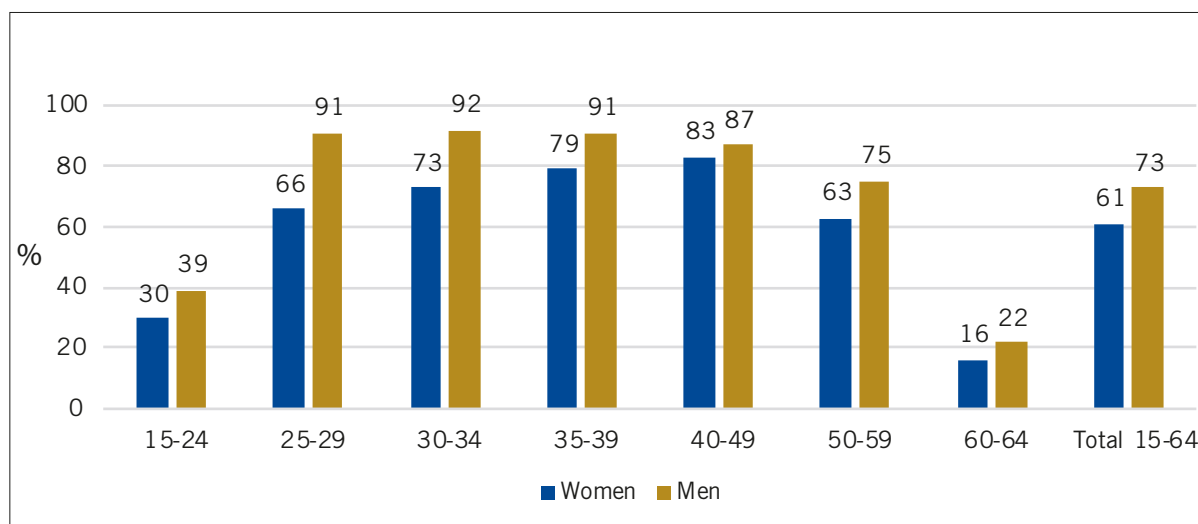
As shown in the Table 2.2, only slightly more than 35 percent of the working age population aged 15–64 in Ukraine currently contributes to the State pension system. When the population coverage is at such a low level, applying the strict contributory principle in terms of eligibility implies that in the long run more than 60 percent of elderly persons would not be entitled to contribution-based pensions.

The difference between the working age population aged 15–64 and the actual number of contributors to the State pension system can be explained by the following factors. In 2018, more than 35 percent of the working age population were not economically active. About 10 percent of the economically active population were unemployed. About 25 percent of employed persons were not registered with the pension fund due to informality and other reasons. And, more than 15 percent of insured persons were not paying contributions every month. Moreover, a certain percentage of contributors underreport their actual wages.

## 2.2.2 Low labour force participation and high unemployment

Based on the Labour Force Survey in 2017, 67 percent of the population aged 15–64 were economically active (61 percent of women and 73 percent of men) in 2017. This level is lower than in neighbouring countries such as Poland, Hungary and Slovakia.

Figure 2.2. Labour force participation rates by sex and age, 2018



Source: State Statistics Service of Ukraine (<https://ukrstat.org/en>).

From Figure 2.1, low labour force participation is observed among youth, women between 25 and 45 years of age, and persons close to retirement. Similar observations are made with respect to employment rates.

First, labour force participation is low among youth aged 15–24 years. Of the economically inactive persons in this age group, about 85 percent (less than 80 percent of women and more than 90 percent of men) are pursuing education, while 11 percent (18 percent of women and slightly more than 3 percent of men) are engaged in family responsibilities. Although there is no direct evidence, it is possible that some young people dropped out of the labour market because they felt discouraged by their future career prospects.

Second, in the prime working age between 25 and 45 years, the labour force participation rates of women are consistently below those of men. Women in this age group are inactive mainly due to family obligations. Presumably many of these are involved in unpaid non-market activities such as household work and caring for children and other family members.

Third, labour force participation rates drop significantly for persons aged 60–64 years, mainly due to pension entitlement. It should be observed that the participation rates of women start declining already in the 50–59 year age group, as some of them have access to pensions before 60 years of age.



From this analysis, it follows that when the Government aims to increase overall labour force participation and employment, it is important to support youth with the transition from education to work, to facilitate men and women sharing the responsibilities of work and family obligations, and to create a labour market environment where older persons are willing and able to continue employment.

### 2.2.3 Informal economy and undeclared work

In Ukraine, as in other countries, the prevalence of the informal economy and the widespread practice of undeclared work impose serious challenges for extending social security coverage.

In Recommendation No. 204, the term “informal economy” (also known as the “grey” or “shadow” economy) refers to “all economic activities by workers and economic units that are—in law or in practice—not covered or insufficiently covered by formal arrangements.”

Table 2.3. Formal and informal employment, 2017

(in thousands)

	TOTAL EMPLOYED	EMPLOYED FORMALLY	EMPLOYED INFORMALLY	FORMAL SECTOR	INFORMAL SECTOR
Total	16,156	12,461	3,696	1,587	2,109
Women	7,771	6,257	1,515	647	867
Men	8,385	6,204	2,181	939	1,242

Source: State Statistical Service of Ukraine, Labour Force Survey 2017 (<https://ukrstat.org/en>).

As Table 2.3 shows, among the 16.2 million employed persons in Ukraine in 2017, 3.7 million were employed informally, which represents 22.9 percent of the total employed population. The informally employed persons consist of the following two categories: informal workers in the formal sector totalling 1.6 million, making up 9.8 percent of the total employed population, and informal workers in the informal sector totalling 2.1 million, or 13.0 percent of the total employed population. Informal workers in the formal sector were predominantly concentrated in urban areas and worked mainly in construction, temporary accommodation and catering services, and the wholesale and retail trade. Informal workers employed in the informal sector were predominantly concentrated in rural areas and worked mainly in agriculture, forestry, fishing, and construction. The share of the informally employed workers in Ukraine is lower than in Russia and Romania, comparable with Moldova, but higher than in most of the other countries in Central and Eastern Europe.<sup>16</sup>

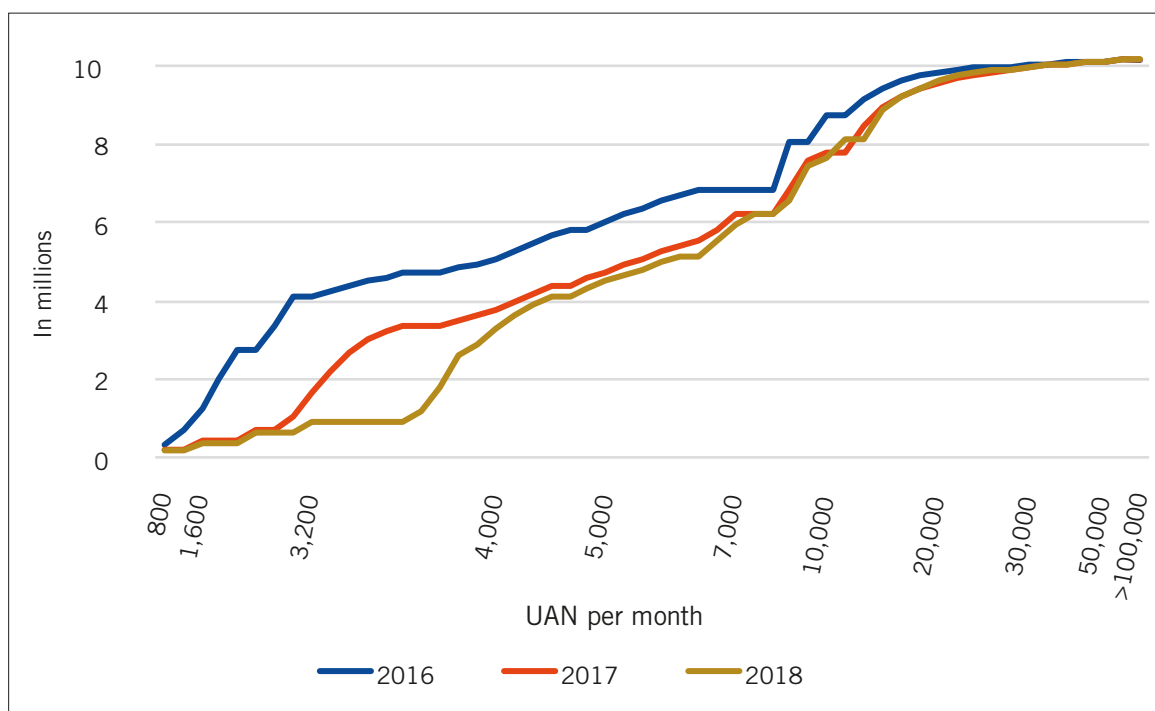
<sup>16</sup> Hirose and Hetteš (2016) report the following estimates for Bosnia and Herzegovina and Moldova. In Bosnia and Herzegovina, 32.8% of the employed population worked in the informal economy and 10.7% of GDP was unreported in 2008. Unpaid social security contributions amounted to 4.7% of GDP, and unpaid income tax amounted to 0.5% of GDP. In Moldova, 34.8% of the employed population had an informal job as their main job in 2015. Undeclared income due to informal employment and underreporting equalled 12.9% of GDP in 2010. Unpaid social security contributions from undeclared income equalled 5.2% of GDP (4.1% for social insurance and 1.1% for health insurance).

These informally employed persons are not contributing to the pension system. Moreover, not all formally employed persons are fully contributing to the system due to undeclared work. Here, undeclared work refers to a formal employment situation in which workers and employers declare a lower-than-actual income to the public authorities to avoid taxes and social security contributions. Typically, all or part of one's salary is paid directly to employees in envelope cash wages.

For the pension system, undeclared work implies fraud and evasion of taxes and social security contributions. Typically, a worker and their employer report only the minimum contribution level stipulated by the law, while the remaining portion of their wage is paid directly and informally. This secures at least a certain benefit level if the worker completes their required contribution period. In this way, undeclared work is the threat to the sustainability of the pension system and the adequacy of pension benefits.

Figure 2.2 presents the distribution of the contributory wage to the Pension Fund of Ukraine from 2016 to 2018. It should be noted that about 60 percent of workers contribute below the average wage and that there is a significant concentration of contributory wages at the minimum wage. As the minimum wage increased substantially during this period, one can observe an upward shift in the contributors paying at the minimum level. Although the distribution of actual wages is not available, these observations strongly suggest the existence of wage underreporting.<sup>17</sup>

Figure 2.3. Cumulative distribution of the contributory wage, 2016–2018



Source: Data from the Pension Fund of Ukraine.

<sup>17</sup> According to the State Statistics Service, 17.8 percent of regular employees were receiving wages at UAH 4,000 or less in December 2018. However, according to the Pension Fund data, 32.8 percent of contributors were paying contributions based on wages at UAH 4,000 or less in August 2018.

An ILO project conducted a survey of undeclared work in Ukraine in 2017.<sup>18</sup> This survey was the first attempt to estimate the size and nature of the undeclared work in Ukraine. It reached 1,000 respondents and was based on the methodology used in the EU. The main findings of this survey are summarized as follows:

- On the supply side of undeclared work, 7.1 percent of respondents admitted to having carried out some paid activity without declaring the full or part of their income to the tax or social security institutions.<sup>19</sup> Moreover, 45.8 percent of respondents personally know people who are paid and do not declare their income, and 33 percent of them estimate that more than half of all work in Ukraine is undeclared.
- On the demand side, 12.2 percent of the respondents reported having acquired services that involved undeclared work, and around 15.2 percent admitted to having purchased undeclared goods.
- Concerning envelope wages, 9.1 percent of employees reported having been paid envelope wages, and 29.0 percent of them received half of their net monthly income this way. Of those employees, 54.7 percent receive income in envelope wages for both regular and overtime work, while 29.4 percent receive it for regular work only. This form of payment was initiated by the employer in 70.9 percent of cases.
- Almost half of respondents reported thinking that the risk of being detected by the tax or social security authorities was rather small, and that the applicable sanctions would not be too harsh.<sup>20</sup>
- When those who admitted having worked without declaration were asked about their reasons for doing so, the most common reasons were: the difficulties in finding a regular job, the seasonal nature of their work, that undeclared work is the way such activities are usually done, that the State does not do anything for them, and that both parties benefit from it.
- When respondents were asked about the two major reasons for engaging in undeclared work, the most cited reasons were a lack of regular jobs, that the State does not do anything for them, insufficient income from regular jobs, and that taxes and social security contributions are too high.

These survey results suggest that undeclared work is widely accepted and practiced in Ukraine.

#### 2.2.4 Non-standard forms of employment

Europe has recently been experiencing a decline in “standard employment,” namely work that is full time, indefinite, and part of a subordinate relationship between an employee and an employer. There is a simultaneous growth in the number of workers in “non-standard forms of

<sup>18</sup> For more details of the survey results, see ILO (2018c).

<sup>19</sup> Taking into account the natural reluctance of the respondents, this value must be considered as a lower bound.

<sup>20</sup> It should be noted that there was a moratorium on labour inspection in Ukraine during the survey period. The moratorium on labour inspection was lifted in early 2018.

employment,” including temporary (fixed-term) and casual employment, part-time and on-call work, temporary agency employment, or employment relationships disguised as self-employment (European Commission, 2018; ILO, 2016). In addition, the so-called “platform” or “gig” economy in recent years has created new types of employment relationships not adequately protected by labour law.

Various sources indicate that non-standard forms of employment in Ukraine are on the rise and constitute a growing share of labour relations. As a recent study points out, undeclared work often overlaps with non-standard forms of work or self-employment, and in some instances these forms can be instrumental for tax and contribution evasion (European Platform Tackling Undeclared Work, 2018). Various sources show that Ukraine is one of the leading countries that have a sizable digital platform economy. It is estimated that at least 3 percent of the Ukrainian workforce is involved in online work (Aleksynska et. al., 2018).

According to the Eurostat data of 2018, across the 28 EU member states, 18.5 percent of the employed population were in part-time employment and 14.2 percent were self-employed, while 14.1 percent of employees worked under temporary contracts. Importantly, non-standard forms of employment are an involuntary choice for a significant part of the workforce. Involuntary temporary employment equalled 7.4 percent of all employment in the EU, and involuntary part-time work constituted a quarter of all total part-time work.

Workers in non-standard forms of employment are commonly not covered by mandatory social insurance, or covered only partially.

In many countries, temporary and part-time workers are compulsorily covered by social security schemes. However, frequent changes in jobs and workplaces result in fragmented contributory periods, leading to a failure to meet the required eligibility conditions. In some cases, social security coverage is not mandatory for certain jobs, such as mini-jobs or zero-hour contracts with salaries below the minimum level (European Commission, 2018b, c).

Self-employed individuals (without dependent employees) pose particular problems to social security coverage. When self-employed workers are compulsorily covered by social security schemes, they have to pay contributions for both employers and workers. In some instances, business-to-business (B2B) contracts are used as a way of avoiding employment contracts and the resulting obligations as the employer.

Workers in the platform economy are not adequately protected by labour law or social security law due to the task-based nature of their work, although they may perform tasks over long work hours. Social security coverage of platform workers is low, and workers who are mainly dependent on the platform economy are more likely to be unprotected (Berg et. al., 2018).

These changes have brought about more instability and fragmented employment careers for many workers. The problem of coverage becomes especially pertinent with respect to the pension systems, which usually require accumulation of entitlements over long periods of time.

## 2.3 Conclusions and recommendations

### 2.3.1 Measures to extend social security coverage in Ukraine

Low social security coverage is a multifaceted phenomenon resulting from the labour market challenges, the design features of social security systems, attitudes towards social security institutions and the quality of governance. There is an urgent need for Ukraine to take measures to increase labour force participation and the rates of formal employment, increase effective coverage of all types of employment contracts, and increase enforcement and compliance with reporting economic activities and paying contributions.

There are a number of prerequisites for successfully extending social security coverage in general (Van Ginneken, 2007). First, the State and the social partners need to recognize the urgency of the matter. Second, the State and the existing national social security systems should be ready to play a central role in realizing this goal. Third, there needs to be a well-functioning coordination mechanism between social security systems and other fields of social policy.

The current Pension Law (No. 1058-IV of 2003), enacted in 2003, adopts a contributory principle where the right to benefits is established by contributions made throughout one's working career. Under the current system, the non-payment or underpayment of social security contributions will directly result in less access to benefit entitlement, including the minimum guarantee. This is unlike the former system, which generously recognized non-contributory periods. The recent reforms have further enhanced this contributory principle by tightening the link between contributions and benefits. Nevertheless, the awareness and understanding of the seriousness of this problem appear to be low among the Ukrainian workers.

Within the current contributory framework, the pension system can extend effective coverage to the unemployed and child-rearing mothers by recognizing their status as contributory. It should be noted that such redistribution would be difficult to organize within private pension systems. However, a study shows that childcare breaks in working careers result in lower pensions in a majority of OECD countries, although the effects depend on the redistributive features of the pension system, the income levels, and the length of the childcare period (OECD, 2015). Similar results apply to unemployment spells.

In Ukraine, contributions during maternity leave are paid on the basis of childbirth benefits. Previously Ukraine was known to provide relatively generous benefits to families with children. However, as a result of the austerity measures implemented in 2014, these benefits were cut drastically, particularly with respect to second and later born children (ILO, 2016b).

Attention should be drawn to gender aspect of social security benefits. In many countries, the gendered division of labour (the male breadwinner compared to the female carer) and the

gender pay gaps manifest in pension inequalities. These show that social security systems were designed primarily for male types of employment and blind to gender differences, which result in unfavourable outcomes for women.

Concerning unemployment, only one in four unemployed persons is registered with the State Labour Service of Ukraine, mainly due to weak registration incentives. Thus, although the legislation provides for contribution payments to be made on behalf of a registered unemployed person, this does not apply to a large majority of unemployed persons. As noted earlier, workers have the option to retrospectively pay contributions for periods of study. There is also an option to purchase past insurance periods of up to two years with a prescribed surcharge. Contributions during military service are covered by the State.

In Ukraine, as in other countries, the informal economy and undeclared work are deep-rooted problems and constitute major obstacles in extending social security coverage. The policies encouraging the transition to formality and the reduction of undeclared work require the long-term commitment and continuous efforts of all stakeholders.

How can social security systems respond to these challenges? One should recall that traditional contributory social security systems served mainly full-time regular employees in the formal employment sector who are still the majority in the labour market, while a relatively small number of workers in other types of employment were kept mostly outside its scope. In view of the recent changes in the labour market, social security schemes should adapt to workers in different types of employment and encourage the formalization of enterprises and their workers. Efforts to extend social security need to take into account the large heterogeneity of workers, especially the variation in their work-related risks, their capacity to build up entitlements, the potential eligibility for social security benefits, and the existence of disguised employment relationships. Social security schemes must also recognize the frequent movement among various forms of employment and ensure the portability of entitlements between schemes while facilitating labour market transitions (OECD/ILO, 2019).

The following policies have been identified to extend social security coverage to workers in non-standard forms of employment, self-employment, and in the digital platform economy (ILO, 2016; Behrendt and Nguyen, 2018; Behrendt et. al., 2019).

First, social security coverage for temporary, part-time and other atypical workers can be improved by lowering the legal thresholds regarding the minimum duration of employment, the minimum hours worked, and by ensuring equal coverage across different forms of employment.

Second, social security coverage should be extended to the categories of workers who were previously outside the scope of compulsory coverage, such as casual workers and self-employed workers including digital platform workers.

Third, access to social security systems should be enhanced. This can be achieved by simplifying the administrative procedures for registration and contribution payments, enhancing access to



information about individual entitlements, and enacting measures so workers can maintain their entitlements, including effective coordination mechanisms for workers with multiple employers operating in different countries.

Fourth, the compliance and collection of social security contributions should be improved through the implementation of measures promoting self-compliance. This involves removing disincentives and providing appropriate incentives for compliance, and strengthening enforcement through inspections, controls and sanctions. Measures should also be taken against the tendency to misclassify workers as self-employed to avoid the payment of social security contributions. Especially, it is crucial to clarify the employment relationships for digital platform work and specify the legal rights and responsibilities of platforms, requesters and workers.

In order to enable these desirable changes, confidence in the social security system should be restored. The aforementioned measures should be supported by efforts to create a social security culture that fosters trust in social security systems. Clearly, such a culture cannot be built overnight. The continuous efforts of all stakeholders involved are essential.

Although there is no silver bullet for fighting the informal economy and undeclared work, there are good practices that have achieved reasonable results in increasing the number of contributors. Box 2.1 presents the experience of Poland in extending social security coverage through the inclusion of workers with atypical contracts, improvements made to administrative measures to enhance the law compliance and contribution collection, and information campaigns aimed at enhancing people's understanding and trust in social security. Also, the ILO has collected and presented a number of good practices in extending social security to workers in the informal economy throughout the world (ILO, 2019b; ILO, forthcoming).

### 2.3.2 Concluding remarks

In Ukraine, as in other European countries, the existing contributory pension system is the main provider of income security for the elderly. This is supplemented by means-tested social assistance benefits, which ensure a basic level of income security for those who are not sufficiently covered by contributory schemes. When we discussed measures to extend coverage in the previous section, a basic underlying assumption is that this institutional framework is best suited for Ukraine.

However, one should acknowledge the potential risk that, despite serious efforts to stimulate employment rates, formalize employment, and prevent widespread undeclared work and evasion, the existing pension system may not ensure adequate income security to a growing share of the population in Ukraine. If one cannot reverse the declining trend of the contributory pension system, one may have to consider replacing it with some type of non-contributory universal basic pension scheme aimed at preventing poverty in old age, in accordance with Convention No. 102 and Recommendation No. 202.

It should be noted that in countries that introduced similar reforms (tightening links between contributions and pension benefits, removing the redistributive elements of pension benefits),

policy debates are underway concerning a possibility to introduce some forms of basic pensions (with or without income-test) for individuals with shorter employment careers in response to these future reductions in coverage and adequacy (Hinrichs and Jessoula (eds.), 2012). More generally, there has been a global discussion on the possibility of introducing an unconditional universal basic income, although there are still many open questions regarding its acceptability and feasibility (see Ortiz et. al., 2018).



### Box 2.1. Polish experiences in extending social security coverage and improving the compliance and collection of contributions

The Polish pension system operates on the notional defined-contribution principle, and the benefit formula and pension amount directly depend on the contributions one pays throughout their contributing career. In the last decade, there was a dynamic growth of non-standard forms of employment in Poland, especially under so-called Civil Code contracts. Emerging coverage gaps affected both the adequacy of future benefits and the sustainability of financing. We present recent reform measures that aimed to increase coverage, improve compliance and simplify administrative procedures.

**(a) E-contributions.** In 2018, the Social Insurance Institution introduced a new electronic system to handle the records of insured workers and transfer their social security contributions. First, every economic entity employing workers is assigned a unique account number (based on their company tax number), and it transfers all contributions due in a single payment. Second, instead of reporting contributions on three or four separate forms for each insurance title, just one form with their identifying account number is required. Third, since there is one account per company, collected money is allocated to the oldest contribution arrears first. Overall, this reform resulted from the cooperation of a number of stakeholders, including the banking sector. It contributed to the elimination of unidentified contribution payers, which in turn reduced the administrative efforts of the social insurance administration. Payments are now being settled immediately, the costs of transfers have been reduced, and arrears have been partially paid. This system reduces costs to employers and simplifies the procedure for the voluntarily insured. Also, due to liquidating payment arrears, insured individuals gain fuller entitlements to their benefits.

**(b) Extension of social security to non-standard forms of employment.** Many workers are employed under contracts of mandate (*umowa zlecenie*), which are different from employment contracts (*umowa o prace*), but often used as a cheaper alternative. Until 2016, for workers who work exclusively on this type of contract, only one contract at a time was subject to social insurance (except for contracts with one's own employer, which would all be covered). A common practice was to sign several contracts and have the one with lowest salary covered by social insurance. Since 2016, all contracts of mandate are subject to social insurance up to the threshold of the monthly minimum wage. Benefit coverage includes medical care, old age, disability, survivors' benefits and employment injury. However, sickness (and maternity) insurance is voluntary. This amendment has considerably increased effective social security coverage.

**(c) Parental benefits for non-insured persons.** In 2016, another new benefit was introduced—a tax-financed parental benefit available to mothers or other carers if they are not eligible for insurance-based maternity and parental benefits or whose monthly benefit falls below the level of the new benefit (especially common among farmers). The benefit is paid for 12 months in full, or as a supplement to low benefits. The only criteria are childbirth or adoption, and the lack of enough maternity benefits.

**(d) Monitoring of contribution payers.** The Social Insurance Institution has recently extended its monitoring of the contribution payers using two major approaches. First, since 2017 the monitoring of payers has been based on a risk analysis with the use of data in the E-contribution system. The analysis is sensitive to specific situations (such as a large share of non-standard forms of work, high numbers of signed Civil Code contracts in a given economic entity, bogus overlapping social security titles, a lack of contributions), and is used to target employers with a risk of irregularity. The second approach involves the fraud control. Fraud commonly involves chain invoicing by using temporary work agency workers or Civil Code contracts, while in fact the employee remains in the employment relationship with the company that started the scheme. Civil Code contracts established with one's own employer should be treated as employment contracts for social security purposes and are thus liable to contributions. Control mechanisms in this case involve inspections, document control, and raising awareness among all parties. These controls target employment in hazardous conditions (with increased work accident contribution rates), where the conditions are misclassified by employers in order to reduce their contribution rates.

**(e) Agricultural Social Insurance Fund.** The Agricultural Social Insurance Fund was established in 1990. As income from farming and the sale of agricultural goods can be irregular, the system operates based on specific principles to protect against the contingencies of work accidents, sickness, maternity, disability and old age.

- The system collects flat-rate contributions that equal 10 percent of the basic pension. This contribution is considerably lower than for employees' system. It covers farmers and their families and household members (separate contributions).
- Contributions are paid monthly, previously quarterly. This change reflects actually performed work.
- The system provides flat-rate benefits. Apart from the old-age pension (which was recently increased to the level of the minimum pension of the general system), funeral allowances and parental benefits (for non-insured individuals who do not qualify for maternity benefits), the benefits are considerably lower.
- Old-age benefits are payable to workers with 25 years of paid contributions at 65 years for men and 60 years for women.
- For bigger farms, the old-age pension contributions are larger.
- For small farms, healthcare contributions are paid by the State budget, and these also cover family members.

One should also mention a recent innovation in the Agricultural Social Insurance Fund. In May 2018, a new type of contract (the so-called "help by harvest" contract) was introduced. While it is subpar compared to the contract of mandate (as no minimum salary is legally stipulated), it provides coverage for work accidents, sickness, maternity, and health care for this specific category of workers, often migrants.

### 3. Financing the Ukrainian pension system

#### 3.1 The current financial situation of the Pension Fund

Table 3.1 presents the revenue and expenditure of the Pension Fund from 2015 to 2019. Pension expenditure in terms of GDP has declined from 16.4 percent in 2013 to 10.1 percent in 2018. Since 2016, the revenue to the Fund has decreased significantly due to the substantial reduction in the single social contribution rate. As a result, the Fund's own revenue (consisting mainly of contributions) covers less than 80 percent of the benefit expenditure to be financed by the Fund.

Against this backdrop, the financing of the Pension Fund has been increasingly dependent on the State budget. The total amount of transfer from the State budget to the State Pension Fund in 2018 amounted to 150.1 billion UAH (equivalent to 4.2 percent of GDP), comprised of the obligatory transfer of 99.4 billion UAH and covering the deficit of 50.7 billion UAH. More than 40 percent of the total expenditure of the Pension Fund is financed by the State budget.

Table 3.1. Pension Fund budget of Ukraine, 2015–2019

	2015	2016	2017	2018	2019 (PLAN)
TOTAL REVENUE	266,537	256,669	293,240	352,175	408,731
1. Own revenue of the Pension Fund	171,642	112,574	159,780	202,084	230,665
- Contributions allocated to the Pension Fund	165,367	107,148	154,301	196,855	225,000
- Other revenue	6,275	5,426	5,479	5,229	5,565

2. Transfer from the State Budget	94,811	142,586	133,459	150,091	178,066
- Statutory transfer financing obligatory benefits	63,052	57,748	77,356	99,438	125,482
- Transfer covering the deficit of the Pension Fund	31,759	84,838	56,103	50,653	52,584
3. Transfer from other Funds	84	7	0	0	0
<b>TOTAL EXPENDITURE</b>	<b>265,668</b>	<b>253,449</b>	<b>291,468</b>	<b>358,605</b>	<b>408,314</b>
1. Expenditure to be financed by the Pension Fund	210,767	202,096	226,676	259,167	282,832
- Pension benefits	199,300	190,638	221,343	244,652	267,459
- Other benefits	9,112	9,060	1,811	9,049	N.A.
- Administrative expenses	2,355	2,398	3,522	5,466	N.A.
2. Benefits financed by the State budget	54,833	51,345	64,791	99,438	125,482
3. Benefits financed by other social insurance funds	68	7	0	0	0

Source: *The Pension Fund of Ukraine* ([www.pfu.gov.ua](http://www.pfu.gov.ua)).

Note: *The own revenue of the Pension Fund includes the surplus of the previous year.*

Table 3.2 presents a preliminary financial analysis of the Ukrainian pension system from 2015 to 2018.

Table 3.2. Key financial indicators of the Pension Fund, 2015–2018

YEAR		UNIT		2015	2016	2017	2018
From statistical data							
A	Number of insured persons	in 1000		12,185	12,863	13,243	12,529
B	as a % of population aged 15 and 64	%		41.1%	43.9%	45.6%	43.6%
C	Number of pensioners	in 1000		12,297	11,956	11,711	11,470
D	System dependency rate		= A/C	0.99	1.08	1.13	1.09
E	National average wage	UAH/month		4,195	5,183	7,104	8,865
F	Average pension	UAH/month		1,700	1,828	2,479	2,646
G	Average replacement rate	%	= F/E	40.5%	35.3%	34.9%	29.8%
From financial statements							
H	Average contributory base	UAH/month		3,285	4,016	5,254	6,950
I	Compliance rate	%	= H/E	78.3%	77.5%	74.0%	78.4%
J	Actual PAYG cost rate	%		55.3%	40.9%	34.9%	34.3%

Source: Authors' own calculations based on the data from the Pension Fund of Ukraine ([www.pfu.gov.ua](http://www.pfu.gov.ua)) and the State Statistics Service of Ukraine (<https://ukrstat.org/en>).

The following observations can be made:

- Due to high beneficiary coverage and low contributor coverage, the system dependency rate, defined by the number of insured persons divided by the number of pensioners, is unfavourable. In 2018, one pensioner was supported by 1.09 insured persons.
- The average replacement rate, defined as the ratio of the average pension to the national average wage, was 45.9 percent in 2013. It has been decreasing continuously and reached 29.8 percent in 2018.
- There is a discrepancy between the national average wage and the average contributory base. Measured by the compliance rate, defined as the ratio of these amounts, less than 80 percent of total payroll was captured as contributory base and subjected to contribution collection. See Chapter 2 for the analysis of low compliance, underreporting and evasion and related policy recommendations.

- As a result, the PAYG cost rate, calculated as the ratio between the total expenditure by the total contributory base, is estimated at 34.3 percent for 2018. The current legal contribution rate for the pension system (22 percent  $\times$  0.856215 = 18.84 percent in 2018) is not sufficient to cover the expenditure. Hence, the financial gap is covered by the transfer from the State budget.

## 3.2 Long-term actuarial projection results

### 3.2.1 Initial remarks

Generally, the purpose of actuarial valuations is to examine the financial status of a pension system in order to ascertain its long-term sustainability and to evaluate the financial impact of the reform options to improve the sustainability.

Convention No. 102 provides that the ratifying countries should “ensure, where appropriate, that the necessary actuarial studies and calculations concerning financial equilibrium are made periodically and, in any event, prior to any change in benefits, the rate of insurance contributions, or the taxes allocated to covering the contingencies in question” (Article 71).

The Pension Law stipulates that the Pension Fund should undertake long-term projections of the financial situation of the mandatory social insurance pension system every five years, and present the results in a report for the Pension Fund board, its Supervisory Board, and the Cabinet of Ministers. The report should include conclusions about the financial condition of the State pension system and recommendations on the measures necessary for ensuring its financial stability.

This section presents the key results of the actuarial projection prepared by the Pension Fund in 2017. It should be noted that the ILO was not involved in the preparation of these projections, and did not have access to the detailed assumptions or results.

The actuarial valuation of the Pension Fund assumes that the mandatory funded pension system (the so-called “second pillar”) will be implemented in 2019. It is not yet clear how the introduction of the second pillar system will affect the benefit level and financing of the State pension system in the long run. Challenges of introducing the second pillar system in Ukraine are discussed in Chapter 4.

## 3.2.2 Key results of the 2017 actuarial valuation by the Pension Fund

### (1) Economic assumptions

Table 3.3 presents the key macroeconomic indicators in recent years. Table 3.4 presents the changes in main macroeconomic indicators assumed by the actuarial valuation.

Table 3.3. Key macroeconomic indicators, 2015–2018

	2015	2016	2017	2018
GDP (at current prices) (billion UAH)	1,989	2,385	2,984	3,559
Real GDP growth (%)	4.8	2.3	2.5	3.3
Increase in the national average wage (%)	-20.2	9.0	19.1	12.5
Contributory base (% of GDP)	20.9	22.8	28.1	29.4 (est.)
Increase in the Consumer Price Index (December to December) (%)	43.3	12.4	13.7	9.8

Source: The State Statistics Service of Ukraine (<https://ukrstat.org/en>).

Table 3.4. Key economic assumptions, 2020–2050

	2020	2025	2030	2040	2050
GDP growth (% year to year)	5.6	4.4	4.0	4.0	4.0
Wage growth (% year to year)	10.6	5.1	4.5	5.0	5.0
CPI (% year to year)	5.6	4.4	4.0	4.0	4.0
Sum of wages (% of GDP)	26.3	27.5	29.1	31.4	31.0

Source: *The Pension Fund of Ukraine, 2018.*

The economic scenario assumes relatively a high real GDP growth rate of about 5 percent per annum, which, taking into account the declining population and labour force, would have to be achieved mainly through a growth in productivity. After recent periods of two-digit inflation, it is assumed that inflation will stabilize at 4 percent per year. Wages are expected to grow faster than GDP, which can be justified by the assumed growth in productivity. As a result, the share of the total contributory base in GDP is expected to grow from 26.3 percent to 31.0 percent by 2050.

## (2) Demographic assumptions

Detailed information regarding the assumptions and results of the population projection used for the actuarial valuation is not available. It was found, however, that the aggregate population estimates presented in the actuarial valuation are close to the results of the “low fertility – low life expectancy – low net migration” variant of the population projections conducted in 2014 by the Ptoukha Institute of Demography and Social Studies of the National Academy of Sciences of Ukraine. For the purpose of our analysis, we shall use the results of these population projections as an approximation. There can thus be some discrepancies with the population projections that were used in the actuarial valuation.

Table 3.5. Key demographic assumptions by three variants, 2020–2050

ASSUMPTION	VARIANT	2020	2025	2030	2040	2050
Total fertility rate (children per woman)	Medium	1.60	1.62	1.64	1.66	1.68
	High	1.81	1.89	1.94	1.99	2.00
	Low	1.37	1.35	1.34	1.33	1.36
Life expectancy at birth, men (years)	Medium	68.6	69.7	70.5	71.8	72.9
	High	70.9	72.9	74.4	77.0	78.7
	Low	65.5	65.6	65.9	66.4	67.1
Life expectancy at birth, women (years)	Medium	77.2	77.7	78.2	79.1	79.9
	High	78.9	80.1	81.1	82.7	83.8
	Low	75.1	75.1	75.2	75.5	76.0
Net migration (% of the population)	Medium	0.06	0.07	0.09	0.11	0.13
	High	0.10	0.13	0.16	0.17	0.19
	Low	-0.05	-0.02	0.00	0.02	0.02

Source: Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, 2014.

As shown in Table 3.5, the “low fertility—low life expectancy—low migration” variant makes the following assumptions. The total fertility rate is assumed to remain below 1.4 throughout the projection period, although increasing slightly after 2040. The life expectancy at birth is assumed to increase by 0.9 years for women and 1.6 years for men. A conservative assumption has been made concerning future net migration.



### (3) Population projections

Table 3.6. Projected population by sex and age group, 2020–2050 (low variant)

		2020	2025	2030	2040	2050
Total population (thousands)	Women	23,266	22,236	21,169	18,964	16,813
	Men	20,167	19,380	18,542	16,842	15,208
	Total	43,433	41,616	39,712	35,807	32,021
Population 15–64 (% of total)	Women	65.3	64.4	64.2	64.0	59.8
	Men	70.4	70.1	70.7	71.1	67.3
	Total	67.7	67.0	67.3	67.3	63.4
Population 65+ (% of total)	Women	20.3	21.9	23.6	24.9	28.1
	Men	12.0	13.2	14.5	15.5	18.6
	Total	16.4	17.8	19.3	20.5	23.6
Demographic dependency ratio (15–64)/65+		4.1	3.8	3.5	3.3	2.7

Source: Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, 2014.

As Table 3.6 shows, the population of Ukraine is projected to decline from 43 million to 32 million by 2050. The share of the population aged 65 or older in the total population is projected to increase continuously, from 16.4 percent in 2020 to 23.6 percent in 2050, while the share of the population aged 15 to 64 years will decline from 67.7 percent in 2020 to 63.4 percent in 2050. As a result, the old-age demographic dependency ratio (the ratio between the population aged 15–64 to the population aged 65 or older) is expected to decline significantly, from 4.1 in 2020 to 2.7 in 2050.

### (4) The number of employed and insured persons

Table 3.7 shows the projected numbers of employed persons, insured persons, and the average contributors. It is apparent that the actuarial valuation does not assume any increases in the labour force participation and employment rates, or any decreases in informality, undeclared work, and contribution evasion. Therefore, the decline in the working age population directly affects the number of employed and insured persons. As a result, the number of persons covered by the pension system is projected to decrease by one third, from 12.2 million in 2020 to 8.2 million by 2050.

Table 3.7. Projected number of insured persons and contributors by sex, 2020–2050

			2020	2025	2030	2040	2050
A	Population aged 15–64 (thousands)	Women	15,192	14,321	13,595	12,130	10,061
		Men	14,201	13,579	13,118	11,980	10,237
		Total	29,393	27,900	26,713	24,111	20,298
C	Employed population (thousands)	Women	7,513	7,108	6,765	5,938	4,847
		Men	8,187	7,740	7,428	6,758	5,551
		Total	15,700	14,848	14,193	12,697	10,397
D	Insured population (thousands)	Women	6,172	5,838	5,581	4,905	4,013
		Men	6,069	5,776	5,592	5,075	4,179
		Total	12,240	11,614	11,173	9,980	8,192
E	Contributors (thousands)	Women	5,215	4,953	4,732	4,150	3,397
		Men	4,956	4,722	4,542	4,144	3,442
		Total	10,171	9,675	9,274	8,294	6,839
C/A	Employment rate among population aged 15–64 (%)	Women	49.5	49.6	49.8	49.0	48.2
		Men	57.6	57.0	56.6	56.4	54.2
		Total	53.4	53.2	53.1	52.7	51.2
D/C	Coverage rate (%)	Women	82.1	82.1	82.5	82.6	82.8
		Men	74.1	74.6	75.3	75.1	75.3
		Total	78.0	78.2	78.7	78.6	78.8
E/D	Contributor density (%)	Women	84.5	84.8	84.8	84.6	84.7
		Men	81.7	81.8	81.2	81.7	82.4
		Total	83.1	83.3	83.0	83.1	83.5

Source: *The Pension Fund of Ukraine, 2018.*

### (5) Number of pensioners

As Table 3.8 shows, although the population of Ukraine is ageing, the number of beneficiaries who receive pensions from the Pension Fund is projected to decline by more than half, from 9.7 million to 4.8 million in 2050. This decline is solely due to the decline in the number of old-age pensioners. As already discussed in Chapter 2, the beneficiary coverage rates are expected to dramatically decline. While now nearly everybody at age 65 or older receives an old-age pension, by 2050 only 36 percent of elderly persons will be eligible for pensions from the Pension Fund.

This is a consequence of low levels of economic activity, widespread informality and undeclared work, coupled with more restrictive entitlement conditions. Despite the low coverage, the system dependency ratio is expected to improve for old age pensions (although the ratio slightly deteriorates for disability and survivors' pensions).

Table 3.8. Projected number of pensioners by sex and type, 2020–2050

			2020	2025	2030	2040	2050
A	Average insured population (thousands)	Women	5,215	4,953	4,732	4,150	3,397
		Men	4,956	4,722	4,542	4,144	3,442
		Total	10,171	9,675	9,274	8,294	6,839
B	All pensioners (thousands)	Women	6,409	5,770	5,020	3,628	2,665
		Men	3,289	2,904	2,507	2,107	2,157
		Total	9,699	8,673	7,526	5,735	4,822
B1	Old age (thousands)	Women	4,938	4,311	3,586	2,278	1,468
		Men	1,951	1,652	1,335	1,064	1,239
		Total	6,889	5,963	4,921	3,342	2,707
B2	Disability (thousands)	Women	630	681	728	769	705
		Men	616	625	629	609	545
		Total	1,245	1,306	1,357	1,379	1,251
B3	Survivors' (thousands)	Women	362	372	383	404	410
		Men	129	147	165	188	190
		Total	490	519	548	592	600
A/B	System dependency ratio (total)	Women	0.8	0.9	0.9	1.1	1.3
		Men	1.5	1.6	1.8	2.0	1.6
		Total	1.0	1.1	1.2	1.4	1.4
A/B1	System dependency ratio (old age)	Women	1.1	1.1	1.3	1.8	2.3
		Men	2.5	2.9	3.4	3.9	2.8
		Total	1.5	1.6	1.9	2.5	2.5
Old age pensioners as a percentage of population 65+ (%)		Women	104.5	88.7	71.9	48.3	31.1
		Men	80.9	64.5	49.7	40.7	43.9
		Total	96.5	80.4	64.2	45.6	35.9

Source: *The Pension Fund of Ukraine, 2018.*

Note: *The number of pensioners refers to the pensions awarded by the Pension Law (No. 1058-IV of 2003).*

## (6) Average replacement rates

As Table 3.9 shows, despite lower accrual rates, the average replacement rates (the ratio between the average pension and the average contributory base of insured persons) are projected to increase.

Table 3.9. Projected average replacement rates by sex and type of pension, 2020–2050

		(% of the average contributory base)				
		2020	2025	2030	2040	2050
All pensions	Women	21.7	22.5	23.5	24.6	24.8
	Men	23.0	24.4	25.9	28.9	31.7
	Total	22.1	23.1	24.3	26.0	26.9
Old-age pension	Women	24.5	25.7	27.1	29.5	31.2
	Men	32.0	33.6	35.4	38.6	40.8
	Total	26.6	28.0	29.5	32.1	33.9
Disability pension	Women	15.8	17.3	19.0	20.3	20.2
	Men	18.4	21.0	23.8	26.9	26.5
	Total	17.1	19.1	21.2	23.2	22.9
Survivors' pension	Women	21.7	18.9	17.7	16.0	14.7
	Men	13.3	14.7	16.5	18.0	17.7
	Total	19.5	17.7	17.3	16.6	15.7

Source: The Pension Fund of Ukraine, 2018.

Note: The number of pensioners refers to the pensions awarded by the Pension Law (No. 1058-IV of 2003).

It is expected that the condition requiring a contribution period of 30 years for women and 35 years for men will lead to an increasing number of pensioners without the right to minimum pension. However, as Table 3.10 shows, projections show an increased share of pensioners receiving the minimum pension.

Table 3.10. Projected share of pensioners receiving the minimum pension, 2020–2050

		(% of the pensioners)				
		2020	2025	2030	2040	2050
All pensioners	Women	27.7	33.2	39.6	52.7	61.9
	Men	30.8	35.3	39.9	44.7	42.8
	Total	28.7	33.9	39.7	49.7	53.4
Old-age pensioners	Women	16.8	21.1	26.0	36.3	44.7
	Men	19.9	22.8	25.3	27.2	27.0
	Total	17.7	21.6	25.8	33.4	36.6
Disability pensioners	Women	88.4	89.5	90.1	90.2	89.6
	Men	76.1	77.6	78.3	77.7	75.9
	Total	82.3	83.8	84.6	84.7	83.6
Survivors' pensioners	Women	60.1	66.6	72.5	78.9	80.6
	Men	86.8	87.1	87.4	87.8	88.0
	Total	67.1	72.4	77.0	81.7	82.9

Source: The Pension Fund of Ukraine, 2018.

Note: The number of pensioners refers to the pensions awarded by the Pension Law (No. 1058-IV of 2003).

The aforementioned results, namely increasing average replacement rates and the increasing share of minimum pensioners, appear to be contradictory. More detailed information is needed to analyse the reasons for these seemingly contradictory results. One possible explanation can be that as a result of widening inequality some pensioners are receiving high pension amounts, which would increase the average pension.

### (7) Financial operations of the Pension Fund

Table 3.11 shows the projected revenue and expenditure of the Pension Fund for the period 2020–2050.

The projection assumes that the current contribution rate for the Pension Fund (18.84 percent) will remain unchanged but part of contributions will be diverted to the second pillar system. Under this assumption, and according to the demographic and financial projections, the contribution revenue is expected to increase from 5.3 percent of GDP in 2020 to 6.3 percent in 2050. At the same time, the expenditure of the Pension Fund is expected to decrease from 9.2 percent of GDP in 2020 to 8.2 percent in 2050. As a result, the deficit of the Pension Fund is expected to decrease from 1.6 percent of GDP in 2020 to 0.4 percent in 2050. The need for financial transfers from the State budget to cover the deficit of the Pension Fund is expected to persist throughout the projection period.

Table 3.11. Projected revenue and expenditure of the Pension Fund, 2020–2050 (% of GDP)

	2020	2025	2030	2040	2050
Revenue	7.5	7.5	7.7	8.0	7.8
Contributions	5.3	5.5	5.9	6.4	6.3
Transfers from the State budget	2.1	1.8	1.7	1.5	1.4
- Obligatory benefits	1.7	1.5	1.3	1.0	0.8
- Covering the deficit	0.4	0.4	0.4	0.5	0.5
Other revenue	0.1	0.1	0.1	0.1	0.1
Expenditure	9.2	8.8	8.6	8.1	8.2
Statutory pension benefits	7.0	6.9	6.8	6.5	6.6
Benefits financed by the State budget	1.7	1.5	1.3	1.0	0.8
Administrative expenses	0.1	0.2	0.2	0.2	0.3
Balance	-1.6	-1.3	-0.9	-0.1	-0.4
Contributions to the second pillar pension funds	0.6	1.6	1.8	1.8	1.7
Percentage of the State budget in the total expenditure (%)	22.6	20.9	19.9	18.0	16.7

Source: *The Pension Fund of Ukraine, 2018.*

### 3.3 Conclusions and recommendations

#### 3.3.1 Financial and social implications of the status quo projection

The scope of the actuarial evaluation conducted by the Pension Fund of Ukraine is strictly limited to the status quo conditions. It assumes that the contribution rates, benefit entitlement conditions, benefit formula, and the levels of labour force participation, informality, and compliance remain unchanged throughout the future projection period. In addition, although legitimate, the actuarial evaluation concerns only the financing of the Pension Fund and does not consider any future implications (such as the growing number of elderly left behind by the contributory pension system, and the costs of the State budget to ensure at least a basic level of income security for this group).

Despite its limited scope, the key results presented in the previous section give rise to several important observations. First, between 2020 and 2050, the average replacement rate of old-age pensions is projected to increase from 27 percent to 34 percent, while the share of old-age pensioners receiving the minimum pension is projected to double from 18 percent to 37 percent. Second, despite the ageing population, the percentage of the population aged 65 or older receiving old-age pensions declines from 97 percent in 2020 to only 36 percent in 2050. This dramatic decline results in a favourable system dependency ratio, from 1.5 to 2.5, over the same period. Third, as a result, the relative cost of the pension system (PAYG cost rate of the Pension Fund) goes down gradually, from 30 percent to about 21 percent. However, the deficit of the Pension Fund that needs to be subsidized by the State budget persists in the long term.

There is thus an unquestionable need to increase the contribution rate to the State pension system. However, increasing the contribution rate is not enough. While the decreasing pension cost will contribute to improve the financial sustainability of the Ukrainian pension system, the projection results show the declining role of the pension system, rendering it socially unsustainable. People will eventually realize that the contributory pension system is not delivering adequate income security for a majority of the population and will lose trust in contributing to the system. Moreover, the costs of guaranteeing income security in old age will simply shift from the Pension Fund to the State, which is obliged to finance social assistance.

#### 3.3.2 Need for exploring a wider range of policy options

For the contributory State pension system to continuously play a major role in income security in old age, there is a need for major policy debates on the future of the pension system in Ukraine. One would need to review the recent reforms, which tightened eligibility conditions and changed the pension formula and the pension indexation. One would also need to consider policy measures to enhance economic activity, reduce informal employment and undeclared work, and improve compliance and contribution collection.

The financial effects of these alternative policy options should be evaluated by actuarial projections under several alternative scenarios. These projection results will provide crucial information for a rational decision-making in the future pension design.

In examining the policy options needed to sustain the current contributory pension system, the key stakeholders in Ukraine may also need to consider the future role of non-contributory benefits. A crucial question is whether social assistance will supplement and fill the gaps of the existing contributory pension system, or, in view of shrinking coverage of contributory pension system, whether a new scheme may be needed to assume a core role in ensuring a basic level of income security for a majority of the population.





## 4. The introduction of mandatory funded pensions: cautionary remarks

Recently, there has been another development concerning the pension system in Ukraine. In 2018, the Ukrainian Government developed a draft law to introduce a mandatory funded pension tier (the so-called “second pillar” system) as part of the Ukrainian pension system. The legal basis for the mandatory funded pensions was already included in the pension legislation, but detailed rules have not been decided on yet.

According to the proposal, the second pillar system is expected to start when the contribution rate is increased by 2 percent. This additional 2 percent contribution rate (equivalent to approximately 25 billion UAH) will be channelled to the private pension funds managing the second pillar system, and will gradually be increased up to 6 or 7 percent. Mandatory enrolment is planned for existing insured persons who are 35 years or younger and for future entrants to the labour market, while coverage is voluntary for those between 35 and 50 years. Those who will not join the second pillar will have their pension accrual rate increased from 1 percent to 1.1 percent. There is a proposal to use the electronic register of the Pension Fund.<sup>21</sup>

Since the mid-1990s, several countries in Central and Eastern Europe have introduced a Chilean-type of mandatory, privately managed pension system into their national pension systems. The countries that implemented this type of pension system include Hungary (1998), Kazakhstan (1998), Poland (1999), Latvia (2001), Bulgaria (2002), Croatia (2002), Estonia (2002), the Former Yugoslav Republic of Macedonia (2003), the Slovak Republic (2005), and Romania (2008) (the number in brackets indicating the year of implementation).

As these countries had pre-existing State pension systems, the reforms resulted in scaling down the State pension systems and partially replacing them with privately managed individual savings accounts. The State pension systems were also reformed, for example, by extending qualifying periods, increasing pensionable ages, and switching from wage indexation to price indexation).

The multi-pillar pension reform strategy advocated for in a seminal report by the World Bank (World Bank, 1994) played a very influential role in the policy debate. This strategy was strongly

<sup>21</sup> See also USAID (2018).

promoted by the World Bank through its technical assistance provided to many countries in Central and Eastern Europe and in the Commonwealth of Independent States. The key argument supporting the multi-pillar pension reform strategy was that privatization with pre-funding based on individual accounts would produce favourable macroeconomic and fiscal impacts, including risk diversification in investment portfolios, increased national savings, capital market development, lower informality and higher coverage, and better labour market incentives.

However, subsequent research conducted in the 2000s revealed a body of evidence suggesting that many of the countries in Central and Eastern Europe and in Latin America which introduced the mandatory private pension schemes had not met the initial conditions of macroeconomic stability, financial market readiness, moderate indebtedness, and low corruption (Indermit et. al., 2005; Andrews, 2006). Indeed, the introduction of mandatory private pension schemes in these countries has not resulted in their intended macroeconomic impact and has failed to expand population coverage. Moreover, the significant transition costs associated with the introduction of these systems added to the fiscal deficits of those countries.

During the global crisis that began in 2008, the weaknesses of the second pillar systems became fully apparent and many countries decided to reverse privatization reforms by scaling down the contributions diverted to the private pension funds (Slovakia, Poland, Romania) or by entirely abolishing the second-pillar system and transferring the private pension fund assets to the State pension system (Hungary) (see Ortiz et. al., 2018).

Will introducing a second pillar in the Ukrainian pension system help solve the problems of insufficient coverage and deteriorating adequacy?<sup>22</sup> Concerning the low coverage rates, the second-pillar system could help only if people find this a more attractive option than contributing only to the State system, thus increasing labour force participation and reducing informality and undeclared work. That was actually the hope of many Central and Eastern European and Latin American countries when they introduced the second-pillar pension systems. However, as mentioned above, this has not yet happened.

With regard to adequacy, it should also be noted that the second pillar systems in Central and Eastern European countries are facing problems related to the payment of benefits, as the private pension funds can provide lower benefits than the State pensions. These countries had to therefore introduce an option for members to opt out of the private pension funds and return entirely to the State pension system, transferring their individual account balance to the State pension system (the balance is not enough to cover the pension liabilities). If the refund transfer option is made widely available and exercised, it will severely strain the State pension financing and create pressure for future cuts in State pensions (see Fultz and Hirose, 2018).

In view of these considerations, Ukraine should act with caution. All stakeholders must learn from the experiences of other countries and avoid making the same mistakes (see Box 4.1). It

<sup>22</sup> Some of this text was published in Hirose and Duran-Valverde (2019).

is a matter of serious concern that workers are not properly informed of the advantages and disadvantages of the second-pillar system and how it will affect their pensions. International experience shows that privately managed pensions, in particular if they are part of the mandatory pension system, involve the powerful vested interests of the financial services sector and reforms are often shaped by these interests, which are not necessarily in line with those of the majority of employers and employees.

One should also be aware that the creation of the second pillar pension system will not solve the challenges faced by the current State pension system. On the contrary, the second pillar systems in other countries face the same problems of informality, evasion and low coverage. The difference is that in the private system, the consequences of these problems will fully fall on the contributors (the workers and their employers), while the State pension system incorporates a certain redistributive mechanism that mitigates harsh impacts on the individuals. The policy-makers and social partners should first address the current problems of low coverage and low compliance with respect to the State pension system. They should then decide which forms of supplementary pensions should be developed—for instance, whether they should be mandatory or voluntary, whether they should be privately managed or centrally managed, or whether they should cover all workers or certain occupational groups.<sup>23</sup>

In conclusion, it is not recommended that Ukraine introduce a second pillar system under the current circumstances. It is recommended that any additional resources should be redirected to the public pension system to reduce the deficit and to improve the adequacy of benefits. At the same time, priority should be placed on taking concerted action along with the social partners to improve social security law enforcement, increase compliance in contribution collection, and reduce informality and undeclared work.

<sup>23</sup> Although it would be risky to implement a mandatory funded pension system for all workers, there are some reasons to support the introduction of professional funds to pay early retirement pensions for workers in arduous and hazardous conditions (List No 1 and 2). First, State enterprises in Ukraine employing these categories of workers often suffer from financial problems (such as mines). Thus, setting aside resources outside the companies can better protect the pensioners. Second, compared with life annuities, fixed-term annuities are simpler to manage. The ILO has documented the experience of the Professional Pension Funds in Bulgaria.

### Box 4.1. Lessons from three decades of pension privatization in Central and Eastern Europe and Latin America<sup>24</sup>

In many countries in Central and Eastern Europe and in Latin America, pension privatization was presented as a clear-cut solution to address population ageing and ensure the sustainability of social security pension systems. However, pension privatization has not necessarily delivered the expected results. Private pensions face similar challenges to public ones, but private pension systems tend to shift the burden of the impact and consequences of these challenges from the providers to the main stakeholders—the workers and their employers.

**(a) Coverage rates stagnated or decreased.** Advocates of pension privatization argued that mandatory individual accounts would earn higher interest and thus improve compliance and willingness to contribute. However, a majority of countries registered a decrease in coverage rates of contributory schemes. In Argentina, coverage rates fell by more than 20 percent. Similar effects were observed in Chile, Hungary, Kazakhstan and Mexico, while in other countries (such as Bolivia, Poland and Uruguay) coverage stagnated.

**(b) Pension benefits deteriorated.** The shift from defined benefits to defined contributions had a serious negative impact on pension benefit adequacy, with pension replacement rates often not meeting ILO standards. This resulted in social protests, making pension privatization unpopular. In Bolivia, private pension benefits averaged only 20 percent of the average salary during one's working life. In Chile, the median future replacement rates average 15 percent and only 3.8 for low-income workers. The deterioration of benefit levels resulted in increases in old-age poverty, undermining the main purpose of pension systems – to provide adequate income security in old age, which requires significant public support.

**(c) Gender and income inequality increased.** Pension privatization broke the social contract enshrined in social security. Well-designed social insurance schemes are redistributive for two main reasons: (i) they include transfers from employers to workers, and (ii) they are designed to redistribute income from those with higher lifetime earnings to those with lower lifetime earnings, and from the healthy and able to those sick, disabled, or unable to work, such as during maternity. The redistributive components of social security systems were eliminated with the introduction of individual accounts. Employer contributions were eliminated. Pensions were a result of personal savings; therefore, those with low incomes or with interrupted careers (because of maternity or family care, for instance) had very small savings and consequently small pensions, thereby increasing inequality.

**(d) High transition costs created large fiscal pressures.** The costs of transition from the public solidarity-based systems to private individual account systems were not properly assessed by international financial institutions. These costs were seriously underestimated across all reformed countries and created new fiscal pressures. The newly created fiscal distress was unacceptable to many governments, particularly as concerns regarding fiscal pressures and the financial sustainability of public pension systems were the main drivers behind privatization reforms in all countries. Privatization had been presented as the remedy to avoid a “social security crisis” and to ensure more sustainable future financing for pension systems.

<sup>24</sup> This box is based on ILO (2018b).

**(e) High administrative costs.** Administrative costs of private pension funds were very high and as a consequence made returns and ultimately pensions lower. Private pension fund administrators have many overhead costs that do not occur in public systems, such as administration charges, investment management fees, custodian fees, guarantee fees, audit fees, marketing fees and legal fees, among others. These charges reduced accumulated assets (or pensions) over a 40-year period by as much as 39 percent in Latvia, 31 percent in Estonia and 20 percent in Bulgaria.

**(f) Weak governance.** Capture of regulation and supervision functions. Regulatory capture is the situation in which a regulatory agency, created to defend the public interest, acts on behalf of certain economic interest groups in the industry that it should be supervising. In general, the management, supervision and regulation of the private pension funds are weak. Close ties between politicians and the financial sector, as well as the scarcity of high-level staff skilled in financial market regulation, contributed to the selection of regulators from the existing industry, often accommodating these interests. Further, in many countries like Bolivia and Poland, the social partners were excluded from the supervision of the private pension funds, thus decreasing the supervisory oversight.

**(g) Concentration of the private insurance industry.** A further argument advanced by proponents of pension privatization was that it was expected to generate competition among pension administrators and thus improve efficiency and service delivery. But competition between pension funds was low in practice, with some countries (like Bolivia and El Salvador) having only two major pension administrators, creating oligopolistic markets and thus defeating the benefits of competition. The number of Chilean private pension fund administrators fell from 21 (1994) to 5 (2008), with the biggest three firms holding 86 percent of all assets. Often international financial groups are major shareholders in the national pension fund administrations, or the national pension funds are their subsidiaries.

**(h) Who benefited from people's pension savings?** The biggest beneficiary was the financial sector. In many countries, the pension reserves in the accumulative phase were used for national development (such as in Europe). However, the use of pension funds for national public investment was generally not undertaken by the funded privatized systems, which invested the savings of individual members in capital markets seeking high returns without prioritizing national development goals. The experience with privatization in developing countries shows that it is the financial sector, the private pension administrators and commercial life insurance companies, who appear to benefit most from people's pension savings—often with international financial groups holding a majority of the invested funds. Further, in a majority of countries, national investment regulations do not include any restrictions on the investment of pension funds abroad, even in countries in great need of social and economic investment (like Armenia, Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Romania and Slovakia). In others, some limits are indicated – in Chile, for example, private pension administrators can invest up to 80 percent of their assets abroad, representing 56 percent of Chile's GDP.

**(i) Limited effect on capital markets in developing countries.** In countries without deep and diversified capital markets, investments could either be heavily concentrated abroad or in government bonds. Government bonds were often issued to finance the high transition costs of pension privatization, generating a vicious and costly cycle where the private pen-

sion fund administrators, cashing in on the administrative costs of the financial transactions, were the only beneficiaries. In Hungary, El Salvador and Bolivia, government bonds initially constituted around 80 percent of all assets. However, in Chile and other high-income economies, there is evidence of positive effects on capital markets.

**(j) Financial market and demographic risks transferred to individuals.** Private individual account schemes shifted the systemic risk burden to individuals, with workers and pensioners bearing the risks of investment, longevity and inflation. In Chile in 2008, the private pension funds lost 60 percent of all benefits accrued from 1982 to 2008. In Argentina, the domestic financial crisis of 2001–2002 led to a 44 percent decrease in the values of the pension funds. In Peru, the assets of pension funds dropped by 50 percent during the 2008 financial crisis, as private fund managers had invested the funds in high-risk instruments. In some countries, the government had to step in to supplement the pensions that should have been provided by the private system. For instance, in 2008 the Chilean Government had to provide pension supplements, and the Government of Argentina had to cover 77 percent of the pension payments to 445,000 private pillar pensioners and additional payments to 179,000 pensioners to maintain the minimum guarantee.

**(k) Deteriorated social dialogue.** Most structural reforms were implemented with limited social dialogue, which later led to questionable legitimacy. There were strong media campaigns to promote private pensions, with the marketing often provided by private pension funds. Distrust in private pension systems increased rapidly when replacement rates plummeted and pension benefit adequacy became a serious problem, failing to provide sufficient protection to persons in old age. Before the reform, most social security pension funds had some form of tripartite governance structure composed of representatives of workers, employers, and governments, in accordance with ILO standards. Privatization eliminated their participation in the new system, even though workers were the sole contributors and the owners of their individual accounts.



# Conclusions

A key finding in this report is that Ukraine is facing insufficient social security coverage, resulting in the inadequacy of income security for a growing share of the population.

In order to move forward and create the perspectives for an adequate and sustainable pension system, there is a need for all key stakeholders—the Government, trade unions and employers—to discuss and decide on the future of the pension system in Ukraine.

For the existing contributory pension system to act as the main provider of income security for the elderly, serious policy efforts are needed to stimulate employment rates, formalize employment, and prevent widespread undeclared work and evasion. At the same time, current provisions should be revised to broaden access to minimum pension guarantees provided by the system.

If this path is not pursued, an alternative is to guarantee basic income security in old age by some types of non-contributory benefits (with or without income-test or means-test). The functions of income replacement and consumption smoothing over lifetime would be left mainly to contributory systems covering workers in formal employment, or to voluntary private pension arrangements and other savings instruments.

The Ukrainian pension system is at a crossroads. Considering the long-term development of the pension system and its surrounding environment, the key stakeholders should discuss a wide range of policy alternatives and make rational decisions in order to deliver a pension system that will meet the needs of income security for future generations.

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