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## TECHNICAL ASSISTANCE REPORT ON PERSONAL INCOME TAX: POLICY REVIEW AND INTRODUCTION OF A UNIVERSAL DECLARATION

This technical assistance report on Republic of Armenia was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in November 2022.

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FISCAL AFFAIRS DEPARTMENT

# Republic of Armenia

# Personal Income Tax: Policy Review and Introduction of a Universal Declaration

Charles Vellutini, Graham Whyte, Andualem Mengistu

Technical Report

January 2023

**This technical assistance (TA) was provided in part by financial support from the European Union.**

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# GLOSSARY

| | |
|---|---|
| AMD | Armenian Dram |
| CBA | Central Bank of Armenia |
| CD | Capacity Development |
| CIT | Corporate Income Tax |
| FAD | Fiscal Affairs Department |
| FY | Fiscal Year |
| GDP | Gross Domestic Product |
| IMF | International Monetary Fund |
| IWTC | In-Work Tax Credit |
| MoF | Ministry of Finance |
| PIT | Personal Income Tax |
| RoA | Republic of Armenia |
| SRC | State Revenue Committee |
| SSC | Social Security Contribution |
| TA | Technical Assistance |
| VAT | Value Added Tax |

# PREFACE

At the request of the Minister of Finance, a technical team from the IMF Fiscal Affairs Department (FAD) visited Armenia between August 29 – September 9, 2022 to assist the authorities in implementing a Universal personal income tax (PIT) Declaration. The mission comprised Charles Vellutini, Graham Whyte, and Andualem Mengistu. The mission met with Mr. Tigran Khachatryan, Minister of Finance, with Mr. Arman Poghosyan, Deputy Minister of Finance, Mr. Artur Manukyan, Deputy Chairman of the State Revenue Committee and various staff members of the Ministry of Finance. The mission also met with Mr. Nerses Yeritsyan, Deputy Governor of the Central Bank of Armenia and various senior staff of the CBA; Mr. David Davit Khachatryan, Deputy Minister of the Minister of Labor and Social Affairs; Mr. Ashot Muradyan, Deputy Chairman of the State Revenue Committee and his staff and Ms. Haykuhi Harutyunyan, Chairwoman of the Corruption Prevention Commission. The mission also had fruitful meetings with Mr. Ori Alaverdyan, Head of Revenue Policy and Administration Methodology Department, Ministry of Finance, who was very instrumental in coordinating government responses to the mission's inquiries. At the conclusion of the mission, recommended options for reform were discussed with the Minister of Finance and his team.

The mission expresses its gratitude to all the individuals it met with for their cooperation.

The mission also thanks Mr. Mehdi Raissi, Resident Representative of the IMF in Armenia, and Mr. Vahram Janvelyan (IMF), Ms. Marine Aleksanyan (IMF) for their valuable assistance during the mission.

# EXECUTIVE SUMMARY

**The government of the Republic of Armenia has expressed its intention to introduce a Universal Personal Income Tax (PIT) Declaration for individual taxpayers who are not in business.** The Declaration would be implemented in phases: civil servants (in 2024 reporting FY2023 income), employees (in 2025 reporting FY2024 income), and other individual taxpayers (in 2026 reporting FY2025 income). The declaration would be annual, and it would cover all types of income.

**At the request of the Minister of Finance, a team from the IMF Fiscal Affairs Department (FAD) visited Armenia to assist the authorities in implementing a Universal PIT Declaration.** The joint Tax Policy and Revenue Administration mission provided recommendations to improve the PIT design and tackle potential implementation challenges of introducing the Universal PIT Declaration.

## Tax Policy

**The PIT is currently characterized by a strong revenue performance and low progressivity.** The redistributive capacity of Armenia's PIT is at the lowest end of its regional peers. At 6.1 percent of GDP in 2021, Armenia's PIT revenue is significant. However, the 21 percent (2022) flat tax rate on employment income, the absence of standard allowance, and a regressive mortgage interest tax credit limit the PIT's progressivity. The cap on the Social Security Contribution (SSC) to the state pension system (Pillar II) further weakens progressivity.

**Costly and regressive tax incentives should be repealed.** Firstly, the mortgage interest tax credit should be repealed, or at least strictly capped. In addition, unless the reform deals with the existing stock of mortgages, the revenue loss will continue to be significant for the next decade. Limiting the mortgage interest credit on existing contracts rather than its complete removal may ease implementation with a minimal revenue cost and a significant increase in progressivity. Secondly, the tax credit on reinvested dividends is overly generous and should be eliminated. Thirdly, capital gains should be taxed, with an exempt allowance for private residences calibrated to cover most or all capital gains for most taxpayers.

**A Universal PIT Declaration makes it possible to implement a more progressive PIT.** A Universal PIT Declaration would make it possible to implement a zero-rated bracket and an In-Work Tax Credit (IWTC) through the aggregation and annualization of taxable income, and the corresponding end-of-year refunds or tax top-up. Conditionally on an assessment of sufficient administrative capacity (including auditing of individuals) and on fiscal feasibility, a zero-rated bracket or a IWTC would introduce significant progressivity and would provide incentives to comply with the Declaration (as end-of-year refunds would become possible). An IWTC would be better-targeted than a zero-bracket and encourage labor supply and formalization.

**A microenterprise regime should be a simplified collection mechanism, not a preferential regime.** The authorities plan to bring employees of microenterprises under the standard PIT regime, a justified reform (replacing and eliminating the monthly AMD 5,000 lumpsum tax per employee), but one leaving unchanged the total exemption of individuals themselves under the regime (not their employees).

### Tax Administration

**The Universal Declaration Administrative System is a major reform in size and scope**. It will require a significant Information Technology (IT) build, will have wide ranging community impacts, and will require good communication with all stakeholders, in particular the affected taxpayers. There are many of the necessary foundations in place. These include a mature withholding tax system, a register of employees, and mandatory electronic lodgment of the withholding return. There are significant implementation risks that need to be managed.

**While the detailed Policy is being developed, it is essential that the State Revenue Committee (SRC) and Ministry of Finance (MoF) work together on the detailed design.** This is to ensure that it can be implemented efficiently and effectively with low costs of compliance by the taxpayers. A working group should be formed to finalize the design with both senior MoF and SRC staff and the staff who will build and operate it. Once the design is finalized this group will cease and a steering group would be formed.

**The mission team recommends that in line with international good practice, SRC prefills the Universal Declaration as much as possible through maximizing the use of third-party information and withholding taxes.** This should include all types of income. Armenian banks are currently not required to report interest income with a unique identifier for the holder of the account. This means that interest income will not be pre-filled, and this may undermine the policy intent. This gap must be addressed by the Government by amending Bank Secrecy laws to ensure that interest income can be prefilled. Should the authorities bring employees of microenterprises under the standard PIT regime the employers must be included in the reporting regime and their universal declarations prefilled.

**To ensure strong governance and accountability during the implementation phase, a steering group should be formed immediately.** The steering group should have very senior chairmanship and members should be drawn from all ministries with an interest in the reform. It provides strategic leadership and direction, to oversee the work of a Project Management Board. The Project Management Board should include experts with relevant technical and project management skills and experience and be chaired at the Deputy Chairman level. It is charged with managing and coordinating the work of project teams identifying and managing resource bottlenecks and other risks.

**There are several issues that need to be considered, particularly the taxpayer register. compliance with the current system, and the withholding system**. For example, there is no register of individuals who earn passive income. It is also important that the withholding system is robust and as many employers are in it. High compliance levels with the current system will ensure a smooth transition. Using Compliance Risk Management principles, SRC should undertake Risk

Assessments on the risk areas and develop Compliance Improvement Plans, including recommendations for law changes.

**Individual taxpayers must be subject to audit based on proper risk-assessment.** The introduction of a Universal PIT Declaration, and the collection of comprehensive information on individual taxpayers, is an excellent opportunity and justification to include natural persons in the scope of possible audits.

## Capacity Development

**The authorities may consider requesting assistance on a possible reform of the taxation of micro and small enterprises. The SRC may consider requesting capacity development assistance from the IMF on implementation of the Universal Declaration.** The area that may be of greatest assistance is addressing the risks identified and advising on international good practices to mitigate them.

### Box 1. Summary of Recommendations

#### Tax Policy Recommendations

- Repeal the tax credit on mortgage interest, with grandfathering of existing contracts with yearly interest below an upper limit in the range of AMD 245,0000-300,000.
- Repeal the tax credit on reinvested dividends.
- Introduce a 10 percent (same as on interest) withholding tax on capital gains, excluding capital gains on housing to the sale of a taxpayers' primary residence up to a specific amount to be calibrated to cover most or all capital gains for most taxpayers.
- Conditionally on an assessment of sufficient administrative capacity (including auditing of individuals) and on the fiscal feasibility of the measure, introduce a zero-rated PIT bracket with an upper threshold in the range of AMD 240,000-300,000 annually.
- Conditionally on an assessment of sufficient administrative capacity (including auditing of individuals), consider the introduction of an In-Work Tax Credit that is annually capped at AMD 53,000 and phase out for income above AMD 800,000.
- Seek FAD assistance on micro and small enterprise taxation.

#### Tax Administration Recommendations

- As a matter of urgency, create a joint SRC and MoF working party to co-design the new system so that all administrative and policy issues are considered, and an efficient and effective system is implemented. Once the design is finalized this group will cease and a steering group etc. would be formed.
- Implement the governance and project management structures and arrangements as set out in Section III, Figure 13 and 14 below. As a matter of urgency, implement Stage 0 (setting up of governance structure, agreeing action plans, and initiating consultations).
- Amend the Bank Secrecy law so that it is mandatory for banks to provide the SRC with all interest payments and a unique identifier so that the interest can be pre-filled into the individual tax declaration.
- Amend the Tax Code to allow tax audits of individuals.

# I. INTRODUCTION

**1. At 6.1 percent of GDP in 2021, the PIT is a significant source of revenue in Armenia (Table 1).** Since 2020, it has been levied at flat rates on both employment and passive capital income (dividends, interest, rental income, and royalties). Taxpayers who only derive income from employment or passive capital income are not required to file a tax declaration or return and are taxed on a withholding basis (see Section III).

**Table 1. Armenia, Tax Revenue (in percent of GDP)**

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| VAT | 7.7% | 7.6% | 8.0% |
| Excise tax | 2.1% | 2.0% | 1.6% |
| Profit tax (CIT) | 3.6% | 2.4% | 2.3% |
| Income tax (PIT) | 6.7% | 6.7% | 6.1% |
| Custom duties | 1.5% | 1.1% | 1.2% |
| Social security contributions | 0.3% | 0.4% | 0.6% |
| Other tax revenues | 0.5% | 2.2% | 2.9% |
| Other revenue | 1.4% | 2. 0% | 1.2% |
| **Total** | **23.7%** | **24.4%** | **23.9%** |

*Source: MoF.*

**2. The authorities have expressed their intention to introduce a Universal PIT Declaration and have requested FAD assistance on the implementation of the measure.** This joint Tax Policy (FADT1) and Revenue Administration (FADR1) mission addressed the tax policy and administration challenges (and opportunities) of a Universal PIT Declaration. Its key characteristics, as currently envisioned by the authorities are as follows:

- The declaration would be implemented in stages: first civil servants (FY2024 reporting on FY2023), then employees (FY2025 reporting on FY2024), and finally other individual taxpayers (FY2026 reporting on FY2025).
- It would be yearly.
- It would be comprehensive, covering all types of income.

**3. While it is primarily a collection and compliance issue, the introduction of systematic return filing by individuals has important tax policy ramifications**. First, the simplified and transparent computation of comprehensive income from various sources would be significantly facilitated by a PIT declaration. This, in turn, would allow for tax policies otherwise difficult to implement, including more progressivity in the PIT rate schedule as well as targeted tax incentives. Second, there is a long-term benefit in gathering individual information from taxpayers in terms of policy analysis. For instance, the distributional impact of tax expenditures (or the removal thereof) relies on the existence of high-quality taxpayer-level data, on employment income but also on capital income – all of which is made easier with the existence of comprehensive return filing. In this mission, we focus on the first aspect of the tax policy implications, that is, how a declaration would pave the way for changes in the PIT, and how they would provide incentives for taxpayers to comply with return filing. In the process, a broad policy review of the PIT was conducted, which in turn led to policy recommendations not always conditional on the introduction of the declaration but nevertheless important in their own right (and consistent with previous TA provided by FAD in 2016 and 2018). Microsimulations of the main reform options are developed, with the estimated impact of each option on revenue and progressivity.

**4. The implementation of a Universal PIT Declaration presents the tax administration with significant challenges and opportunities.** The size and scope of this should not be underestimated. It will require a large and complex Information Technology (IT) build, communication with stakeholders, and it will impact on many in the community. Above all, it will be a new experience for taxpayers, and this will in itself raise many challenges.

**5. This report is organized as follows.** Section II reviews tax policy aspects, Section III addresses tax administration, and Section IV lists capacity development needs.

# II. TAX POLICY

## A. Key Features of the PIT

### Labor and Capital Income

6. **Armenia's PIT is a simple, easy-to-administer, dual income tax system with flat rates applying to both labor and capital income.** The 2020 reform eliminated progressivity in the PIT for all types of income (Table 2). As a result, employment income is taxed at a flat rate of 21 percent[1] with no standard personal allowance -- that is, income is taxed from the first AMD. Dividends are taxed at 5 percent while interest, rental income and royalties attract a 10 percent rate. Importantly, capital gains on the disposal of personal property are not taxed. As noted, PIT on employment and passive income, with only few exceptions, is withheld at source by employers, banks or other sources[2].

**Table 2. The 2018 Tax Reform[3]**

| The 2019 system | The current system (2022) |
|---|---|
| • Progressive labor income tax with a 23% tax rate on income up to a monthly income of AMD 150,000 AMD, 28% on monthly income in the range of AMD 150,000 and AMD 2 million, and a 36% tax on income above AMD 2 million. | • A flat 21% tax rate on all income |
| • The mandatory pension contribution is 2.5% of the monthly gross income (up to a monthly maximum base of AMD 500,000). There is no pension contribution on income above AMD 500,000. | • Pension contribution is 10%, of which 5.5%[4] is contributed by the state. There is a cap on the state contribution of 5.5% of a monthly gross income of AMD 500,000. In addition, no pension contributions at all apply to gross monthly income in excess of 1.02 million. |
| • Taxpayers are allowed to claim any amount of tax due as a mortgage interest tax credit. | • Mortgage interest tax credit is allowable only for properties with a value not exceeding AMD 55 million. |

*Source: MoF.*

7. **Social security contributions (SSCs) cover pensions only, with no SSCs for healthcare or unemployment insurance.** There are three pillars in the Armenian pension system: a budget-

[1] Will be 20 percent from January 2023.

[2] See page 32 below for more details.

[3] The reform was decided in 2018 and implemented in 2020.

[4] Will be 5 percent from January 2023.

financed defined benefit component (Pillar I), a mandatory pension fund plan (Pillar II) and a voluntary pension fund component (Pillar III). From July 1, 2018, contributions to the pension fund plan (Pillar II) are mandatory for all employees born after January 1, 1974, including employees of the private sector. In 2021, there are 477,820 participants in Pillar II (or about 64 percent of individual taxpayers with PIT withheld on employment income, see Table 4). The rate of contribution for Pillar II is 10 percent of gross income, of which 5.5 percent is contributed by the state[5] and 4.5 percent by employees. Additionally, the state contribution on Pillar II is capped at 5.5 percent of a yearly income of AMD 6 million (2.6 times GDP per capita) – which tends to be progressive as the effective rate increases with income; and no contributions at all apply to yearly income in excess of AMD 12.24 million (5.3 times GDP per capita) – which on the other hand contributes to the regressivity of the system.[6] Pillar II contributions are not deductible for PIT purposes, and Pillar II pension payments are correspondingly tax-exempt. Pillar II is therefore a TEE pension system[7]. Voluntary pension plans (Pillar III) are, in contrast, deductible up to 5 percent of gross taxable income and corresponding pensions are taxable. Pillar III is ETT[8]. However, participation to Pillar III is negligible, with only 547 participants as of June 2022.

[5] Will be 5 percent from January 2023.

[6] With these limits and rates, as of 2022, the employee's average contribution rate is 5.5 percent up to a yearly income of AMD 6 million; it gradually rises to 7.3 percent over the AMD 6-12.2 million income range; and gradually declines for income above AMD 12.2 million (with a zero marginal contribution rate).

[7] Tax-Exempt-Exempt (TEE) means that contributions are taxed but earnings on those contributions as well as withdrawal of the benefit are not taxed.

[8] Exempt-Tax-Tax (ETT) means that contributions are exempt but earnings on those contributions as well as withdrawal of the benefit are taxed.

## Table 3. Key PIT and SSC Rates in Armenia and Comparator Countries, 2022

| | Min PIT rate | Top PIT rate | PIT standard allowance (mult. GDP per cap.) | PIT Top threshold (mult. GDP per cap.) | Capital gains | Divi-dends | Interest | Rents | Royal-ties | SSCs Employee | SSCs Employer | SSCs Total | Tax Wedge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albania | 13.0% | 23.0% | 0.54 | 2.68 | 15.0% | 8.0% | 15.0% | 15.0% | 15.0% | 11.2% | 16.7% | 27.9% | 41.0% |
| **Armenia** | **21.0%** | **21.0%** | - | - | **0.0%** | **5.0%** | **10.0%** | **10.0%** | **10.0%** | **5.5-7.3%** | **0.0%** | **5.5-7.3%** | **26.0%**[9] |
| Azerbaijan | 14.0% | 25.0% | - | 3.28 | Ordinary inc. | 10.0% | 10.0% | 14.0% | 14.0% | 3.0% | 22.0% | 25.0% | 40.0% |
| Belarus | 13.0% | 13.0% | 0.08 | - | 0% on real estate | 6.0-13.0% | 13.0% | | | 1.0% | 34.0% | 35.0% | 36.0% |
| Bosnia and Herz. | 10.0% | 10.0% | 0.31 | - | 10.0% | | 10.0% | 10.0% | | 31.0% | 10.5% | 41.5% | 44.0% |
| Bulgaria | 10.0% | 10.0% | 0.02 | - | Ordinary inc. | 5.0% | 8-10% | | | 13.8% | 18.5% | 32.3% | 35.0% |
| Croatia | 24.0% | 36.0% | 0.43 | 3.25 | 20% on real estate | 12.0% | 12-40% | 24.0% | 24.0% | 20.0% | 18.2% | 38.2% | 57.0% |
| Estonia | 20.0% | 20.0% | 0.28 | - | Ordinary inc. | - | Ordinary inc. | Ordinary inc. | Ordinary inc. | 3.6% | 33.0% | 36.6% | 42.0% |
| Georgia | 20.0% | 20.0% | - | - | 20.0% | 5.0% | 5.0% | | 20.0% | 0.0% | 0.0% | 0.0% | 20.0% |
| Kosovo | 4.0% | 10.0% | 0.23 | 1.28 | Ordinary inc. | | | | | 5.0% | 5.0% | 10.0% | 19.0% |
| Moldova | 12.0% | 12.0% | 0.27 | - | Ordinary inc. | 6.0% | 12.0% | | 12.0% | 6.0% | 18.0% | 24.0% | 30.0% |
| Montenegro | 9.0% | 9.0% | - | - | 9.0% | 9.0% | | 9.0% | 9.0% | 24.0% | 8.3% | 32.3% | 36.0% |
| North Macedonia | 10.0% | 18.0% | 0.28 | 3.08 | Ordinary inc. | 10.0% | | | | 28.0% | 0.0% | 28.0% | 41.0% |
| Romania | 10.0% | 10.0% | 0.16 | - | 10% | 5.0% | 10.0% | | 10.0% | 25.0% | 6.3% | 31.3% | 36.0% |
| Russia | 13.0% | 13.0% | 0.04 | - | Ordinary inc. | 13.0% | 13.0-35.0% | | 13.0% | 0.0% | 30.0% | 30.0% | 33.0% |
| Serbia | 10.0% | 15.0% | 3.26 | 6.52 | 15.0% | 15.0% | 15.0% | 20.0% | 20.0% | 19.9% | 16.7% | 36.6% | 42.0% |
| Slovenia | 16.0% | 50.0% | 0.34 | 2.92 | 10-27.5% | 27.5% | 25.0% | 27.5% | 25.0% | 22.1% | 15.5% | 37.6% | 66.0% |
| Turkey | 15.0% | 40.0% | 0.28 | 7.67 | 10.0% | 15.0% | 10.0% | 20.0% | 20.0% | 14.0% | 27.0% | 41.0% | 59.0% |
| Ukraine | 18.0% | 18.0% | 0.10 | - | 5.0-18.0% | 6.5% | 19.5% | 19.5% | 19.5% | 0.0% | 22.0% | 22.0% | 33.0% |

*Source: IBFD, tax codes.*

8. **The PIT revenue performance continued to be impressive**. Armenia's PIT revenue of 6.1 percent of GDP in 2021 compares with a mere 3.7 percent of GDP in comparator countries on average[10] for the same year (Figure 1 and Appendix A). While in slight decline with respect to 2019 and 2020 – possibly reflecting the suppression of the highest bracket during the 2018 reform (Table 2) –, this is still an impressive performance. The relatively high average tax rate (22 percent in 2021) and, above all, an effective withholding collection mechanism are likely drivers of this encouraging outcome.

[9] Based on 5.5 percent employee contribution.

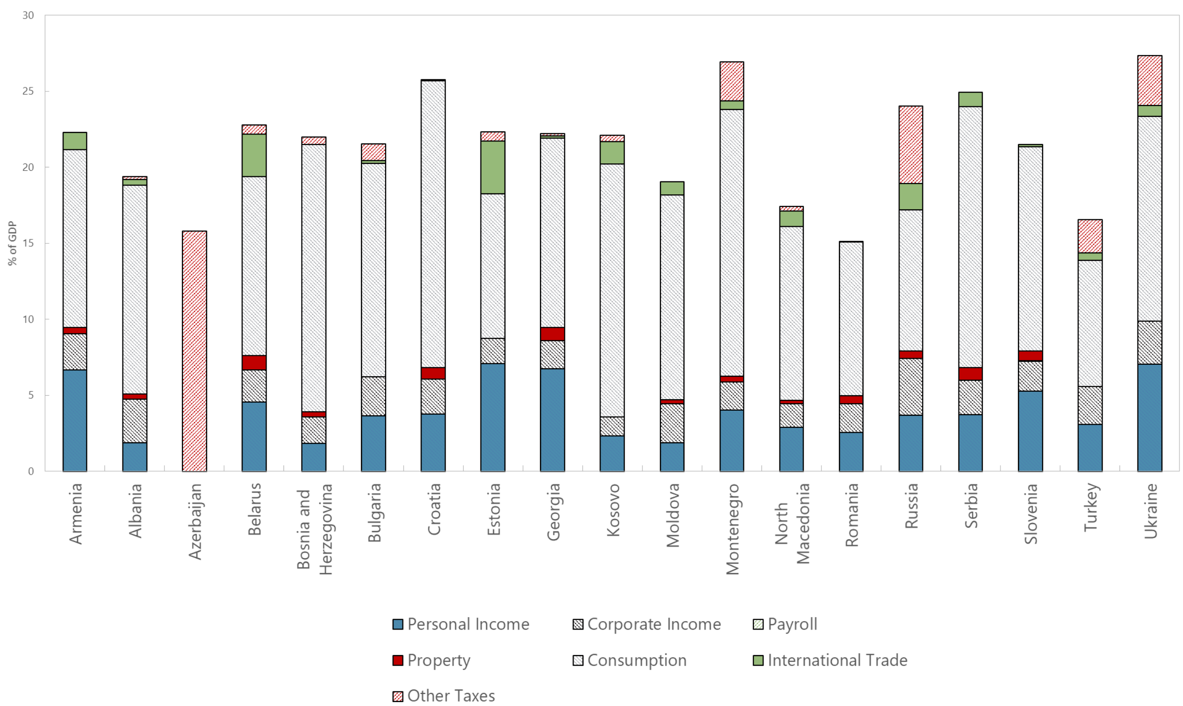
[10] Simple non-weighted average.

**Table 4. Summary Statistics based on Taxpayer Level Labor Income Data (2021)**

| | |
|---|---|
| Number of taxpayers with positive labor income | 739,997 |
| Number of taxpayers contributing to Pillar II | 477,820 |
| Number of taxpayers not contributing to Pillar II | 260,134 |
| Number of taxpayers claiming mortgage interest tax credit (positive amount) | 20,426 |

*Sources: SRC, IMF Staff calculations.*

**Figure 1. General Government Tax Revenue Mix, Latest Available Year of Actual Data (In Percent of GDP)**



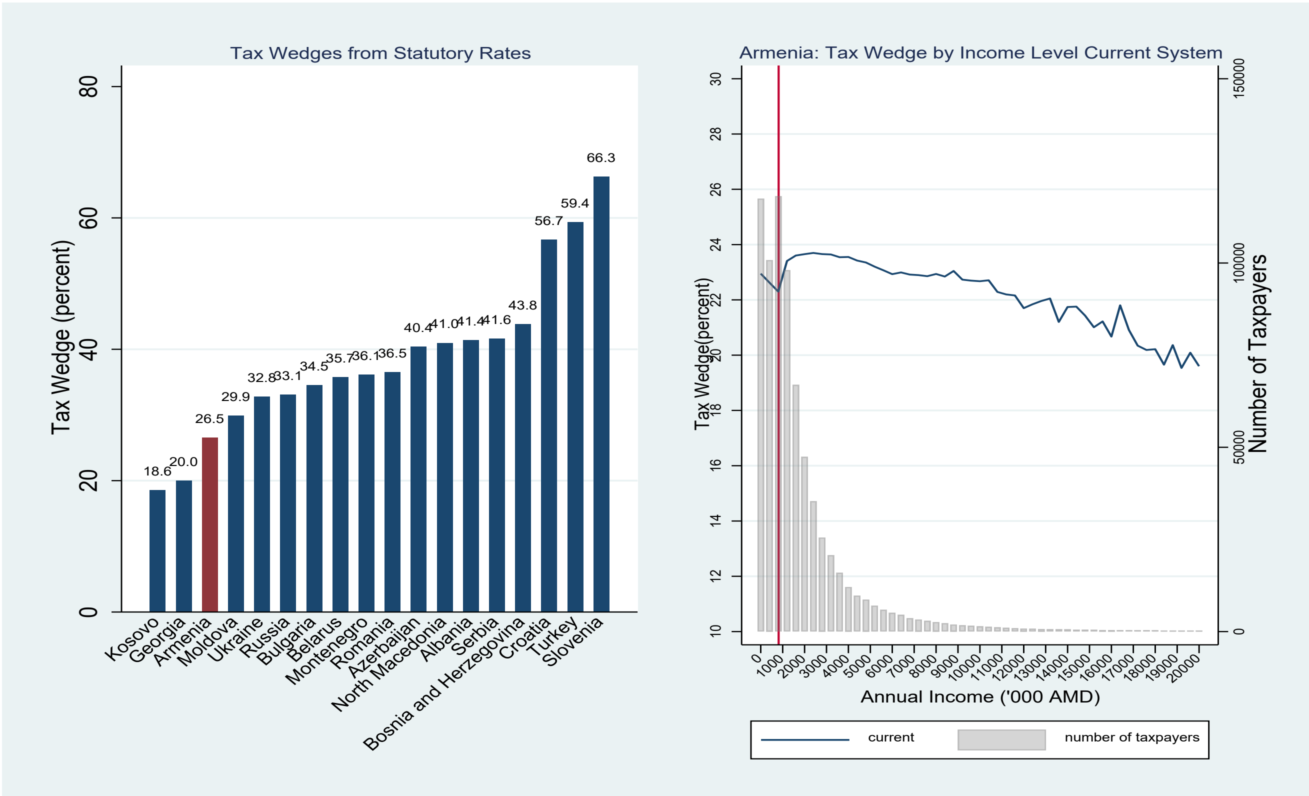

*Source: FADTP ECOS Database (IMF).*

**9. Armenia's labor tax wedge is low but regressive (**Figure 2**).** At 26.5 percent overall, the labor tax wedge ranks low among comparator countries (Figure 2, left panel). This is mainly due to low SSCs – with other countries in the region having significantly higher rates of social contributions (Table 3). This is a positive feature of labor taxation from a tax efficiency viewpoint[11], as it suggests that taxation alone is not a significant impediment to employment formalization generally. However, Figure 2 (right panel) shows that the tax wedge is in fact highest for low incomes, that is, markedly regressive. This is important in a context where informal employment still accounts for more than

[11] The efficiency of a tax system refers to its ability to influence the behavior of taxpayers – here the decision to enter formal employment.

one third of total employment[12], as it suggests that the labor tax wedge, while not high overall, could be a hurdle to the formalization of low-income earners.

**Figure 2. Tax Wedge (2021)**




*Sources: SRC, IBFD, IMF Staff calculations.*

*Notes: Tax Wedge = (PIT liability + Employee SCCs + Employer SCCs) / (Gross wage + Employer SCCs). The red vertical line in the right panel indicates the annual minimum wages for age over 35. Income is in thousands of AMD.*

## Business Income

**10. Business income earned by individuals is not taxed under the PIT**. Individual (unincorporated) businesses are taxed under one of the following regimes: individual businesses with a yearly turnover above AMD 115 million ($ 280,000) are mandated VAT taxpayers and subject to the standard CIT at 18 percent of profits (with standard deduction of business expenses[13]); (ii) businesses with turnover between AMD 24 million ($ 60,000) and AMD 115 million can opt for the turnover

[12] 35.8 percent of the labor force was informal in 2020 (source: Household Labor Force Survey).

[13] Tax Code of the Republic of Armenia, Article 102 and following.

tax[14], where turnover is taxed at rates determined by the type of economic activity[15]; (iii) Individual businesses with turnover below AMD 24 million can opt for the microenterprise regime (see below)[16]. In all three situations, business income is not taxed under the income tax (PIT).

**11. The microenterprise regime provides total exemption of individual business income.** Individuals under the microenterprise regime only pay a lumpsum tax of AMD 5,000 per month and per employee[17]. An individual with no employees does not pay any tax under this regime (and is not enrolled under any of the mandatory pension schemes, Pillars I and II, and corresponding are not eligible to the pension benefits).

## Incentives

**12. A commendable characteristic of the PIT is the reduced number of incentives**. There are only three incentive mechanisms, and they are all tax credits (not deductions), contributing to the simplicity of the system. However, incentives on mortgage interest and on the reinvestment of dividends appear exceedingly generous.

**13. The tax credit on mortgage interest[18] is costly and regressive.** There is a 100 percent tax credit on interest paid on mortgage contracts to build or acquire individual residences from the primary market (new buildings). There are limits to this incentive: (i) After the 2018 reform, the value of the property must not exceed AMD 55 million ($ 0.14 million140,000); (ii) The maximum tax credit is AMD 6 million per year ($15,000) or the annual PIT liability of the taxpayer, whichever is lowest[19]; (iii) Each physical person is entitled to only one incentivized mortgage contract in their lifetime. Despite these limitations, the amount of tax credit is considerable at AMD 22.7 billion in 2021 (or 5.3 percent of overall PIT revenue). This incentive is also regressive, with the top decile of taxpayers claiming 90 percent of the credit (see detailed analysis page 24).

**14. A tax credit on reinvested dividends[20] is excessively generous.** A 100 percent tax credit is granted on dividends reinvested (in the form of new shares or a value increase of existing shares). Conditions and limitations are that: (i) dividend reinvestments must take place during the same fiscal year dividends are distributed; and (ii) the tax credit is capped by the tax paid on dividends that year (5 percent of dividends). In practice, this mechanism enables investors to distribute dividends tax-

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[14] Tax Code of the Republic of Armenia, Article 253 and following. They can also opt for the VAT and the standard CIT.

[15] For instance, 5 percent for trade, 3,5 percent for manufacturing, 10 percent for notaries. In addition, pension contributions of an individual under the turnover tax are as follows: (i) she will pay a yearly lumpsum profit tax of AMD 60,000 as enrollment under Pillar I; another lumpsum payment of the same amount is for Pillar II mandatory contributions.

[16] It can also opt for the turnover tax.

[17] Employees of an individual business under the microenterprise regime also pay standard pension contributions (withheld by their employer).

[18] Tax Code of the Republic of Armenia, Article 160.

[19] Therefore, they can be no refund of the tax credit.

[20] Tax Code of the Republic of Armenia, Article 159, Alinea 4.

free. For example, if reinvestment is set equal to the 5 percent tax (and no more), no net taxes are effectively paid; the investor obtains 95 percent of the distributed dividends tax-free, while retaining 5 percent of that amount as equity.[21]

**15. A tax credit on tuition fee targets students for graduate and post-graduate studies[22] has limited impact and cost to the system.** A 100 percent tax credit on tuition fees can be claimed by students (not their parents) – and is not refundable. Because students are typically not high-income earners, the amount of tax credit effectively used is low at AMD 200 million in 2021, limiting the impact and cost of this incentive.

## B. Directions of Reforms

**16. The mortgage interest tax credit should be repealed for all new mortgage contracts, and at least strictly capped for existing mortgage contracts.** The authorities have confirmed their intention to repeal this incentive on new mortgage contracts in the Yerevan area. However, leaving the mechanism untouched on existing contracts would be a long-term revenue burden and a continued strong contribution to the regressivity of the system. It is recommended to repeal the incentive on all contracts, new and existing – while grandfathering existing contracts under limiting conditions[23]. Simulations presented below suggest that the incentive should be (i) repealed on all new contracts; (ii) on existing contracts, it could be grandfathered but capped at a value of interest of AMD 245,000 per year, per taxpayer, or gradually phased out by grandfathering only interest payments on mortgage contracts for the first three years of a contract.

**17. The tax credit on reinvested dividends is overly generous and should be suppressed.** Because it provides a straightforward mechanism to effectively avoid any taxation of dividends, also contributing to the regressivity of the tax system, this incentive should be repealed.

**18. Capital gains should be taxed.** Most jurisdictions impose tax on capital gains made by resident and non-residents from the disposal of immovable property and investment securities, including Armenia's comparator countries (Table 3). The international experience shows that differential treatment of interest, dividends, and capital gains causes distortions in asset portfolios

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[21] We received data on passive income (interest, dividend, etc.) at the withholding agent level (such as banks). The data for 2021 shows that before the tax credit, total due tax on dividend income was AMD 15.7 billion (0.22 percent of GDP). However, taxpayers claimed back 9.4 billion of the tax as a credit (0.13 percent of GDP). In other words, 60 percent of the tax was claimed as a credit. Therefore, the effective tax rate on dividends was only 2 percent (i.e., 5 percent statutory rate multiplied by 40 percent of the gross tax).

[22] Tax Code of the Republic of Armenia, Article 160.1.

[23] UK's Mortgage Interest Relief at Source (MIRAS) was abolished in 2000 without any grandfathering, but it had been gradually curtailed prior to its suppression to, eventually, cover only about 10 percent of interest payments. The 2021 US Tax Cuts and Jobs Act (TCJA) capped the Mortgage Interest Deduction (MID) to interest deduction to the first $ 750,000 in principal value (down from $ 1 million), again with no grandfathering. In Ireland, the Tax Relief at Source (TRS) on mortgage interest was abolished in 2013 on new mortgages, but existing mortgages up to 2012 were grandfathered up to 2020, when the incentive was repealed entirely.

and erodes the capital income tax base. Neutral taxation of all capital income can minimize avoidance and strengthen revenue mobilization in a progressive manner. For these reasons, capital gains made by individuals on immovable property and investment securities should be taxed, as is the current practice in most countries, including Armenia's peers (Table 3). To minimize distortions, the rate should be the same of that applying to interest (10 percent).

**19. However, it is common practice for an individual's home to be partially or wholly exempt from capital gains taxation.**[24] An exemption to capital gains taxation could be provided for a specific amount of the capital gains on primary residences. That exemption amount would be calibrated so it covers most or all of the capital gains for most taxpayers. As a result, there would be zero capital gains tax for most taxpayers on sale of their primary residence, but high-income individuals would still pay capital gains tax on the gain in excess of the exemption. The exemption amount would have to be set based on examination of housing markets and would have to be adjusted over time as housing prices change.

**20. Microenterprises should benefit from a simplified collection mechanism, not a preferential regime.** The authorities plan to bring employees of microenterprises under the standard PIT regime (replacing and eliminating the monthly AMD 5,000 lumpsum tax per employee), a justified reform. However, the situation of the individuals under the microenterprise regime themselves (not their employees) is not addressed. While their employees would now be under the standard PIT (and Pillar II pension scheme), they would still benefit from total tax exemption and would still be outside the pension system. It is acknowledged that reforming this regime has implications on the turnover tax regime, as well as on the VAT, and is clearly outside the scope of this mission. It is nevertheless recommended to address this critical issue; FAD assistance could be provided.

**21. A Universal PIT Declaration would make it possible to implement a more progressive PIT.** In the current situation with no yearly return filing, there is no practical mechanism for assessing the taxable income of an employee working only a few months during the year, or an employee with several sources of income. A Universal PIT Declaration would correct that and would make it possible to implement a zero-rated bracket or an In-Work Tax Credit (IWTC, see below) through the aggregation and annualization of taxable income, and the corresponding end-of-year refunds or tax top-up[25].

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[24] There are several reasons for the exemption. First, a capital gain on the disposal of a home will usually be "illusory" since the owner will normally have to use all the proceeds of sale to purchase another comparable home. Second, there will be a continuing problem of determining the value base of a home as all expenditures on repairs, alterations, and extensions would need to be accounted for and classified into those that enhanced the value of the home (and, therefore, included in determining the value base of the home) and those that related only to the use or enjoyment of the home. Third, a home is commonly owned for long periods and, over time, a taxpayer may not retain the records of expenditures necessary to properly determine the value base of the home.

[25] Before the 2018 reform, with no universal declaration, progressivity was indeed only partially implemented, with no end-of-year regularizations.

**22. A zero-rated bracket would re-introduce progressivity into the system**. Introducing a zero-rated bracket (minimum income level to be liable to PIT) would be consistent with the practice of country comparators and international practice generally[26], as taxing labor income from the first dollar is detrimental to the perceived equity of the tax system and provides negative incentives to enter formal employment (a relevant issue in Armenia, as noted). In the context of the introduction of the PIT Declaration, a zero-rated bracket would also be an incentive to comply with it. Simulations presented below show that combining the repeal of the mortgage interest tax credit with the introduction of a zero-rated bracket with an upper threshold of AMD 240,000[27] (or 0.13 times GDP per capita – at the lower end of the experience of the comparator countries, see Table 3) would have limited overall impact on revenue while significantly enhancing progressivity. However, if taken in isolation, the revenue impact of the measure, even with relatively low threshold (AMD 240,000, or only 0.13 percent of GDP per capita), would not be negligible at 0.46 percent of GDP. Furthermore, a zero-rated bracket creates new opportunities for tax evasion, notably by fraudulently splitting individual incomes. For these reasons, it is advisable to condition the implementation of a zero-rated bracket not only on the effective repeal of the mortgage interest tax credit but also to an assessment of the administrative implementation capacity, including auditing capacity (see Section III on auditing).

**23. An IWTC[28] would further improve progressivity and incentivize employment formalization**. In addition to a zero-rated bracket, an IWTC would make full use of a Universal PIT Declaration, and would also provide incentives to comply with it, further enhancing progressivity and improving incentives to low-skill and part-time workers to join formal employment. Simulations below show that the net fiscal cost of an IWTC can be made manageable as a function of its key characteristics (maximum credit, range of eligible income), especially when combined with revenue-enhancing measures such as the repeal of the mortgage interest tax credit. Nevertheless, it is acknowledged that an IWTC, which implies net outlays to taxpayers, poses specific compliance and fraud risks. A well-functioning IWTC assumes sufficient compliance management capacity, including, critically, auditing capacity. For these reasons, like the zero-rated bracket above but more so as it involved net outlays, the implementation of an IWTC in Armenia must be subject to a careful assessment of administrative implementation capacity and is not likely to be implementable in the short term.

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[26] Most UE countries have a zero-rated bracket or a standard allowance.

[27] This income level is based on numerical simulations as an acceptable trade-off between revenue loss and gains in progressivity (see next sub-section).

[28] For a given worker, the value of a typical IWTC varies with employment with the objective of encouraging entry into formal employment: it quickly increases as employment income rises from zero; after reaching a maximum amount, it diminishes as income reaches higher levels. Examples of IWTC employment-contingent payments include those in the United States (the Earned Income Tax Credit), the United Kingdom (the Working Tax Credit, moving to the Universal Credit), Sweden (the Earned Income Tax Credit), Belgium (In-Work Benefit), France (the Prime d'Activité), Canada (Self-Sufficiency Program), and Ireland (the Family Income Supplement). Most IWTCs are contingent on earned income alone (US, Sweden, France) while some include labor hours as well as low earnings as a specific condition of entitlement. See Immervoll and Pearson (2009).

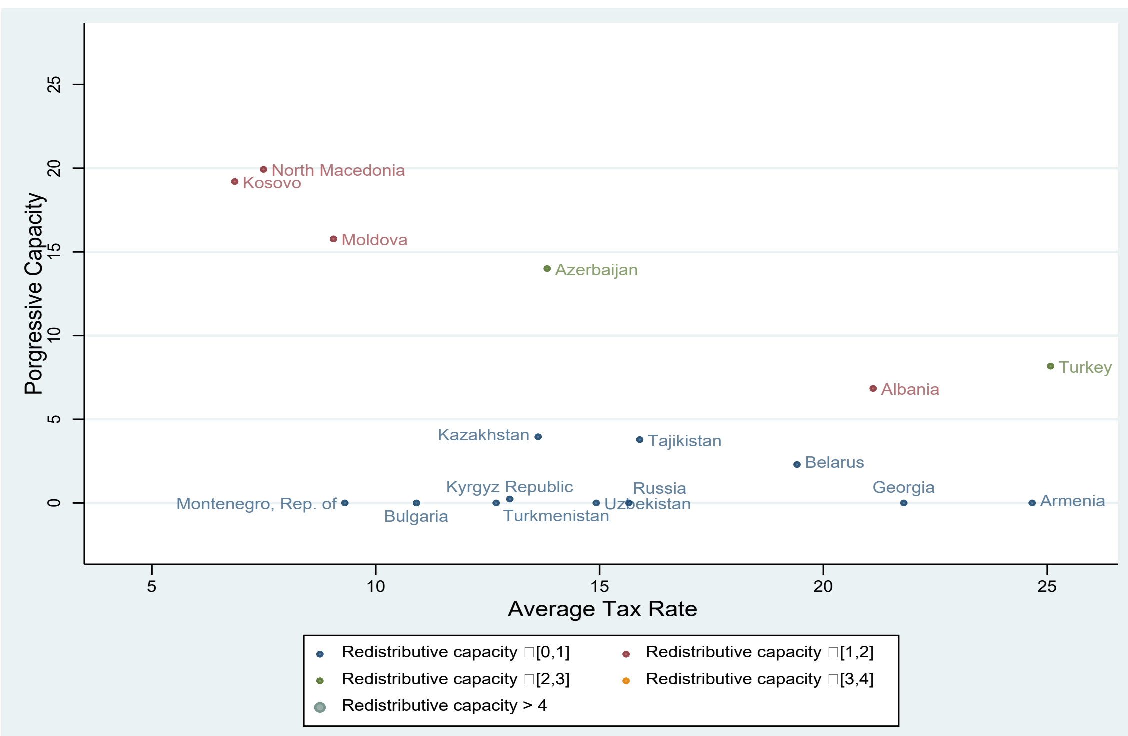
**24. "Social credits" such as PIT credits or deductions for health or education spending are not advisable.** While a Universal PIT Declaration would make it easier to implement such tax credits or deductions, they would likely be regressive – benefitting those households that can afford them; could erode the revenue performance of the PIT (as shown by the revenue impact of the mortgage interest tax credit); are not the standard approach to building redistributive health insurance systems, which is through social security contributions, or other sources of resource, levied in addition to or beside the PIT. This topic is outside the scope of this mission and specific FAD advice could be provided on social protection.

## C. Impact of Reforms Options on Revenue and Progressivity

### Progressivity and Redistributive Capacity of The Current PIT

**25. The PIT is currently characterized by low progressivity and low redistributive capacity.** The flat and relatively high tax rate, the absence of standard allowance or zero-rated bracket, a highly regressive mortgage interest tax credit, and the cap on pension contribution limit the progressivity of the tax system. Figure 3 shows that that the redistributive capacity of Armenia's PIT is at the lowest end of its regional peers.

**Figure 3. Progressivity and Redistributive Capacities Among Regional Comparators (2020)**

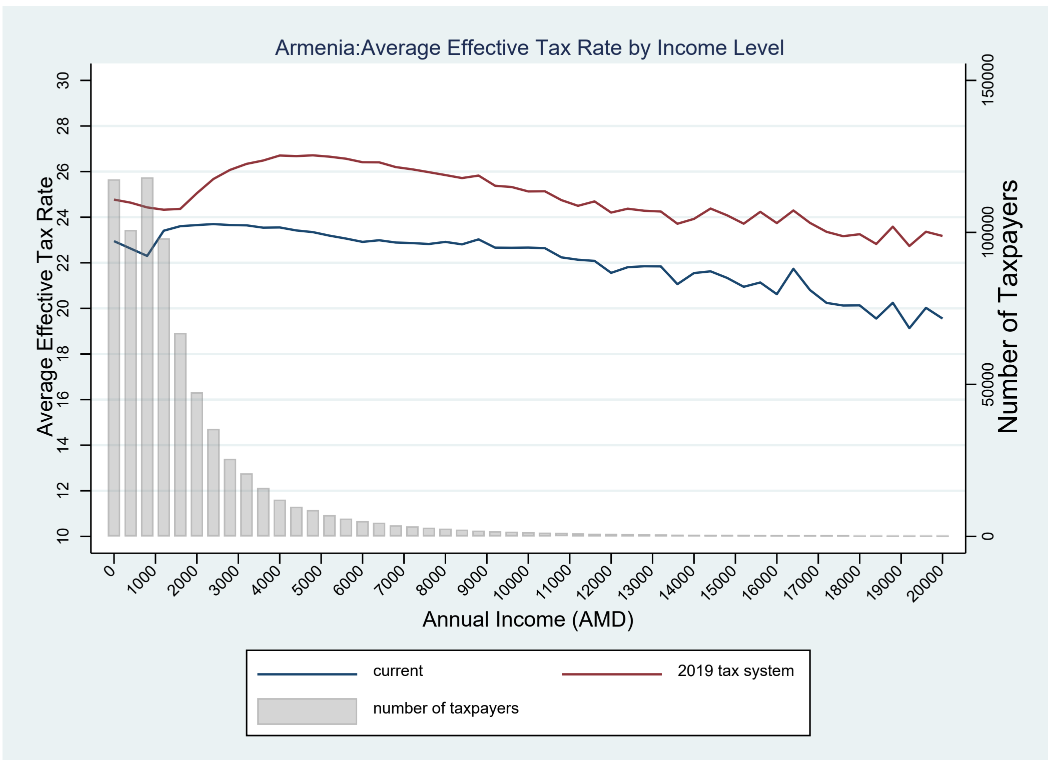



*Notes: The redistributive capacity measures the difference between the Gini coefficients of income before and after tax respectively. Progressivity measures the difference between the Gini coefficients of tax and pre-tax income (the more the tax is concentrated on high incomes, the stronger the progressivity). The average tax rate is the ratio of total revenue collected to total pre-tax income (i.e., revenue to GDP ratio). See Appendix B for methodological orientations.*

*Sources: Tax code, SWIID 9.2, World Revenue Longitudinal Database (IMF), IBFD, EY, IMF Staff computations.*

**26. The introduction of the flat tax system in 2020 has been associated with a fall in PIT revenue and has reduced the progressivity of the tax system.** Although the tax system before the reform had some of the regressive elements maintained in the current system such as mortgage interest tax credit and cap on pension contribution, the progressive tax rates contributed to its progressivity and revenue mobilization potential (Figure 4). The comparison of the two systems shows that the redistributive index and progressivity index decreased from 0.31 to -0.32 and from 1.32 to 0.02, respectively. In addition, although attribution is difficult, the reform was concomitant with a revenue loss from PIT to the amount of 0.7 percent of GDP[29].

**Figure 4. Implication of the 2020 Tax Reform Compared to The System in 2019**




*Sources: SRC, IMF Staff calculations.*

[29] Note that some of the loss may be due to the way the tax is simulated. In the 2021 system, since tax rate is a flat 22 percent, it does not matter whether a person has one job or two or three. However, in a progressive rate structure (the 2019 system) and in the absence of a comprehensive income declaration, income splitting may lower one's tax liability. The simulation presented in this section assumes a comprehensive declaration. Therefore, the estimated revenue loss is at the higher end of possible revenue loss from the reform. Also, as our microdata is limited to labor income, the simulation only captures the impact of the tax policy change on this income category, ignoring individual entrepreneurs possibly switching to the microenterprise regime.

## Simulations

**27. The key reform options recommended above have been simulated using a microsimulation model based on taxpayer-level data**. We use the 2021 taxpayer-level data to analyze the impact of the reforms on revenue, distribution, and progressivity. Although wage income is taxed through final withholding, the State Revenue Committee (SRC) receives information on individual employment income and withheld tax. Employees have a Public Social Number that uniquely identifies them in the micro data received from the SRC. In addition, individual taxpayers file a mortgage deduction claim every quarter using the SRC's e-filing portal. The mission received both data separately and merged them using the unique Public Social Number. The simulations presented below are based on this merged dataset. On the other hand, lack of taxpayer level passive income data (interest, dividend, and rental income) means that this type of income is not included in our simulations. Table 5 summarizes the five simulated options.

**Table 5. Summary of Proposed Options**

| Scenarios | Assumptions |
|---|---|
| Current | • Income tax rate of 22%.[30]<br>• The social contribution is 3.5% up to AMD 6,000,000 and 10% for income above AMD 6,000,000. If annual income is above AMD 12,240,000, then pension contribution is capped at AMD 828,000.<br>• Mortgage interest tax credit that does not exceed the income tax due. |
| Option 1a | • Current system with:<br>• Elimination of the tax credit for mortgage interest. |
| Option 1b | • Current system with:<br>• A limit, rather than complete elimination, of the mortgage interest tax credit<br>• We set the threshold for the credit such that 20 percent of the credit is preserved. The resulting threshold is AMD 245,000 per year.[31] |
| Option 2 | • Option 1a with:<br>• Zero tax rate up to an annual income of AMD 240,000.[32] |
| Option 3 | • Option 2 with:<br>• In-work tax credit (IWTC) that:<br>• (i) linearly increases with income from a basic amount of AMD 15,000 to a maximum of AMD 53,000 over the AMD 0 – 240,000 income range (for this segment, the Government would make net payments to taxpayers); (ii) is constant in nominal |

[30] Based on the 2020 tax reform the flat tax rate on labor income was set to decrease from 23 percent in 2020 to 22 percent in 2021, 21 percent in 2022, and 20 percent from 2023 on.

[31] Note that with a flat tax rate of 22 percent as of 2021 and an exchange rate of AMD 503 per USD, a credit of AMD 245,000 is equivalent to an AMD 1.12 million ($ 2,214) tax deduction.

[32] The parameters are selected based on two criteria. First, we consider the practice in peer countries. The median PIT threshold for zero brackets is 25 percent of GDP Per capita. However, due to the skewed income distribution in Armenia, such a threshold will lead to significant revenue loss. Therefore, we adjust the threshold to 14 percent of GDP per capita (the top income in the first decile).

| | |
|---|---|
| | (AMD) terms over the AMD 240,000 – 520,000 range; and (iii) linearly decreases with income from AMD 53,000 to 0 over the AMD 520,000-800,000 AMD range.[33] |

*Source: IMF Staff calculations.*

*Note: All income figures are annual amounts.*

## Eliminating the Mortgage Interest Tax Credit

**28. The mortgage interest tax credit in Armenia is highly skewed to high income earners.** A significant share of the credit is claimed by few taxpayers (20 percent claiming above 50 percent of the credit, see Figure 5, top panels). In addition, when combined with individual income data, the analysis shows that the top 10 percent of taxpayers for reported income claim 90 percent of all credits, making this incentive particularly regressive (Figure 5, lower left panel).

**Table 6. Summary of The Existing Mortgage Interest Credit System**

| Category | Description |
|---|---|
| Mortgage Interest Tax Credit Rules | The quarterly limit for mortgage interest credit is AMD 1.5 million.<br>An apartment/house with value above AMD 55 million is not eligible for the mortgage deduction. |
| Number of Taxpayers Claiming the Credit | 20,400 |
| Total Mortgage Interest Credit Claimed in 2021 | AMD 22.7 billion (5.3% of total PIT Revenue) |

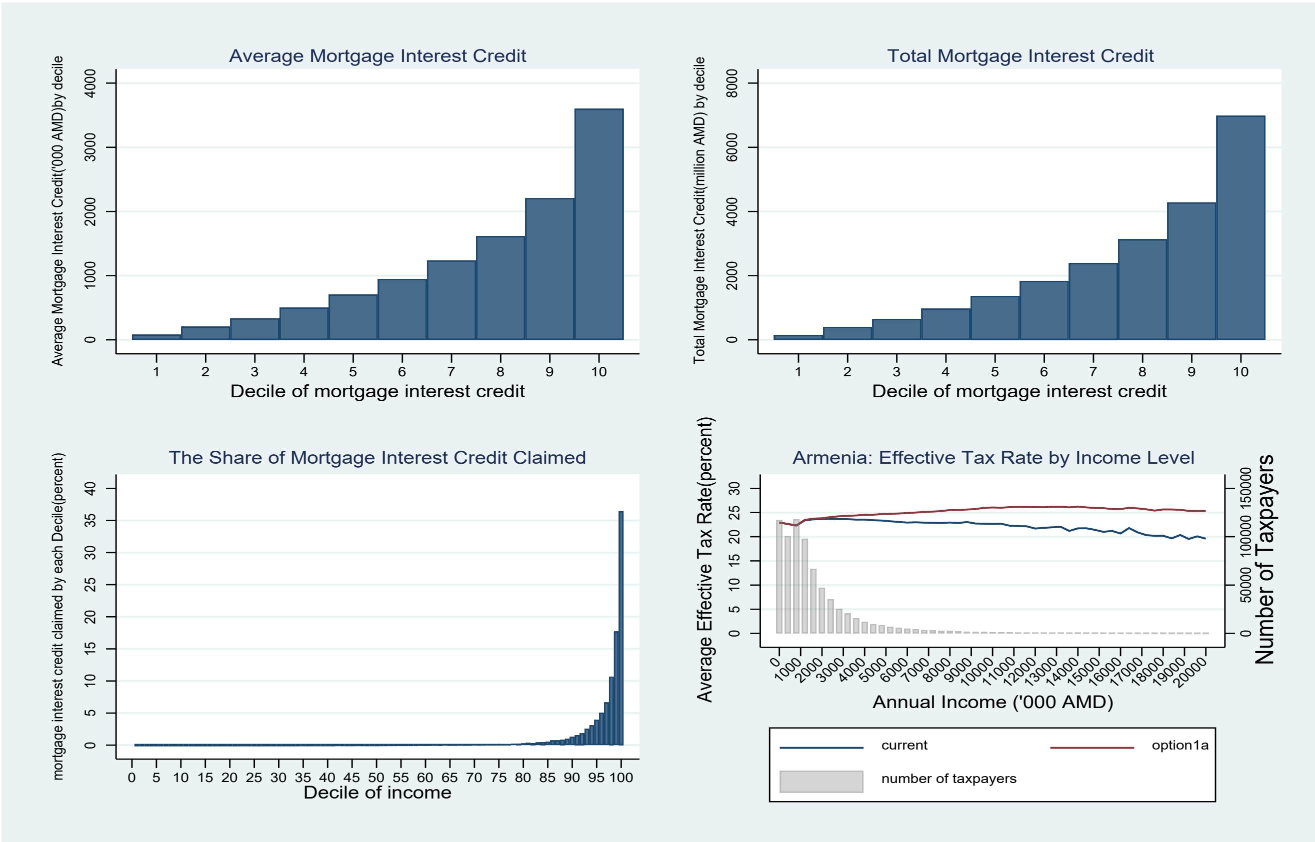
*Source: MoF.*

**29. Eliminating the mortgage interest credit improves progressivity, redistributive capacity of the tax system, and revenue mobilization**. As higher income earners benefit more from the mortgage interest credit, the removal of the tax credit for mortgage interest improves the progressivity and redistributive capacity of the tax system (Figure 5 lower right panel). The redistributive capacity index increases to 0.36 from -0.3 whereas progressivity increases from 0.02 to 1.6. As of 2021, the government credits back 22.7 billion of potential tax revenue to those that claim mortgage interest credit (see Table ). A reform that eliminates these credits would raise revenue by 0.34 percent of GDP or 5.3 percent of current government revenue from PIT[34]. Finally, the authorities indicated that there is evidence that the introduction of this tax credit fueled a boom in mortgage credit and real estate demand. Removing it could therefore support the stability of financial markets as well.

[33] 520,000 AMD is the highest income for those in the bottom two deciles (the 20th percentile).

[34] Revenue from PIT in 2021 was AMD 426.7 billion.

**Figure 5. Progressivity and Redistributive Implication of Reforming Mortgage Interest Credit**



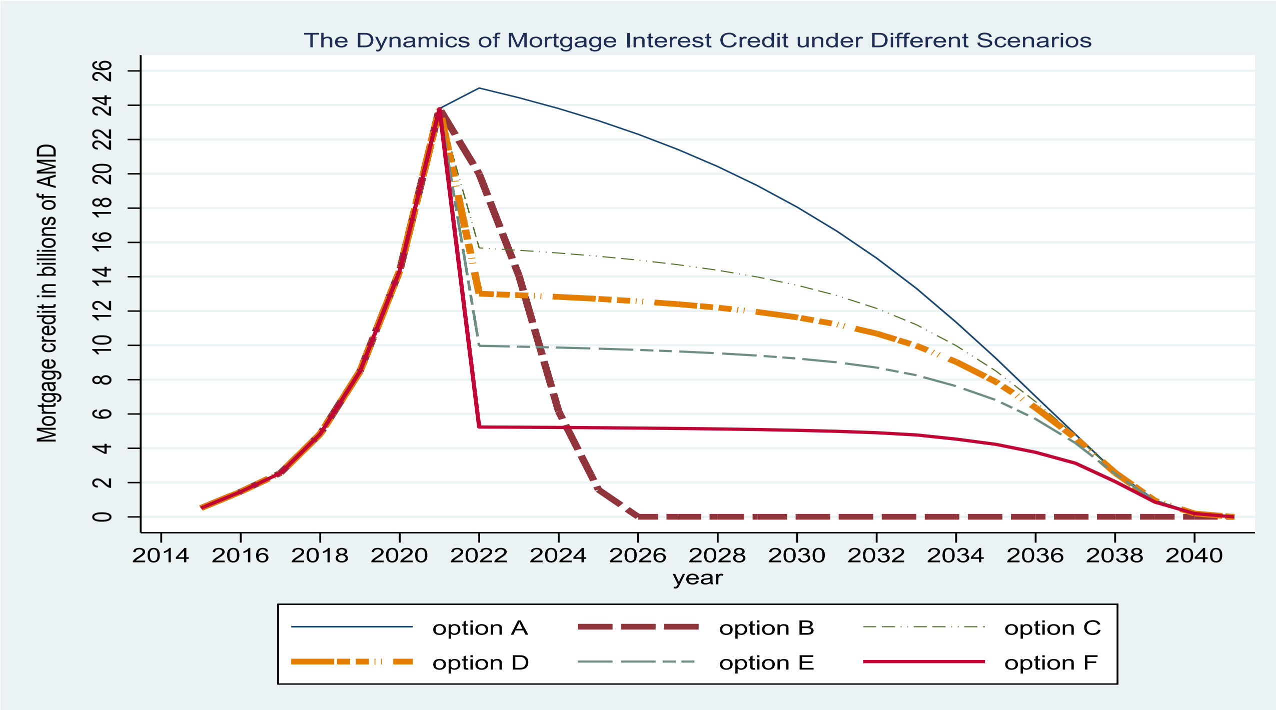

*Sources: SRC, IBFD, IMF Staff calculations*

*Notes: (a) The upper left panel describes the average mortgage interest credit (in thousands of AMD); (b) The upper right panel describes the total mortgage interest credit claimed by decile (in millions of AMD). (iii) The lower left panel describes the distribution of mortgage interest credit by income level. (iv) The lower right panel shows the distribution of the effective tax rate.*

**30. However, unless the reform deals with the existing stock of mortgages, the revenue loss continues to be significant over the next decade**. As Figure 6 shows (Option A), even if new mortgages issued starting from 2023 stop being eligible[35], the revenue loss from existing stock of mortgages continues to be a significant drain on the government revenue. Therefore, any policy that aims at minimizing the revenue loss and introducing progressivity has to deal with limiting the benefit for existing stock of mortgages.

[35] The authorities plan to stop new mortgages that are issued after 2023 in Yerevan from being eligible for the mortgage interest credit. As of 2021, 97 percent of all mortgages are issued for properties in Yerevan and 95 percent of interest credit is from properties in Yerevan. As a result, the planned reform will almost completely stop the issuance of new mortgages eligible for tax credit.

**Figure 6. Mortgage Interest Eligible for Tax Credit in the Next Two Decades**




*Source: CBA and IMF Staff calculations.*

***Option A** is the current policy, including the announced suppression of the tax credit on any mortgage issued after January 2023 in Yerevan[36]. Under this scenario, all mortgages issued until 2022 continue to receive tax credit until the end of the contract.*

***Option B** involves limiting the number of years a mortgage can qualify for tax credit, starting in 2023. Under this scenario, all mortgages would continue to qualify for tax credit but only for three years since being issued.*

***Option C-Option F** involve imitating the amount of tax credit per mortgage, starting in 2023. In option C, the limit is AMD 1 million, in option D the limit is AMD 750,000, in option E the limit is AMD 525,000, and finally in option F the limit is AMD 245,000.*

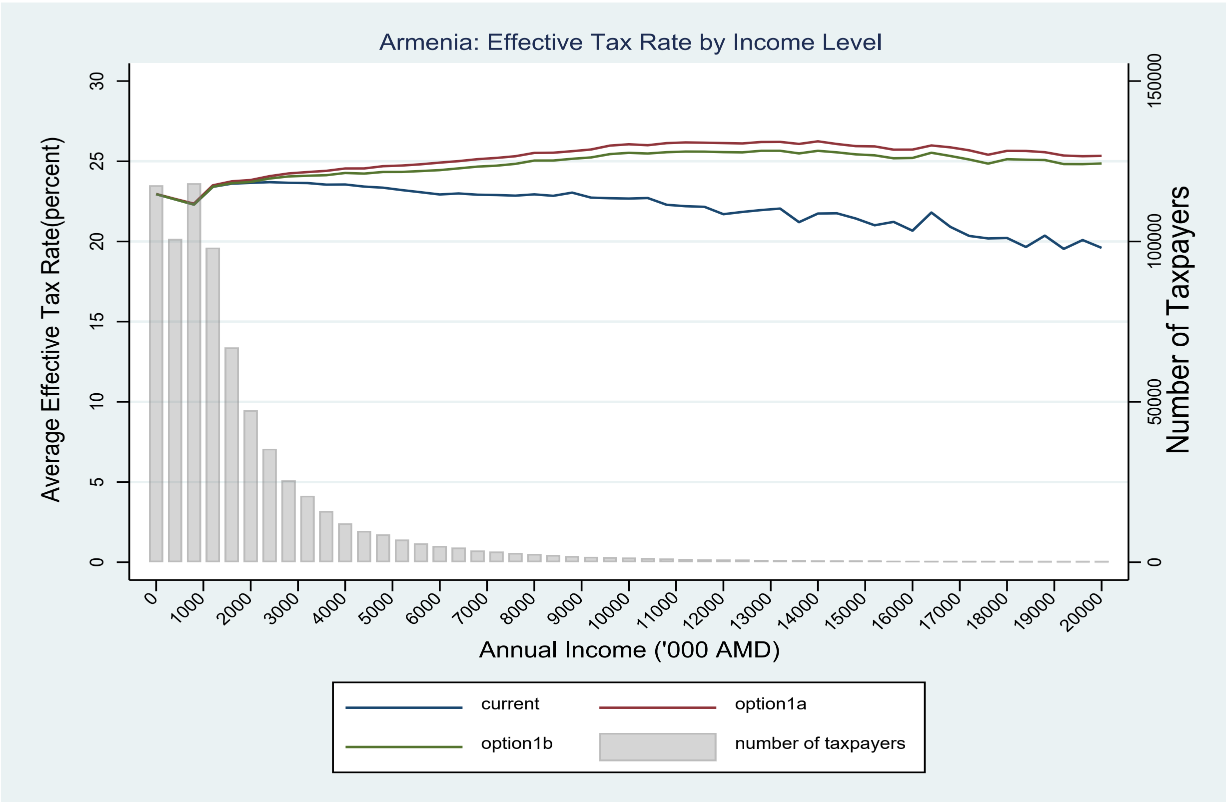
**31. Limiting the mortgage interest credit on existing contracts rather than its complete removal may ease implementation while maintaining the revenue gain and an increase in progressivity.** The proposed cap of AMD 245,000[37] on annual mortgage interest tax credit (Option F) limits the credit claimed to 20 percent of current level. As a result, it increases government revenue by 0.27 percent of GDP compared to the baseline (current system). In addition, the redistribution and

[36] Since Yerevan accounts for 95 percent of all mortgages, the policy amounts to eliminating mortgage interest tax credit from 2023 on.

[37] We allocate 20 percent of the claim on the existing stock of mortgages to be still available. The interest credit threshold that still leaves 20 percent of the credit claimed in 2021 is AMD 245,000. Note that with a flat tax rate of 22 percent as of 2021 and an exchange rate of 503 AMD per USD, a credit of AMD 245,000 is equivalent to an AMD 1.12 million ($ 2,214) tax deduction.

progressivity indexes increase from -0.3 to 0.38 and 0.02 to 1.68, respectively. Figure 7 illustrates how the effective tax rates increases with income under various reforms scenarios.

**Figure 7. Implication of a Repeal of Mortgage Interest Tax Credit Compared to a Cap**



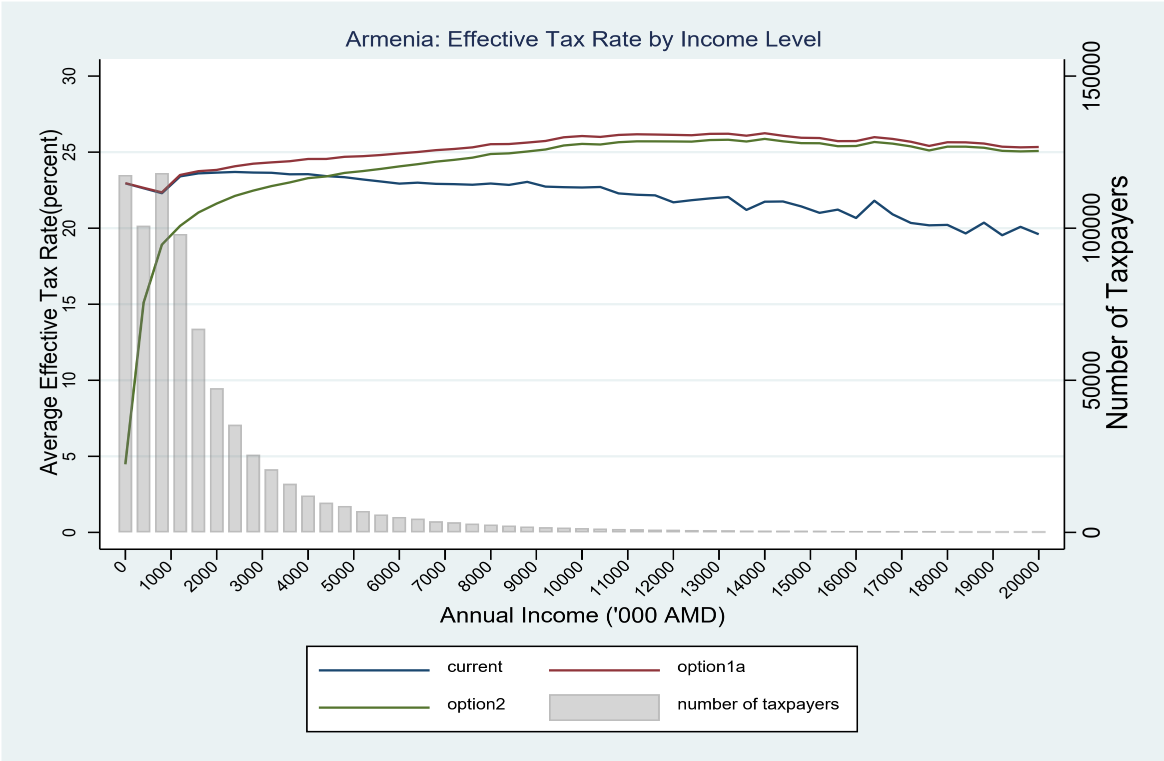

*Sources: SRC, IBFD, IMF Staff calculations.*

*Note: In option 1a we assume that the mortgage interest credit is eliminated for all contracts. In option 1b, a cap of AMD 245,000 (Option F) is assumed on existing mortgages rather than an immediate zeroing of the benefit.*

### Introducing a Zero-Rate Bracket [Option 2]

**32. With its favorable revenue and distributional impact as well as relative ease of administration, a zero-rated bracket could be considered**. The proposed standard deduction of AMD 240,000 is 13 percent of GDP per capita and is equivalent to $ 593. The proposed threshold is at the lower end of peer countries as a multiple of GDP per capita (see Table 3) and has been set running simulations – seeking a adequate balance between revenue losses and progressivity gains. Introducing this standard tax deduction in addition to changing the mortgage interest credit rule increases the redistributive and progressivity index by 1.9 and 5.8 percentage points, respectively. If combined with the elimination of the mortgage interest credit, on net, government revenue remains close to the baseline current system (Figure 10).

**Figure 8. Progressivity and Redistributive Implication of Introducing a Zero-Rated Bracket**




*Sources: SRC, IBFD, IMF Staff calculations.*

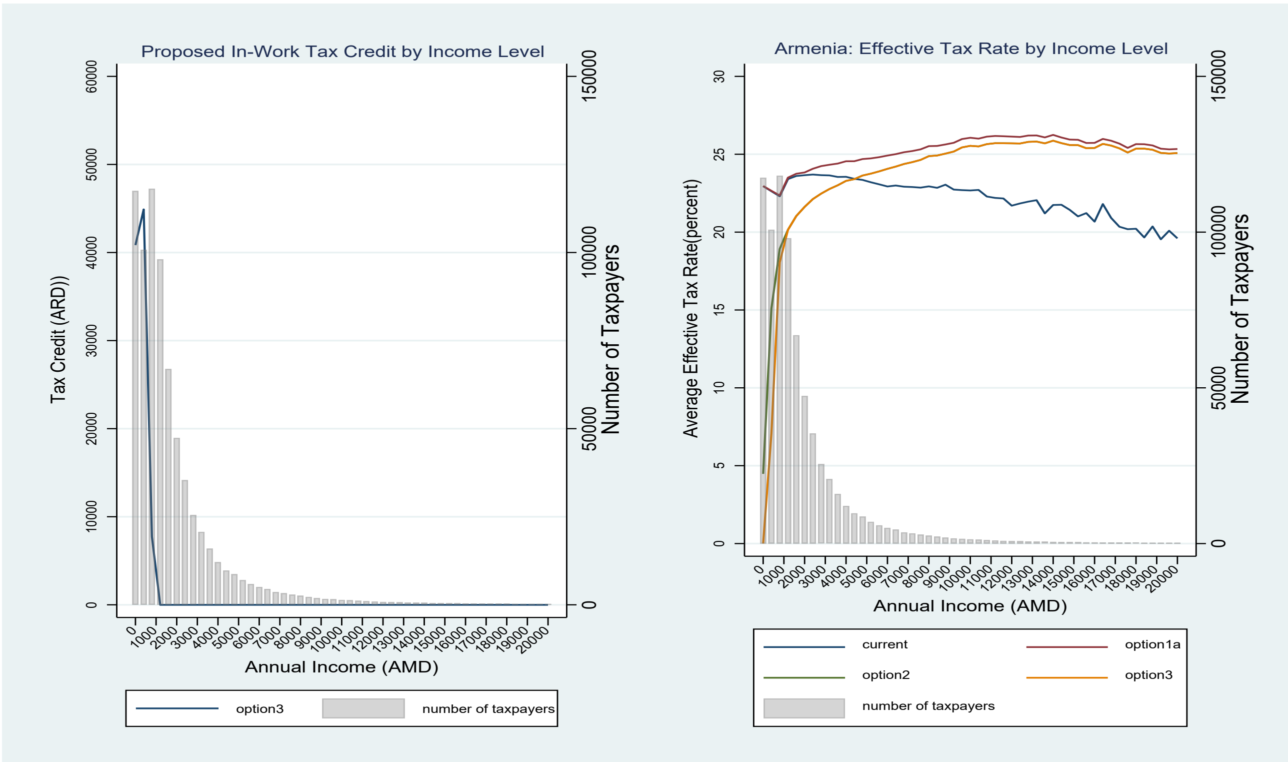
## Introducing an IWTC

**33. An IWTC incentivizes formalization and further increases progressivity with limited revenue loss**[38]. In this illustrative scenario, we introduce an IWTC in addition to a zero-rated bracket and the elimination of the mortgage interest tax credit. An IWTC is simulated with the characteristics specified under Option 3 (see Table 5): at the lowest income levels (below AMD 240,000), the IWTC is a net outlay (as the PIT rate is zero) which increases with income, rewarding additional labor supply; at higher income levels, the IWTC only decreases gradually (above EUR 53,000), which is also incentive-compatible with increased labor supply. This IWTC implies that the lowest 10 percent of labor income earners receive a net payment from the Government. Such a reform significantly improves the progressivity and redistributive capacity of the tax and transfer system (from -0.32 to 2.57 and from 0.02 to 9.41 respectively). As Figure 9, right panel, shows, this impact is due to a large reduction in the effective tax rate of low-income taxpayers. In addition, the revenue loss associated with the reform is minimal (0.19 percent of GDP). The proposed standard deduction and IWTC will be relatively revenue neutral even with only capping the tax credit on existing mortgage contracts,

[38] For a context regarding the in-work credit, the earned income tax credit in the US ranges from $560 to $6,935. Adjusting for GDP per capita difference, the minimum credit is 16,000 AMD. Considering the revenue implication, we choose a slightly lower value of 15000 AMD. The maximum credit in our scenario is equivalent to $1,980.

rather than its complete elimination[39]. The progressivity and redistribution indexes, compared to baseline, increase from 0.02 to 9.28 and from -0.32 to 2.47, respectively.

**Figure 9. Progressivity and Redistributive Implication of Introducing in-work credit**




*Sources: SRC, IBFD, IMF Staff calculations.*

## Summary of Impact on Revenue

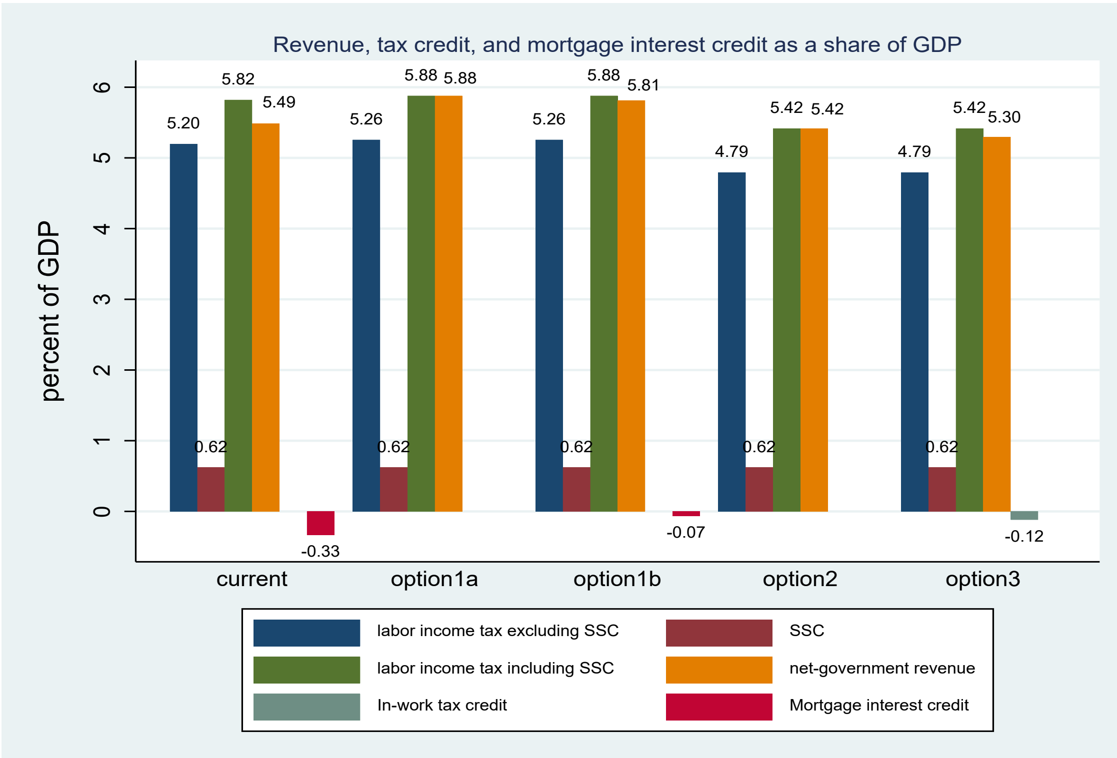
**34. Reforming the mortgage interest tax credit enables the introduction of a standard allowance and an IWTC in a close to revenue-neutral way**. As Figure 10 shows, stopping the credit including for the existing stock of mortgages increases government revenue by at least 0.34 percent of GDP[40]. Grandfathering the existing stock of mortgages with a limit on the amount of credit they can

[39] Note that option 4 (limiting the mortgage interest credit) includes the standard deduction and in-work credit.

[40] The figure we included is calculated as AMD 22.7 billion of mortgage credit as of 2021 divided by a GDP of AMD 6.983 trillion. The tax expenditure report issued by the Ministry of Finance, on the other hand, is estimated to be AMD 38 billion for 2022. The main difference between the actual benefit provided (AMD 22.7 billion) and the estimated tax expenditure (AMD 38 billion) is that the former (actual) accounts for all the limitations on the credit. These include the AMD 6 million annual cap. And some of the mortgages may not even get the entire AMD 6 million cap as there is a 1.5 million quarterly cap. i.e., If the mortgage interest in the first quarter, for instance, is AMD 1 million and 1.7 million in the other three quarters, the taxpayer will only get AMD 5.5 million instead of the whole 6 million credit. In fact, our simulations show that once these factors are accounted for, the mortgage interest tax credit claims in 2021 drop from AMD 38 billion to 22.7 billion.

claim annually (AMD 245,000) keeps the revenue gain while enabling a smoother transition[41]. Finally, coupling standard deduction and IWTC with elimination of mortgage interest credit leads to minimal loss of revenue (0.19 percent of GDP) compared to the current scenario. As mentioned, caveats apply on the feasibility of introducing a zero-rated bracket and an IWTC in the short term.

**Figure 10. PIT Revenue across Scenarios**




*Sources: SRC, IBFD, IMF Staff calculations.*

*Note: SSC is social security contributions from all pension pillars.*

## Tax Policy Recommendations

- Repeal the tax credit on mortgage interest, with grandfathering of existing contracts with yearly interest below an upper limit in the range of AMD 245,0000-300,000, which could yield up to 0.27 percent of GDP in new tax revenue and significantly improve progressivity of the tax system.
- Repeal the tax credit on reinvested dividends, which could yield at least 0.13 percent of GDP in new revenue.

[41] In this scenario (cap on mortgage credit), government revenue increases by 0.27 percent of GDP capered to the current system.

- Introduce a 10 percent withholding tax on capital gains, excluding capital gains on housing to the sale of a taxpayers' primary residence, up to a specific amount to be calibrated so it covers most or all capital gains for most taxpayers.
- Conditionally, on an assessment of sufficient administrative capacity (including auditing of individuals) and on the fiscal feasibility of the measure, introduce a zero-rated PIT bracket with an upper threshold in the range of AMD 240,000-300,000 annually, which would cost about 0.46 percent of GDP.
- Conditionally, on an assessment of sufficient administrative capacity (including auditing of individuals), consider the introduction of an IWTC that is annually capped at AMD 53,000 and phase out for income above AMD 800,000, which could cost about 0.19 percent of GDP.

# III. TAX ADMINISTRATION

## A. Current Administrative System

**35. The State Revenue Committee of the Republic of Armenia (SRC) is the national Tax Administration.** It is charged with maintaining the current system of taxation of individuals who are not in business as long as it is required and implementing the new Universal Declaration Policy (the Policy) through creating the Universal Declaration Administrative System (the System). The two systems will operate in parallel until the current system is redundant.

**36. Armenia's tax system is a self-assessment system.**[42] Under this system the income and claims a taxpayer makes in their declaration are accepted by the tax administration after electronic pre-assessment checks and an assessment notice is issued. Even though a declaration may be initially accepted it may still be subject to further risk based post-assessment review or adjustments if third-party data is corrected. Currently the SRC has no legislative power to undertake audits of PIT Taxpayers. It is recommended that the Tax Code is amended to allow tax audits of individuals This is an important consideration in the design of the new system.

**37. Individuals are not subject to audit.** As pointed out by the 2016 and 2018 FAD capacity development (CD) missions, the law allows audit of companies but not individuals (natural persons). With sufficient information collection mechanisms in place, audits by tax authorities should act as an incentive for increased compliance and tax collection from individuals. The introduction of a Universal PIT Declaration, with the collection of comprehensive information on individual taxpayers, is an excellent opportunity and justification to include natural persons in the scope of audits.

**38. Under the current system, individual taxpayers who are not in business (i.e., only derive income from employment or passive income) are not required to file a tax declaration or**

[42] As advised by MoF.

**return.** The current system is streamlined because employees are taxed on a flat rate of 21 percent[43] with no threshold, as noted. The final PIT is withheld by the employer, reported electronically, and paid to the SRC monthly. Withholders of taxes are called Tax Agents. The reporting includes a wide range of information, including name and a unique identifier. There is also withholding and reporting to the SRC of passive income by payers (Tax Agents) and this includes, interest, dividends, royalties, and some rental arrangements. There is no reporting system for rental income where the rental is arranged privately and not by a rental agent (Tax Agent). The extent of noncompliance is unknown.

**39. There are several incentives that are provided through the tax system.** Taxpayers claim these through various systems on a quarterly or annual basis, depending on the benefit (see description above). They claim a refund from tax withheld and it is paid into a bank account.

**40. There are many of the necessary foundations for the new Universal Declaration Administrative System already in place.** These include a mature withholding tax system with 58,945[44] employers, 739,997[45] employees, and mandatory electronic lodgment of the withholding return. However, they do not report information to identify the owner of the account to the SRC.

**41. Importantly, there are good IT systems and infrastructure in place.** Since 2010 all functions have been automated. There has been significant World Bank support in this area.

## B. Universal Declaration Administrative System

**42. The proposed Universal Declaration Administrative System[46] for PIT is a major reform in size and scope**. It will require a significant IT build, will have wide ranging community impacts, and will require good communication with all stakeholders, in particular the affected taxpayers. It is important to note that this is not just an IT challenge, it will impact on many areas of the SRC. The SRC advised that it is expected that the IT build would take twelve months to complete once the legislation is passed.

**43. Many countries have implemented a system of Universal Declaration**.[47] They have developed Universal Declaration Administrative Systems to support their declaration regimes which

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[43] Rates to change to 20 percent in 2023.

[44] See International Survey on Revenue Administration (ISORA) Data 2018.

[45] See Table 4 above.

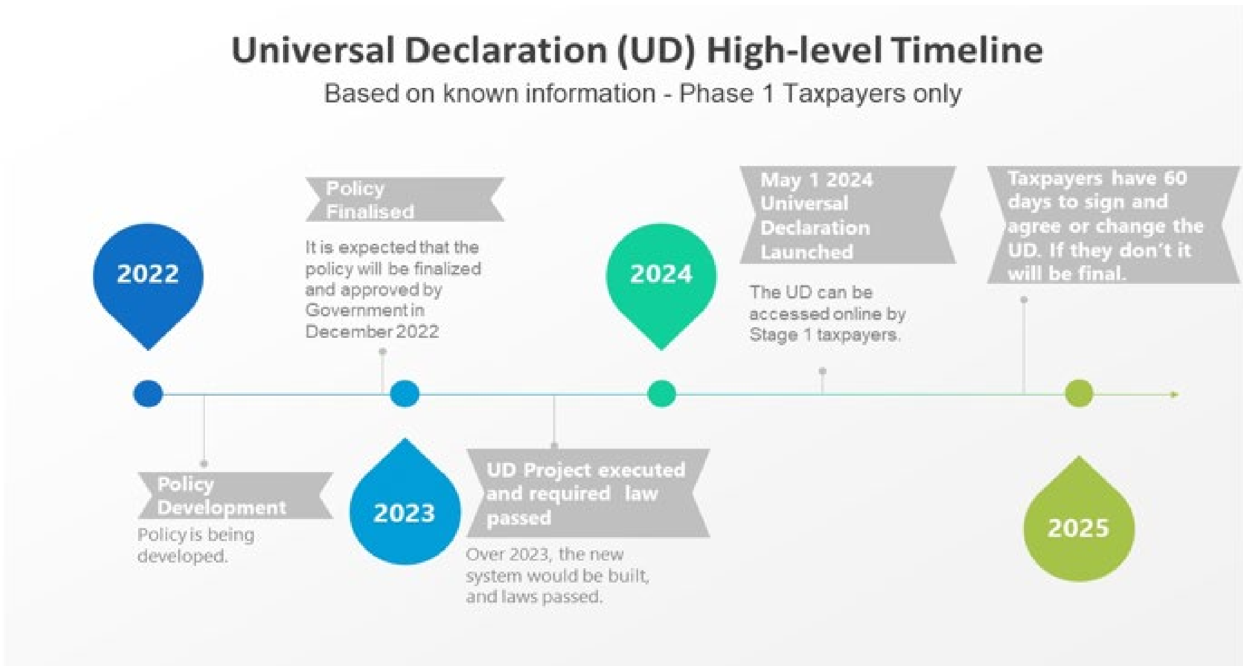
[46] See high-level description of the system in Prime Ministers Decree N 919 2022-2025 Program for Managing Tax Revenue.

[47] See, for example, Tax Administration 2021, Comparative Information on OECD and other Advanced and Emerging Economies, OECD, page 334.

may go by many different names and "brands".[48] A simulator of the Australian tax return system for individual taxpayers was provided to MoF and SRC staff.[49]

**44. In summary, the proposed Universal Declaration Administrative System will operate on the following basis.** The SRC will continue to collect withholding tax and identifying data from employers and passive income providers. This data and the data that it already holds (e.g., the data in the register of employees) will be presented electronically to an individual as a prefilled return. The individual will either accept or add missing income (e.g., Private Rental Arrangements and income not reported by a Tax Agent). If the taxpayer does not sign the declaration after a certain period, it will be taken as deemed acceptance by the taxpayer.[50] Below is a high-level timeline for the launch of the new system.

**Figure 11. Implementation Timeline**




*Source: IMF Staff.*

**45. Taxpayers will then electronically "sign" the return and make a declaration that it is true and correct.** If they do not sign the return within sixty days (based on international good

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48 For example, the Australian Taxation Office's (ATO) system is branded myTax which is a registered trademark.

49 See ATO simulator at https://onlineservicessimulator.ato.gov.au/.

50 There are at least fifteen countries with deemed acceptance: Austria, Belgium, Cabo Verde, Denmark, Finland, France, Grenada, Hungary, Malta, Moldova, New Zealand, Norway, Portugal, Singapore, South Africa. See ISORA Data 2022.

practice), it will be deemed as accepted by the taxpayer (deemed acceptance). In Box 2 below is an example of the declaration that is required in the Australian tax return for individual taxpayers.[51]

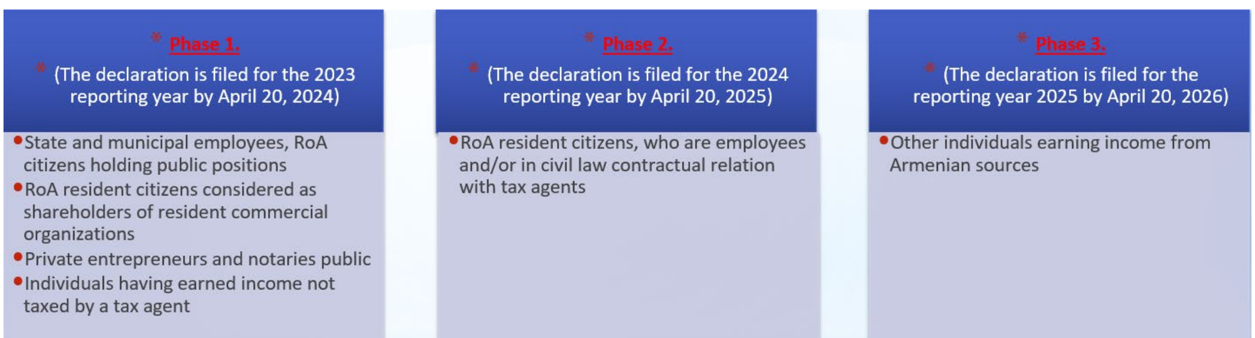
**Box 2. Declaration from the Australian tax return**

I declare that:

- all the information on this tax return, including pre-filled information, is true and correct
- all the income I have to declare for 2021-22 is included, and
- I have the necessary receipts and other records – or expect to obtain the necessary written evidence within a reasonable time of lodging this tax return - to support my claims for deductions and tax offsets.

**46. The Universal Declaration Administrative System is planned to be introduced on a phased approach from 2024 reporting FY2023 income.** Importantly, the first Phase will include State and Municipal employees, citizens of the Republic of Armenia (RoA) holding public positions, shareholders of companies, private entrepreneurs and notaries public, and individuals earning income without withholding tax withheld by a Tax Agent. Figure 12 below sets out the three phases. It is estimated that 200,000 taxpayers will be involved in Phase 1.[52] Phasing is supported by the Mission Team as it mitigates several implementation risks.

**Figure 12. The Three Phases**




*Source: Armenia MoF.*

**47. The final Universal Declaration Detailed Policy (the Policy) that can be used to build a new system has not yet been finalized and approved by the Government of Armenia[53].** There is no conclusive statement of the Policy as it is still in development. At this stage there are questions outstanding, for example, who will be included in the declaration population has not been determined. For example, should all citizens, minors, people, for example, on a non-taxable pension and others who have no legal obligation to participate in the tax system be included. Including those

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[51] In the Australian tax system, the return must be signed. There is no provision for deemed acceptance.

[52] Source MoF.

[53] The High-Level Policy is in Prime Ministers Decree N 919 2022-2025 Program for Managing Tax Revenue.

people who have no legal obligation to participate in the tax system will add complexity to the system.

**48. The Mission Team were advised that the Universal Declaration Policy would be finalized by the end of December 2022.** In the interim, it is essential that the MoF and SRC work together on the design to ensure that it can be implemented efficiently and effectively with low costs of compliance by the taxpayers. It is recommended that a working group be formed with both senior MOF and SRC staff and the staff who will build and operate the new Universal Declaration Administrative System to resolve some of the outstanding issues.

**49. Once the Policy is approved by Cabinet, further legislation will be required to give effect to the Policy**. For example, there is no legislative power to review and alter the declaration by the SRC after acceptance or deemed acceptance.[54] To undertake such a review using indirect audit techniques, in the most egregious cases, would require access to full bank information in those cases.[55] The additional indirect audit methods recommended in the recent IMF-FAD report[56] would need to be incorporated into the Tax Code.

**50. There are several design principles that were identified by the mission team that should be kept in mind.** They are based on a strong focus on the user experience (UX). This is essential for the adoption of the system by the community. UX design is entirely focused on users, which makes usability of the design one of the most crucial user experience design principles. The basic principle is it will not get take up by the users unless it is easy to use.

**51. The identified international good practice design principles are in** Box 3 **below and are self-explanatory.** There may be other design principles identified when the Policy is final.

**Box 3. International Good Practice Design Principles**

The Universal Declaration Administrative System should:

- Be implemented on the phased approach as planned.
- Prefill data, as much as possible, from third-party data (including interest income from banks) and information held on SRC systems.
- Be based on the principle of reporting to government agencies only once.
- Be a secure online system able to be accessed on computers and other devices.
- Bring together in one place not only incomes, but all benefits (tax transfers) that are provided through the tax systems.

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[54] It is common in Universal Declaration systems for third-party data providers to re-report data because of errors.

[55] See recommendations in IMF-FAD Report, *Republic of Armenia Tax Compliance - Indirect Audit Methods*, September 2021.

[56] See recommendations in IMF-FAD Report, *Republic of Armenia Tax Compliance - Indirect Audit Methods*, September 2021.

**52. The mission team recommends that, in line with international good practice, SRC prefills the Universal Declaration as much as possible**. In this situation, the tax administration, rather than the taxpayer, is the originator of the declaration for a majority of the personal income taxpayer population, using a large range of third-party information sources and other information held by it, which is relevant to each taxpayer's tax affairs. In countries where these arrangements have been established on a comprehensive basis, prefilled returns are made available to the relevant taxpayer electronically for their confirmation, or if necessary, to obtain any additional information required to enable a final assessment to be made. There are limitations that will depend on the tax system, as to the extent to which complete and accurate prefilled returns can be generated for the bulk of the taxpayer population. Based on international good practice, the declaration would be available on a secure online system.

**53. As noted, in the current system the Armenian banks are not required to report interest income with a unique identifier for the holder of the account.** In the new system this means that interest income will not be able to pre-filled, and it may undermine the Government's policy intent for the Universal Declaration. It will mean that all income will not be disclosed. The Mission Team met with the Deputy Governor of the Central Bank who advised the Mission Team that an agreement can be reached where the banks would be required to provide this data to the SRC for the purposes of prefilling the Universal Declaration.

**54. There are several foundational issues that need to be considered, particularly the taxpayer register, compliance with the current system, and the withholding system**. A comprehensive system of taxpayer registration and identification is critical for the effective operation of a Universal Declaration Regime. The SRC has an employee register in place. There does not appear to be register of individuals who earn passive income and so the taxpayer register is not complete. It is also important that the withholding system is robust and as many employers who should be in the system are in the system. It is important that there are high compliance levels with the current system to ensure a smooth transition to the new system. A number of compliance risks that impact on the new system were raised, including Rental income and Freelancers. It is recommended that the SRC, using Compliance Risk Management processes[57], undertake Risk Assessments on the Taxpayer Register, Rental Income, Freelancers, Seasonal Workers, and the Platform Economy and develop appropriate Compliance Improvement Plans[58]. Changes to the law may be required to address these risks.

[57] See *Revenue Administration: Compliance Risk Management: Overarching Framework to Drive Revenue Performance*, IMF at https://www.imf.org/en/Publications/TNM/Issues/2022/08/26/Revenue-Administration-Compliance-Risk-Management-Overarching-Framework-to-Drive-Revenue-520479

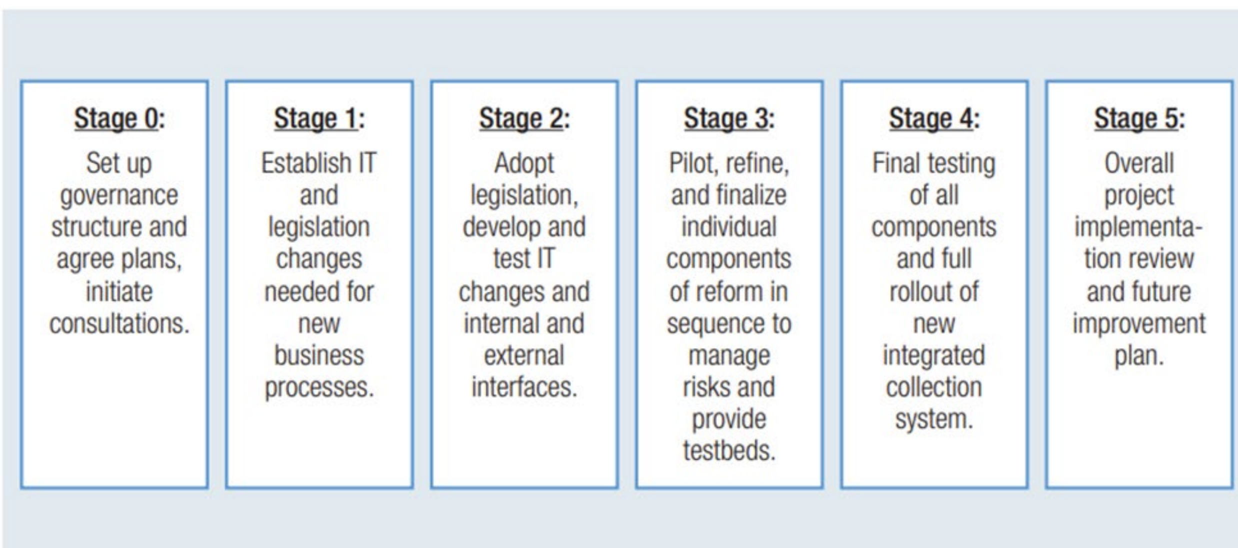
[58] See Compliance Risk Management: Developing Compliance Improvement Plans, IMF at Compliance Risk Management: Developing Compliance Improvement Plans (imf.org).

## C. Implementation Governance and Project Management

**55. Reform projects on this scale have the potential to cause major disruption to the day-to-day activities of all stakeholders who depend on the smooth running of the tax system.** These risks, to both the existing and the new system, are best managed and mitigated by staging the implementation of the reform. This involves comprehensive requirement mapping of each component of the reform and repeated testing and refinement until each component achieves an agreed performance standard, while the existing system continues to operate until every component is proved to be ready to be brought into play.

**56. The implementation cycle characterizing such an approach may be divided into six key stages.** The first two stages lay the foundations for the reform. The next two are about designing, testing, and sequencing each separate component of the reform. The fifth stage entails full implementation of the new system and occurs only when all the individual components are performing satisfactorily. And the final stage, which is about learning how to refine and improve the new system, occurs once it has bedded in. This staged approach is summarized in Figure 13, below. Further explanation of each stage can be found in the IMF Technical Note and Manual 21/01.[59]

**Figure 13. Implementation Cycle**



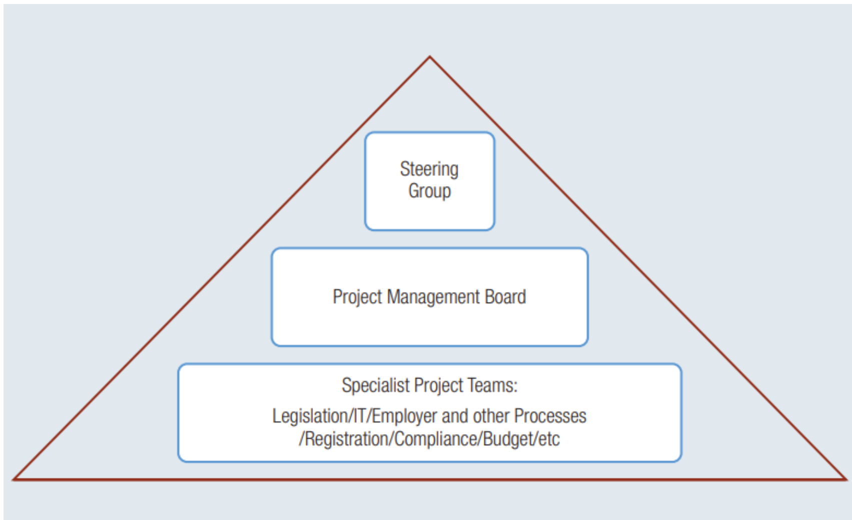

*Source: IMF Staff.*

**57. Stage 0 is critical and should be implemented as a matter of urgency.** Stage 0 lays the first foundations for the reform by establishing a transparent and accountable governance framework and effective internal and external communications strategies. This framework should consist of three basic layers, represented in Figure 14, with a cross government steering group

[59] See Integrating the Collection of Social Insurance Contributions and Personal Income Taxes, IMF at Integrating the Collection of Social Insurance Contributions and Personal Income Taxes (imf.org)

providing strategic oversight and cross-government support for the project; a Project Management Board (with MoF representation) responsible for overall management and coordination; and specialist project teams providing the detailed planning and implementation work on each strand of the reform.

**Figure 14. The Governance Pyramid**




*Source: IMF Staff.*

58. **Appropriate staffing—both in terms of skills and stakeholder representation—of each of these governance layers is important.** This should help ensure that the detailed changes necessary are properly scoped and budgeted for, that all stakeholders are consulted, involved, and represented, and that the project receives continuing support at the highest government level.

59. **The Steering Group should have very senior chairmanship and members should be drawn from all ministries with an interest in the reform.** In addition to the SRC and MoF, the Steering Group's composition will depend on Armenia's institutional framework. Its job is to provide strategic leadership and direction, to oversee the work of the project board, to resolve interdepartmental disagreements, and to ensure enduring high-level political commitment to the change. Such commitment will usually depend on wider stakeholder support for the project; including one or more nongovernment representatives—from, for example, bodies representing employers and tax professionals—on the Steering Group can help secure and maintain that support, as well as providing an external perspective.

60. **The Project Management Board should include experts with relevant technical and project management skills and experience and be chaired a by senior SRC official at the Deputy Chairman level.** It is charged with managing and coordinating the work of the project teams, producing a consolidated budget and timeline and reconciling it with the steering group, and identifying and managing resource bottlenecks and other risks.

**61. Project teams should be staffed full-time by subject experts in the various strands of the reform— IT, legislation, operational processes, compliance, taxpayer services, and so on.** Their job will be to scope in detail the nature of the changes necessary in their respective areas, to produce realistic timetables and budgets, and to implement those changes in due course. During Stage 1 the project teams carry out detailed scoping of the various changes needed in their areas of responsibility. This would include producing resource budgets and implementation timelines, which are then tested and consolidated by the Project Management Board and reconciled with the Steering Group. The work of the project teams needs to cover all the aspects and implications of the reform: legislation, IT, business processes, employer reporting and electronic processes, audit and risk assessment routines, banking, accounting, debt management and arrears collection, organizational changes, the transfer, recruitment and training of staff, and employer and other taxpayer information and education.

**62. A typical scope of a project team brief is shown in** Box 4 **below.** The Project Management Board consolidates the results of these scoping exercises to produce a budget and timeline for the project as a whole. It should also identify potential interdependencies and other risks and develop strategies for managing them, including escalation to steering group level when necessary.

**Box 4. Scope of Project Team Briefs**

Brief for each workstream to include:

- Clear mapping of the work to be undertaken.
- Timelines for delivery of each work component.
- Milestones with delivery dates to allow tracking and early warning of risks.
- Dependencies: internal (with other workstreams) and external (with other department and government reforms).
- Connection between workstream activities and overarching reform.
- Appropriate parameters to measure success of team's delivery.
- Estimated budget including clearly identified contingency.
- Details of key staff resources and where/how obtainable.
- Workstream risk register.

*Source: IMF Staff.*

**63. As much as possible, the principles of UX based design should be used.** Box 5 below sets out the main principles.

**Box 5. UX Based Design Principles**

- **Start early.** Early in the project, spend time with current and prospective users to better understand their perspective and the context of the problem.
- **Use a range of methods of UX based design.** Use a range of qualitative and quantitative research methods to determine people's goals, needs, and behaviors.
- **Use prototypes.** Use prototypes to test your assumptions and solutions with real people, in the field if possible.
- **Share your findings.** Document and share your research findings with team members, managers, and the public whenever practical.
- **Test regularly.** As the product is being built, regularly test it with potential users to ensure it meets people's needs.

*Source IMF Staff.*

**64. The SRC can learn from other tax administrations who have implemented such systems.** For example, Kazakhstan, a fellow member country of the IMF's Caucasus, Central Asia, and Mongolia Regional Capacity Development Center (CCAMTAC)[60], has already shared its experiences. The IMF can assist the SRC to connect with other Tax Administrations in the region that have implemented Universal Declaration Systems.

## D. Implementation Risks and Mitigations

**65. There are several significant implementation risks that need to be managed and mitigated.** As the Policy is not finalized, the list of implementation risks is not yet comprehensive. Table 8 below sets out some of the possible risks and mitigation strategies to be considered and adopted.

[60] See https://ccamtac.imf.org/

## Table 7. Implementation Risks and Mitigations

| Risk | Mitigation |
|---|---|
| There is poor governance of the reform. | Implement the structures and arrangements described in the 'Implementation Governance and Project Management' sub-section above (Figure 13, Figure 14) |
| There is poor planning. | SRC to develop a comprehensive Project Plan to implement to new system as soon as possible. |
| There are compliance issues with the current system (e.g., Rental income, Freelancers, Seasonal and Platform Workers, and Private Rental Arrangements) that should be addressed in preparation for the new system. | Develop a risk assessment to evaluate the extent of the noncompliance and develop Compliance Improvement Plans, if necessary, to address the risks. This may include recommendations to change the law. Addressing these risks, will require access to bank information and the power to undertake audits of individuals. |
| The SRC staff do not know about the new system or can't advise individual taxpayers. | Develop a staff skilling and training plan. Ensure that all SRC staff have an awareness of the new system and that there are sufficient SRC experts to advise individual taxpayers. |
| Individual taxpayers have not heard about the new system. | Develop a Marketing and Communication Plan. |
| Individual taxpayers do not know how to use the new system. | Have clear instructions in place so that individual taxpayers can "self-service" as much as possible and have other taxpayer services in place e.g., call-center, provision of advice, education, website. |
| An individual taxpayer's prefill data is not complete or available. | Ensure that there is extensive third-party data collection and quality of data. |
| Information Technology Build and Declaration interface and systems. | Ensure that SRC's current IT technology and capacity can deliver the new system. |
| Compliance assurance. | The new system may generate refunds and the SRC needs to ensure that there is integrity in the tax refund system to mitigate potential fraud. In addition, improving compliance with the registration, withholding and reporting systems. |
| Individual Taxpayers do not know that the declaration is available to review and sign. | Look at ways to inform the taxpayer, e.g., email or SMS. |
| Low community take-up and a low level of participation. | Ensure that Individual Taxpayers understand the benefits of participating. In later phases, there will be taxpayers with low financial literacy and potently poor access to technology/internet. Consider international good practices to support these taxpayers e.g., volunteer services provided by community members to assist with electronic lodgment. |
| Taxpayers have to pay for an electronic signature to sign their declaration. | Ensure that taxpayers can "sign" their declaration without charge. |
| Senior Civil Servants will have to lodge an Anti-Corruption Declaration and a Universal Declaration. | Ensure that those affected understand why. |
| The Taxpayer Register is not complete. | The taxpayer register is a foundation on which to build the new system. Ensuring that the system is complete is essential. SRC needs to make it easy for initial registration of natural persons via multiple registration channels. |
| Poor consultation with external stakeholders. | Set up a consultation forum with impacted stakeholders. |

*Source: IMF Staff.*

### Revenue Administration Recommandations

- As a matter of urgency, create a joint SRC and MoF working party to co-design the new system so that all administrative and policy issues are considered, and an efficient and effective system is implemented.
- Implement the governance and project management structures and arrangements as set out in Figure 13 and 14, above. As a matter of urgency, implement Stage 0.
- Amend the Bank Secrecy law so that it is mandatory for banks to provide the SRC with all interest receipts and a unique identifier so that the interest can be pre-filled into the individual tax declaration.
- Amend the Tax Code to allow tax audits of individuals.

# IV. CAPACITY DEVELOPMENT

**66. The SRC may consider requesting CD assistance from the IMF on implementation of the Universal Declaration.** The area that may be of greatest assistance is addressing the risks identified in Table 8, above, and advising on international good practices to mitigate them.

**67. The authorities may also consider requesting IMF assistance on a possible reform of the taxation of micro and small enterprises.** This issue, which also bears on CIT and VAT, could be the object of specific assistance. Assistance could also be provided on social protection.

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# APPENDIX I. GOVERNMENT REVENUE BY SOURCE, LATEST AVAILABLE YEAR (PERCENT OF GDP)

| Country | Year | Total Revenue | Tax Revenue (excl. SSC) | Income, Profits, and Capital Gains | | | | Payroll | Property | Consumption | | | | | International Trade | Other Taxes | Social Contributions | Grants | Other Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Personal Income | Corporate Income | Other | Total Income | | | General | VAT | Excises | Other | Total | | | | | |
| Armenia | 2020 | 25.2 | 22.0 | 6.7 | 2.4 | 0.0 | 9.1 | ... | 0.4 | 7.9 | 7.5 | 2.0 | ... | 11.7 | 1.1 | ... | 0.4 | 0.9 | 1.9 |
| Albania | 2019 | 27.2 | 19.4 | 1.9 | 2.9 | 0.0 | 4.7 | ... | 0.3 | 8.3 | 7.8 | 2.8 | ... | 13.7 | 0.4 | 0.2 | 5.7 | 0.5 | 1.6 |
| Azerbaijan | 2020 | 33.8 | 15.8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15.8 | 3.3 | 0.0 | 14.7 |
| Belarus | 2020 | 35.8 | 22.8 | 4.5 | 2.1 | 0.0 | 6.7 | ... | 0.9 | 9.2 | 8.5 | 2.1 | ... | 11.7 | 2.8 | 0.6 | 10.9 | 0.4 | 1.7 |
| Herzegovina | 2020 | 41.6 | 22.0 | 1.8 | 1.7 | 0.0 | 3.6 | ... | 0.3 | 16.7 | 16.7 | 0.3 | ... | 17.6 | 0.0 | 0.5 | 15.8 | 0.2 | 3.5 |
| Bulgaria | 2021 | 35.0 | 20.7 | 3.7 | 2.6 | 0.0 | 6.2 | ... | ... | 14.0 | ... | ... | ... | 14.0 | 0.2 | 1.1 | 7.3 | 2.6 | 6.0 |
| Croatia | 2020 | 48.0 | 25.8 | 3.8 | 2.3 | 0.0 | 6.1 | ... | 0.7 | 13.1 | 12.8 | 4.3 | ... | 18.9 | 0.0 | 0.1 | 12.1 | 2.7 | 7.4 |
| Estonia | 2021 | 40.4 | 22.4 | 7.1 | 1.7 | ... | 8.7 | ... | ... | 9.5 | ... | ... | ... | 9.5 | 3.5 | 0.6 | 12.5 | 2.3 | 3.2 |
| Georgia | 2020 | 25.1 | 22.2 | 6.7 | 1.9 | 0.0 | 8.6 | ... | 0.9 | 9.2 | 9.2 | 3.3 | ... | 12.5 | 0.2 | 0.1 | ... | 0.8 | 2.1 |
| Kosovo | 2020 | 25.5 | 22.1 | 2.3 | 1.3 | 0.0 | 3.6 | ... | ... | ... | ... | ... | ... | 16.7 | 1.5 | 0.4 | ... | 0.6 | 2.7 |
| Moldova | 2019 | 29.9 | 19.0 | 1.9 | 2.6 | 0.0 | 4.4 | ... | 0.3 | 9.6 | 9.6 | 3.0 | ... | 13.5 | 0.9 | 0.0 | 8.7 | 0.8 | 1.4 |
| Montenegro | 2020 | 43.3 | 26.9 | 4.0 | 1.9 | ... | 5.9 | ... | 0.4 | ... | 12.7 | 4.9 | ... | 17.6 | 0.5 | 2.6 | 11.4 | 1.6 | 3.4 |
| Macedonia | 2020 | 28.6 | 17.4 | 2.9 | 1.6 | 0.0 | 4.4 | ... | 0.2 | 7.3 | 7.0 | 3.5 | ... | 11.4 | 1.0 | 0.3 | 10.0 | 0.4 | 0.8 |
| Romania | 2020 | 28.9 | 14.3 | 2.5 | 1.9 | 0.0 | 4.4 | ... | 0.5 | 6.5 | 6.1 | 2.9 | ... | 10.1 | 0.0 | ... | 12.0 | 1.6 | 1.1 |
| Russia | 2020 | 35.3 | 24.5 | 3.7 | 3.7 | 0.5 | 7.9 | ... | 0.5 | 6.9 | 6.9 | 1.8 | ... | 9.3 | 1.7 | 5.1 | 7.7 | 0.0 | 3.0 |
| Serbia | 2020 | 41.3 | 24.1 | 3.7 | 2.2 | 0.0 | 6.0 | 0.0 | 0.8 | 10.2 | 10.0 | 5.8 | ... | 17.2 | 1.0 | ... | 13.6 | 0.5 | 3.1 |
| Slovenia | 2019 | 43.8 | 21.5 | 5.3 | 2.0 | 0.0 | 7.2 | 0.0 | 0.6 | 8.0 | 8.0 | 3.5 | ... | 13.5 | 0.1 | 0.0 | 15.7 | ... | 6.6 |
| Turkey | 2021 | 28.9 | 16.6 | 3.1 | 2.5 | ... | 5.6 | ... | ... | 8.3 | ... | ... | ... | 8.3 | 0.5 | 2.2 | 5.3 | ... | 6.2 |
| Ukraine | 2020 | 40.0 | 27.3 | 7.0 | 2.8 | 0.0 | 9.9 | ... | ... | ... | ... | ... | ... | 13.5 | 0.7 | 3.3 | 7.2 | ... | 5.5 |
| Avg, excl. Armenia | | 35.2 | 21.6 | 3.7 | 2.2 | 0.0 | 6.0 | 0.0 | 0.6 | 9.5 | 9.3 | 3.0 | ... | 13.8 | 0.8 | 4.1 | 10.3 | 0.8 | 7.1 |
| Avg, incl. Armenia | | 34.6 | 21.6 | 3.9 | 2.2 | 0.0 | 6.2 | 0.0 | 0.5 | 9.4 | 9.2 | 2.9 | ... | 13.7 | 0.8 | 4.1 | 9.6 | 0.8 | 6.8 |

*Source: FADTP ECOS Database (Internal).*

*Note: Tax Revenue does not include Social Contributions. "..." fields represent missing values.*

# APPENDIX II. MEASURES OF PROGRESSIVE AND REDISTRIBUTIVE CAPACITIES

The standard measurement of the redistributive effect of taxation, as developed by Musgrave and Thin (1948) and Reynolds and Smolensky (1977), is the difference between the Gini coefficients of respectively pre- and post-tax income. In the same spirit, the progressivity index proposed by Kakwani (1977) is defined as the difference between the Gini coefficients of respectively pre-tax income and the tax liabilities—the more the tax liability is concentrated on higher incomes, the more progressive is the PIT.

A critical contribution of Kakwani was to decompose the total redistributive effects of taxation into its progressivity and its "size", measured as the ratio of total tax liabilities over total pre-tax income (referred to as the aggregate tax rate). The intuition behind this decomposition is that progressivity is a necessary but not a sufficient condition of redistribution. For example, a PIT generating a total revenue of 0.001 percent of GDP can be made extremely progressive—that is, strongly concentrated on high incomes—but would still achieve little income redistribution, simply because it is too small.

Like the Reynolds-Smolensky index, a limitation of the Kakwani index (and the related decomposition) is that it is a function of the pre-tax distribution, therefore confusing the measurement of the intrinsic progressivity of each tax regime with any given initial conditions in the economy. The literature has proposed procedures that make redistribution indices comparable across countries and years, controlling for differences in pre-tax distributions. The analysis in this report uses a methodology that "transplants" tax regimes to be compared into a common base with an identical pre-tax distribution (Dardanoni and Lambert 2002). The indices thus computed are the intrinsic progressive and redistributive capacities of the PIT in each country, corrected for pre-tax distributions. The calculations use simulated microdata based on Gini coefficients of pre-tax income (Benítez and Vellutini 2021).