



ROMANIA

TECHNICAL ASSISTANCE REPORT ON REFORMING PERSONAL INCOME TAXATION

June 2022

This technical assistance report on Romania 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 June 2022.

Copies of this report are available to the public from

International Monetary Fund • Publication Services

PO Box 92780 • Washington, D.C. 20090

Telephone: (202) 623-7430 • Fax: (202) 623-7201

E-mail: publications@imf.org Web: <http://www.imf.org>

Price: \$18.00 per printed copy

**International Monetary Fund
Washington, D.C.**

Romania

Reforming Personal Income Taxation

Shafik Hebous, Naomi Feldman, Jean-Francois Wen, and Philippe Wingender



Technical Report

June 2022

The contents of this report constitute technical advice provided by the staff of the International Monetary Fund (IMF) to the authorities of The Bahamas (the "TA recipient") in response to their request for technical assistance. This report (in whole or in part) or summaries thereof may be disclosed by the IMF to IMF Executive Directors and members of their staff, as well as to other agencies or instrumentalities of the TA recipient, and upon their request, to World Bank staff and other technical assistance providers and donors with legitimate interest, unless the TA recipient specifically objects to such disclosure (see Operational Guidelines for the Dissemination of Technical Assistance Information—

<http://www.imf.org/external/np/pp/eng/2013/061013.pdf>).

Disclosure of this report (in whole or in part) or summaries thereof to parties outside the IMF other than agencies or instrumentalities of the TA recipient, World Bank staff, other technical assistance providers and donors with legitimate interest shall require the explicit consent of the TA recipient and the IMF's Fiscal Affairs Department.

CONTENTS

ABBREVIATIONS AND ACRONYMS	5
PREFACE	6
EXECUTIVE SUMMARY	7
I. INTRODUCTION	9
II. CURRENT ISSUES	9
III. ANCHORING REFORM OBJECTIVES	14
A. Implications of the Current PIT	14
B. Illustrative Scenarios Based on Optimal Taxation Principles	18
IV. PIT REFORM OPTIONS FOR ROMANIA	23
REFERENCES	37
BOXES	
1. The Special Importance of Agriculture in Romania	32
2. Effective Tax Rates	33
FIGURES	
1. Personal Income Tax Revenue and Rates in the EU, 2019	12
2. Net Income by Country (for a Couple without Children), 2021	13
3. Income Inequality	13
4. Tax Rates on Various Income Sources and Legal Forms (Percent)	14
5. Income Distributions, 2021	15
6. Average Tax Rates, 2021	15
7. Marginal Effective Tax Rates on Wages (Including SSCs and Benefits)	16
8. Gross and Disposable Income	16
9. Policy Weight on Marginal	17
10. Optimal Tax Reform: Impact on Effective Tax Rates	19
11. Net Gains from Optimal Reform	20
12. Marginal Effective Tax Rates	22
13. Effective Tax Rates and the Organizational, Varying Profitability	29
14. Employment in Agriculture	32
15. Turnover and Profitability of Microenterprises	36
TABLES	
1. INCOME SUMMARY STATISTICS (ANNUAL FIGURES), 2021	15
2. TAX AND BENEFIT PARAMETERS: CURRENT AND OPTIMAL REFORMS	19
3. ECONOMIC IMPACTS OF THE OPTIMAL REFORMS	20

4. TAX AND BENEFIT PARAMETERS: REFORMS TO INCREASE REVENUES BY 1 PERCENT OF GDP	21
5. ILLUSTRATIVE PROGRESSIVE PIT SCALE	24
6. EFFECTIVE TAX RATES AND THE ORGANIZATIONAL FORM	28

APPENDICES

1. Optimal Taxation	34
2. Illustrative Progressive PIT Scale	35
3. Description of the Microenterprise Sector	36

ABBREVIATIONS AND ACRONYMS

ANAF	National Agency for Fiscal Administration
CIT	Corporate Income Tax
EC	European Commission
ETR	Effective Tax Rate
EU	European Union
EUR	
EUROMOD	A Tax-Benefit Microsimulation Model for the EU
FAD	Fiscal Affairs Department (of the IMF)
GDP	Gross Domestic Product
IMF	International Monetary Fund
METR	Marginal Effective Tax Rate
MOF	Ministry of Finance
OECD	Organisation for Economic Cooperation and Development
PIT	Personal Income Tax
RON	The currency of Romania: 1 Romanian Leu = 0.21 USD or 0.2 Euro (as of May 2022)
RRF	Recovery and Resilience Facility
SILC	Survey on Income and Living Conditions
SSC	Social Security Contribution
USD	U.S. Dollar
VAT	Value-Added Tax

PREFACE

At the request of Ministry of Finance, a team headed by the IMF Fiscal Affairs Department conducted a 'remote' mission to Romania during May 9-19, 2022, to assist the authorities in reviewing personal income taxation. The mission comprised Shafik Hebous (mission head), Jean-Francois Wen (FAD), Philippe Wingender (RES), and Naomi Feldman (FAD expert).

The mission held discussions with the Ministry of Finance (MoF) led by the Minister of Finance Mr. Adrian Căciu and including Mr. Alin Chitu (Secretary of State), and Mr. Dan Matei (Director General). The team also held meetings with officials from National Agency for Fiscal Administration, the Ministry of Labor, and the Ministry of Agriculture and Rural Development.

The mission also met with representatives of the Fiscal Council led by Mr. Daniel Dăianu, (Chairman), Mr. Bogdan-Octavian Cozmâncă (Deputy Chairman), as well as members of the Working Group of the Fiscal Council including Mr. Gabriel Biriș, Ms. Delia Florina Cataramă, and Mr. Ionuț Dumitru.

The mission team would like to express its sincere thanks to the authorities for the constructive discussions and for Ms. Carmen Balasoiu and Mr. Elian Dicușescu for the excellent organization throughout the mission, facilitating access to data, and the informative discussions. The mission team also thanks Mr. Liviu Voinea (Senior Advisor to Executive Director at the IMF).

EXECUTIVE SUMMARY

With one of the lowest revenues in the EU and a projected budget deficit exceeding 7 percent of GDP, Romania should rely on an array of tax (policy and administration) instruments to mobilize revenues. A fundamental question facing Romania's reform efforts is how to spread the burden of the tax in an equitable manner, especially given the already relatively high income inequality. The fiscal system as a whole currently provides little income support at the bottom of the income distribution.

The personal income tax (PIT) plays an integral role in the overall reform to balance revenue, efficiency, and distribution considerations. Romania relies on a flat PIT with the lowest rate in the EU of 10 percent, and at the same time imposes the highest social security contributions. This policy mix has resulted in disincentivizing (formal) labor supply; widespread tax arbitrage opportunities; and constant pressures on policymakers to provide exemptions and preferential tax treatments. The analysis in the report identifies PIT reform directions.

The PIT should be reformed to support revenue and reduce inequality. Recommendations guided by an optimal taxation analysis constitute the following package:

- Introduce a new employment income bracket with a moderate top PIT rate, for example of 20 percent. A combination of 20 percent tax on the top decile of the income distribution and the existing 10 percent on the rest of the income distribution raises revenues by 1 percent of GDP, while leaving the majority of taxpayers unaffected. This is a specific illustrative example. Other PIT scales would be in principle also feasible. Adopting a new top PIT bracket would be in line with recent examples of countries abandoning the PIT flat rate regime such as Czech Republic, Latvia, Lithuania, and Slovakia.
- Eliminate PIT exemptions in the IT and construction sectors (as well as the planned PIT exemption for the agriculture sector). Existing PIT exemptions already cost about 0.6 percent of GDP annually. Adding a PIT exemption for the agriculture sector would raise tax expenditures. Overall, based on the horizontal equity principle, efficiency, and concerns about revenue leakages, these sectoral exemptions are strongly discouraged.
- Improve support at the bottom of the income distribution, ideally with an income tax credit that phases out as earnings increase. Compared to the existing benefit of a guaranteed minimum income, the income tax credit is (i) conditional on earnings (i.e., supplying labor); and (ii) more generous. However, the generosity of the income tax credit is a policy choice. For instance, if the budgetary cost of the income tax credit is about 0.5 percent of GDP, then together with the above reform recommendations (top rate of 20 percent and eliminating exemptions) it would still raise PIT revenue by about 1 percent of GDP and the system would become more equitable. Importantly, the income tax credit also enhances efficiency by encouraging labor market participation. However, it requires strong administrative capacity.

- Harmonize the tax rate on interest income, royalties, and all capital gains at least at 10 percent.

The taxation of the self-employed and microenterprises should be strengthened to close revenue leakages and safeguard the integrity of the tax system. Recommendations include:

- Freelancers should pay social security contributions on their total net income, possibly up to a cap (expressed as a multiple of minimum wage). This would reduce the room for tax arbitrage—in principle making the freelancer indifferent between freelance and formal labor work—and raise revenues under SSCs by 0.4 percent of GDP.
- Adopt one simplified turnover tax regime for ‘microenterprises with employees’ below a specific turnover threshold (ideally around the VAT threshold, as guided by common practice). The turnover tax rate should be uniform and set at 1 to 2 percent. Take steps to prevent artificial splitting of companies to benefit from the microenterprise tax regime.
- ‘Legal entities without employees’ should be obliged to be under the corporate income tax regime or a transparent entity where the beneficial owner is taxed under the PIT. Under a top PIT rate of 20 percent, the owner of the entity would be indifferent (from a tax standpoint) between being taxed under the PIT or the corporate income tax. Reducing the turnover threshold of the simplified regime (for example to 250,000 RON as an upper bound cutoff) and migrating microenterprises without employees to the income tax, together, would raise revenue by about 0.3 percent of GDP, and importantly close loopholes in the current system.

Upgrading the administrative capacity of ANAF in income taxation, as well as other taxes, is important to complement tax policy reforms. The authorities could consider seeking further policy and legal advice to follow up on the findings of this report.

I. INTRODUCTION

1. There is a need to raise revenues in Romania. The total tax-GDP ratio is 12 percent—the lowest in the EU—and the budget deficit reached 6.8 percent of GDP in 2021. In the context of the *European Semester*, the European Council (EC) urged Romania to pursue fiscal consolidation and strengthen tax collection to put an end to excessive deficits. Under the Recovery and Resilience Facility (RRF), Romania aims at raising its tax-GDP ratio by 3 percentage points, with 0.5 and 2.5 points from policy and administrative measures, respectively.

2. Reforming the personal income tax (PIT) in Romania to support revenues and tackle inequality is vital. The PIT here covers i) employment income, ii) capital income of individuals (such as dividends, capital gains, and interest), and iii) business income of the self-employed and small/micro businesses. The PIT is one integral element of the tax system, and a holistic view of all taxes (and spending measures) is required to achieve the intended policy objectives, including raising revenues. In these efforts, the PIT has a key role in supporting revenues and distributing the tax burden in an equitable way. In 2019, the Gini coefficient in Romania was 34.8, higher than the EU average of 30.2. The share of the PIT in total tax revenues, at 16.5 percent, is the lowest in the EU (**Figure 1**).¹

3. This report explores PIT reform options and discusses their impacts on revenues, efficiency, and equity. PIT reforms inevitably entail balancing trade-offs between revenue, efficiency, and redistribution objectives, while considering administrative constraints. The report proceeds as follows. Section II presents key features of the current the PIT in Romania. Section III discusses directions for reforming labor income taxation, while Section IV discusses tax neutrality and the taxation of microenterprises.

II. CURRENT ISSUES

The PIT rate is low...

4. Romania generally imposes a statutory flat tax of 10 percent on personal income, and the tax unit is the individual.² Prior to 2005, the progressive PIT scale had a top PIT rate of 40 percent. A flat PIT with a rate of 16 percent was introduced in 2005. The rate was then lowered to 10 percent in 2018, making it the lowest top PIT rate in the EU as of 2022 (together with Bulgaria, **Figure 1**).

5. There are important exceptions for capital income taxation, notably dividends that are taxed at 5 percent, and for selected sectors (IT, construction, and agriculture). Also,

¹ Excluding Cyprus: If revenues from the special contribution to defense in Cyprus are classified under the PIT revenue (rather than the corporate income tax revenue), Cyprus' PIT share in total revenues would be higher.

² There is a basic monthly allowance given gradually based on the level of the monthly salary and number of persons in care, if the monthly salary is below 3,600 RON.

while capital gains are generally taxed at 10 percent, exceptions include gains from the sales of improvable properties (3 percent) and gains from the sale of government bonds (exempt), inter alia.³

... but social security contributions (SSCs) are at the high end

6. The combined PIT and employee' SSC rate in Romania is 41.5 percent. The flat PIT rate is applied on income net of the employee' social insurance contribution (25 percent) and the employee' health insurance contribution (10 percent). This implies, for example, that the net take-home pay for a couple (with no children) earning the average wage is 58.5 percent of its gross earnings, which is the lowest in the EU (**Figure 2**). Further, the employer is required to pay 2.25 percent of gross labor earnings of the employee as additional work insurance for the employee. There are no in-work benefits in Romania.

PIT revenue and total revenue remain low while income inequality is high

7. Despite the high SSC rate, the total revenue (including from SSCs) remains the second lowest in the EU, just above that of Ireland (Figure 1**).** Romania's PIT revenue at 2.4 percent of GDP is currently the lowest in the EU. In 2017, even before the rate cut from 16 to 10 percent, the PIT-GDP revenue ratio was 3.6 percent, also below the OECD's or EU's average of about 8 percent. While a 1-percentage point increase in the PIT-GDP ratio would roughly restore PIT revenue to the prior 2018-reform level, policy choices (within the broader context of tax reform) ultimately define the exact revenue goal and overall role of Romanian PIT.

8. Romania has a relatively high level of income inequality as measured by the Gini coefficient. While redistribution in Romania is higher than neighbors in Eastern Europe, overall, the tax and transfer system could do more to allocate the tax burden more equitably (**Figure 3**).

Non-neutrality and arbitrage opportunities are pervasive

9. Effective tax rates (ETR) in Romania vary by income sources, sectors, and legal forms. Such disparities not only run against the fundamental idea of imposing a flat tax rate on a broad base, but also generate distortions and revenue leakages. The ETR—here is the combined statutory tax payment as a share of income or profit—varies as depicted in **Figure 4**. SSCs are not shown in **Figure 4**, but differences in mandatory SSCs exacerbate non-neutrality as discussed in detail in Section IV. Albeit mandatory, SSCs are generally not regarded purely as taxes because they are levied for the specific purpose of social protection, with benefits paid in return (in terms of health services,⁴ pension payouts, and unemployment benefits).

³ There is no tax on imputed rent of owner-occupied houses and mortgage interest is not tax-deductible. There is no inheritance tax in Romania and the analysis here does not cover it.

⁴ Although the link can be imperfect, and in the case of health, the service is the same for all entitled individuals—i.e., it is not tied to the level of contributions.

10. The main sources of non-neutrality in the PIT design in Romania are differences in SSCs obligations and ETRs:

- *Income source:* The corporate income tax (CIT) rate is 16 percent, and hence the combined CIT and dividends' tax (or ETR) rate is 20.2 percent, compared to 10 percent on interest income or royalties (on individuals). To be under the CIT, a microenterprise should have two or more employees and a relatively low social capital of at least 45,000 RON (9,500 USD).
- *Sector—due to sector-specific PIT exemption:* Salaries of individuals in the IT, construction, and agriculture sectors are exempt from the PIT. Agriculture plays an important role in Romania (**Box 1**) and the PIT exemption for wages in the agriculture sector is planned to enter into effect in July 2022.
- *Legal form:* Self-employed entrepreneurs have choices over how to organize their businesses, with different tax implications. They can operate as (i) natural persons (unincorporated independent activities, or so-called freelance work), or (ii) a legal entity. If the legal entity satisfies the requirements for a microenterprise, then there is a further choice of operating without employees, or of establishing a labor contract between the entrepreneur and the microenterprise (owner-employee relationship). A microenterprise can also have more than one employee or form corporations. Each form of these options for organizing entrepreneurial activities has specific tax obligations, as follows:
 - *Freelancers* pay a tax of 10 percent on their profits computed on a cash-flow basis. Freelance workers are required to pay SSCs only on their income up to 12 times the monthly minimum wage. In contrast, wage workers do not benefit from such a cap and hence they face a much higher ETR than freelancers.
 - *Microenterprises* face ETRs that depend on profitability:
 - Without employees: they pay a turnover tax of 3 percent and the 5 percent dividend tax on distributions. Individual owners/founders of microenterprises who are remunerated via dividends contribute to health insurance on up to a cap of 12 times the monthly minimum wage, but do not pay any pension contributions. The ETRs are 33.5 percent and 14.5 for profit margins of 10 and 30 percent, respectively.
 - With (one or more) employee(s): they pay a tax on turnover of 1 percent and the 5 percent dividend tax on distributions. PIT and the full mandatory SSCs apply to the wages of a microenterprise owner-employee. The ETRs are 14.5 percent and 8.2 for profit margins of 10 and 30 percent, respectively.

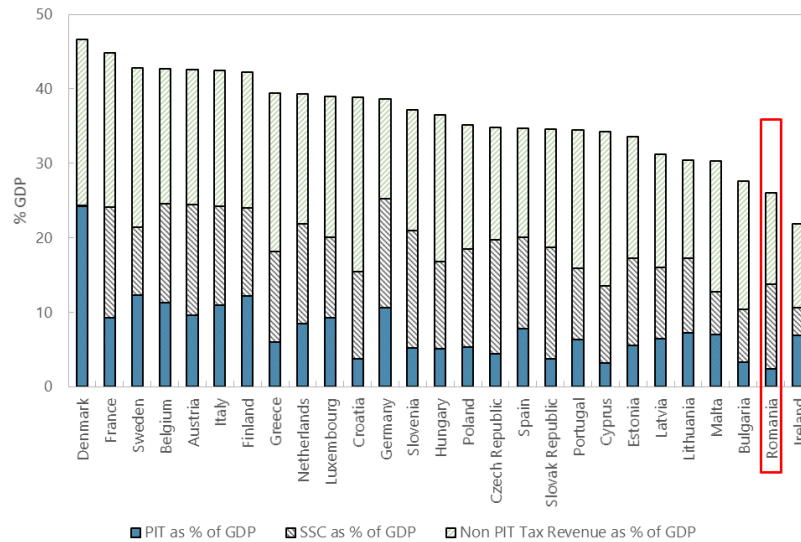
And thus, there is a strong case for a PIT reform

11. Overall, given low revenues, high income inequality, and various tax loopholes in the system, the PIT design should be improved. To guide a PIT reform, the following

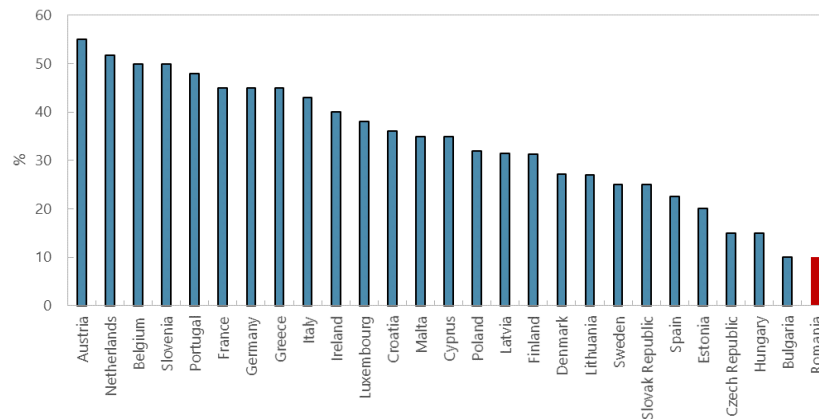
discussion focuses on who is paying the PIT, what that means for policymakers' preferences over equity and efficiency, and what should a PIT reform seek to achieve. Having set PIT reform directions, the discussion then lays out concrete reform scenarios.

Figure 1. Personal Income Tax Revenue and Rates in the EU, 2019

a. Tax Revenue (% of GDP)

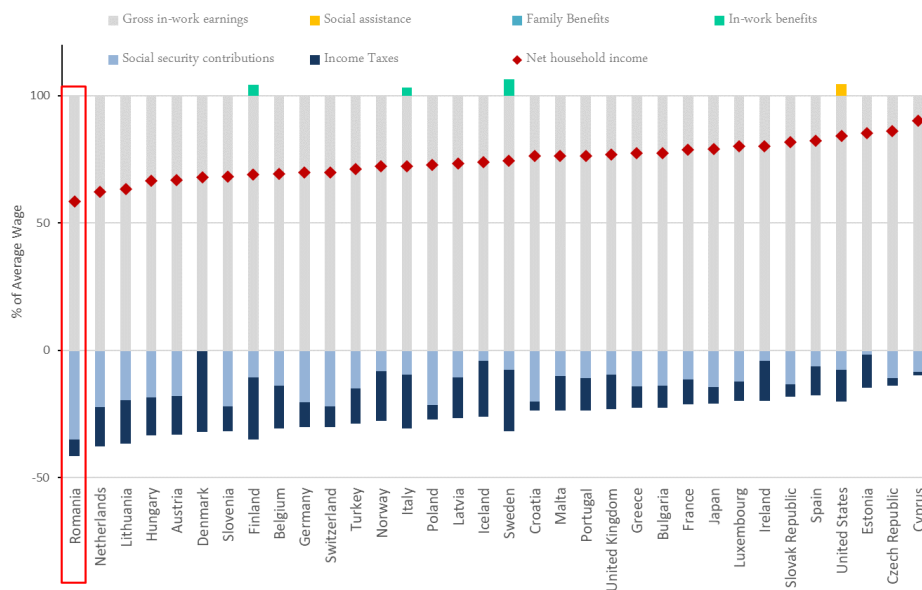


b. Top PIT Rates



Source: OECD and Eurostat databases.

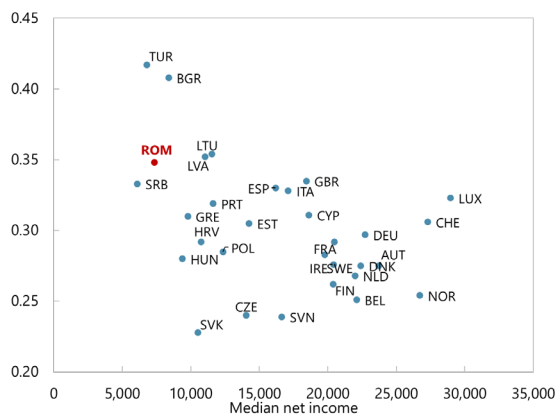
Figure 2. Net Income by Country (for a Couple without Children), 2021



Source: OECD tax benefit calculator.

Figure 3. Income Inequality

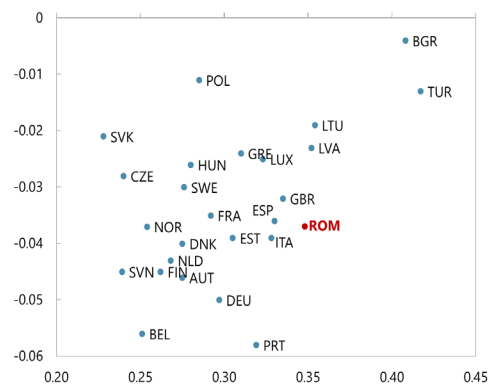
a. Income Levels and Income Inequality (Gini index)



Source: Eurostat.

Notes: Median net income in PPS. Gini index is for disposable income after taxes and transfers. Data are for 2019 or latest year available.

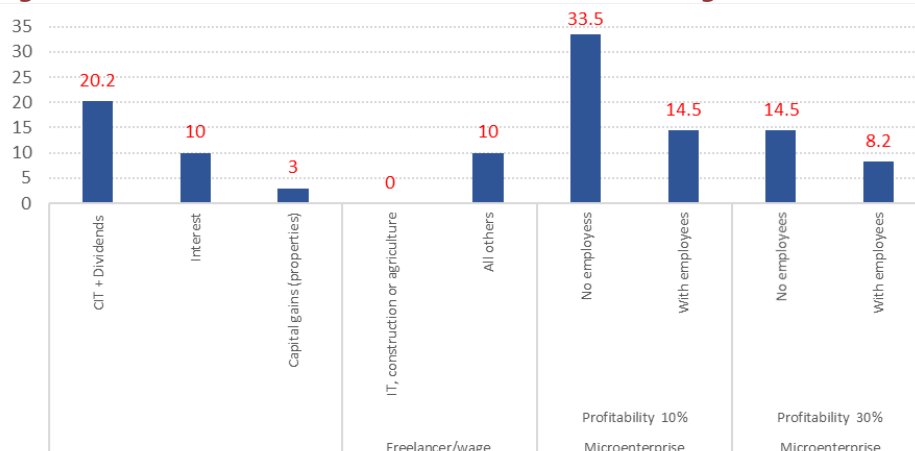
b. Difference between gross and disposable Gini index



Sources: Eurostat, OECD, IMF staff calculations.

Notes: The Gini index on the horizontal axis is for disposable income after taxes and transfers. Data are for 2019 or latest year available.

Figure 4. Tax Rates on Various Income Sources and Legal Forms (Percent)



Source: Tax code and IMF staff illustration.

III. ANCHORING REFORM OBJECTIVES

12. This section uses distributional analysis with microdata from a nationally representative household survey to shed light on effective labor income taxation and optimal reform scenarios. The main source of the data is the 2019 Romanian Survey on Income and Living Conditions (SILC). The analysis applies the tax and transfer system of 2021 to the SILC figures (after inflating nominal values) using EUROMOD—a Tax-benefit microsimulation model. The three cornerstones of this section are: (i) descriptive statistics on wages, average tax rates, and the marginal effective tax rates (METRs). (ii) contrasting the existing system with an ‘optimal’ one (taken revenue as given); and (iii) a discussion of an optimal tax reform that raises revenues. The optimal tax reform analysis is useful in informing policymaking about reform directions.

A. Implications of the Current PIT

The PIT reflects very little redistribution

13. On average, annually, a Romanian individual roughly earns double the annual minimum wage. In particular, 57 percent of individuals earn the average wage or less (4,640 RON per month), while around 10 percent of workers earn below the minimum wage (2,300 RON per month). The median monthly wage is around 4,050 RON, just slightly below the average. **Table 1** provides annual summary statistics. Furthermore, a large share of reported earnings for agricultural workers (around 80 percent) is below the minimum wage (**Figure 5**). The incomes of households engaged in agricultural activities are low, but the sector is very large in Romania, accounting for almost a quarter of employment, the majority of whom are self-employed.

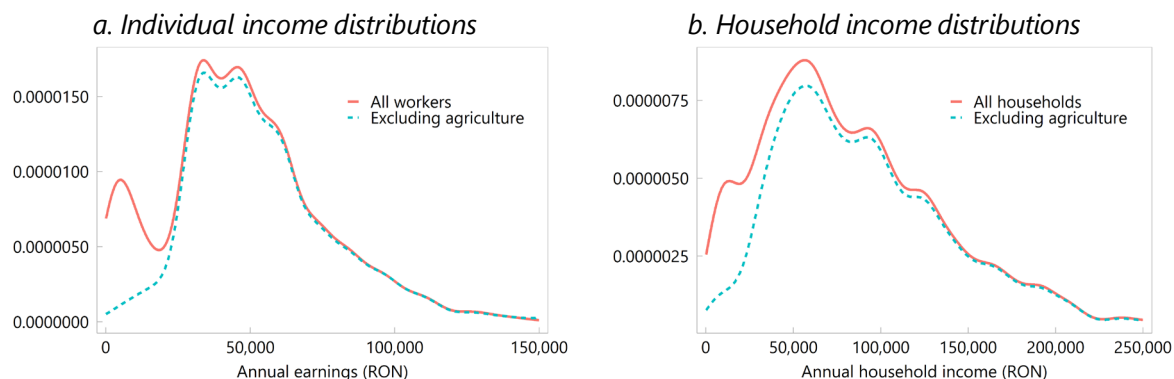
Table 1. Income Summary Statistics (Annual Figures), 2021

	Mean	10th	25th	Median	Percentiles 75th	90th	95th
Individual earnings	55,699	29,797	35,085	48,642	66,843	91,729	108,628
Household income	98,758	35,607	54,394	86,253	126,884	178,171	210,782

Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions.

Notes: Sample includes individuals aged 18 to 60 and excludes students and retirees and agricultural sector workers.

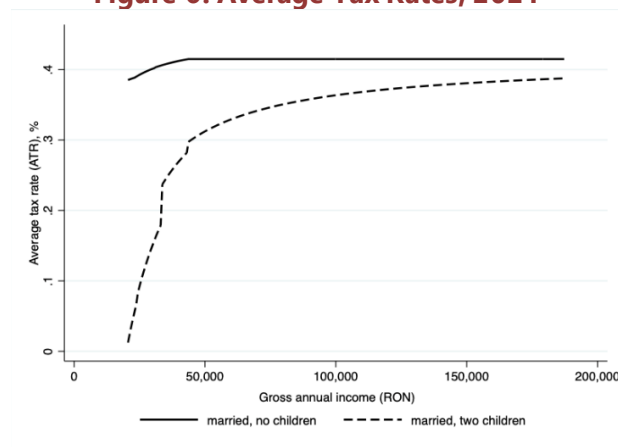
Figure 5. Income Distributions, 2021



Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions.

14. The average tax rate in Romania is fairly flat over a large range of income levels, and hence the PIT exhibits very little progressivity. A progressive tax system is one where the average tax rate grows with income. **Figure 6** illustrates that the average tax rate in Romania quickly reaches the top marginal rate of 41.5 percent for married couples with no children at an income level of about 35,000 RON, well below the average household wage. Thereafter, the average tax rate remains flat. Married couples with children receive family benefits that lower their tax burdens at lower levels of income. As these benefits are phased out, the average tax rate increases steeply but then grows more slowly over the remainder of the income distribution. Importantly, **Figure 6** shows that over a large range of incomes in Romania, the PIT is better characterized as relatively flat and thereby lacking progressivity.

Figure 6. Average Tax Rates, 2021

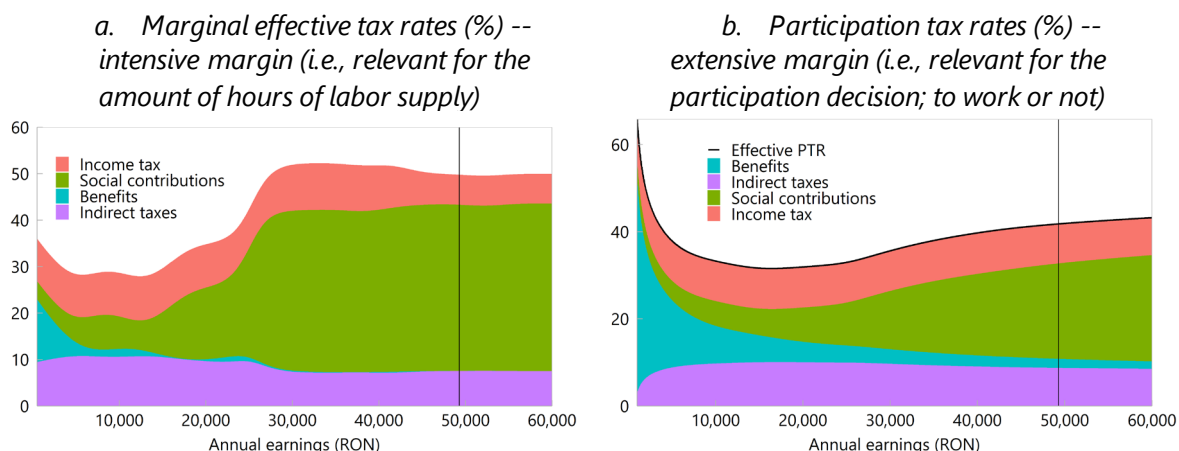


Source: OECD tax-benefit calculator and IMF staff calculations.

15. Understanding how the current tax and transfer system affects labor supply incentives is crucial to formulating reforms. Considering the transfer system gives the full picture of incentives to supply labor. The two key margins of labor supply are the intensive margin—how many hours to work—and the extensive margin—whether to work or remain outside the labor force. The METR affects labor supply along the intensive margin, while the participation tax rate—which is the difference in net tax liabilities when working and not working (scaled by earnings)—affects the decision of whether to work or not.

16. The METR, which sums the marginal rates of all relevant taxes and SSCs, is mildly progressive at the bottom of the distribution (Figure 7), but rather flat at higher levels of income. The slight progressivity in the METR (despite flat rate schedules for the PIT and SSCs) is largely the result of excluding the earnings of the self-employed (with annual earnings below '12 × the monthly minimum wage') from mandatory SSCs. The phasing-out of low-income transfers also increases the METRs at the very bottom of the earnings distributions.

Figure 7. Marginal Effective Tax Rates on Wages (Including SSCs and Benefits)

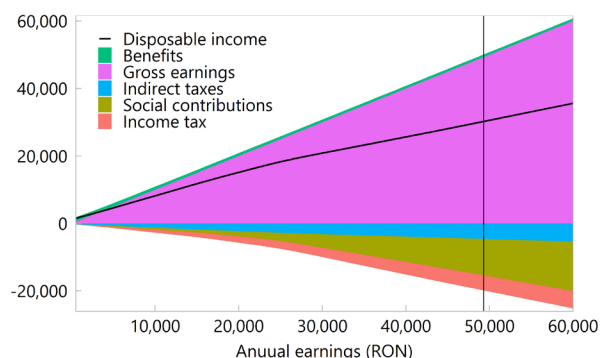


Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions.

Note: The vertical line indicates median annual earnings equal to 48,642 RON. The average annual earning (not depicted) is 55,700 RON.

17. Low-income transfers provide little income support at the bottom of the income distribution (Figure 8). These transfers consist mainly of a guaranteed minimum income, a non-contributory means-tested and non-taxable benefit, as well as family, children and housing allowances (EUROMOD, 2021; OECD, 2020). On average across family types, out-of-work benefits amount to 17 percent of median household income, well below the OECD average of 40 percent of median household income.

Figure 8. Gross and Disposable Income

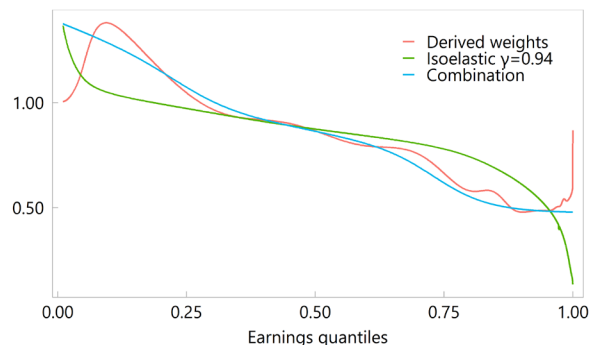


Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions. The vertical line indicates median annual earnings equal to 48,642 RON. The average annual earning (not depicted) is 55,700 RON.

18. The analysis suggests the current tax design in Romania, in part, gives lower weights to the consumption of low earners than high earners. The observed tax and benefit policy in a country implicitly assigns a value to individuals' marginal consumption—i.e., how much each additional unit of consumption is valued by policy makers. This value can be inferred using the marginal effective tax rates and participation tax rates (Appendix 1). **Figure 9** displays the result of this exercise. Two features of the welfare weights in Romania stand out:

- Current policy in Romania *generally* puts more weight on the marginal consumption of lower income workers than for workers that are better off. This is because the derived implicit welfare weights are generally declining in income (*Derived weights* curve in red in **Figure 9**).
- However, current policy in Romania also values the marginal consumption of *lowest* earners *less* than those with higher earnings. This can be seen in *Derived weights* curve in red in **Figure 9** that are *increasing* below the 10th percentile and above the 95th percentile. This pattern is inconsistent with a redistributive motive: they imply the government would rather give an additional leu to someone at the 10th percentile than someone at the 1st percentile of the earnings distribution. Similarly, policy makers value marginal consumption of top incomes more than upper middle-income workers.

Figure 9. Policy Weight on Marginal Consumption by Earnings Levels



Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions. Note: The chart shows the 'social welfare weights'.

New benchmarking of redistribution objective to guide reform

19. An “optimal” tax reform weighs the cost of raising revenues through taxes that affects labor supply incentives against the benefits from redistributing the burden across workers of different incomes. The society (or policy) preferences determine the weights policy makers assign to these costs and benefits, and the specific shape of these weights guides an optimal PIT reform. See Appendix 1 for details.

20. To guide reforms, the analysis reoptimizes policy (or societal) weights on consumption to be in line with a redistribute motive in an optimal tax framework. Instead of inferring the weights from the existing tax and transfer schedule (as in **paragraph 18.**), the analysis presents two estimates of benchmark welfare weights (**Figure 9**). The first corresponds to an estimated coefficient of inequality aversion for Romania (γ) of 0.94, implying that that society values the additional consumption of someone at the 10th percentile of the income distribution 3 times more than someone at the 90th percentile (this benchmark is called

‘isoelastic’ welfare function; depicted in green in **Figure 9**).⁵ A second benchmark for welfare weights—the preferred benchmark by the mission, and shown in green in **Figure 9**—is the average of the implicit policy welfare weights (shown in red in **Figure 9**) and the isoelastic welfare weights (shown in blue). This *Combination* function further ensures that welfare weights are strictly decreasing in incomes, consistent with the redistributive motive. Compared with the *Derived weights* curve, it gives more weight to the lowest earners and ensures social welfare weights remain flat for top earners. And, when compared to the *Isoelastic* weights, the *Combination* function gives more weights to lower- and upper-middle income workers.

B. Illustrative Scenarios Based on Optimal Taxation Principles

Current PIT is far from optimal (even if current revenues are kept constant)

21. A PIT system that optimally balances the tradeoff between equity and efficiency differs from the current tax schedule.⁶ In particular, an optimal reform would depart from a flat tax structure and introduce instead a U-shaped schedule of marginal tax rates ([Piketty and Saez, 2013](#)). This would be the result of the following three key features:

- *The introduction of an in-work tax credit to support low incomes* (**Figure 10**, panel b). An in-work tax credit is a transfer to low-income workers that is conditional on labor force participation.⁷ This contrasts with the current small penalty of 313 RON for joining the labor force—a result of means-testing (**Table 2**). The simulation suggests that an optimal reform would introduce an in-work tax credit amounting to around 12 to 15 percent of median earnings for very lowest earners (**Table 2**). In turn, this would significantly reduce their participation tax rates, which would promote labor force participation.⁸ The strong incentive for labor force participation of in-work benefits makes these transfers very effective in supporting low-income workers while minimizing their fiscal costs.
- *Targeting the in-work transfer to low-income earners.* This would be required to minimize the fiscal cost. This targeting is achieved through a steep phase-out rate, which is illustrated by the high METRs at the bottom (**Figure 10**, panel a). Different welfare preferences lead to different levels of the in-work tax credit and different phase-out rates. This in turn will determine how many workers would receive the income tax credit and hence be exempt from PIT liabilities. Under *Isoelastic* preferences, the earnings cutoff for exemption from PIT

⁵ An isoelastic social welfare function means society values the additional consumption of two individuals only according to their relative income levels. For individuals at the 10th and 90th percentiles of the income distribution in Romania, this is calculated as $(85,000/25,000)^{0.94} = 3.2$. See also Appendix 1.

⁶ By design, this exercise considers a revenue neutral reform. This allows the analysis to highlight the main features of an optimal PIT system in contrast with the current schedule.

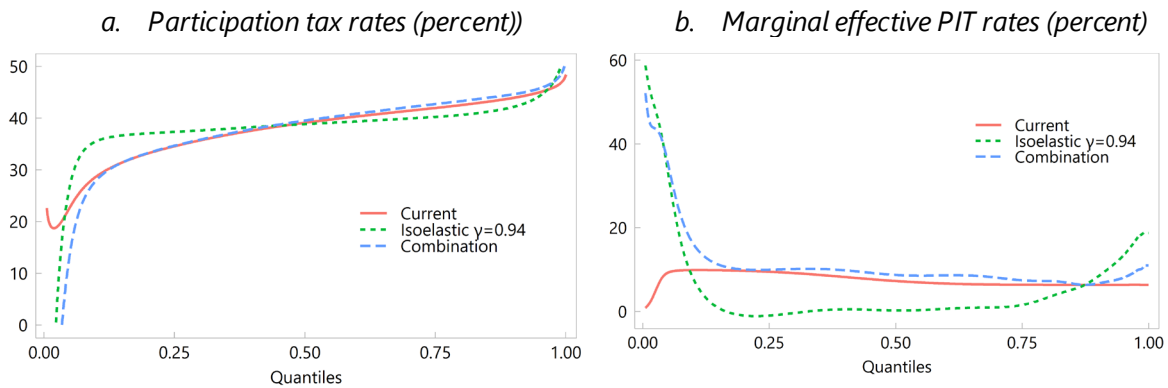
⁷ This contrasts with welfare benefits or guaranteed minimum incomes, which are not condition on work.

⁸ The participation tax rate is defined as the difference between net taxes paid when working and transfers received when not working, divided by earnings. Note that in contrast to an income tax credit, a zero-bracket would apply to all taxpayers thereby reducing the tax payment (at given rates) also for high-income individuals. Therefore, an income tax credit is better targeted than a zero-tax bracket.

would be 16,791 RON and around 5 percent of earners would receive the credit. Under the *Combination* preferences, the in-work tax credit would be around 26,000 RON, exempting the bottom 11 percent of earners.

- *Higher tax at the top.* The optimal tax reform raises the marginal tax rates for top earners, in contrast to the current schedule. This reflects the relatively smaller weights assigned to the highest earners (from **Figure 9**) and the desire to increase redistribution to the rest of the population (thereby at least in part financing tax relief for the lower-income earners). The extent of the optimal progressivity will in turn depend on social preferences.

Figure 8. Optimal Tax Reform: Impact on Effective Tax Rates



Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions.

Note: Marginal effective PIT rates equal the statutory PIT rates multiplied by 1 minus social contribution rates. PIT is payable on earnings after a deduction for social contributions.

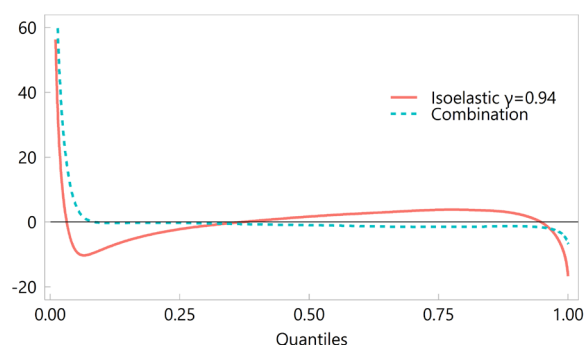
Table 2. Tax and Benefit Parameters: Current and Optimal Reforms

	Current	Isoelastic	Combination
Out-of-work benefit (RON)	1,537	1,537	1,537
(percent median income)	3.1	3.1	3.1
In-work tax credit (RON)	-313	6,208	7,695
(percent median income)	-0.6	12.3	15.6
PIT-exemption earnings cutoff (RON)	23,342	16,791	25,964
PIT-exempted workers (percent of total)	8.3	4.8	11.2
Marginal effective tax rates (percent)			
1st percentile	2	85	73
10th percentile	10	6	22
25th percentile	10	1	16
Median	10	2	13
75th percentile	10	4	11
90th percentile	10	15	11
Top rate	10	29	17

Notes: *Current* uses the current personal income tax. *Isoelastic* implements the optimal reform using isoelastic social welfare weights with $\gamma=0.94$. *Combination* uses the average between the current implicit social welfare weights and the isoelastic weights. The out-of-work benefit is held constant across scenarios.

22. The optimal reforms redistribute the tax burden, compared to the current system. The lowest-income workers benefit the most from the introduction of the in-work tax credit (**Figure 11**). The lower in-work tax credit and higher phase-out rate under *Isoelastic* preferences means that workers near the bottom of the distribution have a higher tax bill than in the current system. Upper middle-income workers are the second group that benefits from the reform, while the highest income earners see a large drop in their net income. In contrast, the *Combination* preferences yield a mostly flat pattern above the lowest earners. This is consistent with the higher weights for lower-income workers found in **Figure 9**.

Figure 11. Net Gains from Optimal Reform
(Percent of current consumption)



Source: IMF staff analysis using the Romanian Survey of Income and Living Conditions.

23. The optimal reforms improve aggregate welfare compared to the current system. The change in total earnings differs between the two optimal reforms (**Table 3**) because of difference in weights assigned to lower middle-income workers between the *Isoelastic* and *Combination* preferences. Lower weights in the former means that these workers face a higher participation tax rate (**Figure 10**, panel b), which depresses their employment rates. However, this also allows for lower marginal tax rates on middle and upper-middle income workers, which contribute to the higher aggregate earnings and hours worked. In this revenue-neutral reform, the welfare gains, as measured by the equivalent variation,⁹ are 0.06 and 0.03 percent of total earnings.

Table 1. Economic Impacts of the Optimal Reforms

	Current	Isoelastic	Combination
Net revenues (percent of earnings)	37.2	37.1	37.4
Total earnings change (percent)	-	0.3	-0.6
Total hours change (percent)	-	0.4	-0.5
Employment rate	79.8	79.8	80.0
Welfare gains (percent of earnings)	-	0.06	0.03

Notes: Current uses the current personal income tax. Isoelastic implements the optimal reform using isoelastic social welfare weights with $\gamma=0.94$. Combination uses the average between the current implicit social welfare weights and the isoelastic weights. The out-of-work benefit is held constant across scenarios.

⁹ The equivalent variation is the lump-sum amount every individual should receive so that social welfare under the current system is the same as under the optimal reform.

PIT revenues can be increased while strengthening progressivity and without jeopardizing efficiency

24. The optimal tax framework can also be used to find the most efficient and equitable way of increasing PIT revenues. In contrast with the previous section where reforms were revenue-neutral, this section examines a reform that increases total revenues collected by around 1 percent of GDP. The analysis relies again on policy preferences (the ‘weights’) that can be described by the *Isoelastic* and *Combination* functions. In addition, the analysis considers simpler reforms that either increase PIT rates uniformly or introduce a second bracket with either 20 or 25 percent statutory marginal tax rate.

25. The revenue-raising optimal reforms maintain the in-work tax credit for low-income earners and the low marginal tax rates for most workers. Compared to the revenue-neutral reforms presented in **Table 3**, the in-work tax credit declines slightly to 9 and 12 percent of median earnings (**Table 4**). It also becomes more targeted to low-income earners, as only 3.3 percent of workers remain exempt from any PIT payment under *Isoelastic* preferences and 5.6 percent under *Combination* preferences. Recall, this contrasts with 4.8 and 11.2 percent, respectively, in the case of revenue-neutral reforms. The phase-out rates of the in-work tax credits remain steep. For example, the METR on earners at the 1st percentile of the distribution is 87 and 75 percent for the *Isoelastic* and *Combination* reforms, respectively. The METR on earners at the median is 10 for *Combination* reform. The full schedules of marginal tax rates, however, remain the same as under the revenue-neutral reforms considered previously in **Table 3**.

Table 2. Tax and Benefit Parameters: Reforms to Increase Revenues by 1 Percent of GDP

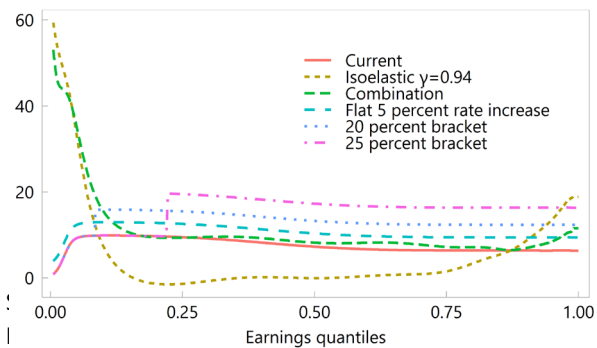
	(1)	(2)	(3)	(4)	(5)	(6)
	Current	Isoelastic	Combination	Flat 15 percent rate	10 percent below 10,000 RON, 20 percent above	10 percent below 13,600 RON, 25 percent above
Out-of-work benefit (RON)	1,537	1,537	1,537	1,537	1,537	1,537
(percent median income)	3.1	3.0	3.1	3.1	3.2	3.2
In-work tax credit (RON)	-313	4,694	6,153	-313	-313	-313
(percent median income)	-0.6	9.3	12.4	-0.6	-0.6	-0.7
PIT-exemption earnings cutoff (RON)	23,342	12,855	18,611	17,706	23,426	23,342
PIT-exempted workers (percent of total)	8.3	3.3	5.6	4.8	8.6	8.3
Marginal effective tax rates:						
1st percentile	2	87	75	7	2	2
10th percentile	10	5	20	15	20	10
25th percentile	10	1	15	15	20	25
Median	10	2	13	15	20	25
75th percentile	10	4	11	15	20	25
90th percentile	10	15	11	15	20	25
Top rate	10	30	18	15	20	25

Notes: Column (1) uses the current personal income tax. Column (2) implements the optimal reform using isoelastic social welfare weights with $\gamma=0.94$. Column (3) uses the average between the current implicit social welfare weights and the isoelastic weights. Column (4) increases marginal tax rates uniformly from 10 to 15 percent. Column (5) maintains the flat 10 percent marginal tax rate below 10,000 RON and increases the marginal tax rate to 20 percent for earnings above 10,000 RON. Column (6) maintains the flat 10 percent marginal tax rate below 13,600 RON and increases the marginal tax rate to 25 percent for earnings above 13,600 RON. The out-of-work benefit is held constant across scenarios. All reforms increase tax revenues by 1 percent of GDP.

26. Stepwise parametric PIT reforms can also raise PIT-GDP ratio by 1 percentage point. Optimal reform

scenarios give continuous tax rates whereas PIT scales in most countries encompass discrete income brackets. The analysis, thus, considers three parametric reforms (columns 4-6 in **Table 4**): (i) a first reform maintains a flat marginal tax rate schedule with a uniform rate of 15 percent; (ii) a second reform keeps the 10 percent rate for earnings below 10,000 RON and introduces a second bracket with a marginal tax rate of 20 percent for incomes above 10,000 RON; and (iii) a third reform introduces instead a second bracket with a marginal tax rate of 25 percent for incomes above 13,600 RON. For these three reforms, low-income benefits are kept at their current levels (**Table 4**), i.e., no in-work tax credit is considered. Compared to the stepwise parametric PIT reforms, the optimal reforms maintain lower marginal tax rates for most workers. However, the stepwise PIT scales come closest to the optimal taxation at the top of the distribution (**Figure 12**). Guided by the optimal reform scenarios, the efficiency-equity feature of a stepwise PIT scale can be enhanced by introducing an income tax credit.

Figure 9. Marginal Effective Tax Rates (Percent)



Note: In the chart, marginal effective tax rates equal the statutory PIT rates multiplied by 1 minus social contribution rates. PIT is payable on earnings after a deduction for social contributions.

27. While optimal reforms are by design the most efficient way to increase PIT revenue, stepwise PIT scales—for example introducing a 20-percent bracket—can come close, especially if coupled with an income tax credit. The *Isoelastic* and *Combination* optimal reforms both lead to higher total earnings and hours worked, as they can efficiently promote labor supply along the intensive margin, and along the extensive margin for low-income workers. However, to be mindful of efficiency, a stepwise PIT scale can maintain the statutory flat 10 percent for the significant majority of taxpayers. Increasing the top PIT rate only at the top would bring the Romanian PIT closer to the estimated optimal weights while the income tax credit would be more progressive than a tax deduction or a zero rate, since the value of the latter depends on the marginal tax rate that the taxpayer faces.

28. The upshot of the optimal tax analysis presented in this section is that raising the PIT rate at the top of the income distribution, coupled with an in-work tax credit at the bottom of the distribution, would generally improve the redistribution features of the system and support revenues, without compromising on efficiency. In fact, an in-work tax credit would stimulate employment rates, which beyond enhancing efficiency, becomes per se another revenue-raising aspect. Next the report looks closely at the average tax rates of a PIT scale with 10 and 20 percent brackets, and further PIT reform options for Romania.

IV. PIT REFORM OPTIONS FOR ROMANIA

A moderate new top bracket can raise significant revenue without impacting the majority of taxpayers

29. While the previous section provides profound directions for PIT reforms, this section outlines concrete reform options, with an illustrative stepwise progressive PIT scale, and recommendations to restore tax neutrality. The analysis here focuses on the impacts on average tax rates of one illustrative PIT scale with two brackets (with rates of 10 and 20 percent). A similar analysis can be done for other possible scales, for instance 16 and 20 percent or 16 and 25 percent.

30. In recognition of the desirability of strengthening the taxation at the top of the income distribution, recently some countries returned from flat to progressive taxation. Examples include Czech Republic (2021), Latvia (2018), Lithuania (2019), and Slovakia (2013).

31. A new top rate of 20 percent on the top decile of the income distribution in Romania (while maintaining the PIT rate of 10 percent up to the top decile) would leave the majority of taxpayers unaffected. Based on this reform scenario, roughly 5.6 million taxpayers—out of the universe of 6.25 million PIT taxpayers—would *not* pay higher taxes. **Table 5** reports the average tax rate for households (single or married with two children) earning roughly the minimum wage (30,407 RON), median income (49,933 RON), and 90th and 95th percentiles (94,248 and 176,012 RON, respectively). Married households without children are comparable to single households (therefore not explicitly shown in the Table). At the top of the income distribution, the *average* tax rate would increase by about 5 percentage points (for singles or married with two children). For a household with wages at the 90th percentile, the increase in the top marginal tax rate increases this household's tax burden by about 8,231 RON annually or 4.7 percent as a fraction of gross income. The reform would raise the PIT-GDP revenue ratio by 1 percentage point (ignoring the budgetary cost of the income tax credit and in line with the results in **Table 4**).

32. Introducing an in-work tax credit would lower the average tax rate at the bottom of the income distribution. As suggested by the optimal tax reform analysis, the efficiency-equity feature of the PIT improves by introducing an in-work income tax credit at the lower end of the income distribution. In the illustrative calculations in **Table 5**, the income tax credit is phased out by the minimum wage. A household earning 10,610 annually would receive an additional 4,031 RON refund, or 38 percent of its gross income. This means, this reform scenario has no impact on the average tax rate between the 10th and 90th percentiles; it decreases it for the lowest 10th percentile; and it increases it for those above the 90th percentile. The exact design of the income tax credit is a policy choice. The optimal tax analysis suggests that the income tax

credit could be phased out at a lower income level than that in **Table 5**.¹⁰ Finally, it is important to note that the income tax credit requires strong administrative capacity.

Table 3. Illustrative Progressive PIT Scale

Sample incomes:	Current law, 10 percent flat tax rate				Reform: in-work tax credit for bottom decile / 10 percent / 20 percent marginal tax rate on top decile				Change in tax revenue	Change in ATR
	Single		Married, 2 children		Single		Married, 2 children		Single/Married, 2 kids	Single/Married, 2 children
Annual gross income (RON)	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)		
bottom 10th percentile										
10,610	3,792	0.357	(3,390)	(0.320)	(240)	(0.02)	(7,421)	(0.70)	-4031	(0.38)
20,597	7,936	0.385	256	0.012	5,902	0.29	(1,778)	(0.09)	(2,034)	(0.10)
30,467	12,296	0.404	4,785	0.157	12,260	0.40	4,748	0.16	(37)	(0.00)
middle 10-80th percentiles										
39,946	16,470	0.412	10,758	0.269	16,470	0.412	10,758	0.269	-	-
49,933	20,722	0.415	15,586	0.312	20,722	0.415	15,586	0.312	-	-
63,664	26,162	0.411	21,285	0.334	26,162	0.411	21,285	0.334	-	-
top 10th percentile										
94,248	39,113	0.415	33,977	0.361	39,168	0.416	34,032	0.361	55	0.001
176,012	73,045	0.415	67,909	0.386	81,276	0.462	76,140	0.433	8,231	0.047
187,247	77,708	0.415	72,572	0.388	87,062	0.465	81,926	0.438	9,355	0.050

Source: IMF staff analysis. Current law is obtained from the OECD tax-benefit publications. Numbers in parentheses are negative.

33. Two important caveats should be made for a proper interpretation and assessment of the income tax credit. First, the high numbers of taxpayers around the minimum wage in Romania could be in part the result of the microenterprise regime that incentivizes the self-employment of the owner of the enterprise with a minimum wage contract. Data suggest that there are about 1 million labor agreements in the microenterprises. This increases the cost of the income tax credit **Table 5**. As discussed below, loopholes should be closed, and the taxation of microenterprises should be reformed. And the income tax credit can be made less generous. Second, **Table 5** is a static analysis that does not consider the dynamic effect of an income tax credit. Yet, one important goal of the income tax credit is to induce individuals to enter the labor market. This dynamic effect—i.e., the increased labor market participation—generates revenues that are not modelled in **Table 5**. Third, abolishing the sectoral PIT exemptions would increase the number of taxpayers that contribute to the system, thereby increasing the potential revenue increase from illustrative reform in **Table 5**. Taken together, a well-designed in-work income tax credit to encourage labor supply (especially at the extensive margin) and support progressivity can have a lower revenue budgetary cost than suggested in **Table 5**.

There is little rationale for sectoral PIT exemptions

34. Providing tax incentives should be guided by the policy objectives and sectoral PIT exemptions should be contrasted with alternatives for an accurate review of their effectiveness and efficiency. As noted, Romania completely exempts three sectors from the PIT: IT, construction, and agriculture (the latter starting from July 2022). The budgetary cost of this PIT

¹⁰ Appendix 2 offers an alternative, more modest, scenario whereby the current social assistance credit is increased and expanded (phasing out at 24,000 RON). This scenario is less redistributive at the lower end of the income distribution and requires a lower level of tax expenditure, but does not generate the incentives to work as the income tax credit since it is not conditional on earnings.

exemption (excluding the planned agricultural sector) is about 0.6 percent of GDP.¹¹ Moreover, the construction sector (and starting from July 2022 the agriculture sector as well) exempts qualified employees from the health contributions and reduces the rate of social insurance from 25 to 21.25 percent (in contrast to the standard combined SSC rate of 41.5 percent), subject to a sunset clause for 31 December 2028.

35. Sectoral PIT exemptions are subject to policy and administrative concerns and should be abolished. PIT exemptions (i) erode the tax base; and (ii) shift the income tax burden onto non-exempted sectors, thereby violating the horizontal equity principle (that states that individuals in the same income group pay the same level of income tax). (iii) Even if horizontal inequity is to be tolerated, selecting sectors is problematic: highly educated and skilled labor are not only in the IT sector for example, and others also provide important value added and service to the economy (doctors and engineers, for instance)—opening the door for political pressures to allow for more and more exemptions. The incidence of the exemption is not clear and can be partially reflected in lower wages (i.e., the benefit is received by the employer rather than the employee). Misallocation can occur as for example an IT specialist working at a governmental institution, or a non-IT company does not benefit from the PIT exemption. Moreover, such PIT exemptions generally imply the need for increasing other taxes or the rate on the non-PIT-exempt, thereby increasing distortion in the system. On top of the policy concerns, such exemptions introduce administrative and enforcement challenges of preventing loopholes.

Consider better designed CIT R&D incentives (rather than sectoral PIT exemptions)

36. If the policy objective is to encourage R&D investment and the demand for qualified experts, then R&D tax credits in the CIT are generally found to be an effective instrument if they are well-designed. There is a compelling argument to incentivize R&D investments as their social benefits can exceed private benefits for the firm (due to positive knowledge and other spillovers). Rich evidence suggests that R&D tax credits stimulate R&D investment. CIT credits can be linked to researchers' wages (as, for example, in The Netherlands and Belgium). Some studies look directly at their impact on wages of researchers/experts. For instance, Hægeland and Møen (2007) find that 33 percent of the Norwegian R&D tax credit transmits to higher wages.

37. There is considerable scope to improve existing R&D CIT incentives in Romania, which would render the IT PIT exemption redundant. The CIT in Romania provides (i) an additional deduction of 50 percent of qualified expenditures; (ii) a 10-year holiday for 'R&D companies'; and (iii) exemption for reinvested profit in 'technological equipment'. The last two incentives are ill-designed. Cost-based incentives (such as super deductions and tax credits) directly reward expenditures on investment are more efficient than profit-based incentives (such

¹¹ Based on statistics from Eurostat, total earnings in the construction sector and the IT sector are RON 26,614 million and RON 30,383 million, respectively. Assuming that half of the aggregate earnings benefit from the PIT exemption and multiplying by 6.5 percent yield around 0.6 percent of GDP.

as reduced rates and tax holidays). Moreover, the recent international agreement under the G20-OECD Inclusive Framework to a global minimum corporate tax of 15 percent ('Pillar 2') reduces the effectiveness of offering tax holidays and reduced to in-scope companies (if implemented). A full review of the CIT incentives is beyond of this report. One avenue is to abolish the tax holiday and the exemption for reinvested profit in technological equipment and instead adopt an R&D tax credit, for instance of 50 percent, while considering lowering the generosity of the R&D super deduction. The estimated forgone revenue (tax expenditures) in the CIT (mainly driven by the above three measures) is 0.4 percent of GDP in 2021).¹²

A progressive PIT reinforces the redundancy of PIT exemptions, especially if the motivation is redistribution

38. The above presented example of a PIT scale and a well-designed tax relief at the bottom of the distribution reinforce the redundancy of PIT exemptions. Most agricultural workers earn around the minimum wage or less. If the progressive PIT provides a tax credit at the bottom of the income distribution (or possibly other benefits), it essentially extends the 'no-PIT payment' to everyone in the economy with low earnings, including in the agriculture and construction sectors. This means there would be no need for a sector specific exemption. As to highly paid workers (in both sectors) it is not clear why they should be exempt from the PIT and receive preferential policy treatment. Importantly, PIT exemptions do not necessarily lower the wage cost. Thus, overall, these PIT exemptions are ill-targeted for redistribution or for encouraging the demand for labor.

The capacity of tax administration should be upgraded

39. A PIT with progressive marginal rates may require an end-of-year reconciliation between the amount of tax that was withheld and the amount of tax to be paid or refunded based on self-declarations. In the last two decades, Romania has collected taxes on employees through withholding by employers. In the case of one full-time job (12 months a year) then the system should be able to withhold accurately at the individual level even under a progressive PIT scale. Challenges occur in cases of multiple jobs and part time jobs. Reconciling withholding with final declarations for PIT necessitates assigning unique taxpayer identifications numbers to individuals, rather than to enterprises. One candidate for taxpayer IDs for individuals is the already existing system of social security numbers.

40. However, moving to an annual PIT should represent a very limited technical burden, as SIC and ID numbers are already used. The current system of withholding taxes could continue to apply, with individuals receiving a tax credit for taxes withheld, when filing their end-of-year tax declaration. Currently, all payments to social security are allocated to

¹² See Guvernul României Ministerul Finantelor Raport Privind Situatia Macroeconomică Pe Anul 2022 Și Proiectia Acesteia Pe Anii 2023-2025.

individual pension accounts at the Social Security Fund using the social insurance numbers. This information could be completed with taxpayer-level information to form an overall view of a taxpayer's income sources.

The PIT should aim at reducing tax non-neutrality

41. Tax neutrality occurs when the tax system does not distort the economic choices of individuals and businesses. Currently, decisions that can be impacted by taxation. An investor faces different income taxes when comparing, for example, the following alternative: (i) buy shares in a corporation and receive dividends (tax of 20.2 percent); (ii) lend the amount and receive interest income (tax of 10 percent); (iii) buy a property and sell it with gains (tax of 3 percent). Moreover, the organizational form that entrepreneurs use to carry out their activities has different tax implications.

42. While full tax neutrality can be difficult to achieve, as discussed in paragraph 10, existing differences in statutory tax rates and SSCs as well as the microenterprise regimes offer significant arbitrage opportunities. Next, the discussion considers reform options to reduce the gaps.

Tax rates should be chosen to achieve neutrality to the extent possible

43. The top PIT rate should equal to the combined rate on CIT and dividends. This implies that the top PIT rate of 20 percent would roughly match the existing tax rates on corporate income and dividends (**Figure 4**).

44. A uniform tax should be imposed on all individual capital income (royalties, interest income, all capital gains, and possibly dividends). The rationale for a uniform taxation of all capital incomes is the ease with which one capital income source can be converted to another (for example, by transforming interest income to capital gains through use of zero-coupon bonds or the use of financial instruments to recharacterize income as dividends/interest) provides. This implies that all capital gains (including gains from the sales of improvable properties) should be subject to a tax of 10 percent. If the statutory tax rate on dividends is increased from 5 to 10 percent, the corresponding top PIT rate should be 24.4 percent.

45. Existing ETRs (including SSCs) reveal important gaps in the taxation of self-employment/small enterprises, requiring urgent reforms. Next, this section examines in detail the ETRs (including mandatory SSCs) of each form of self-employment: freelance and legal entity with or without employment. A legal entity with 'employment' can include a single labor contract for the owner as the sole employee of the microenterprise. A description of the microenterprise sector is provided in Appendix 3. See **Box 2** for an explanation of the ETR calculations.

Freelancers should face a similar tax rate as employees

46. Freelancers should pay SSCs on their total net income, possibly with a cap. There is tax-induced preference for individuals to work as freelancers, rather than accept formal labor contracts. The ETR for freelance work is almost always less than that for wage work (45 percent). The ETR of a freelancer at, for example, a profit margin of 30 percent and a turnover of 150,000 Euro, is only 14.3 percent (**Table 6**). This means a person earning a relatively high wage would significantly lower the tax bill by doing the job as an outsourced contractor (paying PIT and only SSCs on 12 times the monthly minimum wage) rather than being formally employed by the company. A higher PIT marginal statutory tax rate in the top bracket (e.g., 20 percent) would reduce the gap. However, importantly, freelancers, like wage earners, should also be required to pay the SSCs on their full self-employment earnings, possibly up to a cap (expressed as a multiple of minimum wage, e.g., 3 times the annual minimum wage), which applies to all forms of employment. This would reduce the room for tax arbitrage, in principle making the freelancer indifferent between freelance and formal labor work. It would also increase revenue by 0.4 percent of GDP.

The turnover tax regimes should be reformed to simplify and close loopholes

47. A microenterprise can have a tax advantage over corporations paying profit tax. Consider a profit rate of 30 percent and a turnover of 150,000 EUR. Then instead of paying tax on corporate profits and dividends, which would result in an ETR of 20.2 percent, the entrepreneur can claim microenterprise status (with a sole employee) to reduce the ETR to 14.0 percent. Furthermore, importantly, medium-size corporations have an incentive to spin off part of their activities as multiple microenterprises to reduce their overall tax burden. However, at the lower profitability level of 15 percent, the ETR for a microenterprise with employees is close to the ETR for CIT at the 150,000 EUR turnover.

Table 4. Effective Tax Rates and the Organizational Form

Profit margin equals 15%	Effective Tax Rates (%) under Alternative Organization Forms					
Turnover (EUR)	50,000	100,000	150,000	200,000	250,000	300,000
Microenterprise tax, without employees	32.2	28.1	26.7	26.1	25.6	25.4
Microenterprise tax, with owner-employee	46.3	28.8	23.0	20.1	18.3	17.2
Freelance (natural person)	36.0	23.0	18.7	16.5	15.2	14.3
Corporation	20.2	20.2	20.2	20.2	20.2	20.2

Note: The case of a microenterprise with employees assumes the owner is employed by the company and is paid 12 MW.

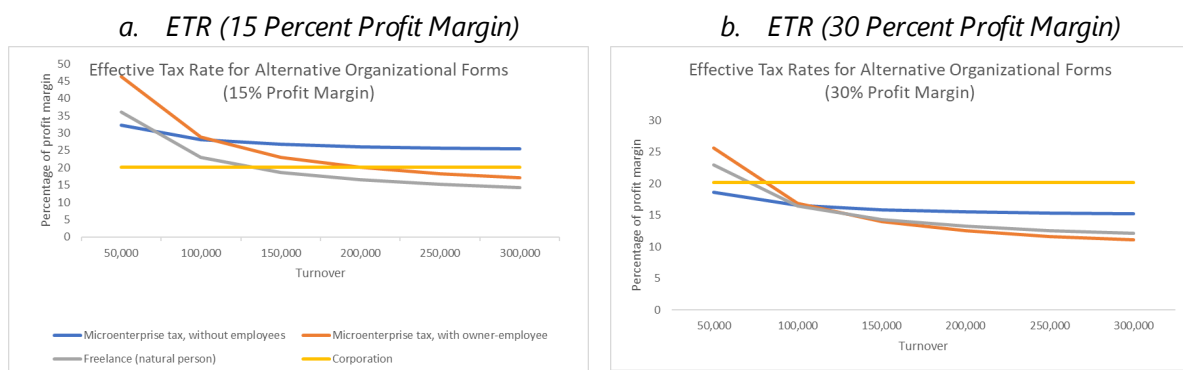
Profit margin equals 30%	Effective Tax Rates (%) under Alternative Organization Forms					
Turnover (EUR)	50,000	100,000	150,000	200,000	250,000	300,000
Microenterprise tax, without employees	18.6	16.6	15.9	15.5	15.3	15.2
Microenterprise tax, with owner-employee	25.7	16.9	14.0	12.5	11.7	11.1
Freelance (natural person)	23.0	16.5	14.3	13.2	12.6	12.2
Corporation	20.2	20.2	20.2	20.2	20.2	20.2

Note: The case of a microenterprise with employees assumes the owner is employed by the company and is paid 12 MW.

Source: IMF staff analysis.

48. Microenterprises with employees have a lower ETR than those without employees, except at modest turnover or low profit margins. At a profit margin of 30 percent, beyond turnover of about 100,000 EUR, the reduction in the microenterprise tax from 3 percent to 1 percent more than compensates for the mandatory social contributions and the PIT on the owner-employee's wage income (**Table 6**). Only at smaller turnover levels, is the ETR lower when the microenterprise has no employees. These observations may explain the observation that there are about 100,000 more microenterprises with employees, compared to those without employees, while there are more microenterprises without employees only at the lowest band of turnover. At low turnover levels, the SSCs have greater relative impact on ETRs (see the statistics on the microenterprise sector described in Appendix 3). As mentioned in **paragraph 43**, under a top PIT rate of 20 percent, the legal entity would be indifferent between being taxed under the PIT or the CIT.⁴³

Figure 10. Effective Tax Rates and the Organizational, Varying Profitability



Source: IMF staff analysis.

49. The precise purpose of the microenterprise tax regimes in Romania is unclear and warrants reconsideration. Simplicity should be the main aim of a turnover tax regime that targets small businesses. First, a tax on turnover is simpler than the CIT, thereby reducing taxpayer compliance costs and tax administration costs. Both types of costs tend to be high for smaller businesses relative to their turnover. Second, the non-deductibility of costs serves to generate tax revenues even when companies are making losses. While the issue of tax evasion would be better addressed with stronger tax administration, as a 2nd best or in tandem to administrative reforms, the objective of safeguarding revenues can call for an alternative minimum tax regime for the corpore sector (that is conceptually different from a simplified regime for the small businesses). It is indeed conceivable to combine the CIT with an alternative minimum tax regime (based on turnover) and have a separate simplified turnover (final) tax regime for small business, with a lower turnover threshold than is currently the case.

50. Romania's turnover tax regime is also targeting companies with proper bookkeeping capability. Simplified tax regimes, such as turnover taxes, alleviate some of the financial reporting and tax filing obligations of microenterprises. However, in Romania,

microenterprises include various corporate forms, which must in any case satisfy corporate filing obligations.

Consider a uniform turnover tax regime with a lower threshold

51. The microenterprise tax regime in Romania has a high turnover threshold of 1 million EUR (i.e., more than 10 times higher than the VAT registration threshold of 88,000 EUR). This suggests that many of the legal entities operating under the microenterprise tax have the capacity to satisfy taxpayer filing obligations. Many countries have turnover tax regimes, but the threshold is usually much lower. For example, in France the threshold for the micro regime is 176,200 EUR for trading activities and 72,000 EUR for all other commercial and industrial activities. In Armenia, the turnover tax regime has a threshold of about 116,000 EUR; in Georgia, it is 160,000 EUR; in Uzbekistan, it is 86,000 EUR; and in Kazakhstan, it is 192,000 EUR. The turnover tax rates in these countries range between 1 percent and 4 percent. The one million EUR threshold for the turnover tax in Romania is among the (if not the) highest in the world.

52. A common practice is to align the threshold for the microenterprise regime with the VAT registration threshold. Romania's VAT threshold of EUR 88,500 would be a reasonable level for the microenterprise tax. It would also mitigate the need to distinguish between enterprises with and without employees, since currently companies below that threshold would tend to have few or no employees. Reducing the threshold to, for example, 250,000 EUR (a higher upper bound) would eliminate about 33,500 companies (with and without employees) from the microenterprise regime. Microenterprise tax revenues would fall by about 175 million EUR or 33 percent of microenterprise tax revenues in 2019. However, this loss would be compensated by higher profit tax revenues from microenterprises removed from the regime because of the lower threshold—the gain from the CIT (and the tax on dividends) is estimated to be close to 580 million EUR (i.e., the net increase in tax revenue is about 400 million EUR).

53. The turnover tax rate should be uniform and set at 1 to 2 percent. The 1 percent rate (on turnover) by itself is low in comparison to the turnover tax rate in many countries. However, in combination with the dividend tax on microenterprises (5 percent), the ETR becomes close to that for both CIT and unincorporated individuals (freelance) at a profitability of 15 percent and a turnover of 150,000 Euro.¹³ A progressive PIT reform that reduces the marginal tax rate at the bottom end of the distribution would tend to close the ETR gaps in the first tranche of turnover.

Specific businesses and professionals should not be eligible for the simplified regime

54. Legal entities without employees should be obliged to be under the CIT or possibly deemed as a transparent entity leading to taxing the beneficial owner under the PIT.

¹³ A turnover tax rate of 1 percent and a dividend tax rate of 5 percent, together with 10 percent PIT on wages, is Romania's current tax regime for microenterprises with employees. See Figure 13 for the ETR, including the effect of SSC.

Entities without employees, if allowed to be in the simplified regime, can be used to avoid the CIT. Eliminating enterprises with no employees from the simplified regime would further simplify and mitigate abusive tax planning. Together with applying administrative rules against company splitting, loopholes would be closed. Preserving a distinction between enterprises with and without employees becomes less relevant when the threshold of the microenterprise regime is reduced as recommended. Thus, many microenterprises without employees (and with turnover below the threshold) would likely be pushed into the CIT regime, creating further revenue gains by collecting additional CIT of approximately 200 million EUR. The tax would be similar for a transparent entity under a PIT with a top rate of 20 percent.

55. Moreover, professionals, even if they fall below the turnover threshold of the simplified regime, should not be eligible for the simplified tax regime. Lawyers, accountants, physicians, and so on, should operate within the CIT or PIT regime, as they have high levels of educational attainment and often have high profit margins. They ought to be able to comply with the filing requirements of CIT or net income under PIT.

56. Thus, all in all, to close revenue leakages, simplify, and improve tax neutrality between different legal forms, Romania should consider

- Adopting one simplified regime for those microenterprises with employees and turnovers below a threshold, ideally around the VAT threshold (or slightly higher but below 250,000 EUR).
- Taxing microenterprises without employees and professionals under the CIT (or PIT).
- Applying SSCs on the entire total net income of freelancers, possibly with a cap.

Box 1. The Special Importance of Agriculture in Romania

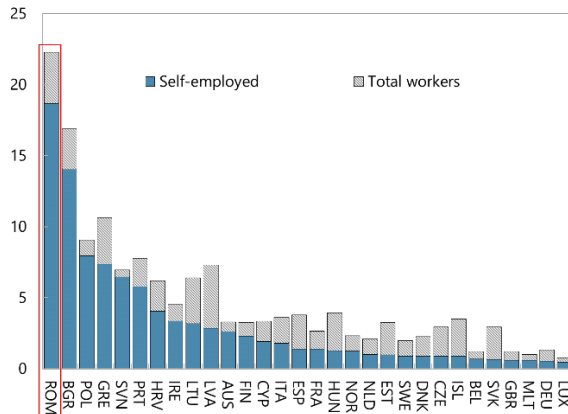
More than one fifth (22 percent) of the Romanian workforce is employed in agricultural related activities, mostly are self-employed (84 percent of the agricultural employment).

Moreover, in contrast to the average EU agricultural landholding of 15 hectares, in Romania about 68 percent of farms are small—with areas of less than two hectares—, and the Romania average landholding is about 3.8 hectares. Romania is the EU's largest corn and sunflower producer and is in the top five of EU wheat and soybeans producers.

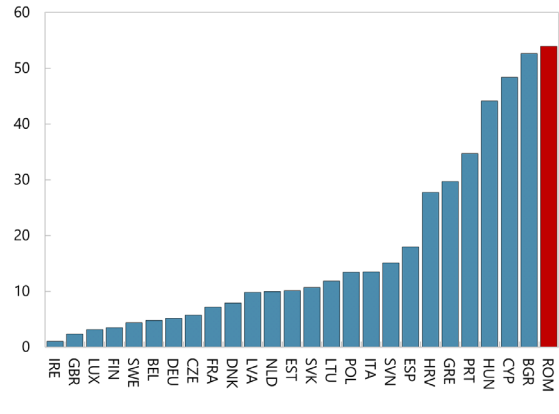
About 10 percent of the workforce is exempt from the PIT due to structure of the agriculture sector. Article 105 of the Fiscal Code exempts incomes from agriculture and livestock below some size thresholds. According to the 2016 Farm Structure Survey, more than 50 percent of agricultural workers work in exempt farms. Statistics from the Tax administration further indicates that less than 10 percent of self-employed agricultural workers are registered under the PIT.

Figure 11. Employment in Agriculture

a. Share agricultural employment in small farms, percent



b. Share of agricultural sector workers in total employment, percent



Source: Eurostat.

Box 2. Effective Tax Rates

Effective tax rates (ETR) are calculated as the total tax burden (TAX) faced by a natural or legal person, as a proportion of profit. An example is the case of a microenterprise without employees. The enterprise pays 3 percent tax on turnover and 5 percent tax on dividends. Then:

$$TAX = 0.03 \times sales + 0.05 \times (sales - costs - 0.03 \times sales)$$

$$\frac{TAX}{PROFIT} = \frac{0.03 \times sales + 0.05 \times (sales - costs - 0.03 \times sales)}{sales - costs}$$

This can be rewritten as

$$\frac{TAX}{PROFIT} = \frac{0.03 + 0.05 \times \left(1 - \frac{sales}{costs} - 0.03\right)}{1 - cost/sales}$$

The expression $1 - \frac{sales}{costs}$ is the businesses' profit margin (before tax).

When mandatory social contributions are considered, such as the case of a microenterprise with employees, the expression for ETR becomes more complicated. It is also a question of whether mandatory social contributions are viewed by individuals in Romania as "taxes," which would then affect their labor and business decisions.¹⁴ In the case of an owner of a microenterprise having a labor contract with his or her company, payment of personal income tax also enters into the ETR.

¹⁴ The linkage between contributions and entitlements is a matter of degree. Romania's public pension system is a defined benefit plan, whereby retirement benefits are determined based a formula (a point system), whereby benefits are less closely matched to contributions than in notional defined contribution systems. In the illustrative calculations, we assume the social contributions are perceived by taxpayers as a tax.

Appendix 1. Optimal Taxation

The optimal tax analysis is conducted as follows:

- *Idea:* The government maximizes a welfare function representing all individuals in the economy. This function has a specific form and includes “social marginal welfare weights” attached to individuals by income levels. The policymaker has an aversion to inequality and faces a budget constraint with exogenous revenue needs. A specific form of government welfare function sums over the welfare of all individuals of the economy. Individuals have different productivities, and hence earnings, and their welfare depends on their own consumption (the more the better) and labor (with some disutility from work). The general solution to this exercise is a continuous non-linear schedule of ‘optimal’ tax rates that optimally balance (i) revenue needs; (ii) efficiency (with taxes affecting labor supply decisions); and (iii) redistribution motives (given social marginal welfare weights).
- *Model calculation:* The model uses information on the distribution of earnings from SILC and values for exogenous parameters:
 - *SILC Sample:* The analysis focuses on the working age population and excludes students, retirees, and workers in the agricultural sector. The latter exclusion is motivated by the fact that most workers and self-employed in the agricultural sector are excluded from the tax system either through formal or effective exemption (**Box 1**).
 - *Elasticities:* The analysis assumes a constant intensive labor supply elasticity of 0.1 (i.e., a 10-percent increase in after-tax salary increases labor supply by 1 percent at the margin); and an average extensive margin elasticity of 0.2 (i.e., a 10-percent increase in after-tax income increases the propensity to participate in the labor market by 2 percent). The extensive margin elasticity is lowest for low- and high-income earners. These elasticities are based on estimates for Poland, Hungary, Greece ([Bargain and others, 2014](#); [Bargain Orsini and Peichl, 2014](#); [Benczúr and others, 2014](#)), Slovakia ([Senaj and others, 2016](#)) and the Czech Republic ([Galuščák and Kátay, 2019](#)).
- *Social preferences through reverse engineering:* For **Figure 9**, the analysis uses the current observed METRs to assess the intended or tolerated level of inequality in Romania. This is done using an ‘inverse tax’ approach, which assumes the current tax-benefit system has been chosen to optimize the trade-off between equity and efficiency ([Bourguignon and Spadaro 2012](#); [Jacobs et al., 2017](#)). By also assuming the responsiveness of earnings to changes in tax rates is known (i.e., elasticities as above), METRs at every income level provide information on how much each additional unit of consumption is valued by policy makers.

- *Estimate for the inequality aversion parameter γ* : Consider a social welfare function that is a weighted sum of individuals utility u_n , with n denoting skills, given by

$$W = \int_0^{\infty} \omega_n G(u_n) f(n) dn,$$

where $f(n)$ is the density of skills in the population. The social welfare weights in W consist of i) an exogenous term ω_n that only depends on the underlying skills of individual n , and ii) an endogenous component $G(u_n)$ that depends on her utility level under a given tax and benefit system. The analysis further assumes that G is described by an isoelastic function of the form

$$G(u_n) = \frac{u_n^{1-\gamma} - 1}{1 - \gamma},$$

where γ is the inequality aversion parameter. Under an optimal tax and benefit system, the social marginal welfare weights are given by

$$g_i = \frac{\omega_i u_i^{-\gamma}}{\lambda}, \quad (A.1)$$

where λ is the marginal cost of public funds (see for example Appendix A in [Piketty and Saez, 2013](#)). Taking logs and summing over the whole population, we can estimate the value of γ such that the squared distance between the left-hand side of Eq. (A.1), which can be observed using the 'inverse tax' approach, and the right-hand side is minimized

$$\hat{\lambda}, \hat{\gamma} = \arg \min_{\lambda, \gamma} \sum (\log g_n - \log \lambda - \gamma \log u_n - \log \omega_n)^2. \quad (A.2)$$

Finally, assuming that the weights ω_n are exogenous to u_n , the solution to Eq. (A.2) is given by ordinary least squares. The result of this exercise is an estimated inequality aversion parameter (γ) for Romania of 0.94.

Appendix 2. Illustrative Progressive PIT Scale

Sample incomes:	Current law, 10 percent flat tax rate				Reform: expanded social assistance credit for incomes below 24,000 RON / 10 percent / 20 percent marginal tax rate on top decile				Change in tax	
	Single		Married, 2 children		Single		Married, 2 children		revenue	Change in ATR
	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)	Tax revenue (RON)	Average tax rate (ATR)	Single/Married, 2 kids	Single/Married, 2 children
bottom 10th percentile										
10,610	3,792	0.357	(3,390)	(0.320)	2,060	0.19	(6,534)	(0.62)	(3,144)	(0.296)
20,597	7,936	0.385	256	0.012	7,501	0.36	(488)	(0.02)	(744)	(0.036)
30,467	12,296	0.404	4,785	0.157	12,296	0.40	4,748	0.16	(37)	(0.001)
middle 10-80th percentiles										
39,946	16,470	0.412	10,758	0.269	16,470	0.412	10,758	0.269	-	-
49,933	20,722	0.415	15,586	0.312	20,722	0.415	15,586	0.312	-	-
63,664	26,162	0.411	21,285	0.334	26,162	0.411	21,285	0.334	-	-
top 10th percentile										
94,248	39,113	0.415	33,977	0.361	39,168	0.416	34,032	0.361	55	0.00
176,012	73,045	0.415	67,909	0.386	81,276	0.462	76,140	0.433	8,231	0.05
187,247	77,708	0.415	72,572	0.388	87,062	0.465	81,926	0.438	9,355	0.05

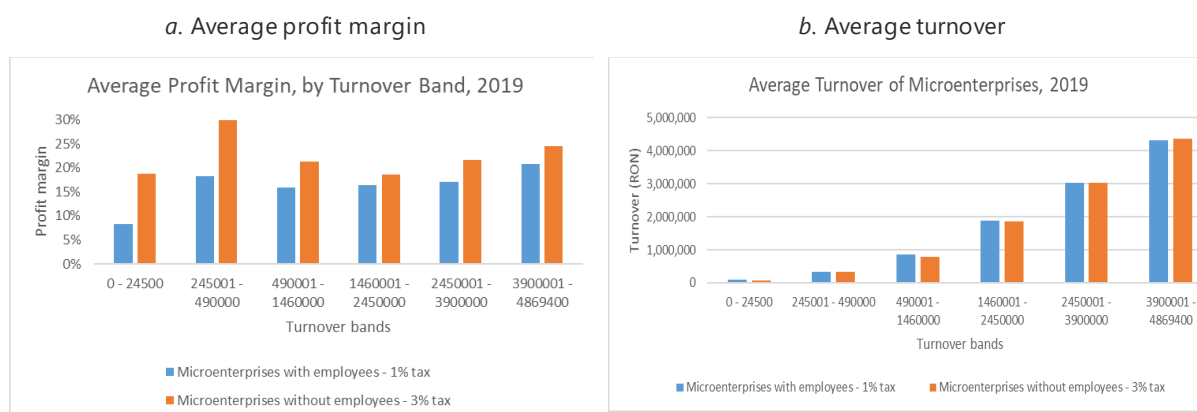
Source: IMF staff analysis.

Appendix 3. Description of the Microenterprise Sector

There are around 350,000 microenterprises with employees, compared to about 250,00 without employees. Only in the lowest turnover band—0 to 245,000 RON (52,000 Euro)—is it the case that the majority of microenterprises has no employees. The overall average profit margin for microenterprises with employees is about 12 percent, while about 20 percent for those without employees. The data also show that the average profit margin varies significantly across turnover bands. Microenterprises in the lowest turnover band have the smallest profit margins. Slightly more than half of microenterprises with employees are in the lowest turnover band. Almost 90 percent of the microenterprises without employees are in this lowest band. Almost 90 percent of the microenterprises without employees are in this lowest band.

Within each turnover band, the average turnover level is similar between microenterprises with and without employees.

Figure 12. Turnover and Profitability of Microenterprises



Source: IMF staff analysis.

REFERENCES

- Bargain, Olivier, Mathias Dolls, Dirk Neumann, Andreas Peichl, and Sebastian Siegloch, (2014). "Comparing Inequality Aversion across Countries When Labor Supply Responses Differ," *International Tax and Public Finance* 21(5), 845–873.
- Bargain, O., K. Orsini and A. Peichl, (2014). "Comparing Labor Supply Elasticities in Europe and the United States," *Journal of Human Resources* 29(3), 723–836.
- Benczúr, Péter, Gábor Kátay, Áron Kiss, and Olivér M. Rácz, (2014). "Income Taxation, Transfers and Labour Supply at the Extensive Margin." Mimeo.
- Bourguignon, François, and Spadaro, Amedeo, (2012). "Tax-Benefit Revealed Social Preferences," *Journal of Economic Inequality* 10, 75–108.
- EUROMOD, 2021, Country Report – Romania.
- Galuščák, Kamil, and Gábor Kátay, (2019). "Tax-Benefit Systems and Differences in Aggregate Labour Force Participation: Comparative Evidence from the Czech Republic and Hungary," *Economic Systems* 43(3-4), 100701.
- Hægeland, Torbjørn and Jarle Møen, 2007. "Input Additionality in the Norwegian R&D Tax Credit Scheme", Report 2007/47, Statistics Norway.
- Jacobs, Bas, Egbert Jongen, and Floris Zoutman, (2017). "Revealed Social Preferences of Dutch Political Parties," *Journal of Public Economics* 156, 81–100.
- Piketty, Thomas and Emmanuel Saez, (2013). Optimal Labor Income Taxation, Handbook of Public Economics, vol. 5, Edited by Alan J. Auerbach, Raj Chetty, Martin Feldstein, and Emmanuel Saez. Amsterdam: Elsevier, 391–474.
- OECD, 2020, The OECD Tax-Benefit Model for Romania: Policy Rules in 2020.
- Senaj, Matus, Zuzana Siebertova, Norbert Svarda, and Jana Valachyova, (2016). "Labour Force Participation Elasticities and the Move Away from a Flat Tax: The Case of Slovakia," *IZA Journal of European Labor Studies* 5(1), 1–26.