

# Inflation



## Recent developments in inflation

### Headline inflation remains high ...

Inflation measured 9.7% in Q3, somewhat below the August forecast of 10.4%. The housing component remained the principal driver of the rise in the CPI during the quarter, owing to a rapid increase in house prices in July, although the price of miscellaneous services and food rose as well.

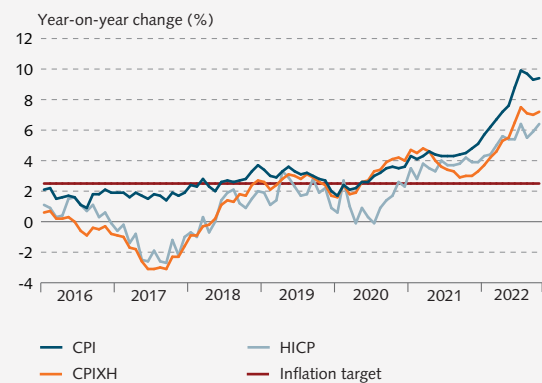
Inflation has been above the Bank's inflation target for more than two years. It measured 9.4% in October, after peaking at 9.9% in July (Chart V-1). An abrupt turnaround in the housing market has played a large role in the past few months' slowdown in inflation (see Chapter II). Inflation has also fallen since last summer in terms of measures that exclude the cost of owner-occupied housing. Inflation according to the CPI excluding housing measured 7.2% in October, while HICP inflation was 6.4%, and the difference between these two measures and the CPI has narrowed in the recent past.

### ... and underlying inflation keeps rising

Underlying inflation in terms of the average of various measures was 6.9% in October and had risen since July (Chart V-2). One measure of underlying inflation that has fallen in the recent term is core inflation, which excludes the effects of petrol and volatile food items. By other measures, however, underlying inflation has continued to rise. Inflation is therefore widespread, and significant inflationary pressures remain. This can also be seen in Chart V-3, which shows that over half of CPI subcomponents had risen more than 6% year-on-year in October, and this share has increased swiftly in the past year.

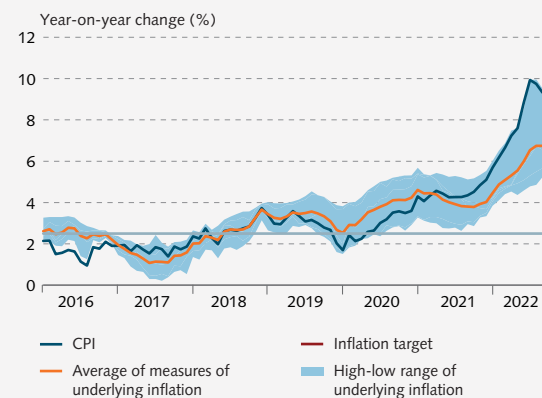
Given the recent slowdown in housing market activity, the composition of inflation is likely to continue

Chart V-1  
Various measures of inflation  
January 2016 - October 2022



Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-2  
Headline and underlying inflation<sup>1</sup>  
January 2016 - October 2022



1. Underlying inflation measured using a core index (which excludes the effects of indirect taxes, volatile food items, petrol, public services, and real mortgage interest expense) and statistical measures (weighted median, trimmed mean, a dynamic factor model, and a common component of the CPI).

Sources: Statistics Iceland, Central Bank of Iceland.

changing in the near future. The contribution of the housing component to headline inflation has declined since July, after having increased virtually without interruption since the beginning of 2021 (Chart V-4). This is offset by a growing contribution from goods price increases.

## Indicators of inflationary pressures

### Imported inflation has held stable overall in the recent term ...

Imported goods prices rose markedly in H1/2022, in the wake of the surge in global oil and commodity prices following the onset of war in Ukraine. Furthermore, it has taken quite some time to unwind the supply chain bottlenecks that developed during the pandemic. On the other hand, oil and commodity prices have fallen since the summer, although they remain high. As a result, domestic petrol prices fell somewhat in Q3 but are still more than a fourth higher than in Q3/2021. The price of imported foods and beverages and other imported goods has continued to rise in recent months, however. On the whole, imported goods prices have increased by 6.6% over the past twelve months, the same rate as in July (Chart V-5).

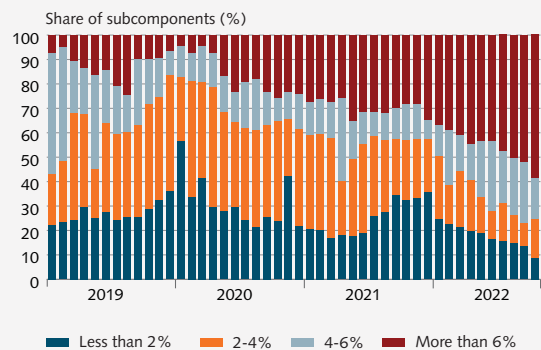
### ... but the inflation outlook has deteriorated ...

As is discussed in Chapter I, inflation has increased still further among Iceland's trading partner countries in recent months, albeit at a reduced pace. The inflation outlook has also deteriorated further in many countries. The outlook is for continued upward pressure on imported goods prices. Pulling in the same direction is the exchange rate of the króna, which rose in H1 but has depreciated recently. The trade-weighted exchange rate is broadly the same as it was a year ago.

Recent developments in inflation are unusual not only because of how steeply inflation has risen all over the world, but also because of how similar developments have been. This indicates that an important part of inflation is attributable to common underlying factors. These include the rise in global oil and commodity prices, disruptions in supply chains, and rapid changes in consumption patterns in the wake of the pandemic. Added to all this is the surge in global demand in the wake of broad-based fiscal and monetary support measures aimed at counteracting the economic contraction.

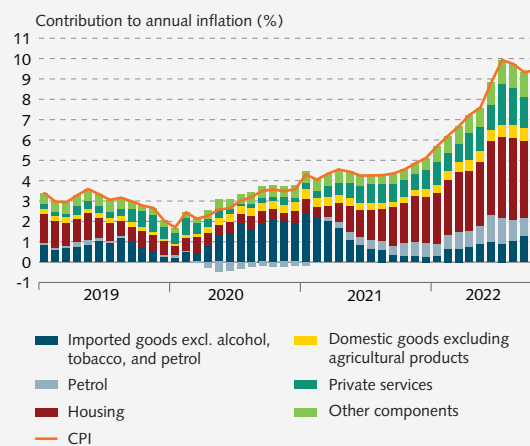
Attempts to analyse the degree to which domestic inflation is coloured by these common factors reveal this pattern clearly (Chart V-6). As can be seen, the share of inflation stemming from them started to increase when

Chart V-3  
Price increases<sup>1</sup>  
January 2019 - October 2022



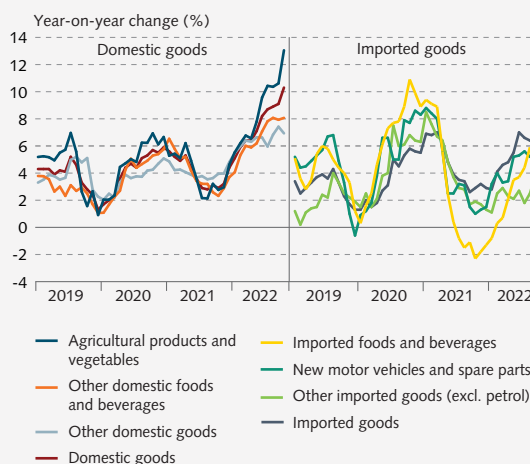
1. The share of CPI subcomponents categorised by their annual increase.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-4  
Components of CPI inflation  
January 2019 - October 2022



Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-5  
Domestic and imported goods prices  
January 2019 - October 2022



Source: Statistics Iceland.

the impact of the pandemic and public health measures on consumption patterns, housing markets, global supply chains, and commodity markets began to intensify. Furthermore, the war in Ukraine has made a widespread impact: since it started, as much as 2/3 of domestic inflation has been attributable to this global inflation cycle.

### ... and a large share of corporate executives expect further price hikes

The price of domestic goods, food in particular, has also continued to rise in recent months – by 10.3% year-on-year as of October (Chart V-5). On the other hand, the twelve-month rise in private services prices – 6.6% in October – has lost pace, partly because of the drop in airfares this autumn. Airfares have been highly volatile since the summer but have averaged more than a fifth higher in 2022 to date than in 2021. Various subcomponents of services – restaurant services and recreation and culture, for instance – have also risen in price recently.

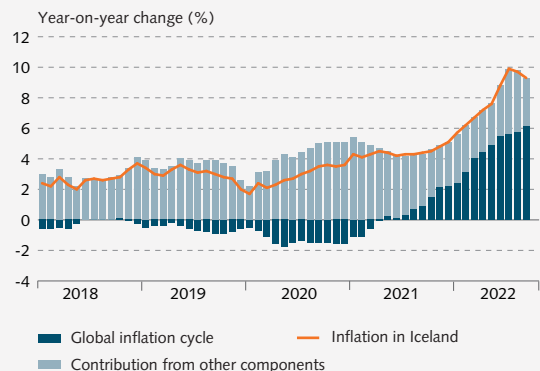
The results of Gallup's autumn survey of corporate expectations show that a large percentage of respondents expect price increases, albeit a smaller share than in the spring survey. Nearly two-thirds of executives expect to raise the price of their own goods and services in the next six months, and nearly 80% expect input prices to rise (Chart V-7). This large share of executives who expect further price increases reflects, among other things, the increase in trading partner inflation and the risk that rising energy prices in Europe, owing to possible shortages this winter, will spread to other input prices.

### Persistent inflationary pressures from the labour market

In the national accounts data published in August, the wage share – i.e., the ratio of wages and related expenses to gross factor income – was revised slightly downwards. It is now estimated to have measured 60.4% in 2021, about 0.6 percentage points above its twenty-year average. The wage share held relatively stable throughout the pandemic, while key drivers of the share have changed significantly. For example, wages per hour rose well in excess of productivity in 2021 and look set to do so again in 2022. On the other hand, higher inflation has pulled in the opposite direction, impeding the rise in the wage share (Chart V-8).

The general wage index rose by 0.4% between quarters in Q3, and by 8.1% year-on-year. Ever since the pandemic spread to Iceland, the average annual wage increase has been 7-8%, in terms of either the general wage index or the total wage index (Chart V-9). Wages have therefore risen steeply during the period, although

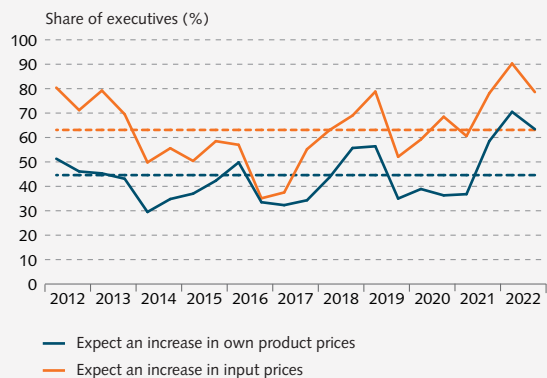
Chart V-6  
Inflation and contribution from global inflation cycle<sup>1</sup>  
January 2018 - October 2022



1. The underlying global inflation cycle is estimated as the first principal component in a principal component analysis of inflation in 23 OECD countries from January 2000 through September 2022. The contribution of the global inflation cycle to domestic inflation is then estimated with a regression where domestic inflation is explained by a constant and the global inflation cycle (in addition to 2% average global inflation during the observation period).

Sources: OECD, Statistics Iceland, Central Bank of Iceland.

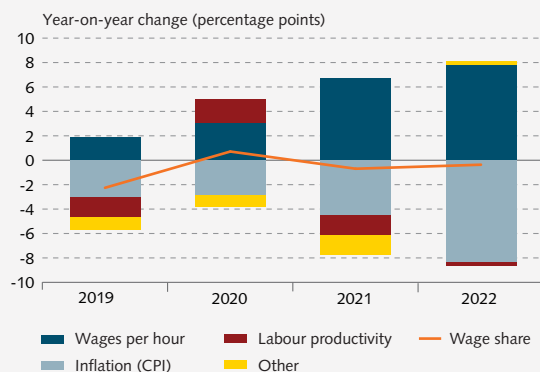
Chart V-7  
Corporate expectations of input and product prices six months ahead<sup>1</sup>  
March 2012 - September 2022



1. Broken lines show averages from 2003.

Sources: Gallup, Central Bank of Iceland.

Chart V-8  
Change in the wage share and contribution of subcomponents 2019-2022<sup>1</sup>



1. The wage share is the ratio of labour compensation to gross domestic product; wages per hour is the wage component of labour compensation per LFS total hours, labour productivity is real GDP per LFS total hours, and "Other" shows the contribution of social security benefits and wage-related expenses, as well as the difference between CPI and the GDP deflator. Central Bank baseline forecast for 2022.

Sources: Statistics Iceland, Central Bank of Iceland.

higher inflation is now chipping away at purchasing power. Even so, the benefits gained by lower-paid groups in the last wage agreements are far from lost.

The new round of wage negotiations is beginning under challenging conditions, with high inflation and a tight labour market (see Chapter IV). According to the Bank's baseline forecast, nominal wages will rise by just under 8% between annual averages in 2022, and by an average of just under 6% per year over the next three years. Given the prospect of relatively modest productivity growth, this implies a steep rise in unit labour costs, or roughly 4¾% per year, on average, for the next three years. This is well above the Bank's 2.5% inflation target, therefore entailing strong inflationary pressures from the labour market during the forecast horizon. As is discussed in Box 1, these assumptions could turn out overly optimistic and labour-generated inflationary pressures could be underestimated.

## Inflation expectations

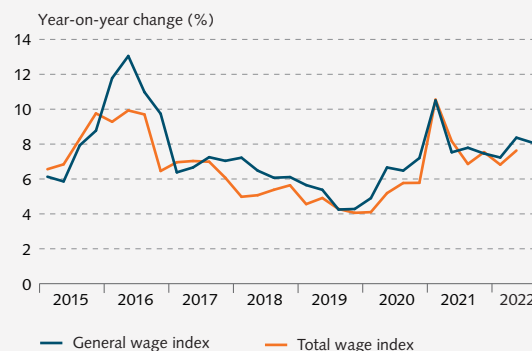
### Short-term inflation expectations have declined by some measures ...

A recent market expectations survey indicates that respondents' one-year inflation expectations declined, and that survey participants now expect inflation to measure just over 5%. Their inflation expectations two years ahead were unchanged, however, at 4% (Chart V-10). The results of Gallup's autumn survey suggest that corporate executives expect inflation to measure 5% in one year and 4.5% in two years' time, which is lower than in the previous survey. Households' two-year inflation expectations rose, however, to 6%.

### ... but long-term inflation expectations are broadly as in August ...

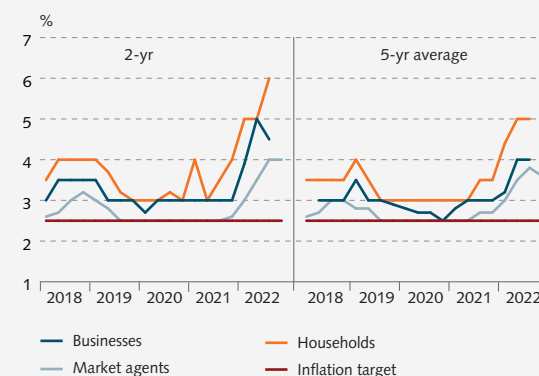
Market agents expect inflation to average about 3½% over the next five and ten years, and overall, their long-term expectations are marginally lower than they indicated in August (Chart V-10). The breakeven inflation rate in the bond market also fell last autumn. It averaged 3.4% in October but has risen again recently (Chart V-11). The five-year breakeven rate five years ahead was about 4% in mid-November, which is somewhat higher than in August. On the other hand, both businesses' and households' long-term inflation expectations were unchanged between Gallup's autumn surveys: businesses expect inflation to average 4% over the next five years, and households expect it to average 5%.

Chart V-9  
Wages  
Q1/2015 - Q3/2022



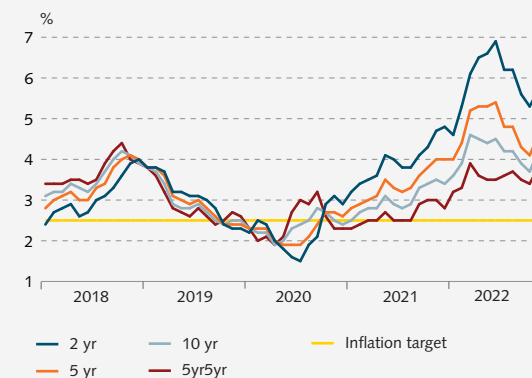
Source: Statistics Iceland.

Chart V-10  
Two- and five-year inflation expectations<sup>1</sup>  
Q1/2018 - Q4/2022



1. Gallup surveys of households' and businesses' inflation expectations and Central Bank survey of market agents' inflation expectations. Median responses.  
Sources: Gallup, Central Bank of Iceland.

Chart V-11  
Breakeven inflation rate<sup>1</sup>  
January 2018 - November 2022



1. Monthly averages. Data through 18 November 2022.  
Source: Central Bank of Iceland.

### ... and appear less firmly anchored to the target

When inflation has been above target for a protracted period of time, there is greater risk that expectations will become less firmly anchored to the target and that bringing them back to target will take longer (see Box 2). Closer scrutiny of household and corporate inflation expectations shows that the share of respondents who expect inflation to be above 5% over the next five years has risen steeply in 2022 (Chart V-12). Apparently, then, fear of high inflation has started to become entrenched.

## The inflation outlook

### The short-term inflation outlook has improved ...

Inflation was lower in Q3 than was assumed in the August forecast, but at that time it was expected to peak in late 2022. The deviation is due in part to the more abrupt slowdown in activity in the housing market than was expected, leading to slower price rises. Petrol prices and airfares also fell more during the autumn than previously expected. The near-term outlook has therefore improved, owing to a more favourable initial position. Inflation is forecast to measure 9.4% in Q4/2022 and 8.5% in Q1/2023, about 1.2 percentage points below the August forecast. According to the forecast, inflation will average 6% in 2023, down from this year's average of 8.3%.

### ... but inflation is still expected to fall slowly ...

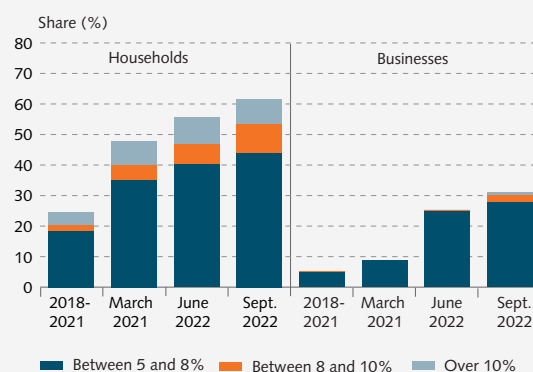
Inflation is still expected to ease gradually, and the long-term outlook is broadly unchanged since August. The inflation outlook for trading partner countries is bleaker than previously assumed, and imported inflation is therefore projected to keep rising. Furthermore, the output gap that opened up in the domestic economy this year is expected to narrow more slowly than was forecast in August, and the króna is now projected to be weaker over the forecast horizon. According to the baseline forecast, inflation will have fallen below 4% in H1/2024 and will be at target by the end of the horizon, provided that interest rates develop in line with the forecast.

### ... and significant uncertainty remains

As is discussed in Box 1, the inflation outlook is highly uncertain. For example, the duration of the war in Ukraine and near-term developments in oil and commodity prices are key risks. The results of the contractual wage negotiations currently underway could also strongly affect developments in inflation. Furthermore, inflation will depend in part on whether housing market activity continues to ease and how prices and supply of

Chart V-12

Share of households and businesses that expect more than 5% inflation during the next 5 years



Sources: Gallup, Central Bank of Iceland.

housing develop. As before, the risk profile is considered tilted to the upside; i.e., near-term inflation is likelier to be underestimated in the baseline forecast than it is to be overestimated. There is a 50% probability that inflation will be in the 3¼-5¾% range in one year and in the 2½-5% range in two years' time (Chart V-13).

