

An empirical assessment of the minimum wage for evidence-based social dialogue in the Republic of Moldova



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► List of abbreviations

GDP	Gross Domestic Product
HDI	Human Development Index
ILC	International Labour Conference
ILO	International Labour Organization
IMF	International Monetary Fund
ISCO	International Standard Classification of Occupations
MDL	Moldovan Lei
NBS	National Bureau of Statistics of the Republic of Moldova
NLFS	National Labour Force Survey
OECD	Organisation for Economic Cooperation and Development
PPP	Purchasing Power Parity
SDG	Sustainable Development Goal
UNDP	United Nations Development Programme
USD	United States Dollars
WESO	World Employment and Social Outlook
WDI	World Development Indicator

Preface

As the world gradually recovered from the unprecedented socio-economic impacts of the COVID-19 crisis, the year 2022 emerged as a year of multifaceted risks that threatened the much-desired human-centred recovery. Foremost among these threats are those related to the slowing of the recovery in the labour market and the Russian Federation's aggression against Ukraine, which has contributed to worsening food and energy shortages and global inflation. These risks are even more critical for the Republic of Moldova, one of the countries most affected by the war in Ukraine. Once again, the most disadvantaged and vulnerable populations are affected by the resulting cost-of-living crisis and the war in Ukraine. Without informed and bold intervention by international partners and national policymakers, deep socio-economic damage could erase decades of sustainable development gains in Moldova, progress already partially erased by the COVID-19 crisis, and thereby undermine the country's social cohesion.

Therefore, to ensure that the recovery from COVID-19, as well as from the multifaceted crises Moldova is currently experiencing, is human-centred, inclusive, sustainable, and resilient, significant efforts will be needed to support the most vulnerable people. Only in this way can a society become less unequal and more inclusive, and only in this way can a society's resilience to crises be built in the short-, medium-, and long term. Among those needed interventions, the minimum wage is one of the most effective labour market instruments for supporting the most vulnerable populations. As the literature suggests, the minimum wage is a powerful tool for reducing inequalities in the labour market and society, including wage inequality against women. Beyond reducing inequality, an effective minimum wage system is also capable of raising the standards of living of the most disadvantaged workers, and thereby of families at the bottom of the income ladder, to reduce poverty, and accelerate the achievement of several of the Sustainable Development Goals of the 2030 Agenda.

Therefore, to improve the minimum wage system so that it is more effective in raising the living standards of the population in the country, this report provides a detailed empirical analysis of wage distribution and wage policies in the Republic of Moldova. The report is part of an ILO technical assistance requested by the Government of the Republic of Moldova and funded by the joint United Nations Programme Strengthening Moldova's resilience to address the impact of the Ukraine war on food security and incomes of most vulnerable groups. Given the wealth of information in this report and the various policy recommendations that emerge from them, this report constitutes an excellent basis for a good faith social dialogue between the different social partners and for defining a new, more effective, and sustainable minimum wage system.

Markus Pilgrim

Director, ILO Office for Central and Eastern Europe *Budapest, Hungary*

February 2023

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This report was prepared by the international consultant **Dr. Khalid Maman Waziri**. The report was completed under the technical supervision of **Rosalia Vázquez-Alvarez**, Econometrician, Wage Specialist, Inclusive Labour Market, Labour Relations and Working Conditions Branch (INWORK) and **María José Chamorro**, Senior Specialist, Gender and Formalization, ILO Office for Central and Eastern Europe. The valuable comments provided by **Markus Pilgrim**, Director of the ILO Office for Central and Eastern Europe and **Ala Lipciu**, National Coordinator of the ILO in Moldova, were incorporated.

Executive summary

In order to support the upgrade of the minimum wage system in the Republic of Moldova, the present report provides empirical evidence that may inform decision-making by social partners and policymakers. This covers, notably, the structure of wage distribution and the labour market, as well as the existing institutional set-up for minimum wages. In the context of a reform aimed at bringing more coherence to the minimum wage system and to increase the minimum wage rate, the report provides information on the reform's potential to support the most vulnerable people and enhance living standards. Although the present report does not assess the potential impact on employment outcomes, it tackles the main areas for improvement in the minimum wage system, and proposes concrete policy solutions, in particular in relation to the three key factors (or conditions) that influence the minimum wage's effectiveness in reducing inequalities and raising the living standards of the most disadvantaged workers and the poorest households. According to the Minimum Wage Policy Guide (ILO 2016) and the Global Wage Report 2020/21 (ILO 2020), these factors are: (i) the extent of coverage and compliance; (ii) the adequacy of the minimum wage; and (iii) the appropriateness of the beneficiaries of such wage protection. If used in the context of a strong, inclusive and good-faith social dialogue, such extensive empirical evidence and recommended measures can help contain the devastating socio-economic effects of the current crisis, protecting the poorest and most vulnerable households, while considerably reducing inequalities.

In relation to the first factor, the extent of coverage and compliance, analysis of the wage distribution showed (considering only the private sector) that more than one in five wage earners are at or below the minimum wage in Moldova. This suggests that upgrading the minimum wage system has considerable potential to reduce inequality and poverty. The review of Moldova's minimum wage legislation revealed some ambiguity, which could affect compliance with the legislation, as two laws on the minimum wage seem to refer to the private sector (otherwise known as the "real sector" in Moldova), even though in practice only one of the two laws is applied (Law no. 847/2002). This could, at least partly, explain the non-compliance rate of 16 per cent that is estimated in the private ("real") sector, which is higher than the average in Europe and worldwide. The employees who are most exposed to non-compliance are women, low-skilled workers, or those with a lower level of education, on one hand, and on the other hand, employees in rural areas, in the smallest enterprises, or in agriculture, forestry and fishing activities. Another major determinant of the non-compliance rate in the country is probably related to the high prevalence of informality. In the private sector, while workers with informal employment represent 33.4 per cent of minimum wage earners, they represent 14 per cent of all employees, and only 9 per cent of employees paid above the minimum wage. Putting measures in place to reduce informality should therefore be an integral part of those measures aimed at making the minimum wage a more effective tool for social justice.

In relation to the second factor, the adequacy of the minimum wage level, two challenges were identified: (i) the minimum wage in the real (private) sector is 48 per cent of the average gross wage, which may be considered low compared with other European countries; and (ii) the minimum wage level is just above the national absolute poverty line, indicating that the monthly earnings of minimum wage earners only allow them to remain above absolute poverty, but are unlikely to be able to cover all of their basic needs.

For the third and final factor, our analyses did not reveal any shortcomings. On the contrary, it was observed that the potential beneficiaries of the minimum wage perfectly correspond to the target of such a wage policy. In the Republic of Moldova, minimum wage earners are found mainly at the bottom end of the income scale and have the lowest wages. The employees who are most likely to be minimum wage recipients are: low-skilled workers, those with a low level of education, adults over 25 years of age, employees living in couples, heads of households, and people who are the only wage earners in their households. Furthermore, it was observed that minimum wage earners find it difficult to cover their and their families' needs if they do not work longer than normal working hours or if they do not find a second job. These results confirm that the minimum wage represents the main means of subsistence for beneficiaries and their families, which implies that minimum wage policies have strong potential to improve several aspects of socio-economic development in the Republic of Moldova.

Policy recommendations

To make the minimum wage system in the Republic of Moldova even more effective in improving the living conditions of low-paid workers and their families, and in reducing inequalities, especially in the context of a minimum wage increase, the following improvements will be necessary.

1. Extent of legal coverage and compliance

Although the government recently approved a new unified minimum wage applying to both the private ("real") and the budgetary sectors (September 2022), set at MDL 3,500, clarification of all the minimum wage laws is needed to remove any ambiguity about the minimum wage in both sectors. Along with simplification of the law, awareness-raising campaigns, capacity-building activities for employers' and workers' representatives, and targeted labour inspections with sanctions should help to significantly improve the level of compliance with the minimum wage. These measures should be accompanied by measures to encourage formalization, which is a major challenge for minimum wage enforcement.

2. Adequacy of the minimum wage

Given that the minimum wage is less than 50 per cent of the average monthly wage for a representative population of formal and informal wage employees, it is recommended that the level be adjusted gradually in accordance with the European Parliament recommendations for EU countries (European Union, 2022). To ensure that the minimum wage covers the needs of workers and their families, it is recommended that the level be gradually adjusted so that it increases to reach and maintain the monetary value of a basket of goods and services (agreed by all social partners), or to achieve either 50 per cent of the average wage or 60 per cent of the median wage. The government, in consultation with social partners, should establish a time-frame for reaching such a goal. Because employer social security contributions increase the total cost of the minimum wage by 22.5 per cent for employers, the government can, on a transitional basis, support enterprises by, for example, lowering these contributions for employees who are minimum wage earners and compensating for the resulting gap.

It is essential, however, that such an increase be carried out in the context of a strong and inclusive social dialogue, based on evidence, which also considers the capacity of enterprises to pay the minimum wage without jeopardizing their survival or employment.

3. Characteristics of beneficiaries

Given the gradual decline in employment opportunities, effective employment policies will be needed to ensure that it dominates work opportunities and that low-paid workers do not move into informality. These employment policies should be designed in line with other macroeconomic, development and sectoral policies, whose primary and explicit objective should be full employment with decent working conditions. Active labour market policies, including training programmes for skills upgrading and re-skilling, could help to maintain and strengthen the labour market attachment of the most disadvantaged workers, who are identified as being most vulnerable to transition to the informal economy. They could also help to increase productivity, which is one of the main drivers of informality. Public employment services will also need to be strengthened, especially for vulnerable workers, so that they can be guided and counselled in their labour market transitions, including the transition to the formal economy.

4. Other important recommendations

Given the wide wage disparities between different economic activities, collective bargaining must be improved, made as broad as possible and extended to all areas. Collective bargaining is indeed better placed than the minimum wage to regulate wages above the minimum, while taking into account the particular circumstances of certain sectors and activities. For this reason, the minimum wage, which should serve only as a floor, must be decoupled from other wages in the different wage scales. Thus, a single minimum wage can be set at an adequate level to serve as a floor for low wages in all economic activities and institutional sectors, while leaving the regulation of wages above that floor to collective bargaining. The

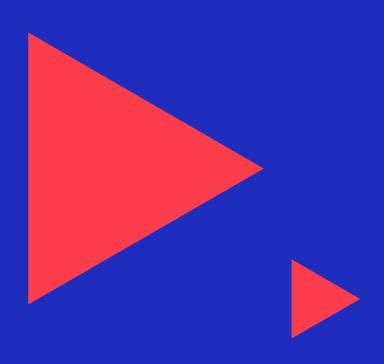
combination of appropriate minimum wage regulations and collective bargaining could significantly reduce inequality, including the gender wage gap, as the micro-simulations in this report have shown.

Finally, it should be noted that access to household micro-data made this analysis possible. However, in order to better inform social partners and public policymakers, this analysis can be complemented by assessments of the needs of workers and their families, on one hand, and of the capacity of enterprises to support a minimum wage level without jeopardizing their survival, on the other. These assessments can be made possible in the first case by micro-data on household incomes and expenditures, and in the second case by micro-data on enterprises that provide information on their employees and their various costs and revenues.

Moreover, strengthening the role of the National Commission for Consultation and Collective Bargaining and creating a technical unit with access to all types of information and data that could guide its discussions could also help to make the minimum wage system more efficient and coherent.

Part

Socio-economic context, the labour market, and minimum wage policies



▶ 1. Background

The Republic of Moldova, a landlocked country in Eastern Europe, located between Ukraine and Romania, is today an upper middle-income country, with an estimated GDP per capita of USD 5,440 in 2022 (IMF 2020). Although the country experienced a drastic decline in GDP per capita in the 1990s after the fall of the Union of Soviet Socialist Republics, the Moldovan economy has gradually recovered from the loss of this market through increasing European and global integration, which has enabled it to achieve enormous success in economic development. Socio-economic progress has occurred mainly in the last twenty years, characterised by an average economic growth of 4.5 per cent since 2000, which has taken place at the same time as inequality has decreased, with a Gini index that has fallen from 0.36 in 2000 to 0.26 in 2019 (World Bank, World Development Indicators Database). This decline in inequality is likely to have been helped by the significant decline in poverty over the same period. Indeed, over the last two decades, the poverty rate, as measured by the poverty line for upper middle-income countries fell from 91 per cent to 15 per cent.

Progress in human development have also been observed over the past two decades, as measured by the Human Development Index (UNDP 2020), which rose from 0.690 in 1990 to 0.750 in 2019. In 2021, the HDI of the Republic of Moldova was estimated to be 0.769, which places the country in the category of high human development countries (UNDP 2022). Such a progress is mainly due to increases in per capita income and average years of education, as well as improved access to health and thereby an increase in life expectancy at birth, all of which have been enabled by inclusive economic growth that reduces inequality and poverty. Nevertheless, progress could have been even more important without the stagnation of the decrease in inequality in recent years, as pointed out by the UNDP (UNDP 2022). It is in the face of persistent inequality, and economic growth that has slowed since 2015 (see WB, HDI), that the COVID-19 crisis hit the country in 2020, particularly impacting the most vulnerable populations and groups of workers. While the country has not yet recovered from the COVID-19 crisis, which caused the reversal of many socio-economic advances around the world, the Republic of Moldova is now one of the countries most impacted by the war in Ukraine. Recent analyses also show that among upper-middle income countries, Moldova is among those most affected by rising energy prices and global price increases, further complicating, and exposing lower income households in the country (UNDP 2022).

To address these crises and their potential effects on the living conditions of populations, particularly the most economically and financially vulnerable, as well as the persistence of inequalities observed in recent years, policy measures targeting the labour market are needed, among other policies. Indeed, labour is the main source of household income, if not the only source for the majority of households in the world. It is the main means by which individuals can meet and cover the living expenses of their families. Therefore, in the context of the current multi-faceted crisis, policies that promote quality employment, especially formal wage employment, and that improve the wage conditions of those already in employment, must be at the centre of any strategy to protect, and improve, the living

conditions of the population in the country. More specifically, wage policies, notably an adequate minimum wage, will allow to effectively target low-paid workers and increase the impacts of the strategy.

Therefore, it is in this context, and in the context of the forthcoming reform of the minimum wage system in the Republic of Moldova, aiming to significantly increase the level of the minimum wage, that this report provides empirical evidence to inform decision-making by social partners and policymakers. For this purpose, after analysing the structure of the labour market and that of the wage distribution, and in the light of the specificities of the institutional characteristics of the minimum wage in the Republic of Moldova, this report identifies the main areas for improvement in the functioning of the minimum wage system. These areas of improvement are identified in relation to the three key factors (or conditions) that influence the effectiveness of the minimum wage in achieving its objectives. According to the Minimum Wage Policy Guide (ILO 2016) and the Global Wage Report 2020/21 (ILO 2020), these factors are: the extent of coverage and compliance, which should be broad; the adequacy of the minimum wage level; and the relevance of the targetting, which should correspond to those most in need of minimum wage protection. The findings of these analyses, together with the results of different policy scenario simulations, both based on the National Labour Force Survey (NLFS) microdata, are then used to propose policy recommendations for improving the minimum wage system in the Republic of Moldova. In any case, it should be noted that the wealth of empirical evidence and the policy recommendations presented in this report can serve the purpose of establishing an adequate and balanced minimum wage, only through a strong and inclusive social dialogue, as emphasized by the Minimum Wage Fixing Convention (No. 131).

2. The labour market structure

Analysis of the functioning of the labour market permits a better understanding of the performance of the labour market in providing employment opportunities to people. Such analysis means identifying key labour market outcomes, including levels of employment, unemployment, and labour market participation, and assessing trends in these indicators to better understand recent labour market performance in the Republic of Moldova. For this exercise, it would be interesting to disaggregate the different key labour market indicators to assess the specific situation of different groups of workers who are generally the most disadvantaged, notably women, young people, and low-skilled workers.

Furthermore, although the target population in this report are the workers who would be affected by a minimum wage policy, that is wage employees, the analysis of the functioning of the labour market also requires attention to other forms of employment, notably employers, own-account workers, or unpaid contributing family workers. It is in this context that the

evolution of these different forms of employment, as well as changes in the composition of employment, are examined, thus making it possible to assess, at least in part, recent changes in the quality of employment in the Republic of Moldova. This is because wage employees are generally the most protected category of workers in the labour market, by being predominantly in the formal economy and therefore specifically targeted by the various labour market policies, in particular wage policies.

At this point, it should be noted that the estimates presented in this report are based on the National Labour Force Survey (the NLFS hereafter), a survey administered by the National Bureau of Statistics (NBS) that interviews a representative sample of Moldovan households every quarter. This household-based survey uses a labour force questionnaire that collects individual information (micro-data) on the different members of the surveyed household, in addition to information on the household itself. In this report, the latest available data accessible in the ILO repository are used, that is micro-data for the second half of 2019. The year 2019 will therefore be the main year of interest for this report. However, trends over the last two decades in the main labour market indicators as described above, are retrieved from the World Employment and Social Outlook (ILO 2022). Although the analysis in this report focuses on 2019, it should be noted that as a result of the COVID-19 pandemic and its negative impact on labour market outcomes, notably for employment trends, the 2019 data are likely to be representative of underlying labour market characteristics for 2021–2022. Indeed, ILO estimates suggest that employment levels have returned to pre-pandemic levels by 2021 and 2022 (ILO 2022).

2.1 Main indicators of the labour market in the Republic of Moldova

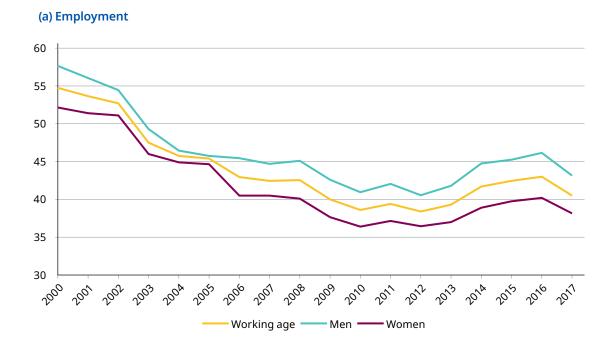
Figure 1¹, using WESO estimates (ILO 2022), provides an overview of employment opportunities in Moldova over the past two decades, through the evolution of key labour market indicators, including employment, unemployment, and inactivity rates. Starting with employment trends, as a percentage of the working age population (15 years and older), employment is estimated at 40.1 per cent in 2019, having fallen since 2000 when it stood at 54.8 per cent, a decline of 14.7 percentage points. This decline was more significant for women, who experienced a 15.7 percentage point drop in the employment rate between

^{1.} It should be noted that the National Bureau of Statistics has introduced a number of changes in the NLFS to improve the quality and representativeness of the survey: (i) from the first quarter of 2018, the definition of the concepts has been adapted to the latest ILO international statistical standards; and (ii) from the first quarter of 2019, the survey population has been revised to include usual resident population, in line with international standards, while taking account of the results from the 2014 Census of Population. Therefore, the 2019 (second quarter) microdata, which is used to produce the empirical analyses of the minimum wage system in the present report, has benefitted from the improvements of the quality of the NLFS survey. However, it should be noted that the different types of improvements resulted in a break in the series of labour market trends, between 2017 and 2019. For this reason, when analyzing the labour market outcomes times series, only the period 2000–2017 is considered.

2000 and 2019, while men experienced a 13.5 percentage point drop over the same period. This result is worrying as employment is an effective means of reducing inequality in society, as suggested by an OECD study which estimates that a one percentage point increase in the employment rate would reduce income inequality by 0.65 percentage points, when the Gini index is used as a measure (OECD 2011).

With respect to the evolution of the unemployment rate, a clear improvement is noted, as the rate has more than halved between 2000 and 2019, falling from 8.5 per cent to 4 per cent. Moreover, while women had already experienced a relatively greater deterioration in the employment rate compared to men, they benefited from a smaller improvement in the unemployment rate, which suggests a greater increase in inactivity for women. This can be seen in the panel (c) of Figure 1, which highlights an increase in the share of working-age people who are not in the labour force, showing a more marked increase for women than for men. For both men and women, the share of the working-age population not in the labour force has risen steadily, from 40.1 per cent in 2000 to 57.7 per cent in 2019, an increase of 17.6 percentage points. Recent estimates indicate that this increase has continued through 2021, reaching 61.4 percent. Such a high level of inactivity is well above the averages for uppermiddle-income countries (36 per cent in 2019), for Eastern European countries (40.6 per cent), and for the 27 EU countries (42.6 per cent). The trends also suggest a widening gender gap in access to employment opportunities and labour market participation.

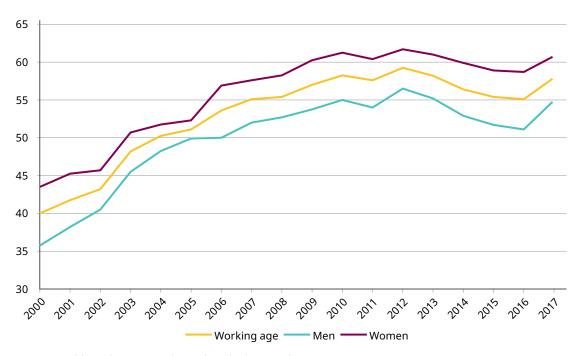
► Figure 1. Labour force status of working age population, 2000–2021 (percentage)



(b) Unemployment



(c) Not in Labour force



Source: World Employment and Social Outlook – Trends 2022.

Such results, characterised by a fall in the employment rate combined with a significant rise in inactivity, suggest a deterioration in the dependency ratio (i.e., the proportion of economically inactive people in relation to active people), which is likely to pose serious challenges in

terms of combating poverty and inequality. Indeed, the ILO modelled estimates² of the labour dependency ratio suggest that while one employed person supported 1.4 people outside the labour force in 2000, that number has increased to 2 in 2019. Therefore, as employment is increasingly being used to meet the needs and livelihoods of a larger number of dependent people, its quality is even more important for policy makers, especially in the context of a strategy aiming to reducing poverty and inequality and achieving the Sustainable Development Goals (SDG) of the Agenda 2030.

Furthermore, when there is a high incidence of non-participation in the labour market, the labour underutilization rate might be a more relevant indicator than the unemployment rate for assessing the functioning of the labour market, especially for measuring the availability of, and access to employment opportunities. In 2019, after a gradual decrease, the labour underutilization³ rate was estimated at 10.2 per cent for the Republic of Moldova (Figure 2), which is higher than the average for Eastern European countries, around 7.6 per cent. In contrast, the level of labour underutilisation in the Republic of Moldova is well below the average for the upper-middle income countries (13.8 per cent). It is also twice as low compared to the rate for low-income countries, which are those mainly characterised by insufficient formal employment opportunities. When this indicator is broken down by gender, it appears that men (12.3 per cent) face much greater labour underutilization than women (8 per cent). Such a difference is caused both by higher time-related underemployment and potential labour force for men than for women.



► Figure 2. Total underutilized labour, by gender, 2006–2019 (percentage)

Source: World Employment and Social Outlook – Trends 2022.

^{2.} ILO Modelled Estimates and Projections (ILOEST) database. Labour dependency ratio. Available at: https://www.ilo.org/shinyapps/bulkexplorer42/?lang=en&segment=indicator&id=POP_2LDR_NOC_RT_A

^{3.} The labour underutilization rate is a more comprehensive indicator which was pioneered by the ILO to provide a measure of the mismatch between labour supply and demand, extending beyond the unemployment alone. To this end, in addition to unem-ployed individuals, labour underutilization considers employed individuals who would like to work more paid hours ("time-related underemployment") and people out of employment who would like to work but who are not actively searching for a job or are not available for work ("the potential labour force").

2.2 Employment composition and trends in wage employment

Moving on to the question about employment quality, Figure 3 provides an overview of the different forms of employment in the Republic of Moldova over the last two decades, by providing an estimate of the composition of employment and the evolution of this composition over time, as can be seen in the left-hand column. In the right-hand column, the evolution of the level of each form of employment is provided as a complementary analysis, using an index with the year 1999 as reference (1999 = 100). The interest in other forms of employment is justified by the fact that not all forms of employment provide the same guarantees in terms of adequate remuneration, job security and, more generally, working conditions. Indeed, it is not only a question of having access to job opportunities, but rather of having access to decent job opportunities that can adequately cover the needs of workers and their families, notably through jobs whose holders are protected by labour market regulations and institutions and who enjoy social protection when unforeseen events occur in their lives.

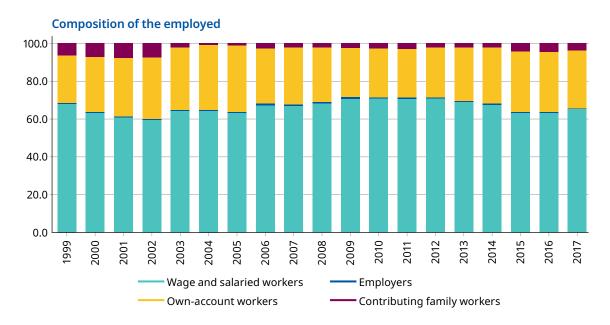
Panel (a) of Figure 3, which provides estimates for all persons in employment regardless of the gender, shows that wage employment is the predominant form of employment and been fairly stable over the past twenty years, averaging around 66 per cent. However, wage employment appears to have slightly declined, from 67.7 per cent in 1999 to 65.2 per cent of employment in 2017. At the same time, own-account employment has increased from 25.1 per cent to 30.7 per cent over the same period, between 1999 and 2017. The share of employers is quite small, accounting for 0.3 per cent in 2017, slightly lower than its level of 0.6 per cent in 1999. The share of employers has in fact varied between 1999 and 2017, increasing and then declining back to levels observed in 1999. The fact that the variations in the share of employers, who by definition employ wage employees, has not coincided with a rise in the share of wage employment suggests that the increase was probably among small size enterprises that had no consequent impact on total wage employment. All these results suggest that wage employment, which is the more prolific form of employment with the above-mentioned protections, seems to have stagnated over the last twenty years while own-account employment rose, a form of employment that are more likely to suffer from decent work deficits. This represents a major challenge when striving for decent work outcomes for all workers in the labour market. These changes are illustrated in the right-hand column of Panel (a) by a gradual decline in the level of wage employment, which in 2017 is equivalent to 92.1 per cent of the level in 1999, a drop of 7.9 per cent, while at the same time, own-account employment has increased by 23.5 per cent.

Looking at gender disparities, which is facilitated by comparing the left-hand columns of Panels (b) and (c), it appears that wage employment is more predominant for women than for men in 2017, estimated, respectively at 69.7 and 60.8 per cent of total employment. This was not the case twenty years ago, where the two proportions were quite close, respectively 66.7 and 68.9 per cent for women and men in 1999. This indicates that the slight decline in

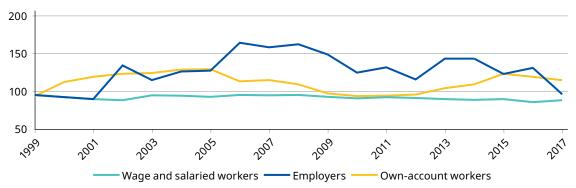
wage employment and the gradual rise of own-account employment, observed above, has occurred mainly among men. Indeed, the graphs in the right-hand columns in Panels (b) and (c) suggest that the quantity of wage employment fell by 7.5 per cent for women, while it fell by 8.1 per cent for men, between 1999 and 2017. Own-account employment increased by 51.4 per cent for men, while it fell by 6.4 per cent for women over the same period. It should be noted that, although the share of employment as an employer is quite small for both men and women, it has more than doubled for women over the past two decades.

► Figure 3. Labour market status of working age population in employment, composition, and trends, 2000–2021

(a) Working age population (men and women)

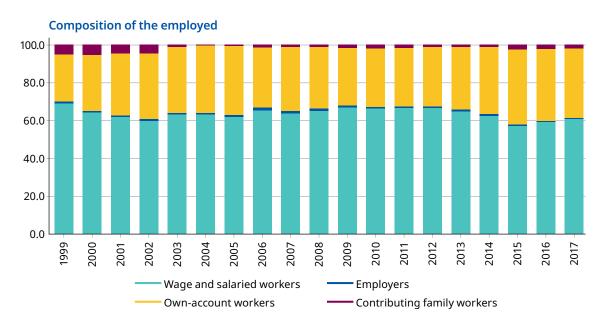




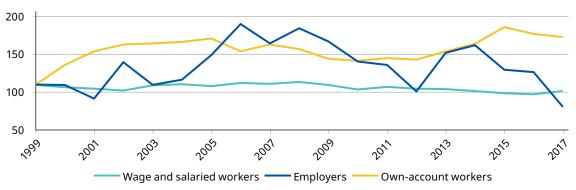


► Figure 3. Labour market status of working age population in employment, composition, and trends, 2000–2021

(b) Men



Trends (Index, 1999 = 100)



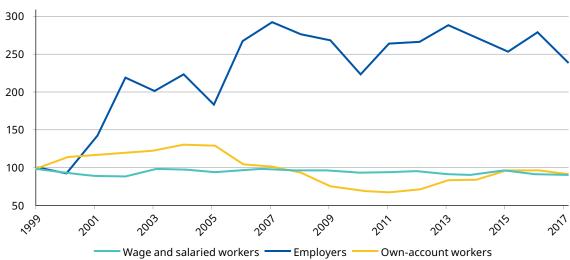
► Figure 3. Labour market status of working age population in employment, composition, and trends, 2000–2021

(c) Women

Composition of the employed



Trends (Index, 1999 = 100)



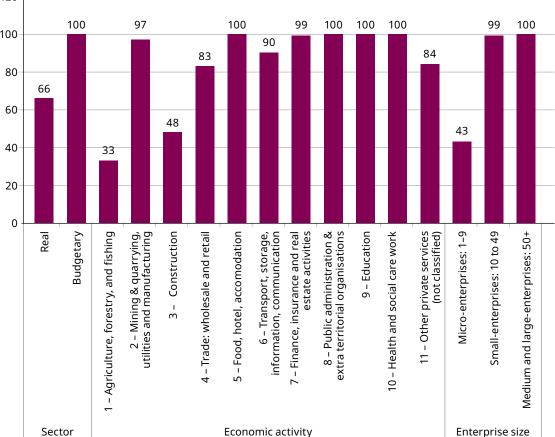
Source: World Employment and Social Outlook – Trends 2022. Author's own calculations.

2.3 Where are wage employees more prevalent, and who are they?

According to the estimates in Figure 3, the share of wage employment has stagnated while new entrants to the labour market seem to find work only as own account workers - with fewer opportunities in the form of wage employment for them. At this stage, it would be interesting to identify the type of employers that are the main providers of wage employment, according to the institutional sector (budgetary/real), the economic activity to which they belong, or the size of the employer, which is illustrated in Figure 4, based on micro-data from the second guarter of the 2019 NLFS. It should be noted that for all subsequent analyses, these same micro-data are used. At this point, it is important to note that in the Republic of Moldova, the terms of 'real sector' and 'budgetary sector' are used to refer to the 'private sector' and the 'public sector', respectively. Therefore, for the sake of simplicity and to adhere to the commonly and officially used terminology, we will refer to the two institutional sectors as the real and the budgetary sectors in the remaining of this report.

enterprises, 2019 (percentage) 120 100 97 100 99 100 100 100 99 100 90 84 83 80

Figure 4. Where is wage employment? Share of wage employees in different groups of



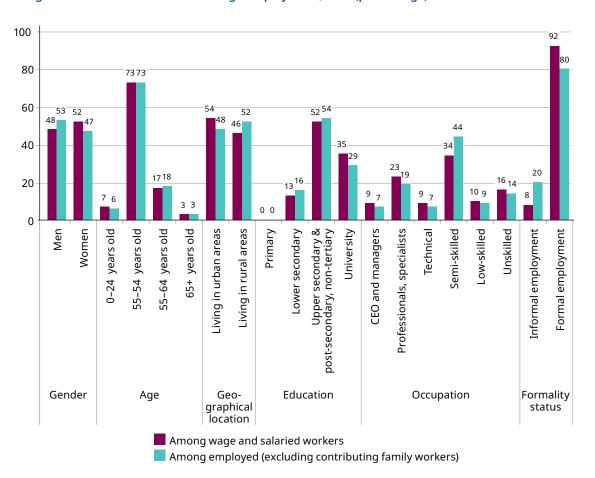
Source: NLFS, 2019. Author's own calculations.

Figure 4 shows that wage employment is more prevalent in the budgetary sector, as well as in the economic activities that are generally in the budgetary sector, notably, public administration and extra-territorial bodies, education, and health and social work, all of which consist exclusively of wage employees. Other economic activities that have a share of wage employees which is close to 100 per cent, include finance, insurance, and real estate (99 per cent), and the group composed by mining and quarrying, utilities, and manufacturing (97 per cent). In contrast, enterprises in agriculture, forestry, and fishing (33 per cent) and in construction (48 per cent) have the lowest shares of wage employment. Looking at the size of the enterprise, the lowest shares of wage employment are observed in micro-enterprises (43 per cent), whereas employment in larger enterprises is almost entirely composed of wage employment.

Another exercise that would be equally relevant for better targeting wage policies is the profiling of wage employees. Figure 5 identifies the individual characteristics of employees who are over-represented in wage employment, compared with other forms of paid employment – regrouping employers and own account workers and excluding contributing family workers. The estimates show that women are slightly over-represented among wage employees, as they represent 52 per cent and 47 per cent, respectively, of wage employment and other forms of paid employment. Looking at the other individual characteristics of the employed population, it is apparent that the most qualified workers (with higher professional occupations and education levels), those employed in the formal economy, and those living in urban areas, are over-represented in wage employment. In contrast, the age of the employed person does not seem to play any role. However, even though workers with semi-skilled occupations and below are more represented in other forms of employment than in wage employment, it should be noted that they account for more than half of wage employment (59 per cent).

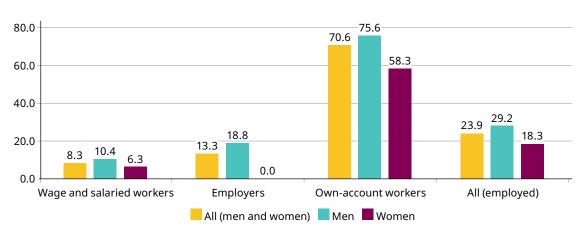
One of the most striking results in Figure 5 is that almost 92 per cent of jobs in the formal economy are wage employment. This is consistent with the idea that wage employment provides workers with better protections, including holding a formal job and therefore being protected by labour market regulations. Looking at the entire labour market, the informal economy accounts for 23.9 per cent of all jobs (Figure 6). Among the various forms of employment, own-account employment is the most prone to informality, reaching 71 per cent for all genders. A gender analysis suggests that the extent of the informal economy is greater among men than among women for all forms of employment. At this level, to complement the above findings, it appears that wage employment, particularly for men, is being progressively replaced by other forms of employment in the informal economy, notably own-account employment. This poses serious challenges for decent work, highlighting the increasing lack of formal employment opportunities.

▶ Figure 5. Main characteristics of wage employment, 2019 (percentage)



Source: NLFS, 2019. Author's own calculations.

► Figure 6. Main characteristics of wage employment, 2019 (percentage)



Source: NLFS, 2019. Author's own calculations.

▶ 3. Minimum wage policies and institutional characteristics of the minimum wage system in the Republic of Moldova

▶ 3.1 Objectives of the minimum wage policies: the minimum wage as a powerful tool to reduce inequalities

Wage policies are central to any strategy that aims to promote social justice, including reducing inequalities and enabling workers and their families to access living conditions that protect their dignity and ensure their inclusion in the society. The importance of wage policies has recently been reaffirmed in the United Nations 2030 Agenda for Sustainable Development (Agenda 2030). SDG 10 explicitly highlights wage policies, alongside fiscal and social protection policies, as a means of progressively reducing inequalities between and within countries. The importance of wage policies was recognised early on by the ILO, which enshrined it in its constitution, in the Declaration of Philadelphia (ILO 1944, Article III(d)), making it a solemn obligation for ILO Member States. The Declaration of Philadelphia explicitly recognises the need for wage policies, alongside policies for other conditions of work, to ensure that workers receive a fair share of the fruits of progress and a living wage. On the one hand, this clearly shows the need to combat inequalities in our societies through adequate wage policies. On the other hand, the idea of a "living wage" highlights the need to ensure that workers are paid enough to provide for the basic needs of their families, and therefore calls for minimum wage policies.

With the recent COVID-19 pandemic, the issue of inequality has become even more prominent in the public debate, as the health and socio-economic crises associated to the pandemic have exposed and exacerbated many of the existing inequalities in our societies. One of the most important lessons to be learned from this crisis is that the societies that are the most resilient to unexpected changes are those with the lowest levels of inequality. This is why the ILO recently called for urgent actions on the global inequality challenge through a resolution concerning inequality and the world of work (ILO 2021a), adopted by the International Labour Conference in December 2021. Prior to this resolution, in its Global Call to Action (ILO 2021b) in June 2021, the ILO already called for the reduction of growing inequalities within and between countries, as it already did in its Centenary Declaration (ILO 2019), including through adequate minimum wages, among other means. In its Part III (section (B)/(ii)), the Centenary

Declaration calls for all workers to "enjoy adequate protection in accordance with the decent work agenda taking into account (...) an adequate minimum wage, whether statutory or negotiated".

This is because minimum wages are a powerful tool for reducing inequalities as they protect workers at the bottom of the wage distribution, generally from the poorest households, from unduly low wages (see: Belman and Wolfson 2014; Dube 2019). When set appropriately, minimum wages reduce the incidence of unduly low pay, compressing the wage distribution and thereby reducing inequality. Positive effects on inequality have been observed even in developing countries, where the means to enforce wage policies is less effective (Belser et al. 2013). Country studies in Latin America have even shown a "lighthouse effect" whereby minimum wages set in the formal economy pull up wages in the informal economy by influencing bargaining between informal economy workers and their employers, thus reducing overall inequality (see: Berg 2015; Boeri et al. 2010; Maloney and Mendez 2004; Arias and Khamis 2008; Canelas 2014). As we can see, minimum wages have a positive effect on all workers, and particularly on those most affected by inequality, the low-skilled workers, women, and all other groups of workers who are over-represented among low-paid workers. Nevertheless, for a minimum wage to effectively fulfil its primary role of providing protection to workers against unduly low pay, it must be set adequately. The Minimum Wage Fixing Convention, 1970 (No. 131), sets out the key elements to be considered when establishing a minimum wage system. This convention on minimum wages goes well beyond the mere incentive character of the Minimum Wage Fixing Machinery Convention, 1928 (No. 26). The Convention (No. 131), specifies, among other things, the need to ensure broad application of the legislation to protect all groups of employees, in full consultation with the representative organisations of employers and workers concerned, ensuring that exceptions are kept to a minimum and duly justified. The other important aspect of this Convention is the need to take into account, when setting the level of the minimum wage, the needs of workers and their families, including the cost of living and the relative standard of living of other social groups, but also the economic factors (Article 3).

Furthermore, as has been said before, the minimum wage can make a significant contribution to reducing inequality, in addition to protecting against unduly low wages, but only under certain conditions or factors, as demonstrated by the recent empirical evidence presented by the Global Wage Report 2020/21 (ILO 2020). First, the minimum wage must have broad legal coverage and enforcement, i.e., compliance, for all workers. The second condition relates to the level at which minimum wages are set, which must be set adequately, as specified by Article 3 of Convention No. 131, ensuring that this level remains relevant over time through regular adjustments (Article 4 of Convention No. 131), in full consultation with the social partners. The third and final factor is related to the relevance of the beneficiaries of the minimum wage policy who must be those most in need of such a protection. When these three conditions are met, beyond its positive impact at reducing wage inequality, the evidence show that a minimum wage policy is also an effective tool to reduce poverty as well as contributing positively to several of the 2030 Agenda's SDGs (see Box 15.1 in the report) – see ILO, 2020. A direct or indirect influence of wages on at least 8 goals is demonstrated (SDGs 1, 2, 4, 5, 8, 9, 10, 17), as adequate wages can influence household income and consumption,

support economic growth by increasing aggregate demand, and reduce poverty. Adequate minimum wages also contribute to improving parents' investments in their children's health and education, limiting discrimination against women and disadvantaged groups, and promoting social, economic, and political inclusion.

At this stage, the many benefits of the minimum wage cannot be discussed without mentioning its critics, particularly in relation to the potential negative effect it could have on employment. The concerns of some economists are that the minimum wage violates one of the conditions of the theoretical model of perfect competition in the labour market. Such a violation is related to the fact that setting a minimum wage would influence wages and deviate them from their market equilibrium. Such a deviation would lead to a decrease in the demand for employment, and thus to a decrease in employment. However, the empirical evidence suggests that this negative impact is often negligent and statistically insignificant and more often than not it affects only particular groups of workers - notably, the lowskilled and younger workers. Targeted active labour market policies could address such an issue when it occurs. Important works in this sense include Card and Krueger (1994, 2000) and Neumark and Wascher (2008). An excellent review of the literature on the employment impacts of minimum wages is also provided by Broecke, Forti, and Vandeweyer (2015). The authors conclude that there is no evidence of adverse employment effects of minimum wages. More recently, Bossler and Schank (2020) provided an assessment of the introduction of the minimum wage in Germany, one of the highest in Europe, and concluded that the employment effects were negligible, while at the same time wages increased overall, and wage inequality decreased4.

► 3.2 Institutional characteristics of the minimum wage in the Republic of Moldova

Having reviewed the importance of having adequate minimum wage policies, we will now focus on the main features of the minimum wage system in the Republic of Moldova. Although the use of minimum wages is widespread across the world – they exist in 90 per cent of the 187 ILO Member States, the recent Global Wage Report 2020/21 (ILO 2020) showed that minimum wage systems differ widely across the world according to the complexity of their institutional mechanisms. First, these differences include the way in which the minimum wage is set, i.e., statutorily or through collective bargaining. A second source of differences in setting mechanisms is the number of minimum wage rates in a country. This number can be quite high in minimum wage systems with multiple rates varying according to economic activity, occupation, age, or geographical location. Some minimum wage systems can even combine several of these criteria. A third major difference lies in the existence and forms of consultations with the social partners concerned. For some countries, the setting of the

^{4.} See also, Bonin *et al.* (2020), Bossler and Gerner (2017), Caliendo et al. (2018), and Garloff (2019), all showing no effect on employment in Germany following the introduction of a minimum wage.

minimum wage is done by a tripartite committee of representatives of the government, employers', and workers' organisations: this leads to statutory minimum wages. Such a committee can also be bipartite in some countries, with only workers' and employers' representatives. In other extreme cases, there is no consultation, and the decision is taken by the government. Finally, minimum wage policies can also be established through collective bargaining, as is the case of the Nordic model.

In the Republic of Moldova, the question of the minimum wage is regulated by two laws, with two different minimum wage rates, which brings some confusion in the application of the minimum wage (see Appendix 1 where all relevant legal acts are listed). In 2019, which corresponds to the year of the microdata available to produce the different empirical evidence presented in this report, the minimum wage is regulated for all legal entities, regardless of the type of ownership and their legal form, by Law No. 1432-XIV of 28 December 2000 on the Setting and Review of the Guaranteed Minimum Wage. This is a regulation that sets a single minimum wage rate that should apply to both the real sector, and the budgetary sector. However, just over a year later, a new law was passed, the Law No. 847 of 14 February 2002 on Wages which sets a guaranteed minimum wage that applies exclusively to the real sector, while Law No. 1432-XIV is still in force and, in theory, still applies to both the real and the budgetary sectors.

In accordance with the provisions of Law No. 1432-XIV, five Government decisions have set and adjusted minimum wage levels for the whole country, since the adoption of the law: in 2001 (decision HG335 of 25.05.2001), in 2005 (decision HG1475 of 30.12.2004), in 2007 (decision HG575 of 24.05.2007), in 2009 (decision HG15 of 19.01.2009), and finally in 2014 by decision HG550 of 07.09.2014. These Government decisions increased the minimum wage level for the whole country from 100 MDL in 2001 to 1000 MDL in 2014. At the same time, another minimum wage was set for the real sector, and for the year 2014, it was set at 1560 MDL for instance. The adjustments in the real sector were conducted in accordance with the provisions of the Law No. 847, and in particular the Government decision HG165 of 09.03.2010 which is revised every year to adjust the level of minimum wage in the real sector. Therefore, the real sector is in theory affected by two different minimum wage rates since 2002, while for the budgetary sector things seem to be simpler as it is only affected by the first rate.

However, the new law on the unitary remuneration system in the budgetary sector, Law No. 270 of 23 November 2018, defines a remuneration floor that applies only to budgetary sector employees with "normal working hours", i.e., those working full time. The remuneration floor (Section IV, Article 27) guarantees that the monthly wage of full-time civil servants is not lower than a threshold that is revised practically every year. Civil servants that are eligible to such a guarantee and whose monthly wage is below the threshold should be compensated to bring their wage up to the level of this threshold. In 2019, this threshold was MDL 2,000 per month, well above the MDL 1,000 minimum wage in force in the budgetary sector.

Despite this relative confusion regarding the minimum wage regulations applicable to the real sector, it is considered that the level set in accordance with Law No. 847 is the authoritative one for the sector, and the one we consider in our analyses. Therefore, with two minimum wage rates, one for the real sector and one for the budgetary sector, we can consider the Republic of Moldova to be among the minimum wage countries that have more than one minimum wage rates, 48 per cent and 31 per cent, respectively at the global level and for the Europe and Central Asia region (ILO 2020). With regard to consultations with employers and workers, the two laws regulating the minimum wage, Laws No. 1432-XIV and 847 (supplemented by Decision HG165) specify that the minimum wage is set by the Government after consultations with employers and trade unions (Article 3(1) of Law No. 1432-XIV and Article 3 of Decision HG165).

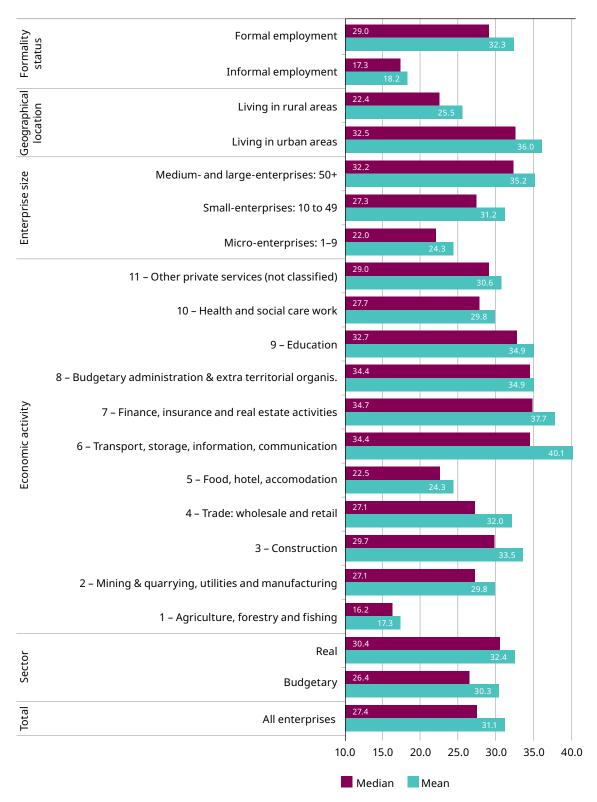
▶ 3.3 The structure and the characteristics of the wage distribution in the Republic of Moldova

After having highlighted the main specificities of the institutional characteristics of the minimum wage system in place, we then move to the analysis of the main features of the wage distribution, which includes the level of wages and different measures of inequality and gender disparities. Figure 7 provides an estimate of the median and average hourly wages of wage earners in the Republic of Moldova. The hourly wage is particularly important here, in the context of an empirical analysis of the minimum wage, as it will allow the comparison of the earnings of wage earners on a common basis that isolates their working time. Indeed, whether a worker works full-time or part-time, their employers are obliged to pay them each hour worked at the minimum hourly rate set by law. This is the reason that motivates the hourly rate of the minimum wage to be specified, each time the minimum wage is revised.

Estimates suggest that wage employees had an average wage of MDL 31.1 per hour in 2019. The median hourly wage (that is, the hourly wage in the middle of the distribution), is slightly lower, estimated at MDL 27.4. The most important and striking information in Figure 7 is the one related to the strong wage disparities existing between the different economic activities, according to the size of the enterprises, according to the geographical location, and according to the formality status of a wage employee. Wage disparity is less pronounced when comparing hourly wages in the real sector and the budgetary sector. Whatever measure of hourly wages is used, whether the median or the mean, the highest wages are clearly observed in the largest enterprises, in urban areas, and in the formal economy. Hourly wages are also high in certain economic activities that stand out from the others, notably in the grouping of activities including transport, storage and information and communication (ICT), and in the grouping of activities related to finance and real estate. On the other hand, the lowest wages are found in agriculture, forestry, and fishing, as well as in food and accommodation activities.⁵

^{5.} The monthly wage that is reported to the interviewers is the wage that was paid to the worker in the month prior to the survey, after deduction of income tax and social security contributions and payment of compulsory health insurance. Therefore, based on the information on the composition of the households from the microdata, and using the indications of the Tax Code of the Republic of Moldova (Code No. 1163 of 24-04-1997), for the year 2018, we were able to retrieve the gross value of the declared monthly salary. The details of our calculations are given in the Appendix 2.





Source: NLFS, 2019. Author's own calculations.

Figure 8 provides an overview of the distribution of hourly wages across several wage categories, grouped around certain thresholds that relate to laws applicable in various contexts in the second guarter of 2019, including: (i) the minimum wage in the budgetary sector (MDL 1,000 per month, or MDL 5.92 MDL per hour); (ii) the wage level for full-time civil servants below which the government must provide compensation (2,000 MDL per month, or 11.83 MDL per hour); (iii) and the minimum wage in the real sector (2,775 MDL per month, or 16.42 MDL per hour). This figure also permits to compare and, in particular, to situate these different wage thresholds on the wage distribution. One of the first interesting observations in Figure 8 is that employees are mostly concentrated in wage categories (4) and (5), i.e., around hourly wages that are above the real sector minimum wage (MDL 16.42 per hour) and below three times this rate, two categories that account for almost three quarters of employees (71.3 per cent) for both the budgetary and the real sectors. The remaining 28.7 per cent of wage employees are sparse at the extreme ends of the distribution, with more employees at the bottom end (categories (1), (2) and (3)) than at the top end (categories (6), (7) and (8)). This concentration of wages around the real sector minimum wage suggests that the real sector minimum wage plays a great role in compressing the wage distribution and thus in reducing wage inequality as suggested by the literature mentioned above. Furthermore, it is also observable that women are more over-represented in the lower wage categories.

Figure 8. Wage distribution (hourly), by gender, 2019 (percentages)

(a) Distribution of wage employees across different categories, budgetary sector

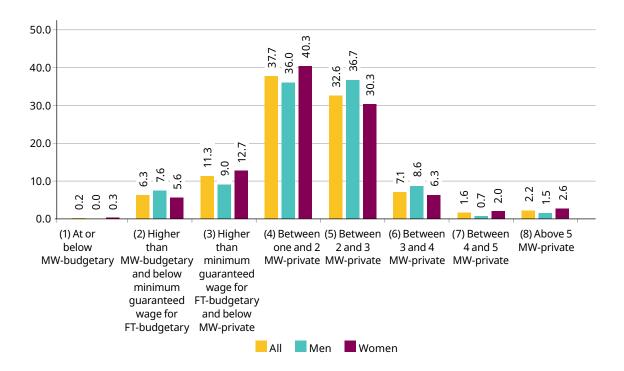
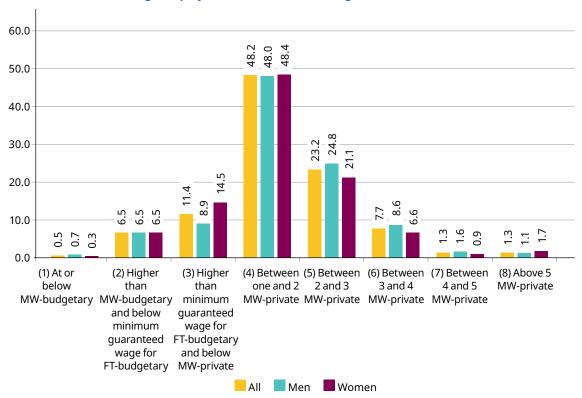


Figure 8. Wage distribution (hourly), by gender, 2019 (percentages)

(b) Distribution of wage employees across different categories, real sector



Source: NLFS, 2019. Author's own calculations.

Notes: MW = minimum wage

In the Panels (a) and (b), the eight salary categories correspond respectively to employees whose salary: (1) is less than or equal to the minimum wage in the budgetary sector; (2) is greater than the minimum wage in the budgetary sector and less than or equal to the minimum wage threshold for full-time civil servants; (3) greater than the minimum wage threshold for full-time civil servants and less than or equal to the minimum wage in the real sector; (4) is between one and twice the real sector minimum wage; (5) is between two and three times the real sector minimum wage; (6) is between three and four times the real sector minimum wage; (7) is between four and five times the real sector minimum wage; and (8) is greater than five times the real sector minimum wage.

Wage inequality estimates are presented in Figure 9. In panel (a) of the figure, different measures of inequality are presented. Starting with the Gini coefficient, which is the most used inequality indicator, ranging from zero in the case of perfect equality (everyone has the same wage) to 1 in the case of complete inequality, the estimates produce a Gini Coefficient equal to 0.29. The D5/D1 indicator, which is the ratio of the median hourly wage to the lowest 10 per cent hourly wages, permits to assess the distance between those at the bottom of the wage distribution and the middle earners. This ratio is therefore the most likely to be affected by minimum wage policies. Comparing this D5/D1 ratio, which is estimated at 1.94, with the D9/D5 ratio, which compares the top 10 per cent wages to the median wage and is estimated at 1.75, it appears that wage inequality is likely to be driven by the bottom half of the wage distribution, rather than by the top half of the distribution. This reinforces the relevance of the minimum wage to reduce inequality in the Republic of Moldova. Moreover, the Palma ratio suggests that the wage share paid to the top 10 per cent of wage earners

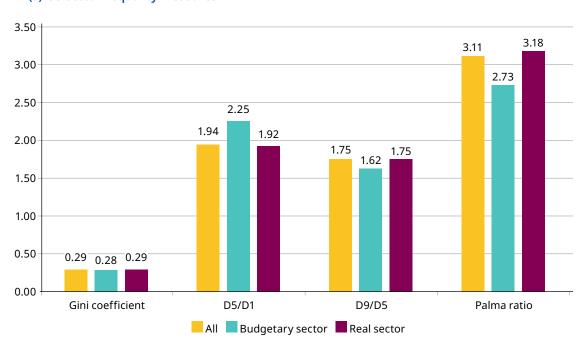
is more than three times the wage share paid to the bottom 10 per cent. Then, comparing wage inequalities in the real and the budgetary sectors, it appears that inequalities are much higher in the real sector. This is not surprising since pay scales in the budgetary sector are often more compress than in the real sector, particularly from the top. However, minimum wage compliance is also higher in the budgetary sector, thus possibly displaying greater compressing at the low end compared to the spread of wages at the bottom in the real sector. Indeed, non-compliance with wage laws is likely to be higher in the real sector, as it includes the informal economy, which is not the case for the budgetary sector.

As regards the gender pay gap, presented in panel (b) of Figure 9, different indicators are used for the analysis. Both mean and median wages are considered to calculate the different measures of the gender pay gap, using different estimation methodologies. The first methodology estimates the raw wage gap, a simple measure of the difference between the (average or median) wages of men and women, expressed as a percentage of men's wages. In all cases, whether the real or budgetary sector is considered, and regardless of working-time schedule of wage employees, the raw measures of the gender pay gap are significantly lower. This is because this measure does not take into account the many factors that characterise the differences between the jobs held by women and those held by men. Consequently, a second methodology takes into account a number of characteristics that differ between men and women in the labour market, thereby refining the measurement of the gender pay gap. This is the factor-weighted gender pay gap, which is estimated by calculating the weighted average of the gender pay gaps in different subgroups of employees grouped by education, age, skill level, and budgetary or real sector (see ILO 2018, for more details on this methodology). When the factor-weighted gender pay gap is estimated separately for the real and the budgetary sectors, only the three first factors are considered (education, age, and skill level). Applying such a more precise methodology to estimating the gender pay gap, a significantly larger estimate is obtained, averaging 9.5 per cent, which is almost four times higher than the estimated raw gender pay gap of 2.4 per cent. Furthermore, when monthly wages are used as the basis for the calculation, the gender pay gap is estimated to be even higher, at around 14.6 per cent, which is due to the fact that women work less hours than men.

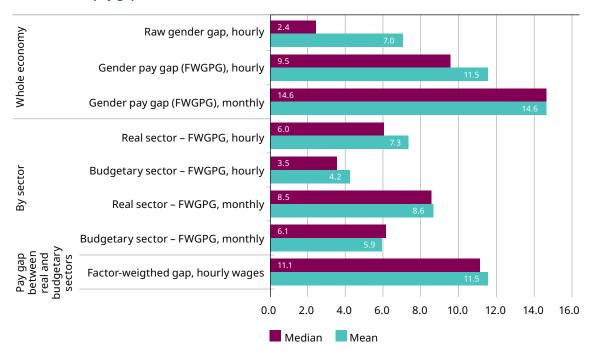
Another key observation in Figure 9 is that all measures of the gender pay gap fall considerably when the estimates are conducted separately for the real and budgetary sectors. In addition, the gender pay gap for both monthly and hourly wages is almost twice as high in the real sector compared to the budgetary sector, which is consistent with the earlier finding of higher inequalities in the real sector. These two results indicate that a large part of the gender wage gap is related to the differences in wages between the real and budgetary sectors. In this regard, a final estimate indicates that hourly wages are 11.5 per cent higher in the real sector than in the budgetary sector. The fact that women are over-represented in the budgetary sector thus contributes significantly to the gender pay gap estimated for all paid employees. Indeed, in the Appendix 3, it can be seen that women are over-represented in economic activities that are predominantly in the budgetary sector, such as education, health, and social services, where women represent about 80 per cent of employees. These economic activities also account for more than a third of the women's wage employment.

Figure 9. Inequality and the wage distribution, 2019

(a) Selected inequality measures^b



(b) Gender pay gaps^a



Source: NLFS, 2019. Author's own calculations.

Note: A Gini coefficient of 0 implies perfect equality and 1 implies perfect inequality. D1, D5 and D9 are, respectively, the threshold values at the first, fifth and ninth decile of the hourly wage distribution. The Palma ratio equals the share of monthly earnings of the top 10 percent wage earners divided by that of the bottom 40 per cent.

▶ 3.4 The number of minimum wage earners in the Republic of Moldova

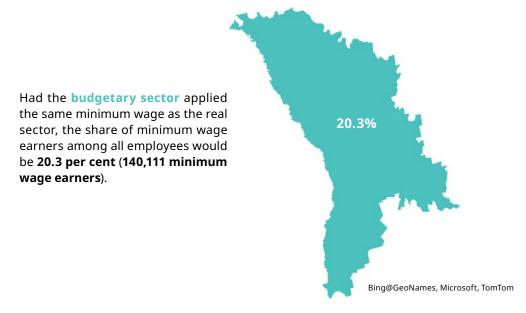
Assessing the number of minimum wage earners gives an idea of the impact that a minimum wage policy can have on the lives of the least well-off and most disadvantaged people in the country. This number corresponds to the number of workers who are paid at or below the minimum hourly wage. Following the methodology used in (ILO 2020), the number of minimum wage earners includes, on the one hand, those earning less than the minimum wage, who are defined as those whose hourly wage is 95 per cent or less of the hourly minimum wage, and, on the other hand, those earning the minimum wage, which are defined as those whose hourly wage is in the vicinity of the hourly minimum wage (between 95 and 105 per cent of the hourly minimum). Taking into account the fact that the Constitutional Court of the Republic of Moldova (decision HCC12/2022) recently declared as unconstitutional the decision HG550 of 07.09.2014 which sets the level of minimum wage in the budgetary sector, it would not be relevant to use the rate of 1000 MDL to assess the number of minimum wage employees in the budgetary sector. Moreover, the ambiguity brought by Law No. 270/2018, which sets a guaranteed minimum salary threshold for full-time civil servants, does not allow for a consistent assessment of the number of minimum wage earners in the budgetary sector. Therefore, as is the case for most countries with a minimum wage, only the real sector, which accounts for more than 60 per cent of the employees in Moldova, will be considered in the analyses of the minimum wage system, and in the rest of the report.

Considering the real sector, where the minimum hourly wage is 16.42 MDL for the year 2019, an estimated 84,917 wage employees are paid at or below the applicable minimum hourly wage in the Republic of Moldova (Figure 10, panel (a)). This is equivalent to 20.4 per cent of all wage earners in the real sector, which is higher than the estimates for Europe and Central Asia (17 per cent) (ILO 2020), and those at the global level (19 per cent). As an indication, if the budgetary sector applied the same minimum wage as the real sector, the share of minimum wage earners would be 20 per cent in the budgetary sector, and 20.3 per cent for the entire labour market, or a total of 140,111 minimum wage earners (Figure 10, panel (b)). The detailed distribution of wage employees in relation to the real sector minimum wage is provided in a table included in the Panel (c) of Figure 10.

- ▶ Figure 10. How many employees earn the minimum wage or less?, 2019 (percentages)
 - (a) Share of minimum wage earners (real sector)



(b) Share of minimum wage earners, had the minimum wage been the same in the budgetary sector as in the real sector (all employees, real and budgetary sectors included)



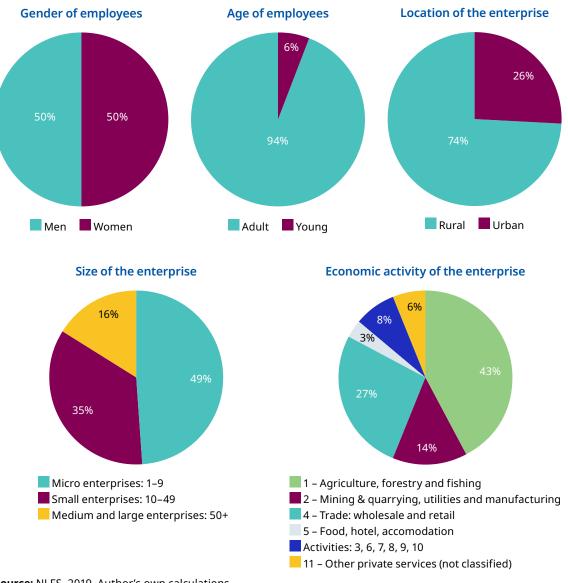
(c) Distribution of wage employees in relation to the real sector minimum wage

	Below the minimum wage	At or below the minimum wage	Above the minimum wage
Real sector	15.7	4.7	79.6
Budgetary sector	14.5	5.5	80.0
Total (real and budgetary sectors)	15.2	5.1	79.7

Source: NLFS, 2019. Author's own calculations.

Figure 11 shows the composition of wage employees at or below the minimum wage in the real sector according to different demographic and enterprise characteristics. The estimates show that almost as many women as men are paid at or below the minimum wage. However, differences in the composition of minimum wage earners are more pronounced by age (94 per cent are over 24 years old), by firm size (49 per cent are in microenterprises), by geographical location (74 per cent are in rural areas), by informality status (66 per cent are in the formal economy), and by economic activity.

► Figure 11. Composition of wage employees at or below the minimum wage, by enterprises and employees categories, real sector, 2019 (percentage)

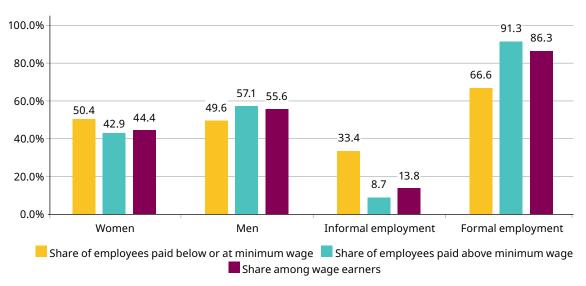


Source: NLFS, 2019. Author's own calculations.

Note: Economic activities with a share lower than 3 per cent are grouped into the category "Activities: 3, 6, 7, 8, 9, 10". Those are the following: Construction; Transport, storage, information, communication; Finance, insurance and Real Estate activities; Budgetary Administration & Extra territorial Organisations; Education; and Health and social care work.

Furthermore, Figure 12 shows that, among minimum wage earners, women and those employed in the informal economy are over-represented. While workers in the informal economy represent 14 per cent of all wage employees and 9 per cent of wage employees paid above the minimum wage in the real sector, they represent 33 per cent of wage employees paid at or below the minimum hourly wage.

► Figure 12. Which employees are overrepresented among those earning the minimum wage or less?, 2019 (percentage)

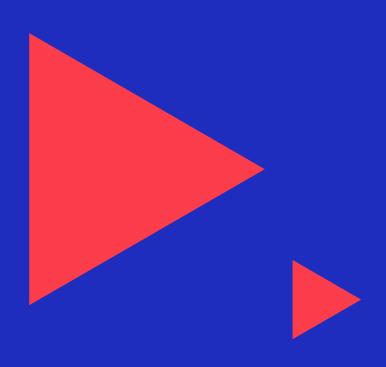


Source: NLFS, 2019. Author's own calculations.

Building on the GWR 2020 (ILO 2020) and the minimum wage policy guide (ILO 2016), the second part of this report investigates whether the minimum wage in the Republic of Moldova is achieving its main objectives which include: (i) providing adequate labour protection from unduly low wages to allow workers to cover their needs and those of their families; and (ii) reducing inequality as a way to contribute to social justice. For this purpose, the three key factors that influence the extent to which a minimum wage may achieve its objectives are analysed, notably: (a) broad legal coverage and compliance with minimum wage legislation; (b) an adequate minimum wage level; and (c) what are the characteristics of the beneficiaries at the lower end of the wage and income distributions?

Part

Is the minimum wage achieving its objectives in Moldova?



4. Coverage and compliance of the minimum wage

► 4.1 The legal coverage and the extent of non-compliance

As has already been pointed out several times, the primary objective of a minimum wage is to protect workers from unduly low pay, which is why the effectiveness of the minimum wage relies to a large extent on the broad coverage of minimum wage legislation, and more particularly on the coverage of certain categories of workers, who are most exposed to low pay: these include, among others, domestic workers and agricultural workers. In the case of the Republic of Moldova, no exclusions apply: therefore, all categories of employees are protected by the existing minimum wage floor.

Non-compliance is described by the share of employees who are paid below the minimum wage. According to the definition in the latest ILO Global Wage Report (ILO 2020), this corresponds to employees whose hourly wage is less than 95 per cent of the hourly minimum wage. Whereas non-compliance with the minimum wages is often higher among wage employees in the informal economy, non-compliance can also occur among wage employees in the formal sector - for instance, if the number of hours worked is above that determined by their contractual arrangements. In general, non-compliance is higher in countries where labour inspection is weak or with a complex system of minimum wages that is difficult to monitor. In the case of Moldova, the estimates show that in the real sector, of the estimated 84,917 employees who are paid at or below the minimum wage, 65,262 employees earn less than the prevailing hourly minimum wage, which is equivalent to 15.7 per cent of all employees in the real sector (Figure 13). The extent of this non-compliance with the law varies greatly according to economic activity, company size, geographical location, and the informality status of the company. As can be seen in Figure 14, the enterprises with the highest rates of non-compliance are those in agriculture, forestry and fishing activities, the smallest enterprises, those in rural areas, and those in the informal economy. Furthermore, estimates show that non-compliance with the law is higher among female employees than among male employees. Similarly, a high rate of non-compliance is observed among employees with only basic (primary) or secondary education, and those with unskilled occupations.

Figure 13. The extent of non-compliance: share of wage earners below the minimum wage, 2019



Source: NLFS, 2019. Author's own calculations.

Figure 14. Minimum wage non-compliance rates in the labour market, 2019 (percentage)

(a) Share of wage employees below the minimum wage, in different groups of enterprises (percentage)

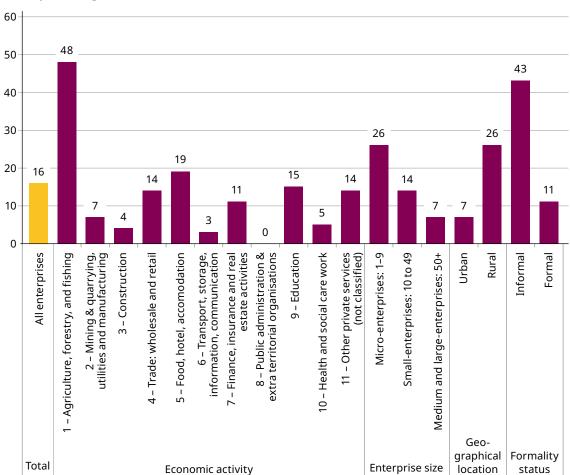
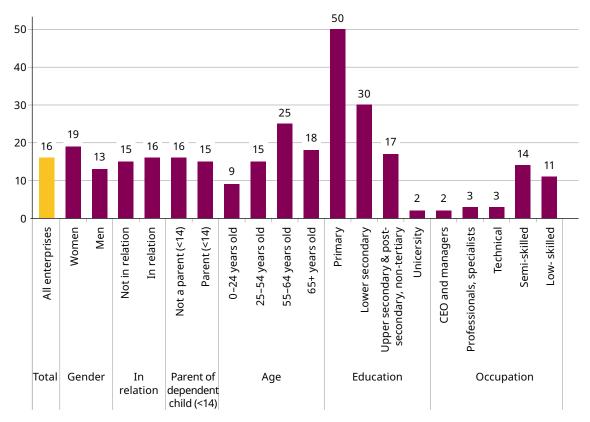


Figure 14. Minimum wage non-compliance rates in the labour market, 2019 (percentage)

(b) Share of wage employees below the minimum wage, by personal characteristics (percentage)



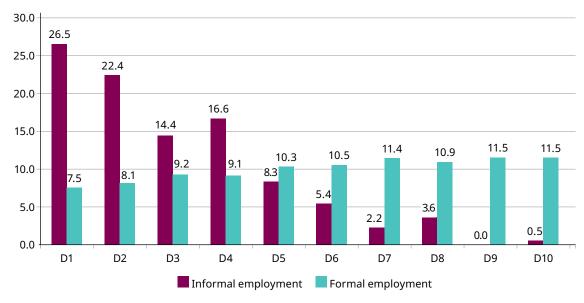
Source: NLFS, 2019. Author's own calculations.

▶ 4.2 Non-compliance and the informal economy

Non-compliance with the minimum wage is higher in the informal economy compared to that in the formal one, as is the case in most countries and regions in the world. Therefore, the size and characteristics of the informal economy are important elements to take into account when designing wage policies. The concern from a policymaker's point of view is that labour protection, regulations, or labour market institutions do not apply to the informal economy. Informal employment often carries worse working conditions, while enterprises in the informal economy are often less productive than those in the formal sector. Improving productivity of enterprises in the informal economy as well as promoting better working conditions for wage employees in the informal economy, including the implementation of the minimum wage, are steps towards the formalization of the informal economy. Considering that Moldova shows a considerable degree of informal wage employment, taking steps to formalize the informal economy should be considered alongside considerations of promoting compliance with the minimum wage.

Figure 15 shows the distribution of wage earners according to whether they hold informal or formal employment. It appears that informal employees are mainly located at the bottom of the wage distribution. In contrast, for employees with a formal employment, a relatively more balanced and less concentrated distribution at the bottom is observed. Given this observation, an interesting exercise consists in identifying the economic activities with a high prevalence of minimum wage earners with informal employment. Figure 16 (panel (a)) identifies three groups of activities that clearly stand out, namely: agriculture, forestry, and fishing; trade; and other unclassified private services. Furthermore, half of all wage employees holding informal employment are paid at or below the minimum wage, compared to 16 per cent for those holding formal employment. The panel (b) of Figure 16 highlights the disparities in non-compliance with the minimum wage in the real sector, depending on whether employment is formal or informal, when considering the different economic activities. It is striking that non-compliance with the minimum wage, regardless of the nature of the employment (formal/informal), is much higher in the above-mentioned activities with a high prevalence of minimum-wage earners with informal employment, notably, agriculture, forestry, and fishing; trade; and other unclassified private services. And, for each of those activities, non-compliance is much higher for employees with informal employment than those with formal employment. Therefore, strengthening labour inspection for these activities, combined with formalization policies, could significantly reduce non-compliance to the minimum wage in the real sector.

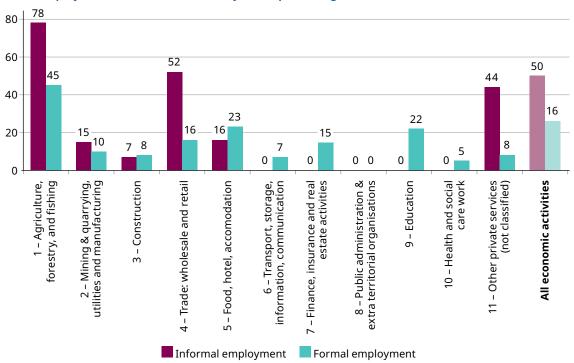




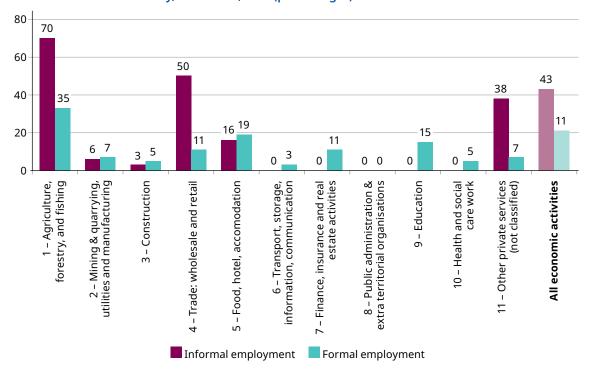
Source: NLFS, 2019. Author's own calculations.

Figure 16. Share of minimum wage earners depending on informality and non-compliance

(a) Share of wage employees at or below the minimum wage by formal/informal wage employment and economic activity, 2019 (percentages)



(b) Rates of non-compliance with the minimum wage by formal/informal wage employment and economic activity, real sector, 2019 (percentages)



Source: NLFS, 2019. Author's own calculations.

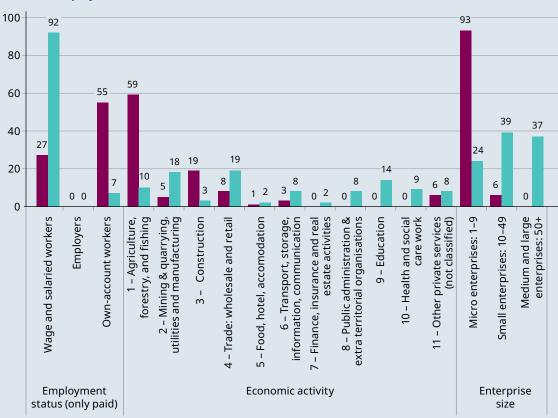
▶ Box 1. Informal employment in the Republic of Moldova

This box provides some results to inform policymakers about the main characteristics of informal employment in the Republic of Moldova, representing 23.9 per cent of total employment in the country. First, Figure 17 compares the main characteristics of individuals with employment according to whether the job is in the informal or formal economy. Panel (a) suggests that workers with informal employment are over-represented in own-account employment, in agriculture, forestry, fishing, and construction activities, and in microenterprises. Panel (b) of Figure 17 shows that the main characteristics of wage employees with informal employment are: (i) they have less than secondary education; (ii) they work in unskilled occupations; (iii) they have temporary contracts and work part-time; (iv) they work fewer hours on average than those in the formal economy; and (v) they want to work more hours and change their job. All these characteristics correspond to employees at the bottom of the wage distribution, which explains the prevalence of minimum wage earners in the informal economy.

A final analysis of the informal employment consists of estimating the wage gap between the informal and formal wage employees, taking into account the possibility of intersectionality due to inequalities already experienced by women in the labour market (Sheppard 2011). The estimates also take into account the main characteristics that differ between men and women in the labour market, using the factor-weighted wage gap method. The results are illustrated by the diagram in Figure 18 which suggests that the average hourly wage of male wage employees in the informal economy is equivalent to 90 per cent of that of male wage employees in the formal economy. Women in the informal economy suffer a double wage penalty and are paid on average 83 per cent of the average hourly wage of men in the formal economy. Furthermore, the wage gap is much wider when monthly wages are used. For example, a woman who is a wage earner in the informal economy receives on average 79 per cent of the average monthly wage of a man in the formal economy. This explains why, faced with low wages in the informal economy, informal economy wage employees are trying hard to increase their working hours, or to change their jobs, as suggested by the estimates in panel (b) of Figure 17.

► Figure 17. Main characteristics of informal economy workers (compared with formal economy workers), 2019 (percentages)

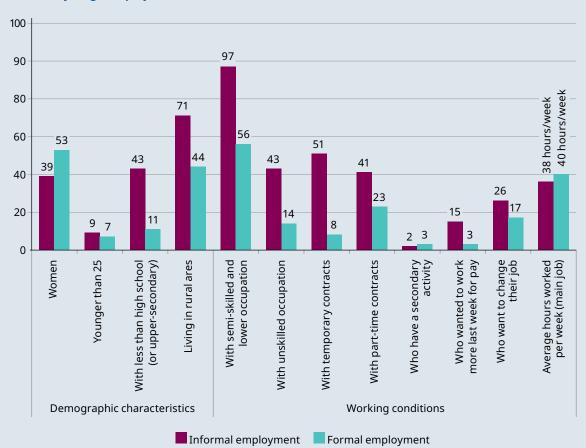
(a) All employed individuals



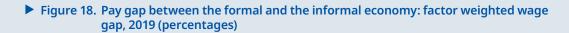
Informal employment Formal employment

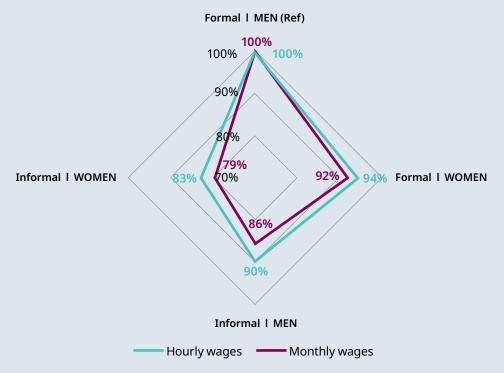
► Figure 17. Main characteristics of informal economy workers (compared with formal economy workers), 2019 (percentages)

(b) Only wage employees



Source: NLFS, 2019. Author's own calculations.





Source: NLFS, 2019. Author's own calculations.

5. The adequacy of minimum wage levels

The second factor that plays a key role in the ability of the minimum wage to achieve its objectives is the level at which the minimum wage is set. As stated by the Minimum Wage Fixing Convention No. 131, this level must be set in such a way as to ensure a decent minimum living standard for workers and their families, while taking into account economic conditions. One way to assess the adequacy of a minimum wage level is to compare the level with relevant poverty lines, that is, with poverty lines that take into account national socioeconomic circumstances. The minimum wage must also take into account economic factors, which means that employers have to be able to pay the minimum wage so that the level cannot be set in a way that it becomes detrimental to employment and business survival. The

use of empirical evidence (evidence-based approach) is fundamental to arrive at an adequate level that accomplishes the above-mentioned conditions, while strong and inclusive social dialogue should be an integral part of the process.

► 5.1 Adequacy of the minimum wage using absolute levels

The first analysis of the adequacy of the minimum wage level in the Republic of Moldova compares the minimum wage in the real sector with the international and national poverty lines that are relevant for the Republic of Moldova, given its socio-economic realities. We use the national poverty lines that are estimated by the NBS at 1,690 MDL and 2,095 MDL for extreme and absolute poverty levels, respectively⁶. The international poverty line of US\$6.85 PPP per day (or US\$208.4 PPP per month equivalent to 1,210.54 MDL⁷) for uppermiddle income countries, as recently revised by the World Bank (World Bank 2022) is used, along with national poverty lines. In addition to the gross value of the real sector minimum wage, our comparisons also consider its net value, after payment of personal income tax and social security contributions; this is useful because net values is what workers and their families use to purchase goods and services. As an indication, all these same comparisons are also made with the minimum wage in force for the budgetary sector and the guaranteed minimum wage for full-time civil servants in 2019.

At this point it is important to clarify that poverty lines only define the minimum income below which a person is considered to be in poverty, and therefore in a situation of deprivation in relation to their basic needs, generally food which is the most essential aspect of subsistence. Therefore, even if a poverty line is relevant for the country, it does not allow for an accurate assessment of whether the minimum wage is sufficient to cover all the basic needs for a family, including decent housing, and access to quality education and health for family members: it is simply a "rough" way to make a first-hand assessment of how effective is the level of the minimum wage at making ends meet, particularly when no other empirical evidence exists to provide a more detailed comparison or evaluation. It is worth noting that alternatives to the basic poverty line can be constructed that capture better what the needs of workers and their families are: the ILO has developed a methodology for estimating the needs of workers and their families, using income and expenditure surveys, and a multidimensional approach

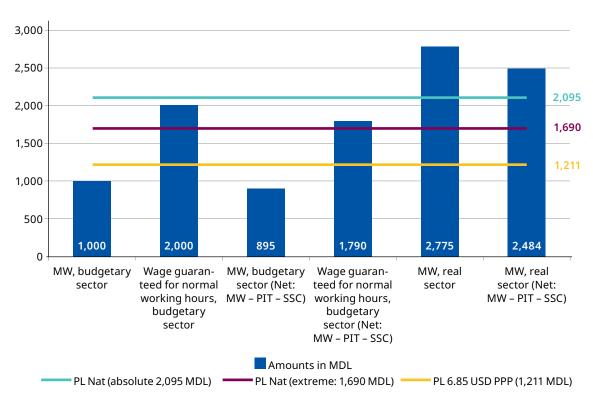
^{6.} National Bureau of Statistics of the Republic of Moldova (NBS). The level of poverty in the Republic of Moldova in 2019. Available at: https://statistica.gov.md/newsview.php?l=en&idc=168&id=6865

^{7.} This amount has been obtained by converting the value in constant USD purchasing power parity (PPP) into Moldovan Lei (MDL). The PPP conversion factor is the number of units of a country's currency that is needed to buy the same quantities of goods and services on the domestic market as are bought with 1 US dollar in the US. Implied PPP conversion rate (national currency per international dollar) for the year 2019 are used for this report. See: IMF, Implied PPP conversion rate, n.d. Available at: https://www.imf.org/external/datamapper/PPPEX@WEO/OEMDC/ADVEC/WEOWORLD

that considers the cost of adequate food, housing, health, and education, as well as other basic needs (ILO 2021c).

Figure 19 presents the results of the different comparisons of the minimum wage to the international and national poverty lines explained above. Whether in net or gross amounts, the minimum wage in the real sector is higher than all the poverty lines that are considered. However, the gap between the real sector minimum wage and the national poverty lines, in particular the absolute poverty line, is quite small suggesting that the monthly earnings of minimum wage earners only allow them to be above absolute poverty. Regarding the minimum wage set by decision HG550/2014, recently recognized as unconstitutional because of its low level, our analyses show that this level is lower than all the poverty lines considered. On the other hand, the guaranteed minimum wage for full-time civil servants, in gross and net terms, is above the international poverty line for upper middle-income countries and the national extreme poverty line. It remains, however, below the national absolute poverty line.

► Figure 19. Nominal minimum wages (in US PPP, 2019) compared to international and national poverty lines, MDL, 2019 (percentages)



Source: NLFS, 2019. Author's own calculations.

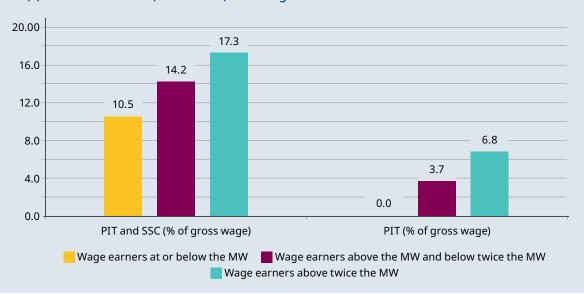
Notes: PPP = purchasing power parity. PL = international poverty line. PL Nat = national poverty line. PIT = personal income tax. SSC = social security contribution.

▶ Box 2. The minimum wage, the personal income tax, and social security contributions in the Republic of Moldova

It is important to understand the specifics of the tax and social security levies that are made from the minimum wage (Figure 20). Indeed, the amount of the minimum wage that is officially announced at each adjustment corresponds to the gross amount, from which personal income tax and social security contributions will be levied. Consequently, it is only the amount available, after these various levies, that the wage employee can use to cover the needs of his or her household. In the Republic of Moldova, a flat-rate taxation is used, which is considered to be detrimental to inequality and detrimental to minimum wage earners (see Box 9.1 in ILO 2020). However, different estimates of the average personal income tax rate, based on the NLFS microdata, have shown that, on average, minimum wage earners in Moldova paid personal income tax of zero in 2019. Those estimates are based on the information contained in the tax code for the year 2019 (see panel (a) in Figure 20). Furthermore, it is interesting to observe that the estimated average personal income tax rate increases as the wage level of wage employees increases. Such progressivity is in fact allowed by the various deductions granted by the tax law (see Appendix 2 for a detailed explanation), allowing the tax base of minimum wage earners to be considerably reduced, given that our estimates take into account the composition of the household using the information contained in the available micro-data. Moreover, when we consider different hypothetical household compositions, we notice that as soon as the minimum wage earner has a spouse who does not work, which is the case for 72 per cent of minimum wage earners, their income tax automatically falls to zero (panel (b) in Figure 20). Finally, panel (c) of Figure 20 shows that social security contributions represent, on average, 100 per cent of the levies that reduce the disposable income of minimum wage earners.

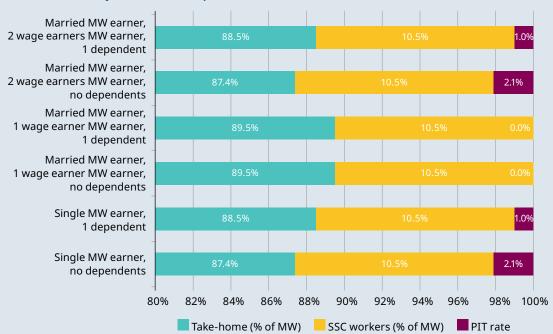
► Figure 20. Personal income tax (PIT) and social security contributions (SSC) deducted from the minimum wage, real sector, 2019 (percentages)





► Figure 20. Personal income tax (PIT) and social security contributions (SSC) deducted from the minimum wage, real sector, 2019 (percentages)

(b) PIT and SSC by household composition, in % of MW (2,775 MDL)



(c) Share of SSC in total levies (PIT + SSC)



Source: NLFS, 2019. Author's own calculations.

Notes: MW = minimum wage. PIT = personal income tax. SSC = social security contributions.

► 5.2 Adequacy of the minimum wage using relative levels

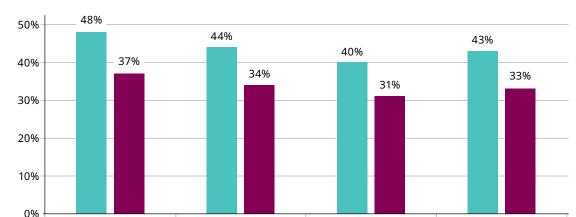
A second analysis of the adequacy level of the minimum wage in the Republic of Moldova, which allows for social and national circumstances to be taken into account, including the "relative standard of living of other social groups" (Convention No. 131, Article 3(a)), consists of calculating the ratio of the minimum to the average wage or the ratio of the minimum to the median wage, the so-called "Kaitz index". This ratio is calculated both using the average monthly wage based on the available NLFS micro-data, and the average monthly wage information published by the NBS and commonly used by the public. On the on hand, the Kaitz ratio obtained using the NLFS micro-data includes both formal and informal wage employees. On the other hand, the Kaitz ratio calculated using the officially published NBS average monthly wage is likely to be only based on the wages of formal employees. As has been showed in the Box 2, Figure 18, wages are much higher for formal employees, and consequently the average of monthly wages officially published by the NBS will be higher than that estimated from the NLFS micro-data. Therefore, a lower Kaitz ratio should be obtained when using the average of monthly wages officially published by the NBS.

Figure 21 presents these different ratios for the real sector, for the year 2019 and for the other years in which the minimum wage has been revised. The ratio of the monthly minimum wage to the average monthly wage is estimated at 37 per cent when using the officially published NBS average wage and 48 per cent when using the NLFS micro-data. As has been argued above, both ratios are valid estimates but depict different realities of wage employment. The first ratio of 37 per cent is less representative of the whole population of wage employees, compared to the second ratio which is more representative of the true value of the minimum wage relative to the whole wage distribution, including those with informal employment. The difference between the two estimates shows how important it is to set a level of the minimum wage that considers all factors in the economy. Setting the minimum wage when considering the lowest ratio, which is only based on formal wage employees, could be an unsustainable policy in the long and medium run as the minimum wage would be based on a higher and not representative estimate of the average wage. A more realistic policy should be designed around the Kaitz ratio that takes into account all wage employees in the population, the one estimated at 48 per cent.

Therefore, only the Kaitz ratio based on the NLFS micro-data is considered in the remaining of this section. Although this ratio seems close to the recommended threshold recently adopted by the European Parliament on adequate wages, which must be at least 50 per cent of the average gross wage (European Parliament 2022), further analyses show that the ratio has deteriorated between 2019 and 2021. Indeed, assuming that the average wage has grown at

^{8.} National Bureau of Statistics of the Republic of Moldova (NBS). Monthly average earnings by Economic activities, Years, Sector, Indicator and Sex. Available at: https://statbank.statistica.md:443/PxWeb/sq/f7704d4c-b4d8-485d-982c-0cca7ba7ac16

the same pace as the officially published NBS figures, it appears the Kaitz ratio of 48 per cent in 2019 falls to 44 per cent in 2020, a year during which the minimum wage has been frozen. Then, the Kaitz in the real sector reached 40 per cent in 2021 and 43 per cent in 2022.



NLFS micro-data, monthly wages NBS official estimates, monthly wages

2021

2022

► Figure 21. Minimum-to-mean ratio, real sector, by gender, 2019 (percentages)

2020

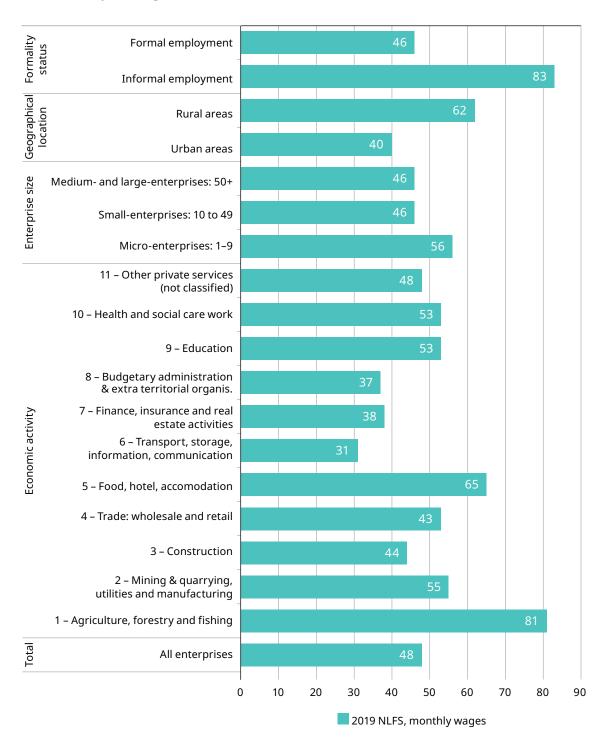
Source: NLFS, 2019. Author's own calculations.

2019

In Figure 22, where only the year 2019 is considered, ratios of the minimum wage to the average wage (Kaitz ratios) are estimated for different enterprise characteristics, including formality status, geographical location, firm size, and different economic activity. These estimates illustrate the considerable variation in the relative level of the minimum wage across different economic activities. The different Kaitz ratios highlight the fact that the economic activities and the type of enterprises that were identified to have the lowest average wages are also those with the highest Kaitz ratios. For instance, the Kaitz ratio reaches 83 per cent for wage employees with informal employment, and 81 per cent for employees in the agriculture, forestry, and fishing activities. It is also notable that activities with a high prevalence of formal employment and the highest wages are those with the lowest Kaitz ratios, including transportation, information, communication, finance, and real estate services, as well as public administration activities. Those results suggest that relative levels may not be relevant in certain circumstances when wages are too low.

^{9.} The estimated average wage in 2022 is calculated using the average nominal wage quarterly wage growth (year-to-year) before the COVID-19, that is from 2017 to 2019, based on the NBS official release, estimated at 12.8 per cent on average.

Figure 22. Minimum-to-mean ratios (Kaitz index), real sector, by groups of enterprises, 2019 (percentages)



Source: NLFS, 2019. Author's own calculations.

► 5.3 Adjustments to maintain the minimum wage at an adequate level

To ensure that the level of a minimum wage remains adequate to cover the needs of workers and their families, regular adjustments are necessary as recommended by Convention No. 131 (Article 4(1)). These adjustments may take into account the quantitative assessment of the needs of workers and their families, price and cost of living increases, economic and labour productivity growth, the possible impact on labour costs and employment, or the relative level of the minimum wage. In the context of this report, because Moldova is characterized but high inflation, we focus on assessing how the minimum wage level has evolved in real terms, i.e., taking into account changes in the cost of living. Our analysis is illustrated by Figure 23, which shows that the minimum wage in nominal terms has almost doubled between 2010 and 2019 in the real sector. This was made possible by frequent adjustments of the real sector minimum wage.

However, the increase in the minimum wage is more moderate, reduced by half, when the change in the general price level is considered, which is due to high inflation over the period. Indeed, the average inflation between 2010 and 2019 is estimated at 7.4 per cent. It also appears that the increase in the minimum wage in nominal terms has slowed down in recent years, particularly since 2017. Indeed, while an increase of 13.3 per cent was agreed in 2017, minimum wages in the real sector increased by 9.7, then 6.3, and 0 per cent in 2018, 2019, and 2020 respectively. In 2021, during the COVID-19 crisis, after a freeze in the evolution of the minimum wage in 2020, a lower increase than in previous years was applied (5.8 per cent). However, a substantial increase of 19.3 per cent is noted for the year 2022, well above previous adjustments, except for 2015 (+21.8 per cent).

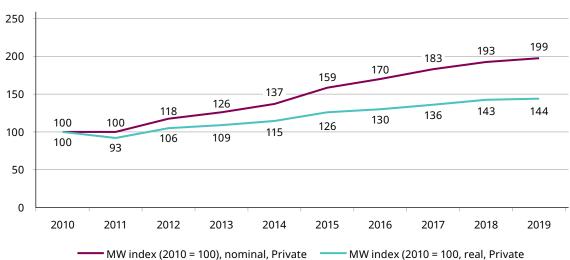


Figure 23. Evolution of real and nominal minimum wages, real sector, 2019 (index, 2010 = 100)

Source: NLFS, 2019. Author's own calculations.

Note: An index with 2010 as reference year is used (2010 = 100).

▶ 6. The characteristics of the beneficiaries

The third and final factor affecting the ability of a minimum wage to achieve its objectives depends on the characteristics of minimum wage beneficiaries, particularly whether they live in households at the bottom end of the income distributions. When minimum wage earners do not belong to low income households where the main source of income is labour income, the redistributive impacts of the minimum wage, as well as all its other benefits, are limited. Therefore, our analyses will focus on identifying minimum wage earners across the household income distribution. This section also looks at profiling minimum wage earners to better understand their characteristics.

6.1 Do minimum wage earners live in poor families?

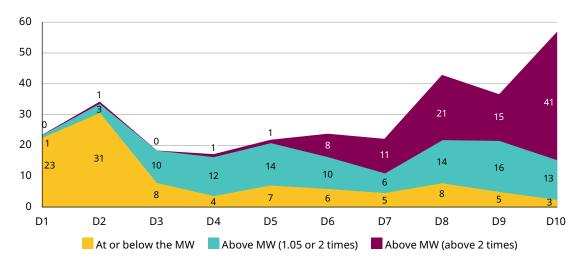
To conduct such an analysis, it is therefore necessary to know the distribution of household incomes in a population. However, the NLFS micro-data used in this report do not contain information to properly calculate household income. The only information on labour income available in the NLFS is that related to wage employment. Thus, the labour income of employers or own-account workers is not reported. To overcome this problem, a distribution of household incomes has been estimated by considering only households that contain at least one salaried employee (Figure 24). Such a distribution, which will serve as a proxy, will make it possible to compare households that are comparable, and, above all, that are likely to be affected by wage policies since they include at least one wage employee member. To be more accurate when interpreting the estimates, the text that follows makes reference to "household's distribution" rather than "household income distribution" – where the term income cannot be correctly captured by the survey.

Looking at employees in the real sector, it is clear from Figure 24 that the majority of minimum wage earners are located at the bottom of the household distribution. Indeed, 73 per cent of employees paid at or below the minimum wage in the real sector are in the bottom half of the income distribution. At the very bottom of this distribution, where the poorest 20 per cent households are, more than half of the minimum wage earners are found (54 per cent). It is also apparent that very few high wage earners (more than twice the minimum wage) are found in the poorest households. These types of wage earners are rather concentrated in the richest households. In panels (b) and (c) the same analysis as above is replicated, but this time differentiating employees by gender or informality status. When only men are considered, the proportion of employees paid at or below the minimum wage is estimated at 69 per cent; for women, the corresponding proportion is 77 per cent. In panel (c), the estimate of the

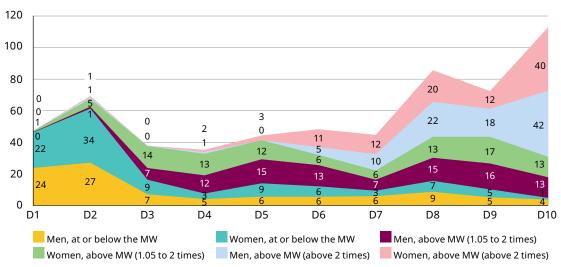
same proportion is 71 per cent and 77 per cent, respectively for employees in the formal and informal economy. Thus, the same conclusions as in panel (a) are confirmed: minimum wage earners are at the bottom of the income distribution in the Republic of Moldova.

► Figure 24. Distribution of wage earners across the household distribution deciles: real sector, by gender, by formality status, 2019 (percentages)

(a) Only real sector wage earners

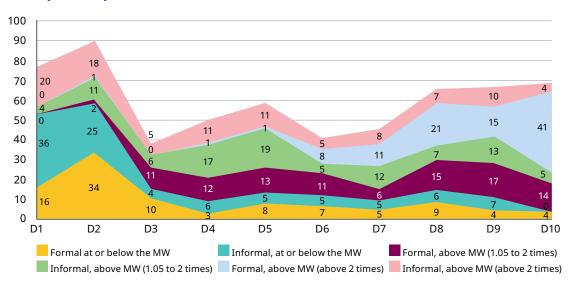






► Figure 24. Distribution of wage earners across the household distribution deciles: real sector, by gender, by formality status, 2019 (percentages)

(c) By formality status



Source: NLFS, 2019. Author's own calculations.

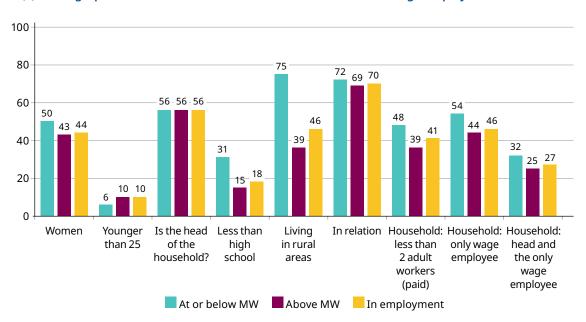
Note: Only households with at least one wage employee are considered.

► 6.2 Main characteristics of minimum wage earners

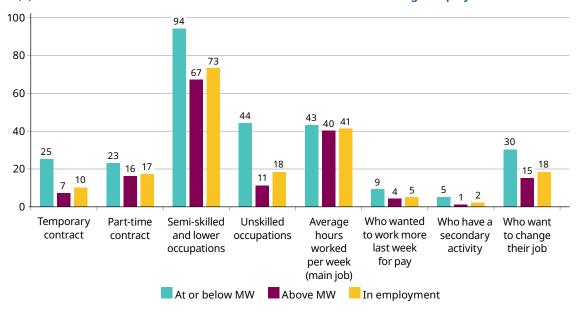
To identify the main characteristics of minimum wage earners in the real sector, their characteristics are compared to those of employees above the minimum wage; considering only the real sector (Figure 25). In panel (a), it can be observed that employees who are female, who have less than secondary education, who live in rural areas and who are in couples are over-represented among employees at or below the minimum wage. The first important piece of information here is that these results suggest that minimum wage policies can help to reduce the gender pay gap. The second piece of information is the fact that minimum wage earners are mostly adults, contrary to what one might think. Moreover, employees who are heads of households are equally represented above and below the minimum wage as panel (a) shows. Minimum wage earners are therefore adults (94 per cent of them) who are heads of households. In addition, the results show that households with only one wage earner, or where the head of the household is the only wage earner, correspond more closely to the household type of minimum wage earners, compared to those above the minimum wage. All these results confirm that the minimum wage is the main source of income for those who receive it, whose employment serves as a means of subsistence for their families. Thus, minimum wage policies have a huge redistributive potential and can improve several aspects of socio-economic development in the Republic of Moldova.

► Figure 25. Characteristics of wage employees whose earnings are at or below the minimum wage, 2019 (percentages)

(a) Demographic characteristics of sub-minimum and minimum wage employees



(b) Labour market characteristics of sub-minimum and minimum wage employees



Source: NLFS, 2019. Author's own calculations.

Panel (b) of Figure 25 shows that minimum wage earners are more likely to have temporary contracts, to work part-time and to hold low-skilled jobs, compared to employees paid above the minimum wage. They also work more hours, on average, most likely because they need to increase their monthly earnings and be able to better cover their family needs. This is further

confirmed by the fact that minimum wage earners are over-represented among employees who want to work more hours for financial reasons, who have a secondary activity, and who want to change their job. These results show that employees paid at or below the minimum wage struggle hard in the labour market to improve their living conditions and those of their families, by working longer hours or taking another paid job, and by trying to find a better paid job. Therefore, an increase in the level of the minimum wage, while taking into account economic factors, would significantly improve the living and working conditions of these people, who represent more than 20 per cent of workers in the real sector, with considerable socio-economic and social justice impacts.

▶ 7. Simulations: How adjustments of the minimum wage level can impact inequality in Moldova?

In section 6, it was noted that the beneficiaries of the minimum wage in the real sector correspond precisely to those employees who typically need the protection provided by the minimum wage. These results also suggest that the minimum wage has a strong redistributive and inequality-reducing potential in the real sector of the Republic of Moldova. To empirically verify this redistributive potential, simulation exercises are conducted for the real sector, considering different minimum wage adjustment rates, as well as different scenarios defined by compliance situations, including minimum wage compliance in the entire real sector, minimum wage compliance that is limited to the formal economy, and minimum wage compliance combined with wage floor compliance in the formal economy. Indeed, by Government decision HG743 of 11 June 2002, wage floors are set for each level of qualification for employees in the real sector (unqualified workers, medium-skilled workers, highly skilled workers, specialist, management staff). However, it should be noted that these floors are not mandatory, as enterprises can choose whether or not to apply them. Our simulations therefore allow us to evaluate the potential redistributive impacts if these floors were mandatory and applied by all enterprises in the real sector.

For the adjustment rates, we use the ratio between the level of the minimum wage in 2022 and average gross wages (Kaitz ratio), as projected for the year 2022, so as to make the relative level of the minimum wage consistent with the recent recommendations adopted

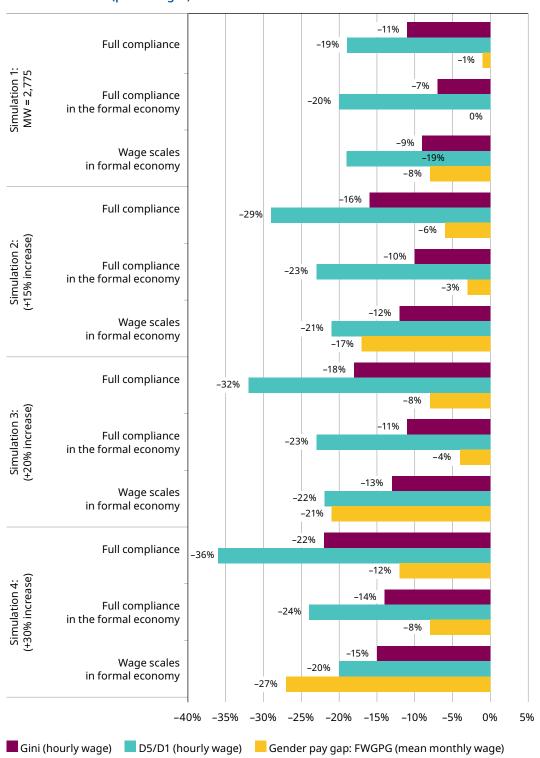
by the European Parliament (European Parliament 2022). According to this recommended rule, the Kaitz ratio must be at least equal to 50 per cent for a minimum wage level to be considered adequate. Thus, several adjustment rates, ranging from 15 to 30 per cent, are proposed in order to reach this benchmark of 50 per cent of average wages. In 2022, the monthly minimum wage for the real sector is MDL 3,500, while the average monthly gross wage is projected at MDL 8,174.75. Therefore, for a 15, 20, 30 per cent increase in the minimum wage, the ratio is expected to rise from 43 per cent to 49, 51, and 56 per cent, respectively. It should be noted that although some of these adjustment rates appear relatively high, this is due to the rapid rise in average wages. As minimum wages were already low relative to this average, they have to grow much faster, so that their level relative to this average does not deteriorate. Therefore, any adjustment rate of the minimum wage that is below or around the nominal growth rate of average wages will lead to an even lower Kaitz ratio.

Figure 26 shows the results of the impact of the simulation exercises on different measures of wage inequality. Indeed, because the available NLFS micro-data cannot properly capture household income, the simulations focus only on the monthly wage distribution, and therefore, taking into consideration the number of hours worked. The Gini index and the D5/D1 ratio are used to measure the impact of the different simulation scenarios on wage inequality. To assess the potential for reducing gender pay gaps, the impact of the simulations is also measured using the factor-weighted monthly pay gap.

The first simulation scenario (at the top of the figure) assumes different compliance hypotheses while maintaining the minimum wage unchanged. It is striking how compliance alone has a significant power to reduce inequality, in particular for the D5/D1 ratio, thereby showing the high potential of compliance to the minimum wage to narrowing the distance between the lowest 10 per cent bottom of the wage distribution and the middle of the distribution. Moreover, all the estimates indicate that when there is full compliance with the minimum wage in the real sector (including in the informal economy), the minimum wage has the strongest impact on reducing inequality, particularly when measured by the Gini index. The more realistic alternative scenario, that of a compliance only in the formal economy of the real sector, has the second highest inequality-reducing power.

In terms of reducing the gender pay gap, it appears that compliance with wage floors and the minimum wage is the most effective of the different scenarios. Indeed, while the wage gap appears to be less sensitive to the different compliance scenarios, except for large increases in the minimum wage, it reacts strongly to wage floors. This is because wage floors would, at all levels of the wage distribution, reduce the wage gap existing between men and women with the same labour market endowments.

► Figure 26. Policy simulations: estimates of percentage change in wage inequality selected measures (Gini, and D5/D1, and the monthly factor weighted pay gap), real sector, 2019 (percentages)

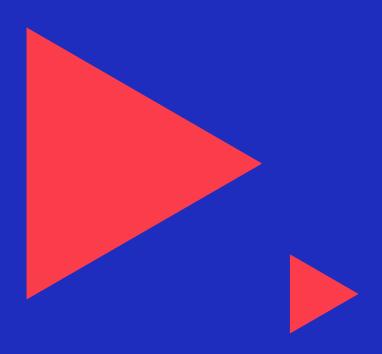


Source: NLFS, 2019. Author's own calculations.

Note: Monthly wages are used to calculate the different estimates, therefore, taking into consideration the number of hours worked.

Part

Concluding remarks and policy recommendations



The empirical analyses carried out in this report have allowed for a better understanding of the labour market in Moldova and to assess the performance of the minimum wage system in place, in relation to its institutional characteristics in the country. The Moldovan labour market has been characterised in recent years by a decline in employment, in particular wage employment, while at the same time inactivity and the size of the informal economy have grown. The deterioration of formal wage employment is likely to have continued during the crises currently affecting most countries in Europe: the COVID-19 pandemic, the rising cost of living, and the impacts of the war in Ukraine.

As recent crises have shown, the negative impacts are likely to be strongest among households that were already the most disadvantaged and vulnerable which is where low-paid workers and potential beneficiaries of a minimum wage policy concentrate. Securing the effectiveness of the minimum wage can help such households at times of crises. Informality is also a key factor in the labour market in Moldova, and therefore, alongside efforts to improving the effectiveness of the minimum wage, taking steps to formalize the informal economy will be needed to reduce inequality and increase the standards of living of wage employees in the country.

Looking at the various analyses presented by the report, there is a need to review the ambiguities associated to the implementation of the minimum wage in Moldova. It seems that two minimum wage laws apply to the real sector, even though, in practice, only one of the two laws is considered to be in force for this sector, Law No. 847/2002. Such ambiguity is likely to generate confusion in the application of the law, or at least to serve as an alibi for enterprises that would choose to use the lower rate, thus increasing non-compliance with the law.

The analysis of the structure of the wage distribution shows that more than one in five wage earners are at or below the minimum wage in the country – considering only the real sector. The estimates also showed that wage inequality is likely to be driven by the bottom half of the wage distribution, rather than by the top half of the distribution, which reinforces the relevance of the minimum wage to reduce inequality in the Republic of Moldova. Reducing wage inequality while increasing formal employment (and reducing informal wage employment) could reduce wage inequality and increase the standards of livings of a significant fraction of household in the country. This could in fact contribute to reduce household inequality. Gender wage inequality, particularly the wage gap, would also be reduced by such policy as the micro-data show that women are overrepresented in the bottom of the wage distribution. The analysis of the wage distribution also revealed large wage disparities between different economic activities.

In the second part of the report, the review of the performance of the minimum wage system in Moldova, in relation to the three key factors (or conditions) that influence its ability and effectiveness in achieving its objectives, highlights the following challenges that need to be addressed. First, in relation to coverage and compliance levels, a 16 per cent non-compliance rate was estimated, which is higher than the average in Europe and worldwide. This is detrimental to the effectiveness of the minimum wage, as suggested by the micro-simulations

conducted in section 7, which demonstrated the importance of compliance with the minimum wage in reducing inequality. The salaried employees most exposed to non-compliance are women, low-skilled workers, or those with a lower level of education, on the one hand, and on the other hand, employees in rural areas, in the smallest enterprises, or in agriculture, forestry, and fishing activities. As suggested above, informal wage employment in Moldova is high, a factor that explains much of the non-compliance rate in the country. Because wages are low in the informal economy, it comprises more than one-third of minimum wage earners (33.4 per cent), while it accounts for 14 per cent of wage earners in the formal sector. Putting in place measures to reduce informality should be an integral part of those measures that aim at making the minimum wage a more effective tool to achieve social justice in the country.

For the second key factor affecting the performance of the minimum wage, the adequacy of the level of the minimum wage, two challenges were identified: (i) the minimum wage in the real sector is 48 per cent of the average gross wage in that sector; and (ii) the level of the minimum wage is just above the national absolute poverty line, indicating that the monthly earnings of minimum wage earners only allow them to be above absolute poverty, but are unlikely to be able to cover all of their basic needs, while escaping poverty.

For the third and final factor, our analyses did not reveal any shortcomings. On the contrary, it was observed that the potential beneficiaries of the minimum wage perfectly correspond to the target of this wage policy. In the Republic of Moldova, minimum wage earners are mostly found at the bottom end of the household distribution, and have the lowest wages. The wage employees most likely to be beneficiaries of the minimum wage are: low-skilled workers, those with a low level of education, adults over 25 years of age, employees in couples, heads of households, and people who are the only wage earners in their households. Furthermore, it was observed that minimum wage earners are more likely to want to increase their work hours for financial reasons, or to take a second job when they already have longer work hours, compared to other higher paid wage employees. This suggests that minimum wage earners find it difficult to cover their needs and those of their families if they do not work longer than normal working hours or if they do not find a second job. These results confirm that the minimum wage represents the main means of subsistence for the beneficiaries and their families, which implies that minimum wage policies have a strong power to improve several aspects of socio-economic development in the Republic of Moldova.

Policy recommendations

To make the minimum wage system in the Republic of Moldova even more effective in improving the living conditions of low-paid workers and their families, and in reducing inequalities, especially in the context of an increase in the minimum wage level, the following improvements will be necessary.

1. The extent of legal coverage and compliance

Although the government has recently approved a new unified minimum wage applying to both the real and the budgetary sectors (September 2022) and set at MDL 3,500, clarification of all the minimum wage laws is needed to remove any ambiguity about the minimum wage in the real sector, and in the budgetary sector. Along with the simplification of the law, awareness-raising campaigns, capacity-building activities for employers' and workers' representatives, and targeted labour inspections with sanctions should help to significantly improve the level of compliance with the minimum wage. These measures should be accompanied by measures to encourage formalization, which is a major challenge for minimum wage enforcement.

The adequacy of the minimum wage

Given that the minimum wage is less than 50 percent in relation to the average monthly wage for a representative population of formal and informal wage employees, it is recommended that the level be adjusted gradually in accordance with the recommendations by the European Parliament for EU countries (European Union, 2022). To ensure that the minimum wage covers the needs of workers and their families, it is recommended that the level is gradually adjusted so that it increases to reach and maintain the monetary value of a basket of goods and services (consensual to all social partners), or to achieve either 50 percent of the average wage in the country, or 60 percent of the median wage in the country. The government, in consultation with social partners, should establish a time-framework to achieve such goal. Since employer social security contributions increase the total cost of the minimum wage by 22.5 per cent for employers, the Government can, for example, support enterprises by lowering, on a transitional basis, these contributions for their employees who are minimum wage earners.

However, it is essential that such an increase is carried out in the context of a strong and inclusive social dialogue, based on evidence, which considers the capacity of enterprises to pay the minimum wage, without jeopardizing their survival or employment.

3. The characteristics of the beneficiaries

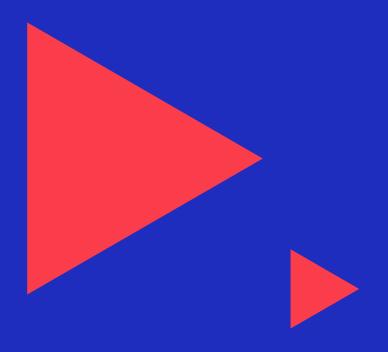
Considering the gradual decline in wage employment opportunities, effective employment policies will be needed to ensure that wage employment largely dominate employment opportunities, and that low-paid employees do not move into informality. These employment policies should be designed in coherence with other macroeconomic, development, and sectoral policies, whose primary and explicit objective should be full employment with decent working conditions. Active labour market policies, including training programmes for skills upgrading and re-skilling, could help maintain and strengthen the attachment to the labour market of the most disadvantaged workers, who are identified as being the most vulnerable to transition to the informal economy. They could also help increase productivity, which is one of the main drivers of informality. Public employment services will also need to be strengthened, especially for vulnerable workers, so that they can be guided and counselled in their labour market transitions, including the transition to the formal economy.

4. Other important recommendations

Given the wide disparities in wages between different economic activities, collective bargaining must be improved, made as broad as possible and extended to all activities. Collective bargaining is indeed better placed, than the minimum wage, to regulate wages above the minimum wage, while taking into account the particular circumstances of certain sectors and activities. For this reason, the minimum wage, which should act only as a floor, must be decoupled from other wages in the different wage scales. Thus, a single minimum wage can be set at an adequate level to serve as a floor for low wages in all economic activities and institutional sectors, while leaving the regulation of wages above that floor to collective bargaining. The combination of appropriate minimum wage regulations and collective bargaining could significantly reduce inequality, including the gender wage gap, as the micro-simulations in this report have shown.

Finally, it should be noted that access to household micro-data made this analysis possible. However, in order to better inform social partners and public policy makers, this analysis can be complemented by an assessment of the needs of workers and their families, on the one hand, and by an assessment of the capacity of enterprises to support a minimum wage level without jeopardizing its survival, on the other. These assessments can be made possible in the first case by micro-data on household incomes and expenditures, and in the second case by micro-data on enterprises that provide information on their employees and their various costs and revenues.

Appendices



Appendix I

List of the legal acts mentioned in the report

Wage regulations

- Law No. 1432-XIV of 28.12.2000 on the Setting and Review of the Guaranteed Minimum (applicable to all entities in theory, but only to the budgetary sector in practice)
- Law No. 847 of 14.02.2002 on wages (applicable to the real sector)
- Government Decision No. HG335 of 25.05.2001, concerning the establishment of the minimum wage for the country (applicable to the budgetary sector)
- ► Government Decision No. HG1475 du 30.12.2004, concerning the establishment of the minimum wage for the country (applicable to the budgetary sector)
- ► Government Decision No. HG575 du 24.05.2007, concerning the establishment of the minimum wage for the country (applicable to the budgetary sector)
- ► Government Decision No. HG15 du 19.01.2009, concerning the establishment of the minimum wage for the country (applicable to the budgetary sector)
- ► Government Decision No. HG550 du 07.09.2014, concerning the establishment of the minimum wage for the country (applicable to the budgetary sector)
- ► Government Decision No. HG165 du 09.03.2010, regarding the guaranteed minimum wage in the real sector (applicable to the real sector)
- Law No. 270 of 23-11-2018, regarding the unitary salary system in the budgetary sector (applicable to the budgetary sector)
- ► Government Decision No. HG743 of 11-06-2002, regarding the remuneration of employees from units with financial autonomy (applicable to the real sector)

Other relevant regulations

- Code No. 1163 of 24-04-1997, Tax Code of the Republic of Moldova
- Constitutional Court Decision No. 12 of 16-06-2022, for the control of the constitutionality of article 3 para. (2) from Law no. 1432 of December 28, 2000, regarding the method of establishing and re-examining the minimum wage, of article 27 para. (2) from Law no. 270 of November 23, 2018, regarding the unitary salary system in the budgetary sector, of Government Decision no. 165 of March 9, 2010, regarding the guaranteed minimum wage in the real sector and Government Decision no. 550 of July 9, 2014, regarding the establishment of the amount of the minimum wage per country.

Appendix II

Calculation of the gross amount of the monthly wages

To produce the different estimates presented in this report, we use micro-data from the National Labour Force Survey (NLFS), a survey administrated by the National Bureau of Statistics of the Republic of Moldova (NBS). In this survey, a questionnaire is submitted to representative households in the population, to collect labour market information for each member of the household, as well as information on the household composition. Among this information, the main variable of interest, that conditions all the analyses in the report, is the variable that provides information on the remuneration of wage employees. The monthly wage information that is present in the NLFS corresponds to the remuneration that the wage employee received in the month prior to the survey, after deduction of taxes and social security contributions (including payment of compulsory medical insurance). Because the amount of the minimum wage is given as a gross value (before any levies), we need to retrieve the gross amount of the wage information for each wage employee present in the database before any comparison with the minimum wage. Another choice would have been to simply calculate the net amount of the current minimum wage and compare it to the already known net monthly wages. However, this easy solution would necessarily lead to highly biased estimates, since the net value of the minimum wage depends on the household composition of the minimum wage earner (as Box X in the report shows). Our approach, as explained below, allows us to obtain more precise estimates of the gross monthly wage.

To calculate those gross amounts of monthly wages for each employee, we use the tax information in force for the year 2019, contained in the Tax Code of the Republic of Moldova, Code No. 1163 of 24 April 1997. By definition, the amount of the gross wage can be obtained by adding social security contributions and income tax to the amount of the net wage, as follows:

The amount of the personal income tax is quite simple to calculate in the Republic of Moldova because a unique tax rate of 12 per cent is applied to the taxable earnings (referred hereafter as the "tax base"), regardless of the income level (flat tax regime). Therefore, replacing personal income tax by its definition in equation (1), we obtain:

On the other hand, following the indications given by articles 33, 34, 35, and 36 of the Tax Code of 2019, which specify the different deductions that can be made from the gross wage to obtain the tax base, we obtain the following definition of the tax base:

Then, replacing in the definition of the tax base (2), the detailed formula of the gross wage given in (1a), we obtain:

And after simplifications:

Consequently, we can calculate the tax base, after having calculated the exemptions to which workers are entitled to, according to the composition of their household (see Articles 33, 34, 35, and 36 of the 2019 Tax Code). These exemptions include exemptions for everyone (MDL 24,000 per year) on the one hand; and on the other hand, exemptions based on household composition, including whether the taxpayer's spouse does not work (MDL 11,280 per year), and whether the taxpayer has dependents (MDL 3,000 per dependent per year). With detailed information on household composition in the micro-data, we can accurately calculate, for each employee, their number of dependents, which refers to the number of ascendants or descendants of the taxpayer or his wife (husband) whose annual income does not exceed 11,280 MDL.

Once the taxable amount is known, the income tax can be calculated. Then, we can calculate the gross amount of the wage, using its detailed formula (1a), without having to calculate the social security contributions whose calculation information are provided by Ernst and Young Global (2019):

We obtain:

It should be noted, however, that our calculations use the annual wage by multiplying the monthly wage by 12, which implicitly assumes that each employee in the database will work the whole year. Furthermore, we did not consider the higher exemptions that can be made in special circumstances, such as the illness of a dependent that leads to disability, because this information was not available in the data. Finally, it is necessary to precise that the calculations that permitted to retrieve the gross amount of the wage variable were only applied to employees in the formal economy, who are by definition the only ones covered by the law. Therefore, the gross and the net wages are equivalent for employees in the informal economy.

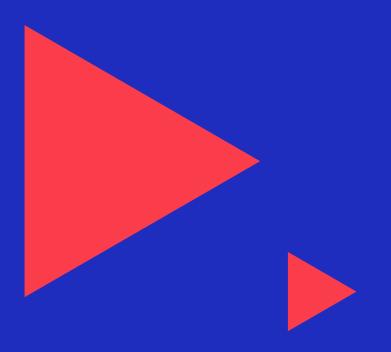
Appendix III

► Table 1. PIn which economic activities female wage employees are overrepresented?, 2019 (percentages)

Economic activities (ISIC, Rev.4)	Men, Composi- tion of wage employment	Women, Composi- tion of wage employment	All, Composition of wage employment	Men, share in the economic activity	Women, share in the economic activity
1 – Agriculture, forestry, and fishing	5.8	13.34	9.43	31.9	68.1
2 – Mining & quarrying, utilities, and manufacturing	16.8	20	18.4	47.6	52.4
3 - Construction	0.9	8.3	4.5	10.7	89.3
4 - Trade: wholesale and retail	16.2	18.8	17.4	48.1	51.9
5 – Food, hotel, accommodation	3.6	1.4	2.6	73.3	26.7
6 – Transport, storage, information, communication	5.1	11.1	8.0	33.2	66.8
7 – Finance, insurance, and real estate activities	1.8	1.5	1.6	56.9	43.1
8 – Budgetary administration & extra territorial organis.	6.4	9.1	7.7	43.2	56.8
9 - Education	21.8	5	13.7	82.6	17.4
10 – Health and social care work	13.1	4.3	8.9	76.6	23.4
11 - Other private services (not classified)	8.4	7.3	7.9	55.3	44.7
Real sector	51.6	69.5	60.2	44.4	55.6
Budgetary sector	48.4	30.5	39.8	63.1	36.9
Wage employment (all activities)	_	_	_	51.8	48.2

Source: Author's own calculations. International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4.

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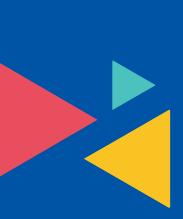
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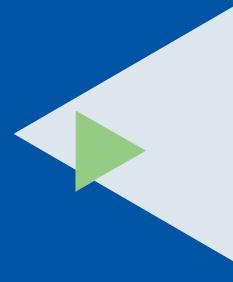
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