

HIGH INFLATION HAS ERODED THE MINIMUM WAGE RISE

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Executive Summary

In this brief, we examine the effect of the minimum wage increase on the purchasing power of individuals by comparing the increase that took place in January 2022 with the increase of January 2016. Although the minimum wage increase enhances consumers' purchasing power and protects consumers from the adverse effect of price increases, the data shows that the increase in the first half of 2022 has significantly melted due to the striking inflation. It is clear that the significant price increases in food, electricity, gas, and other fuels, which take up a large part of the consumption basket of the poor, have eroded the minimum wage increase in the first half of the year.

The government increased the minimum wage from 4,253 TL rose to 5,500 TL on 1 July 2022 by an extra 30 percent to mitigate the devastating effect of inflation. The last observation point of the data we use in the tables and graphs is June since we do not have enough data to extend the observation period. We will investigate the effects of an extra increase in the minimum wage in the following periods and then update the research brief.

Weight of minimum wage earners

Table 1 shows the rate of those earning less than or equal to minimum wage over the years. Although there have been yearly variation, nearly one out of every three employees earns less than or equal to the minimum. The rate is much higher for informal workers (about 60 percent). Notably, this rate has tended to increase for formal employees in recent years. In 2021, the rate of total workers earning less than or equal to the minimum wage was 33.6 percent, 29.9 percent and 61 percent for formal and informal workers, respectively. The majority of wage earners in Turkey are significantly affected by the minimum wage increases.

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Table 1: The ratio of the workers earning less than or equal to minimum wage (% , 2004-2021)

	Total	Formal	Informal
2004	41.6	28.7	69.5
2005	33.0	21.7	57.8
2006	33.2	22.5	57.7
2007	29.2	20.3	52.0
2008	28.6	19.9	54.6
2009	25.5	17.9	48.8
2010	28.0	19.7	54.2
2011	26.9	19.9	49.9
2012	29.7	23.5	53.7
2013	27.1	21.0	54.8
2014	28.6	23.2	54.1
2015	33.1	27.7	60.9
2016	35.8	31.0	61.0
2017	31.6	26.9	56.3
2018	33.3	27.9	62.2
2019	39.8	34.7	67.5
2020	34.2	30.4	61.2
2021	33.6	29.9	61.0

Source: Turkstat, Authors' calculations.

Note: The income question is coded as zero for those who started working in the survey month and those who did not declare their income. Therefore, those who declared their income as "0" were not considered in calculating the rate of those earning at or below the minimum wage. On the other hand, since the income information is based on declarations and the majority of the respondents round up their income when giving their income information, 5 percent more than the minimum wage was used as the threshold when calculating the number of those earning wages less than or equal to minimum wage. Since the Minimum Living Allowance (AGI) application started in 2008, no minimum wage AGI contribution exists prior to that. Before 2008, employees collected value-added tax (VAT) refunds by accumulating spending slips. Although the VAT refund was calculated annually, it is possible to calculate the monthly amount. According to our calculations, a VAT refund corresponds to an increase of approximately 8 percent in the monthly income of a minimum wage worker. In order to make comparisons between years, the minimum wages before 2008 were multiplied by 1.08.

The progress of the minimum wage and inflation over the years

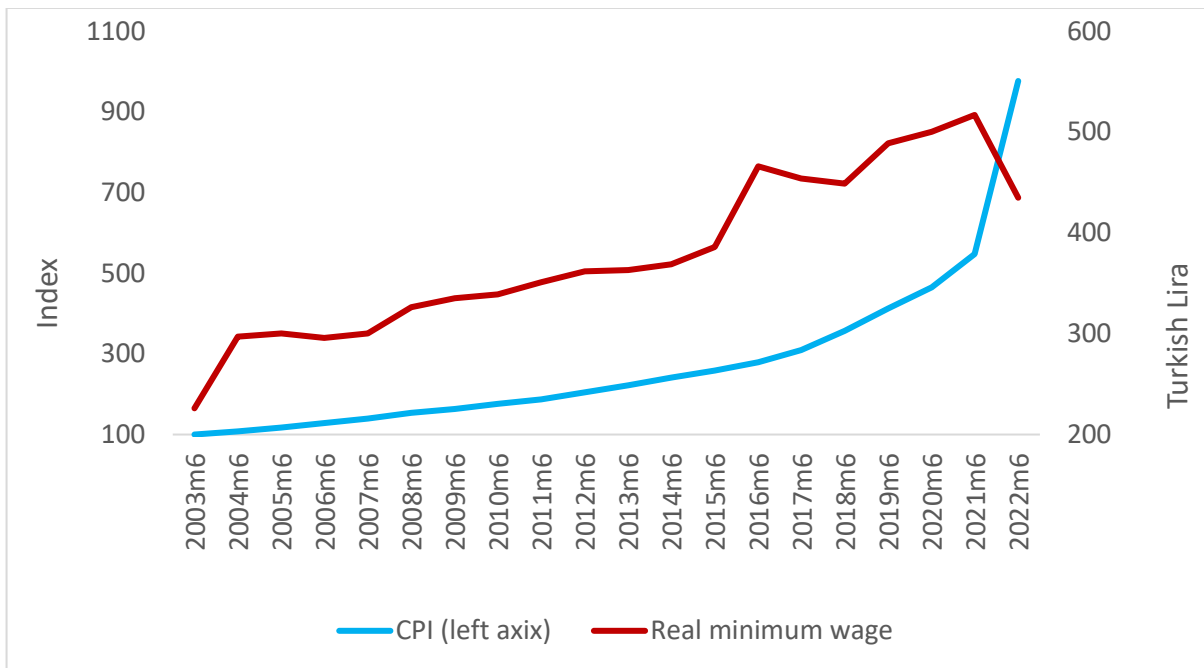
Figure 1 shows the development of the minimum wage and inflation over the years. The minimum wage increased at a very high rate of 40 percent at the beginning of 2004. Since inflation was in single digits in this period, the real minimum wage, 226 TL in June 2003, increased to 297 TL in June 2004 (31 percent increase) and remained around 300 until June 2007¹. Inflation was also in single digits in this period (Figure 1 and Annex Table 1). In the following period, a steady increase, albeit slowly, is observed in the real minimum wage. As a result, the real minimum increased to 369 TL in June 2014. The real minimum wage increased by 23 percent between 2007 and 2014.

The highest nominal minimum wage increase after 2004 was realized at the beginning of 2016 (30 percent). With a low annual inflation rate (8 percent) in 2016, the real minimum wage increased from 386

¹ Since 2022 has not been completed, the annual inflation rate is unavailable. Therefore, to calculate real minimum wage for June 2022, the price index for June 2003 was taken as a basis. The same method was followed for real minimum wage calculations in other years.

TL to 466 TL, by 21 percent from June 2015 to June 2016. The real minimum wage more than doubled between June 2003 and June 2016.

Figure 1: Real minimum wage (TL) ve CPI (2003 June=100)



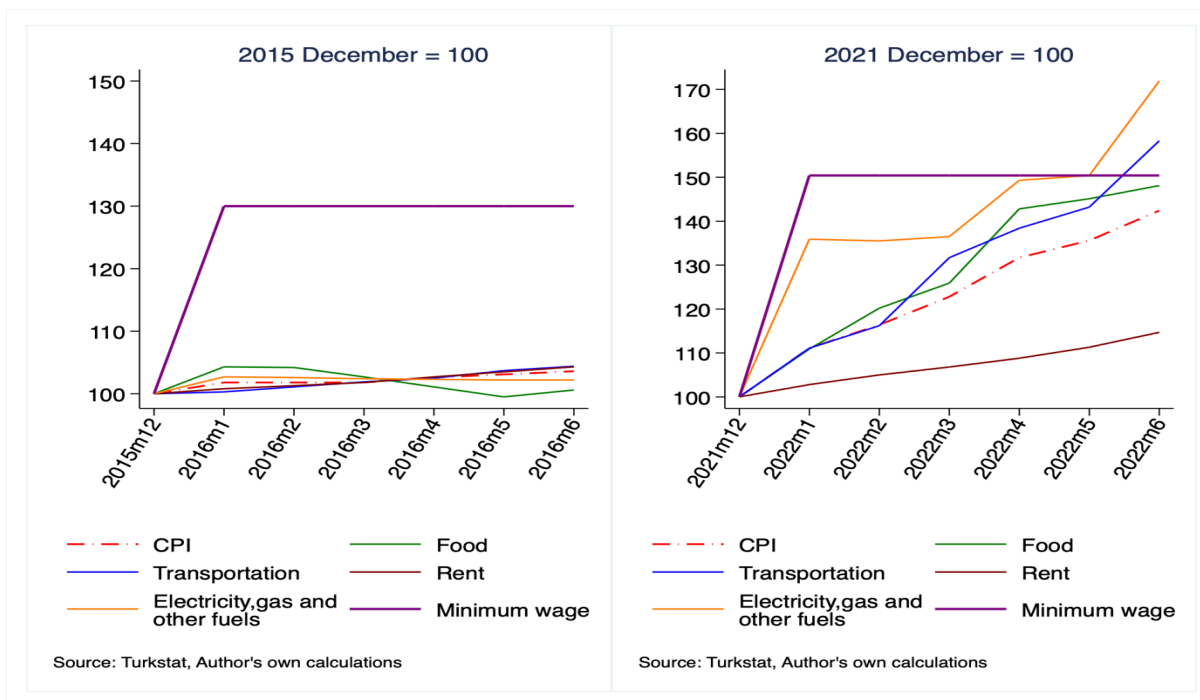
Source: Turkstat, Authors' calculations.

In the following years, real minimum wage increases stagnated (Figure 1 and Annex Table 1). Also, inflation has resulted in double digits since 2017. As of May 2020, the nominal minimum wage also started to increase with the acceleration of inflation. The real minimum wage, 489 TL in June 2019, increased by 5.7 percent in June 2021 to only 517 TL. Inflation reached a record level of 78.6 percent on an annual basis in June 2022. Despite the 50 percent increase in the minimum wage at the beginning of 2022, the real minimum wage decreased by 15.9 percent in June 2022, decreasing from 517 TL a year ago to 435 TL (Figure 1, Annex Table 1). We have entered a new period in which high inflation rapidly melts minimum wage increases.

Food, housing and transport inflation melted the minimum wage

The food, rent, electricity, gas, and other fuels and transportation price indexes, which constitute approximately 50 percent of the weight in the consumption basket of low and middle-income groups, can be compared with the CPI to understand how the minimum wage increase affects the purchasing power of the consumer. To ease comparison, the indexes in Figure 2 were created by taking the December value of each item in 2015 and 2021 as 100. Figure 2 shows that the price indexes of all sub-items either slightly decreased or increased over time in 2016 (left graph). Food prices even started to decline after February 2016. As mentioned above, the low increases in consumption item prices and the 30 percent nominal increase in the minimum wage led to a significant increase in the real income of the households and increased their purchasing power.

Figure 2: Increases of indexes in consumption expenditure and minimum wage



This situation is entirely different for the year 2022. All item prices increased significantly (right graph). Energy, food, and transportation prices have increased considerably above the general price index in the recent period. Although the increase in rent prices was more moderate compared to other items and remained below the CPI increase, the high minimum wage increase at the beginning of 2022 has melted mainly due to the striking price increases in the other three expenditure items. As mentioned above, the real minimum wage decreased from 517 TL in June 2021 to 435 TL in June 2022. This indicates a severe loss in the purchasing power of households.

Conclusion and recommendations

The findings in this research note reveal that the minimum wage increase in 2022 melted in the first six months of the year. Based on the recent global food, energy crisis and exchange rate shock, food and housing expenditures, which take up a significant percentage of the low-income consumption basket, are expected to increase in the future. Therefore, even if the government increases the minimum wage in the year's second half, a one-time increase will likely not prevent a decline in workers' incomes. During such periods of high inflation, however, government social assistance, such as direct income support to the poor and middle classes, will protect the purchasing power of relatively poor households against price increases.

Annex Table1: Minimum wage and Consumer Price Index

Year(June)	CPI (2003 June=100)	Real Minimum Wage(TL)	Nominal Minimum Wage (TL)
2003	100.0	226	226
2004	107.1	297	318
2005	116.7	300	350
2006	128.5	296	380
2007	139.5	300	419
2008	154.3	326	503
2009	163.2	335	546
2010	176.8	339	599
2011	187.9	351	659
2012	204.5	362	740
2013	221.5	363	804
2014	241.8	369	891
2015	259.2	386	1001
2016	279.0	466	1301
2017	309.4	454	1404
2018	357.0	449	1603
2019	413.1	489	2021
2020	465.3	500	2325
2021	546.8	517	2826
2022	976.7	435	4253

Source: Turkstat, Authors' calculations.

Annex Table 2: Consumption Expenditure Indexes (2003=100)

	General	Food and non-alcoholic beverages	Transportation	Real rent	Electricity, gas ve other fuels
2015 December	269.54	302.27	245.87	364.90	302.92
2016 January	274.44	315.22	246.71	367.72	311.04
2016 February	274.38	315.10	248.61	369.70	310.65
2016 March	274.27	310.29	250.57	371.46	310.11
2016 April	276.42	305.70	252.13	374.64	309.75
2016 May	278.02	300.69	254.90	377.52	309.65
2016 June	279.33	304.18	256.62	380.66	309.58
2021 December	686.95	874.42	791.13	643.07	738.56
2022 January	763.23	969.71	879.32	660.79	1003.84
2022 February	799.93	1051.29	919.45	675.49	1000.38
2022 March	843.64	1101.00	1041.68	686.71	1008.15
2022 April	904.79	1248.33	1094.98	699.54	1102.57
2022 May	931.76	1268.74	1132.57	715.50	1110.93
2022 June	977.90	1295.25	1252.47	737.75	1269.72

Source: Turkstat, Authors' calculations.

Annex Table 3: Weights by expenditure groups of consumer price index (2003=100, %)

	Food and non-alcoholic beverages	Transport	Actual rentals for housing	Electricity, gas and other fuels
2016	23,68	14,31	5,15	6,62
2021	25,94	15,49	5,47	5,85

Source: Turkstat, Authors' calculations.