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HOW MANY FOOD BASKETS DOES AN AVERAGE WAGE BUY? WAGES AND FOOD PRICES IN THE 20 REGIONS OF KAZAKHSTAN, 2024-2026

Abstract: Average wages in Kazakhstan are growing quickly, but so are food prices, and both differ a lot between regions. In this study I asked whether an average monthly wage in each region could buy more or less food in 2026 than two years earlier. I collected official retail prices for 12 basic foods in the 20 regional centres from 32 monthly bulletins of the Bureau of National Statistics (January 2024 to August 2026) and the average monthly nominal wage for the 20 regions (first quarter of 2024 to second quarter of 2026). Milk, pasta and rice were left out of the main analysis because the Bureau changed these items in January 2026. For the other nine foods I built a simple basket with one unit of each and counted how many such baskets one average wage could buy. Between the second quarter of 2024 and the second quarter of 2026, the basket became 27.7% more expensive on average, while wages grew by 19.2%. As a result, the number of baskets per wage fell in 17 of the 20 regions, with the median region losing 8.5%. The largest falls were in Ulytau (-13.1%), Atyrau (-12.6%) and West Kazakhstan (-12.5%), and the largest rise was in Astana (+6.3%). Beef alone explained 57% of the increase in the basket's cost, and without beef the number of baskets fell in only 11 regions. The results show that wage growth did not keep up with the price of basic food in most regions, but also that this conclusion depends strongly on one product.

Keywords: food prices; wages; purchasing power; food basket; regional statistics; Kazakhstan

Introduction. When people in Kazakhstan talk about prices, they usually mean food. Every month the Bureau of National Statistics publishes the prices of basic foods in every regional centre, and every quarter it publishes the average wage in every region [1, 2]. Both numbers have been rising. The national average monthly wage went from 403,251 tenge in the second quarter of 2024 to 486,388 tenge in the second quarter of 2026 [2]. But a higher wage does not mean much by itself. What matters for a family is what the wage can buy, and especially whether it can buy basic food.

Researchers usually measure this by comparing the cost of food with income. International organisations calculate how much a healthy diet costs in each country and what share of people cannot afford it [3, 4]. Bai and co-authors did this for 177 countries using retail prices of individual foods [5]. Reeves, Loopstra and Stuckler compared food prices with wages in 21 European countries and found that when food prices rose faster than wages, more people reported that they could not afford meat, chicken or fish every second day [6]. So the gap between food prices and wages is not only an abstract number, it is connected to what people actually eat.

Kazakhstan is a good place to look at this inside one country, because the regions are very different. In 2024 the average wage in Atyrau region was about twice as high as in Zhetysay region, while basic food cost about the same in both [1, 2]. If food prices and wages grow at

different speeds in different regions, some regions can become poorer in real terms even when their wages grow.

In this study I asked three questions:

- How many baskets of basic foods could an average monthly wage buy in each region of Kazakhstan in the second quarter of 2024 and in the second quarter of 2026?
- In which regions did this number go down, and was the cause slow wage growth or fast price growth?
- Which foods pushed the cost of the basket up the most?

Data and methods. Food prices. I took the prices from the monthly bulletin "Retail prices for selected goods and services in the Republic of Kazakhstan" (form T-15-03-M) of the Bureau of National Statistics [1]. Each bulletin gives the average price of more than 50 foods in the capital, the two other cities of republican significance and the 17 regional centres. I downloaded all 32 bulletins from January 2024 to August 2026 and copied the prices of 12 foods that people buy almost every week: wheat bread made from first-grade flour, top-grade wheat flour, rice, pasta, sunflower oil, beef on the bone, chicken, eggs, sugar, potatoes, onions and milk. This gave 7,680 price records: 20 places, 12 foods and 32 months. For each region I used the price in its regional centre, for example Aktau for Mangystau region and Zhezkazgan for Ulytau region.

Wages. I took the average monthly nominal wage by region and by quarter from the Bureau's indicator 252101 [2]. This gave 200 values: 20 regions and 10 quarters, from the first quarter of 2024 to the second quarter of 2026.

Three foods left out. In the January 2026 bulletin the Bureau changed some of the items. Milk is now described as "milk 3.2-4.5% fat" instead of "pasteurised milk 3.2-4%", so it is a different product. On the same date the national average price of pasta fell from 633 to 495 tenge (-21.8%) and the price of rice fell from 625 to 551 tenge (-11.8%), and in the following months both prices changed only a little [7, 8]. Real prices do not usually move like this in one month, so the change most likely comes from what was being measured, not from the market. The January 2026 bulletin was also published later than usual, with a note that the data had been reformatted because of a technical error [8]. Because I could not compare these three foods before and after January 2026, I left them out of the main basket. In addition, for 2024 and 2025 the Bureau did not publish a milk price for five regional centres (Atyrau, Kyzylorda, Aktau, Turkestan and Shymkent). I kept these cells empty and did not fill them with averages.

The basket. The main basket contains one unit of each of the nine remaining foods: 1 kg of bread, 1 kg of flour, 1 litre of sunflower oil, 1 kg of beef, 1 kg of chicken, 10 eggs, 1 kg of sugar, 1 kg of potatoes and 1 kg of onions. For each quarter I took the average of the three monthly prices of each food and added them up. Then I divided the average wage of the region by the cost of the basket. The result is the number of baskets that one average monthly wage could buy. I call it "baskets per wage".

Comparison. I compared the second quarter of 2024 with the second quarter of 2026. I used the same quarter in both years because wages and some prices change with the season. For example, the average number of baskets per wage across the regions was 59.4 in the second quarter of 2024 but 62.5 in the fourth quarter of 2024, when wages are higher at the end of the year. Comparing the same quarter removes this effect.

Statistics. To check whether 17 falls out of 20 could happen by chance, I used a sign test. To see whether the change in baskets per wage was linked more to wages or to prices, I used

Spearman's rank correlation [9]. I also repeated the main comparison without beef and with the first quarter instead of the second, to see if the result depends on these choices.

Results

Baskets per wage in 2024 and 2026. In the second quarter of 2024, the basket of nine foods cost 6,534 tenge on average across the 20 regional centres. In the second quarter of 2026 it cost 8,347 tenge, which is 27.7% more. Over the same two years the average regional wage grew by 19.2%, from 389,894 to 464,790 tenge. The average number of baskets per wage fell from 59.4 to 55.6.

Table 1 shows every region. Baskets per wage fell in 17 of the 20 regions. If rises and falls were equally likely, a split as uneven as 17 to 3 would happen with a probability of only about 0.3% (two-sided sign test, $p = 0.003$). The median region lost 8.5% of its baskets. The largest falls were in Ulytau (-13.1%), Atyrau (-12.6%) and West Kazakhstan (-12.5%). Baskets per wage went up only in Astana (+6.3%), Pavlodar (+1.1%) and North Kazakhstan (+0.4%), and in Mangystau (-0.5%) and Akmola (-0.7%) they hardly changed.

Table 1. Wages, basket cost and baskets per wage by region, second quarter of 2024 and 2026

Region	Wage growth, %	Basket growth, %	Baskets per wage, Q2 2024	Baskets per wage, Q2 2026	Change, %
Ulytau	+12.6	+29.5	76.1	66.1	-13.1
Atyrau	+6.2	+21.5	87.6	76.6	-12.6
West Kazakhstan	+17.5	+34.2	58.2	51.0	-12.5
Zhambyl	+16.3	+30.4	50.8	45.3	-10.8
Aktobe	+18.9	+33.1	64.9	58.0	-10.7
Kyzylorda	+16.0	+29.2	58.8	52.8	-10.2
Almaty region	+18.2	+31.6	49.5	44.4	-10.2
Abai	+24.1	+36.2	56.1	51.1	-8.9
Zhetysu	+25.8	+37.7	46.0	42.0	-8.7
East Kazakhstan	+21.2	+32.6	56.5	51.6	-8.6
Shymkent city	+20.2	+31.3	48.2	44.1	-8.4
Turkestan	+14.3	+22.8	51.0	47.5	-6.9
Almaty city	+27.0	+34.9	70.2	66.1	-5.8
Kostanay	+22.2	+25.6	52.8	51.4	-2.7
Karaganda	+24.0	+27.0	59.4	57.9	-2.4
Akmola	+23.0	+23.9	50.5	50.2	-0.7
Mangystau	+16.2	+16.8	78.6	78.2	-0.5
North Kazakhstan	+22.1	+21.7	45.3	45.5	+0.4
Pavlodar	+22.8	+21.5	56.5	57.1	+1.1
Astana city	+25.0	+17.5	70.3	74.8	+6.3

Wages: average monthly nominal wage in the region. Basket: one unit of each of nine foods at prices of the regional centre. Regions are sorted from the largest fall to the largest rise. Source: author's calculations based on data of the Bureau of National Statistics.

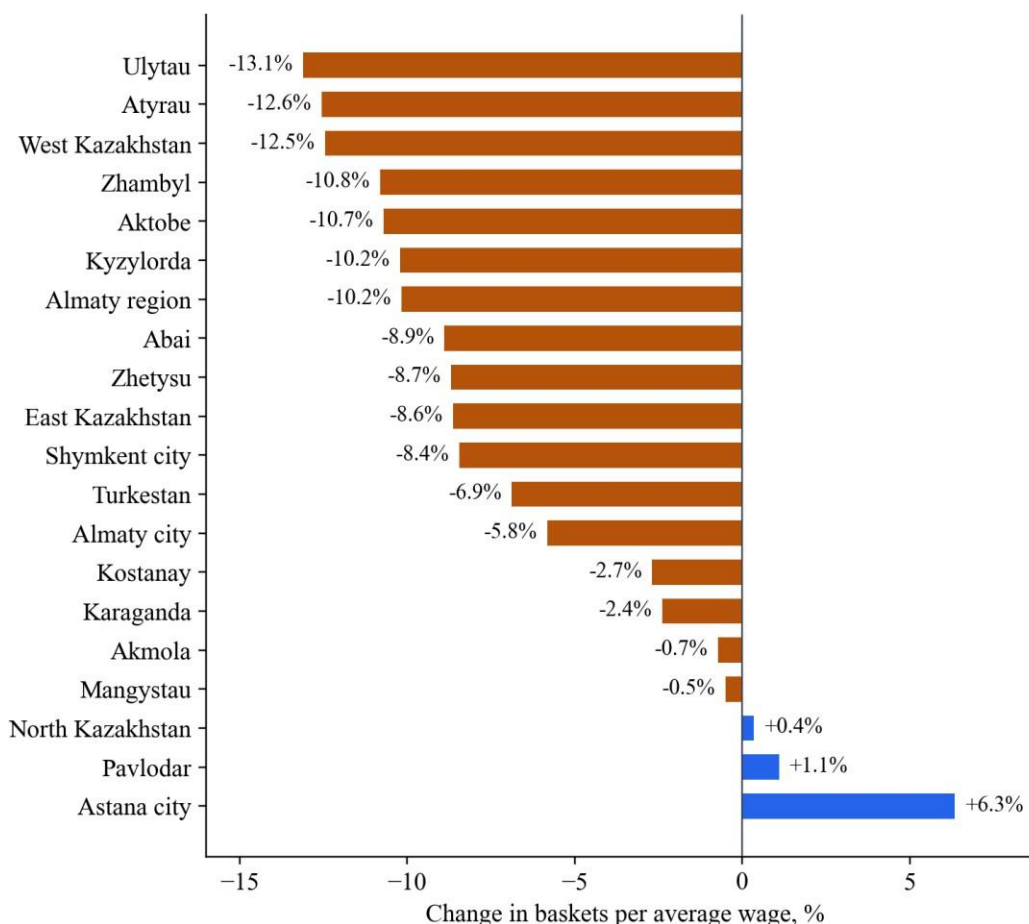


Figure 1. Change in the number of food baskets one average wage can buy, second quarter of 2024 to second quarter of 2026

Wages or prices? The basket became more expensive faster than wages grew in the same 17 regions. The median region's wage grew by 20.7%, and the median basket by 29.4%. Both sides mattered. Across the regions, the change in baskets per wage was linked to wage growth (Spearman's $\rho = 0.57$, $p = 0.008$) and, in the opposite direction, to basket growth ($\rho = -0.53$, $p = 0.015$), and the two links were about equally strong.

Figure 2 shows this. Each point is a region, and the diagonal line marks the regions where wages and the basket grew at the same speed. Most regions are below the line. Astana is the clearest exception: its wages grew by 25.0%, one of the highest rises, while its basket became only 17.5% more expensive. In Ulytau the situation was the opposite: wages grew by 12.6% and the basket by 29.5%. Atyrau and Mangystau had the highest wages in 2024 and both still had wages much higher than most regions in 2026, but Atyrau's wages grew by only 6.2%, the slowest in the country.

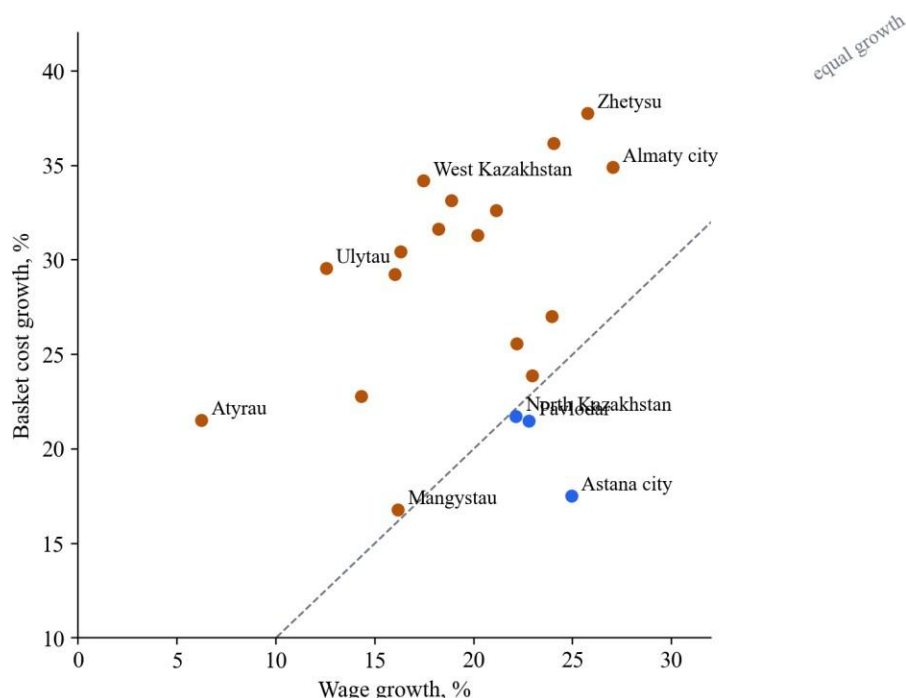


Figure 2. Wage growth and basket growth by region, second quarter of 2024 to second quarter of 2026. Below the line the basket grew faster than wages

Which foods pushed the basket up. Table 2 shows how much each food contributed to the increase in the basket's cost. Beef was the most important by far. It made up 44% of the basket in 2026 and its price rose by 38.8%, so it explained 56.7% of the whole increase. Sunflower oil (+41.0%) explained another 14.4%, and chicken (+16.1%) explained 12.9%. Potatoes and onions became much more expensive in percentage terms (+54.3% and +43.1%), but they are cheap, so they added little to the basket. Sugar changed the least (+4.7%).

Table 2. Average prices of the nine foods across the 20 regional centres and their contribution to the increase in the basket's cost

Food	Price Q2 2024, tenge	Price Q2 2026, tenge	Change, %	Share of the basket increase, %
Beef on the bone, kg	2,648	3,675	+38.8	56.7
Sunflower oil, litre	638	899	+41.0	14.4
Chicken, kg	1,454	1,689	+16.1	12.9
Potatoes, kg	163	252	+54.3	4.9
Eggs (10)	512	581	+13.4	3.8
Onions, kg	113	162	+43.1	2.7
Wheat flour (top grade), kg	384	421	+9.4	2.0
Wheat bread (first-grade flour), kg	203	229	+13.2	1.5
Sugar, kg	419	439	+4.7	1.1

Prices are averages of the three months of the quarter and of the 20 regional centres. Source: author's calculations based on data of the Bureau of National Statistics.

Checking the result. Because beef is such a large part of the basket, I repeated the comparison without it. With only eight foods, baskets per wage still fell in 11 of the 20 regions,

but this is much closer to half. I also compared the first quarter of 2024 with the first quarter of 2026 instead of the second quarters. In that comparison baskets per wage fell in 13 of the 20 regions. So the direction of the result stays the same, but its size depends on the choice of foods and on the quarter. The finding that wages fell behind food prices is strongest for a basket that includes meat.

Discussion. The main result is that between 2024 and 2026 an average wage in most regions of Kazakhstan could buy less basic food than before, even though wages grew by about a fifth. This is similar to what Reeves and co-authors described for Europe, where food prices rose faster than wages [6]. In their study this gap was connected with more people being unable to afford meat or fish regularly. My data cannot show what families actually bought, but the fact that meat was the main reason for the rise in my basket points in the same direction.

The regional differences are also important. The average result for the country hides very different situations. In Astana the wage became worth more food, while in Ulytau, Atyrau and West Kazakhstan it lost more than a tenth. Some regions with high wages, like Atyrau, lost a lot because their wages grew slowly, and other regions lost because their food prices grew quickly. So a single national number for prices or wages is not enough to understand how people in different regions live.

Working on this study I also learned how much the result depends on the data. When the Bureau changed the description of milk and the prices of pasta and rice jumped at the same time, a careless comparison would have shown changes that never happened in the shops. I first filled the missing milk prices with averages from other regions, but this created a 61% "increase" in the price of milk in Atyrau in one month, which was not real. That is why I kept missing values empty and left these three foods out.

Limitations. This study has several limitations. First, the basket has one unit of each food, so it does not show how much of each food a real family buys. Beef has a large weight in my basket simply because it is the most expensive item per kilogram. Second, the prices are measured in the regional centre, while the wages are averages for the whole region, including smaller towns and villages where prices can be different. Third, the average wage is pulled up by a small number of very high salaries, especially in oil regions like Atyrau and Mangystau, so it is higher than what a typical worker earns. Fourth, I used nominal wages and did not include pensions, social payments or other income. Finally, two years is a short period, and the result is weaker when the first quarter is used instead of the second.

Conclusion. Between the second quarter of 2024 and the second quarter of 2026, a basket of nine basic foods became 27.7% more expensive across the regional centres of Kazakhstan, while wages grew by 19.2%. The number of baskets an average wage could buy fell in 17 of the 20 regions, most of all in Ulytau, Atyrau and West Kazakhstan, and rose only in Astana, Pavlodar and North Kazakhstan. More than half of the increase in the basket's cost came from beef. Future studies could use a basket that matches what families actually buy and add data from the Bureau's household budget surveys to see whether the same regions lost purchasing power in real spending.

Author contribution and use of AI. I collected the data myself: I downloaded all 32 monthly price bulletins and the regional wage table from the website of the Bureau of National Statistics, built the price and wage tables (7,680 and 200 records), and calculated the basket and the number of baskets per wage. My mentor checked all the prices and wages against the original files of the Bureau, ran the statistical tests and helped me write the text in English. No data,

number or reference in this paper was produced by an AI tool; all numbers come from the official data and the calculations described in Section 2.

Data availability. All data come from the public website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. The price and wage tables used in this study are available from the author on request.

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