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TURKEY'S WAGE ISSUE: WHY DO WE TALK ABOUT THE MINIMUM WAGE SO MUCH?

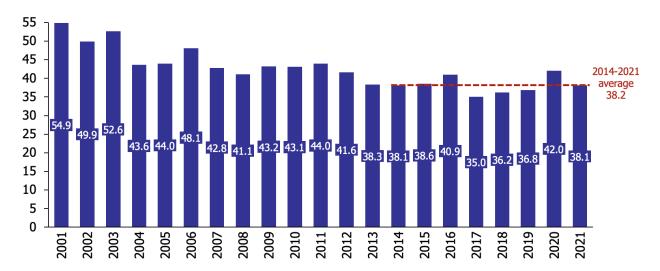
At least one month every year, minimum wage negotiations are the main topic of the economic agenda. While the Minimum Wage Determination Commission met only once a year in the 2016-2021 period, it has started to meet twice a year for the last two years due to high rate of inflation. The rapid convergence of the minimum wage to the average wage and the fact that it has become the indicator that determines the standard of living of millions of laborers, and the fact that the minimum wage is below the hunger limit announced by Confederation of Turkish Trade Unions (TÜRK-İŞ) are frequently addressed by representatives of the labor sector. On the other hand, employer representatives accept the convergence of the minimum wage to the average wage and accordingly argue that high minimum wage increases will drag Turkey down in terms of competitiveness, investment attractiveness and boost informal employment. Apart from all these debates, the fact that Turkey is discussing the minimum wage so intensely can be regarded as one of the signs that the country is unable to move out of being a mediocre economy or that it is stuck in the middle income trap. The government needs to be aware of the causes and possible effects of the increasing intensity of the minimum wage and the increasing convergence of the average wage to the minimum wage in order to get the country out of the middle income trap.

This evaluation note provides a detailed discussion of the wage problem in Turkey. The first part of the note estimates the number of minimum wage earners in the country and shows that the main problem is not the level of minimum wage earners. Rather, the convergence of wages to the minimum wage in general. The second part of the note focuses on the causes and possible negative effects of the convergence trend in wages to the minimum.

The Number of Minimum Wage Earners in Turkey is too High!

In Turkey, the main reason why the minimum wage is discussed so much is the high number of minimum wage earners. In every minimum wage determination period, however, the fact that the exact number of minimum wage earners in the country is remains unknown. The number of minimum wage earners that the government shares with the public is available in the statistical yearbooks of the Social Security Institution (SSI). In the chart that presents the distribution of compulsory insured people covered by 4/a according to the ranges of daily earnings based on premiums, the lowest level of earnings is of course the minimum wage, and according to the 2021 statistical yearbook, 6.16 million insured people in Turkey are minimum wage earners. This number equals 38.08% of the total number of insured people. SSI data shows a decreasing trend when looking at the development of the minimum wage rate over the time. While in 2001, 54.9% of the 4/a registered employment earned minimum wage, this rate followed a downward trend until 2014 and declined to 38.1%. Even though there has been an upward trend in the post-2017 period, the ratio of minimum wage earners in 4/a registered employment is 38.2% on average in the 2014-2021 period (Graph 1).

Graph 1. The percentage of minimum wage earners among compulsory insured people covered by 4/a (%)



Source: SSI, TEPAV calculations.

Data from the SSI shows that the density of minimum wage earners is higher in the private sector and among women. Based on 2021 data, the proportion of minimum wage earners among the compulsory insured covered by 4/a is 4.5% in the public sector and 42.7% in the private sector. Gender wise, 39.5% of female and 37.4% of male employees who are registered in 4/a are minimum wage earners. The highest proportion of minimum wage earners are women employees in the private sector with 44.7% of women 4/a employees being minimum wage earners. Nevertheless, SSI data show that wages beyond the minimum wage are not very high in formal employment.

78.6 80 72.5 72.8 69.7 70 65.6 60 50 44.7 42.7 41.7 39.5 37.4 40 36.8 34.2 32.7 30 20 7.6 10 4.5 2.7 0 Private Private sector Private **Female** Male **Public** Public sector **Public** sectorsector-Male sectorsector-Male Female **Female** Minimum wage Gross wage below 1.51 times the minimum wage

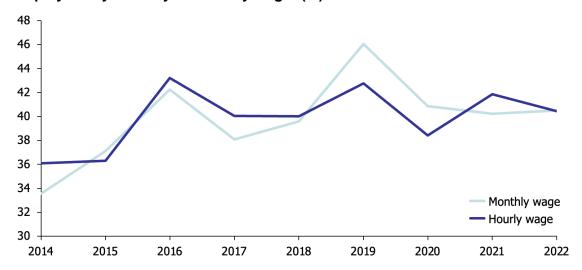
Graph 2. Distribution of wages of compulsory insured people covered by 4/a, by sector and gender (%, 2021)

Source: SSI, TEPAV calculations.

The minimum wage rate in Turkey is higher than the rate announced by the SSI both because of irregularities in registration procedures and the high rate of unregistered employment. According to data released by Turkish Statistical Institute (TÜİK) for the first quarter of 2023, 12.5% of total wage earners and casual employees and 11.2% of wage earners and casual employees outside agriculture are unregistered workers. Since a large majority of unregistered workers earn wages below the minimum wage, it can be expected that the density of minimum wage earners in the labor market is higher than what is reflected in SSI data. In fact, our calculations using the TÜİK labor force survey confirms this expectation. As wage income in the labor force survey is based on declarations, the general tendency is to consider those with incomes below 1.05 times the minimum wage is considered as minimum wage earners. The other issue to be considered when using the labor force survey is missing wage data. Observations with missing wage data are not randomly distributed, missing observations are estimated using the data of those who reported wage data. Accordingly, the number of wage earners and casual employees in Turkey with a wage income below 1.05 times the minimum wage is 8.1 million in 2021 and 8.8 million in 2022. The minimum wage rate is 40.2% in 2021 and 40.5% in 2022. Based on calculations using the labor force survey. the minimum wage rate increased from 37% in 2015 to 42.2% in 2016 due to the minimum wage increase in 2016, and from 39.6% in 2018 to 46% in 2019 due to also the minimum wage increase in 2019. Yet, in the last three years, the minimum wage rate has remained almost stable at around 40.5% on average (Graph 3).

The rate of minimum wage earners calculated based on hourly wages for all waged and casual employee is in line with the result calculated on the basis of monthly wages. As all wage earners and casual employees do not work full-time and there is underemployment in Turkey, it would be more accurate to calculate the minimum wage rate based on hourly wages. Nevertheless, as seen in Graph 3, the rates of minimum wage earners based on monthly and hourly wages are quite close to each other.

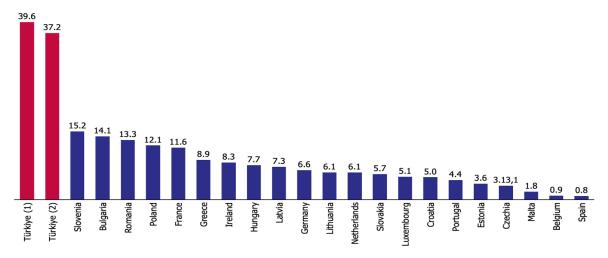
Graph 3. Percentage of minimum wage earners among all wage earners and casual employees by monthly and hourly wage* (%)



*Missing wage data in the labor force survey are estimated by varying age, educational attainment, type of employment, sector, occupation code, administrative responsibility, region, registration status and number of employees in the firm.

Comparing Turkey with European countries, Graph 4 shows how high the minimum wage rate is in Turkey. The statistical office of the European Union (Eurostat) also uses the minimum wage rate as a measure of the share of wage and casual employees with incomes below 1.05 times the minimum wage in total wage and casual employees. In 2018, Slovenia had the highest rate in Europe with 15.2%, while the rate is 13.3% in Romania, 12.1% in Poland and 7.7% in Hungary, which are Turkey's comparator countries. When the same calculation is made for Turkey by excluding missing wage data, the rate is 36.2% and when missing wages are estimated using the regression method, is the rate reaches 39.6%.

Graph 4. Share of wage earners and casual employees earning less than 1.05 times the minimum wage in total wage earners and casual employees (%, 2018)

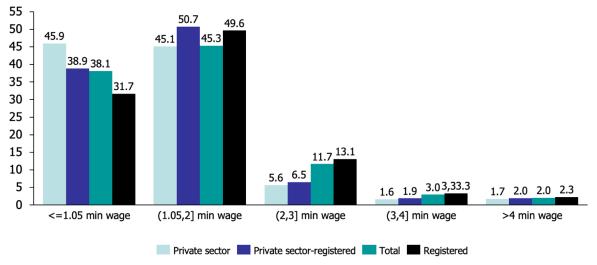


Source: Eurostat, TÜİK Household Labor Force Survey, TEPAV calculations.

(1) Missing wage data in the labor force survey are estimated by varying age, educational attainment, type of employment, sector, occupation code, administrative responsibility, region, registration status and number of employees in the firm. (2) Missing wage data are not analyzed.

While the number of minimum wage earners in Turkey is high, the real point is that many wage earners and casual employees in the private sector earn at most twice the minimum wage. The main concentration of full-time wage earners and casual employees in the private sector earn more than the minimum wage but less than twice the minimum wage. According to 2022 data, 91% of full-time wage earners and casual employees in the private sector have a monthly net wage income of twice the minimum wage or less. This rate is 83.3% for all full-time wage earners and casual employees, as wages in the public sector are generally higher than in the private sector. Considering that the minimum wage is 11,402 TL and the lowest civil servant salary is 22,077 TL with the recent wage increases, 91% of full-time wage earners in the private sector in Turkey have a wage income lower than the lowest civil servant salary. Such a situation poses the risk of a decline in the attractiveness of the private sector in terms of employment. As a matter of fact, recent media reports indicate that young employees in some sectors are leaving their jobs in the private sector with the motivation to become public sector employees (Graph 5).

Graph 5. Distribution of full-time wage earners and casual employees by wage income groups defined as multiples of the minimum wage (%, 2022)



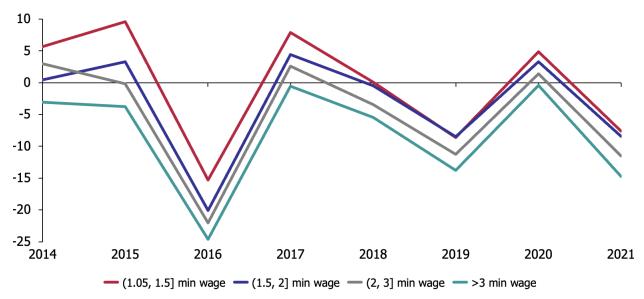
Source: TÜİK Household Labor Force Survey, TEPAV calculations.

Causes and Possible Effects of the Convergence of the Average Wage to the Minimum Wage

One of the most obvious reasons for the convergence of the average wage to the minimum wage is that the rate of increase in wages above the minimum wage remains behind the rate of increase in the minimum wage. The calculations we have made using the panel dataset of TÜİK's income and living conditions survey show that the minimum wage increases in 2016, 2019 and 2021 are considerably higher than the increases in all other wage groups. Another important finding is that the average wage rate decreases as the wage level increases. The wage changes that are closest to the minimum wage increase occur in the wage group up to 1.5 times the minimum wage, which triggers the convergence trend in average wages to the minimum wage (Graph 6).

^{*}Missing wage data in the labor force survey are estimated by varying age, educational attainment, type of employment, sector, occupation code, administrative responsibility, region, registration status and number of employees in the firm.

Graph 6. Difference between the average annual wage increase of wage earners and casual employees* and the minimum wage increase (% Difference, by categories of wage level one year ago)

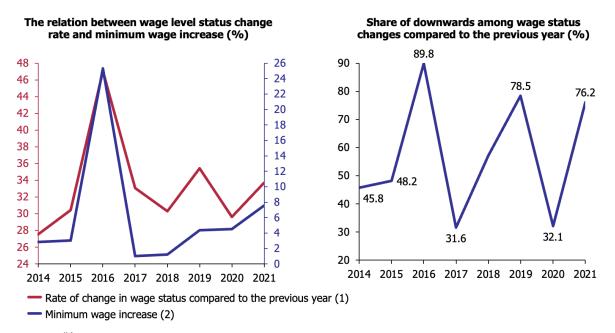


Source: TÜİK Income and Living Conditions Survey panel data set, TEPAV calculations.

During periods when the minimum wage increase is very high compared to other wage levels, downward wage status transitions in the labor market gain momentum. In order to calculate wage status changes, full-time wage earners and casual employees are categorized into five wage groups based on multiples of the minimum wage. Graph 7 shows that there is a strong positive relation between the shares of those whose wage status changed compared to the previous year in total employees and the real increase in the minimum wage. The right panel of the graph shows that during periods of strong increases in the minimum wage in real terms, the majority of these transitions are downward, i.e. towards a lower wage level.

^{*}Wage earners and casual employees working full-time for 12 months in period t and t-1 are included in the analysis.

Graph 7. The relation between the minimum wage increase and changes in the wage level status of full-time wage earners and casual employees

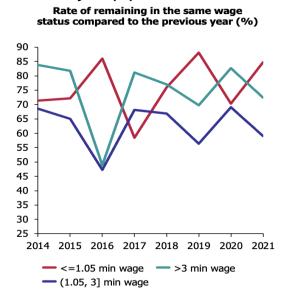


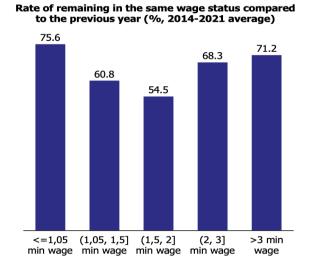
Source: TÜİK Income and Living Conditions Survey panel data set, TEPAV calculations.

(1) Wage earners and casual employees who worked full-time for 12 months in periods t and t-1 are included in the analysis. The share of employees whose wages were in the categories of "<1.05 minimum wage", "(1.05, 1.5] minimum wage", "(1.5, 2] minimum wage", "(2, 3] minimum wage" and ">3 minimum wage" in period t-1 and who switched to another category in period t in the total number of employees. (2) Annual inflation in November is excluded from the annual rate of increase in minimum wage.

The probability of a minimum wage earner moving to a job that pays more than minimum wage is low. It is seen in Graph 8 that the wage level group with the highest probability of remaining in the same status after one year is minimum wage earners. Throughout the 2013-2021 period, the proportion of minimum wage earners who remain in the same wage status after one year ranges between 58% and 88%, and the average of this proportion is 75.6%. It is noteworthy that there is a U-shaped relationship between the wage level and the rate of staying in the same wage status. In Turkey, the group with the highest wage transitions in the labor market is the 1.5-2 minimum wage range, but this group also shows a downward transition in periods of high minimum wage increases.

Graph 8. Percentage of full-time wage earners and casual employees in a specific wage level status defined in multiples of the minimum wage who remained in the same status after one year (%)

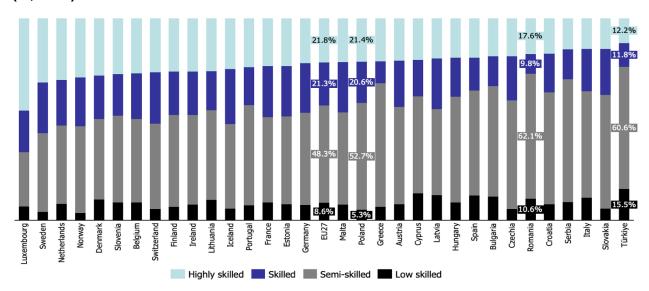




Source: TÜİK Income and Living Conditions Survey panel data set, TEPAV calculations.

Turkey's wage problem is rooted in the country's lack of structural transformation and the consequent concentration of low-skilled jobs in total employment. Based on 2021 data, while 8.6% of jobs in the EU27 average are low-skilled and 48.3% are semi-skilled, in Turkey the same rates are 15.5% and 60.6%, respectively. Turkey has the highest concentration of low-skilled jobs in Europe with this employment structure. While the share of high-skilled jobs in total employment is 17.6% in Romania and 21.4% in Poland, it is only 12.2% in Turkey (Graph 9).

Graph 9. Distribution of jobs across European countries by broad skill level categories* (%, 2021)



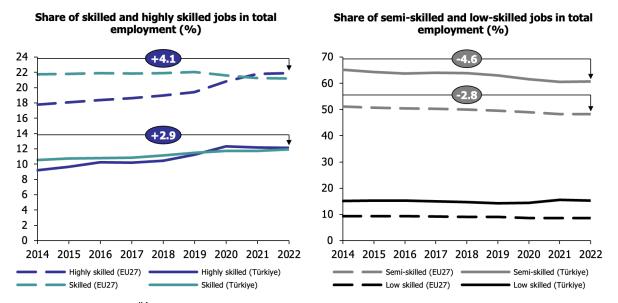
Source: Eurostat, TÜİK Household Labor Force Survey, TEPAV calculations.

^{*}According to the ISCO-08 occupation classification, main group 2 is considered highly skilled, main groups 1 and 3 are considered skilled, main groups 4-8 are considered semi-skilled and main group 9 is considered low skilled.

Even though the share of high-skilled jobs in total employment has been on an upward trend in Turkey since 2014, the increase has remained below the EU27 average. From 2014 to 2022, the share of high-skilled jobs in total employment increased by 4.1 points in the EU27 and by 2.9 points in Turkey. For example, employment in Turkey increased by 15.2% in 2020-2022, when employment recovered rapidly, but 54.1% of this employment growth was driven by semi-skilled jobs and 21.6% by low-skilled jobs. Turkey is, in other words, a country where the number of high-skilled jobs is both low and growing slowly (Graph 10).

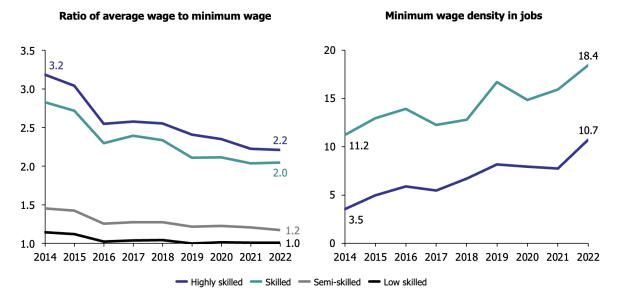
Although the density of low-skill jobs triggers the wage problem, the average wage of jobs at all skill levels has been on a downward trend since 2014. For example, the average wage of full-time wage earners and casual employees in high-skilled jobs was 3.2 times the minimum wage in 2014, falling to 2.2 times in 2022. Additionally, the average wage in low-skilled jobs has been almost equal to the minimum wage since 2016. However, a more dramatic finding is that the density of minimum wage earners in high-skilled and skilled jobs is increasing rapidly. By 2022, 10.7% of full-time wage earners and casual employees in high-skilled jobs and 18.4% in skilled jobs in Turkey reported a wage earnings are 1.05 times the minimum wage or less (Chart 11).

Graph 10. Trends in the distribution of jobs by broad skill levels in Turkey and EU27 (%)



Source: EUROSTAT, TÜİK Household Labor Force Survey, TEPAV calculations.

Graph 11. Development of average wage and minimum wage density in full-time wage and casual employment in Turkey (by broad skill level categories)



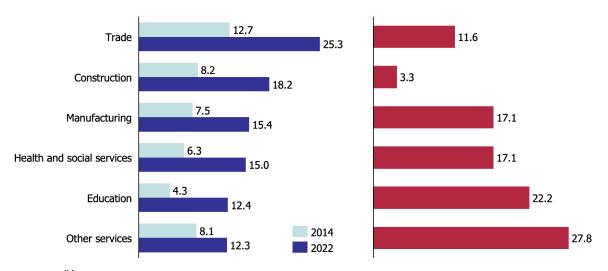
*For skilled wage and casual employment, the share of wage earners earning 1.05 times the minimum wage or less.

Main drivers of the increase in minimum wage density in high-skilled and skilled jobs and the decline in average wages were the services sector, particularly education and health. According to labor force survey data, the minimum wage density for skilled and high-skilled jobs increased from 6.3% to 15% in the health and social services sector and from 4.3% to 12.4% in the education sector from 2014 to 2022. Over the same period, these two sectors accounted for 39.3% of the increase in the number of minimum wage earners in skilled and highly skilled jobs. In these two sectors, which are among the basic public services, the rapid expansion of the private sector can be considered as the main cause of the wage problem. In fact, year-end data from the Social Security Institution (SSI) show that in the 2014-2022 period, education and health and social services sectors accounted for 2% and 3.6% of the increase in the number of workplaces in the private sector, respectively, while these two sectors contributed 3.7% and 8.5%, respectively, to the increase in the number of compulsory insured persons covered by 4/a in the private sector (Graph 12).

Graph 12. Sectoral outlook of the change in the minimum wage density of full-time wage earners and casual employees in skilled and high-skilled jobs in Turkey

The share of those who are paid 1.05 times or less than the minimum wage in skilled and high-skilled jobs (%)

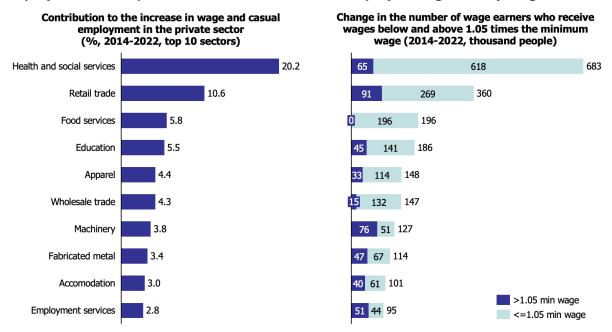
Contribution to increase of minimum wage earners in skilled and high skilled jobs (%, 2014-2022)



Source: TÜİK Household Labor Force Survey, TEPAV calculations.

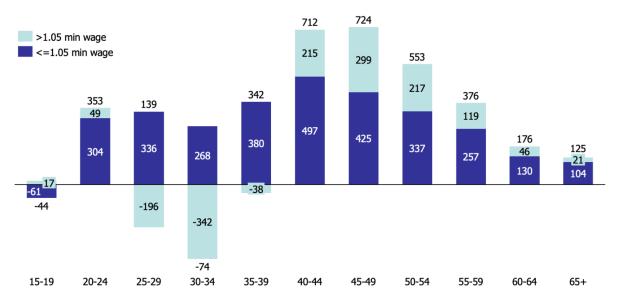
For skilled jobs as well as for employment in general, the expansion of the minimum wage is a consequence of the sectoral dynamics of Turkey's growth. The domestic demand-driven growth model and the increase in spending out-of-pocket on public services such as education and health are mirrored in the sectoral outlook of employment growth. Between 2014 and 2022, 20.2% of the increase in the number of wage and casual employment in the private sector was recorded in the health and social services sector and 5.5% in the education sector, while the total contribution of consumption-oriented sectors such as wholesale and retail trade, food and beverage services to employment growth was 20.8%. The private sector's wage and casual employment in these five sectors increased by 1.6 million people in the 8-year period, 86.3% of this increase was in the minimum wage sector. The machinery sector, which is among the ten sectors that contributed the most to employment growth and is at the upper-middle technology level, increased 40% of its employment at the minimum wage level. Our finding indicates that the long-standing ideal of increasing the economic weight of sectors with high technology intensity may actually be one of the solutions to the wage problem in the labor market (Graph 13).

Graph 13. Sectors that contributed the most to the increase in wage and casual employment in the private sector, distribution of employment growth by wage levels



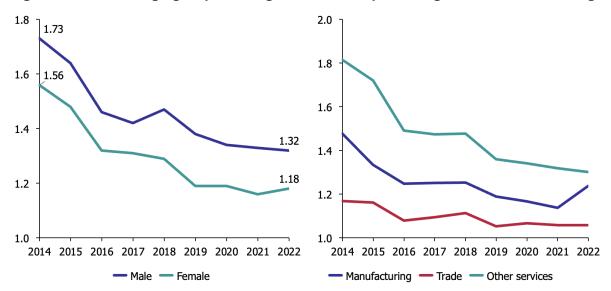
The wage problem in Turkey differs across age groups and young people are more likely to be affected by the issue, which poses long-term structural risks. As can be seen in Graph 14, 86% of the increase in employment among the 20-24 age group in the 2014-2022 period was recorded at a wage level of 1.05 times the minimum wage and below, while the number of employment in the 25-39 age group that pays above the minimum wage decreased, while the number of jobs paying the minimum wage increased. For young people in general, especially those who have just started working, the fact that the minimum wage has become almost the norm may have a detrimental effect on young people's careers. Similar risks include anchoring the wage to the minimum wage throughout the career due to the high status solidity of the minimum wage, creating a gap in the resume due to dissatisfaction with the wage, and young people who cannot find the job or the wage they want, working in minimum wage jobs that are not compatible with their competencies and deteriorating the quality of their resumes. All these risks may trigger financial and psychological problems in young people, which may lead to permanent problems and create a scarring effect that today's young people will experience throughout their working careers (Graph 14).

Graph 14. Change in the number of wage earners and casual employees in the private sector earning wages higher and lower than 1.05 times the minimum wage (2014-2022, by age groups, thousand people)



The wage problem among young people is also relevant for higher education graduates, which is one of the reflections of deterioration in the quality of education in the labor market. Since 2014, the average wage of higher education graduates in the 20-24 age group who work full-time as wage and casual employees has been getting closer to the minimum wage. Average wages of male employees in this category decreased from 1.73 to 1.32 times the minimum wage and average wages of female employees decreased from 1.56 to 1.18 times the minimum wage in the 2014-2022 period. While sectoral structure is also among the prime suspects for young higher education graduates, the rapid expansion in higher education after 2005 also stands out in this regard (Graph 15). After 2005, the number of universities in the country increased by 2.7 times, while the number of students in higher education, which increased at an average annual rate of 7% in the 2002-2008 period, increased by 11.8% in the 2008-2018 period and by 9.7% in the 2008-2022 period. While in 2009, 150,000 male and 159,000 female higher education graduates aged 20-24 were employed, in 2022 these numbers were 270,000 and 371,000, respectively. The average wage of the first 150 thousand young male higher education graduates in employment in 2022 is 1.9 times the average wage of the other 120 thousand while the average wage of the first 159 thousand young female higher education graduates is 1.8 times the average wage of the other 212 thousand. This wide difference in wages may indicate two possibilities: 1) Education has not experienced a quantitative expansion in quality and the signal effect of graduates of new universities on the labor market has remained low, 2) No planning was done to take into account the educationemployment linkages during the expansion of higher education, triggering the problem of skills mismatch in the market.

Graph 15. Average wage of wage earners and casual employees with a higher education degree in the 20-24 age group working full-time as a percentage of the minimum wage



Conclusion

This is an interesting period in terms of wages and salaries where the government has the power of influence. The minimum wage has become a political tool, pensions have been raised but the lowest pension remains unchanged, equal wage increases have distorted the proportional structure between wages in the public sector, and many other issues are frequently discussed these days. But the structural problems of Turkey's labor market, which have been persisting for many years and which have not yet been solved, are worsening. This evaluation note attempted to conduct a detailed assessment of the wage problem in Turkey, discussing the causes and indirect negative effects of the wage problem. To reduce the negative potential materialization of said effects, it is important to start structural reforms immediately. The government's priorities should include policies to transform the labor market towards sectors that are likely to provide better job opportunities and education policies to increase the wage gains from education.