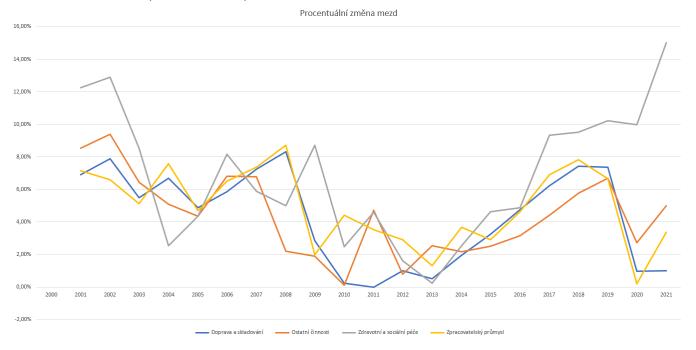
## 1. Have wages in all sectors been rising over the years, or have they been falling in some?

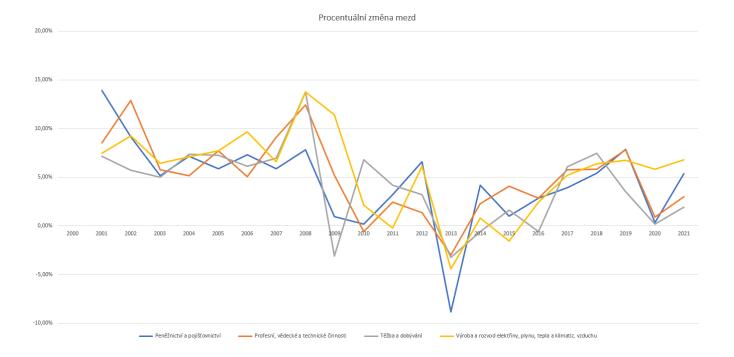
In general, wages have been rising over the years in all sectors. In these sectors, wages have always risen or stayed the same:

- manufacturing (zpracovatelský průmysl)
- transport and storage (doprava a skladování)
- health and social care (zdravotní a sociální péče)
- other activities (ostatní činnosti)



Some sectors experienced wage declines with a gradual recovery in the following years. The most significant wage declines were recorded in 2013 in the following sectors:

- mining and quarrying (těžba a dobývání)
- production and distribution of electricity, gas, heat and air conditioning (výroba a rozvod elektřiny, plynu, tepla a klimatiz. Vzduchu)
- money and insurance (peněžnictví a pojišťovnictví)
- professional, scientific and technical activities (profesní, vědecké a technické činnosti)



## 2. How many litres of milk and kilograms of bread can be bought in the first and last comparable period in the available price and wage data?

#### 2006:

Average wage: 21 165 CZK
Price of bread: 16,1 CZK/kg
Price of milk: 14,4 CZK/l

#### 2018:

Average wage: 33 092 CZK
Price of bread: 24,2 CZK/kg
Price of milk: 19,8 CZK/l

The average wage in **2006** could buy approximately **1,314.6** kilograms of bread and **1,469.8** liters of milk. In **2018**, the average wage could buy approximately **1367.4** kilograms of bread and **1671.3** liters of milk.

Year	Average wage	Price of bread	Price of milk	Quantity of bread	Quantity of milk	Wage increase (%)	Bread price increase (%)	Milk price increase (%)	Bread quantity increase (%)	Milk quantity increase (%)
2006	21 165	16,1	14,4	1 314,6	1 469,8	-	-	-	-	-
2018	33 093	24,2	19,8	1 367,4	1 671,3	56,31	50,31	37,50	4,01	13,72

# 3. Which category of food is becoming more expensive at the slowest rate (lowest percentage increase year-on-year)

Based on the data provided on the average percentage change in food prices between years, I find that the food categories with the lowest percentage year-on-year increase are:

- 1. **Crystalline Sugar:** There was a price decrease of -0.09%, indicating a slight cheapening of this product.
- 2. **Red round paradise apples:** This food category also recorded a price decrease of -0.04%, also indicating a cheapening of this food.
- 3. **Bananas Yellow:** With a minor price change of 0.04%, it is one of the food items with the most stable prices.
- 4. **Pork roast with bone:** saw a slight price increase of 0.05%, one of the lowest price changes among the categories surveyed.
- 5. Natural carbonated mineral water: Like pork roast, this food category also saw a price increase of 0.05%.

It should also be noted that category of **White Wine** only has data for the period 2015 to 2018 and therefore it is not possible to compare its price trends between years.

## 4. Is there any year in which the annual increase in food prices was significantly higher than wage growth (greater than 10%)

Based on the data provided, in **no year** is the annual increase in food prices significantly **greater than 10%.** The most significant differences between annual food price increases and wage increases are in 2009, 2012, 2013 and 2017:

- In **2009**, the year-on-year <u>decline</u> in food prices was -6.41% and the year-on-year increase in wages was 3.09%, corresponding to a difference of **-3.34%**
- In **2012**, the annual food price increase was 6.74% and the annual wage growth was 2.93%, corresponding to a difference of **-3.81%**
- In **2013**, the annual food price increase was 5.1% and the annual wage <u>decrease</u> was -1.56%, corresponding to a difference of **-3.55%**.
- In **2017**, the annual food price increase was 9.62% and the annual wage increase was 6.17%, corresponding to a difference of **-3.45%**.
- 5. Does the level of GDP affect changes in wages and food prices? Or, if GDP rises more significantly in one year, does this translate into a more significant rise in food prices or wages in the same or the following year?
  - 1. **The effect of GDP on wage changes:** I find that higher percentage changes in GDP usually correspond to higher percentage changes in wages, but this is not always clearly true every year. For example, in 2007, wage growth (6.88%) was higher than GDP growth (5.57%), suggesting that there are other factors that affect wage changes independent of GDP.
  - 2. Impact of GDP on changes in food prices: the data analyzed show that periods of higher GDP growth are often associated with more pronounced changes in food prices. For example, in 2006-2007 and 2017-2018, GDP growth was observed along with significant changes in food prices. In 2009, when there was a decline in GDP (-4.66%), there was also a significant negative change in food prices (-6.41%). This decline in GDP suggests an economic recession, which resulted in reduced demand for food and a subsequent reduction in food prices.

Therefore, based on the analysis of the data provided, it can be said that **GDP development** has an impact on **wage and food price dynamics**, but these relationships are not clear-cut from year to year. **Higher GDP growth** is usually associated with **positive changes in wages** and often also with **increases in food prices**, but other factors such as **economic policy, international trade conditions or local market factors also influence the resulting changes**.