

Þjóðhagur

Economic Forecast for 2017-2020

November 2017



Foreword

This is the seventh edition of Þjóðhagur, the annual review of Landsbankinn Economic Research. Þjóðhagur focuses on developments and the outlook in the economy. It features Economic Research's macroeconomic and inflation forecast, provides a comparison with the previous forecast as well as forecasts from main public entities.

Economic conditions in Iceland have been favourable in recent years, with inflation remaining consistently below the Central Bank's inflation target since February 2014 and a streak of uninterrupted economic growth since 2011. The purchasing power of wages has never been as high, unemployment levels are low and household and corporate debt has decreased significantly. The National Treasury stands very strong and the net foreign debt situation has seldom been as favourable. Economic recovery in Iceland's main trading countries continues and inflation is trending towards target in many of these countries. Global economic and political uncertainty nevertheless remains considerable, with increased tension in the Korean peninsula, Brexit looming and the independence campaign in Catalonia.

Landsbankinn Economic Research expects continued robust economic growth throughout the forecast period of 2017-2020, despite indications that the economic upswing is close to peaking. According to the forecast, economic growth will be 5.5% in 2017, 4.5% next year and fall to 3.6% in 2019 and 2.5% in 2020. Inflation gradually increases to approach the Central Bank's inflation target around the middle of next year, with rising real estate and import prices pushing inflation over target around mid-2019. Inflation is expected to be slightly over target on average during the latter half of the forecast period yet to trend back to target towards the end of the period. According to the inflation forecast, inflation will average 2.7% during the period 2017-2020.

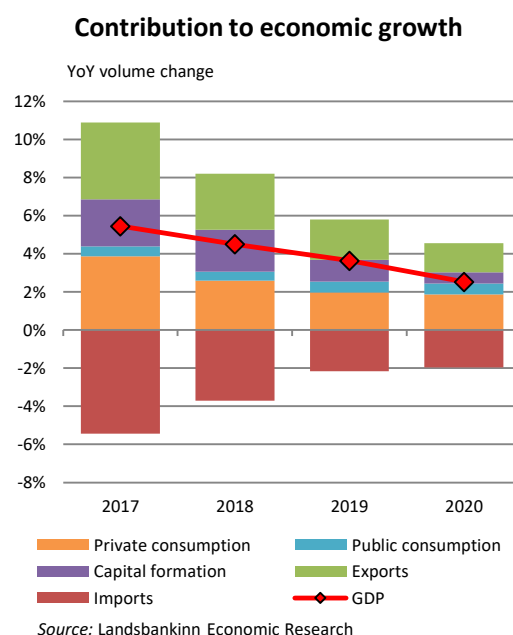
Introduction and overview

Economic conditions in Iceland are in most respects very good. Economic growth is strong and inflation low. Household finances have improved greatly in recent years, debt has decreased as have unemployment rates, and disposable income has reached historic heights. In general, the balance sheets of corporates are solid and public finances strong enough to allow for investment in infrastructure. The outlook is for continued economic growth over the next three years. The inflation outlook has rather worsened as real estate prices are expected to continue to increase at a brisk pace while import prices can be expected to start increasing over the next two years.

The current growth period is in its seventh year and the outlook is for continued economic growth throughout the forecast period to year-end 2020. We expect to see growth of around 5.5% this year, driven by a powerful upswing in private consumption, export and investment. We further expect private consumption to increase throughout the forecast period while industrial investment growth slows down over the next two years, to finally contract somewhat towards the end of the period. Investment in residential housing and public investment is on the other hand expected to increase throughout the forecast period. The forecast assumes average annual economic growth of around 4%, which is much more robust than what is expected during the same period in other developed countries. Economic conditions in Iceland are in many ways unique. The economy's strong position is due, amongst other things, to the extremely fast growth of the travel industry since 2011, the strong position of households, companies and the banking system following radical adjustments after the financial crises.

Economic forecasts are always subject to a high degree of uncertainty about numerous domestic and foreign factors. Uncertainty in the current forecast is relatively high, not least as regards the inflation outlook. The development of real estate prices and the ISK exchange rate are important factors in this regard. There remains some risk of overheating, since growth will remain considerably in excess of the economy's production capacity balance despite economic growth slowing down in coming years.

Finally, a number of foreign factors, outside of the influence of the Icelandic economy, such as uncertainty about oil prices and other commodities prices, could have considerable influence on both the inflation and economic outlook in Iceland.



Private consumption has picked up considerable speed

Most factors that impact the development of private consumption are extremely favourable at the moment. These factors include employment levels, the development of purchasing power and disposable income, as well as household finances.

Private consumption received a significant boost last year, growing by 7.1%. Initial figures for the first half of this year indicate that growth was even more powerful this year to date, or 8.3% between years. A certain turning point was reached in Q1 of this year when private consumption exceeded the 2008 peak for the first time.

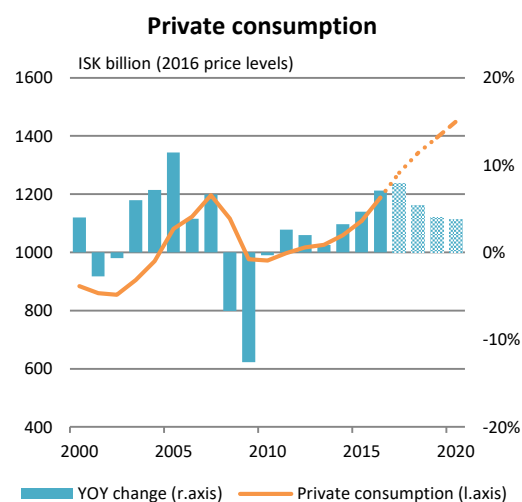
There are indications that private consumption growth is approaching a high point and that we will see slower, albeit still robust growth in coming years. The outlook is for a slower increase in nominal wages in coming years as compared with the last few years yet the real increase in wages and disposable income will most likely be considerable in coming years. Lower indebtedness and rising real estate prices, which contribute to a stronger household equity position, are likely to drive private consumption growth in excess of purchasing power growth over the next two years, reducing savings. Low unemployment, high labour participation rates and continued rapid population growth, notably through an influx of foreign nationals, will also support growth in private consumption.

We expect private consumption growth for 2017 to be 7.9%. If this forecast eventuates, growth of private consumption in 2017 will be the highest since 2005. We expect significantly slower growth in 2018, or 5.3%. Private consumption is expected to continue to increase in the latter part of the forecast period, or by 4% in 2019 and 3.8% towards the end of the forecast period in 2020.

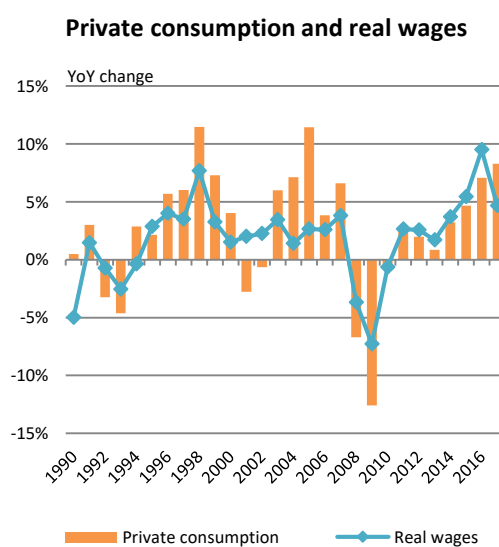
Labour market remains tight

As is usually the case in upswing periods in Iceland, the labour market is red-hot. Labour participation is historically speaking very high, with 83% of the working age population active in the labour force in September.

Unemployment levels have fallen steadily in recent years to slow down, as unemployment now is extremely low. According to information from the Directorate of Labour, unemployment was 1.8% in



2017-2020 is the forecast of Landsbankinn Economic Research
Source: Statistics Iceland, Landsbankinn Economic Research



Source: Statistics Iceland, Landsbankinn Economic Research

September and 2.2% on average over the past 12 months.

Working hours have decreased somewhat in recent months and the number of employed persons has fallen. Total working hours have as a result fallen considerably which could indicate some relaxation in the labour market.

The high demand for labour has mostly been met with foreign employees. The net increase in foreign nationals has been significant, with three out of four foreign nationals arriving in Iceland in the age bracket 20-39 years in the second quarter. There are certain signs that the number of foreign employees in the Icelandic labour force is underestimated and that this distortion has grown over the past two years alongside the great increase in foreign employees.

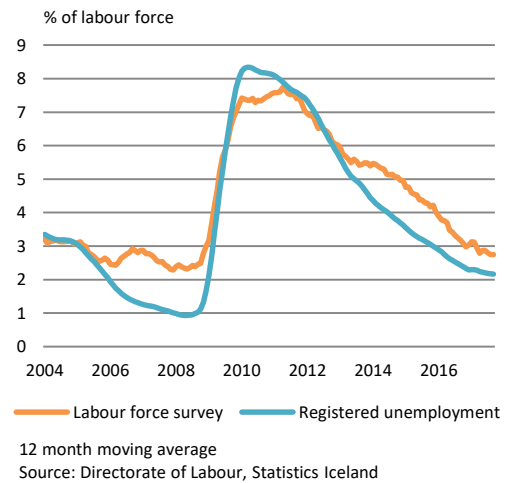
Wage hikes still significant

The wage index was up by 7.4% between September of 2017 and 2016. The annualised wage increase has held fairly steady at just over 7% in recent months. Low and steady inflation has caused the purchasing power of wages to increase steadily in line with higher nominal wages and has been at a historic height in the past three months. The purchasing power of wages has now outstripped last year's figure by 6%.

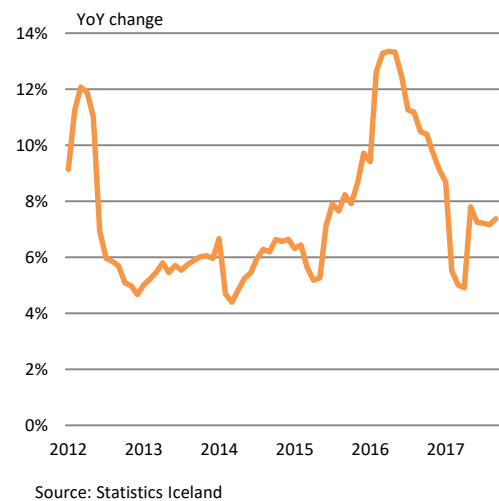
Numerous collective bargaining agreements have expired, mainly in the public sector. Negotiations are on-going yet inconsistent, due mainly to the fact that the current government lacks a mandate to conduct negotiations. The outcome of negotiations will no doubt be a vital factor in the decision of whether or not to extend bargaining agreements in the public sector in February of 2018.

The position in the labour market is unique in the way that all bargaining agreement goals concerning purchasing power increase and stability have been attained. The aim of the contract process this time around is not to recover lost purchasing power. It is likely that the Confederation of Icelandic Employers and the Icelandic Federation of Labour, who have seats at the table, will first and foremost look toward wage increases for other groups during negotiations and it has been said more than once that decisions of the Senior Civil Servants Salary Board for wages to certain groups in the public sector will serve as guidance.

Unemployment rate



Wage index



Real estate prices - have we reached a turning point?

Data from the National Registry on October real estate prices shows that the price of multi-family dwellings has increased by 17% over the past 12 months and by 19% for single-family dwellings. The total increase is 17.6%.

Setting aside the housing item, the economy has been experiencing deflation since mid-2016. The consumer price index (CPI) less housing in October of 2017 was 2.3% lower than in October of 2016. The real price of real estate has thus risen by over 20% in one year, between October of 2016 to October 2017.

Current conditions favour construction

Housing prices have over a long period risen greatly in excess of construction cost. The long-term relationship between housing prices and construction cost shows that it has seldom been as economic to build as just now.

Despite the slower price increase of multi-family dwellings in recent months, the gap between price increases and construction cost has grown historically wide.

Purchasing power cannot keep up with real estate prices

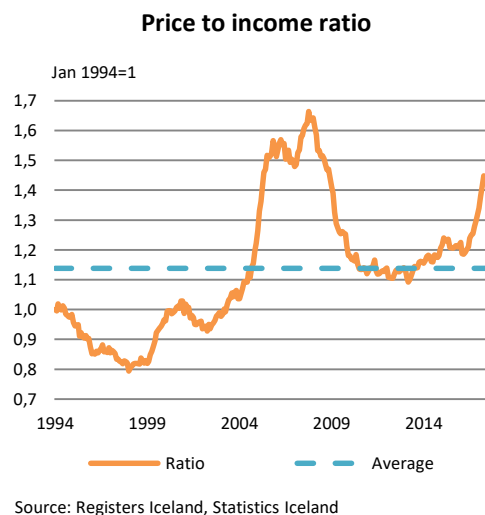
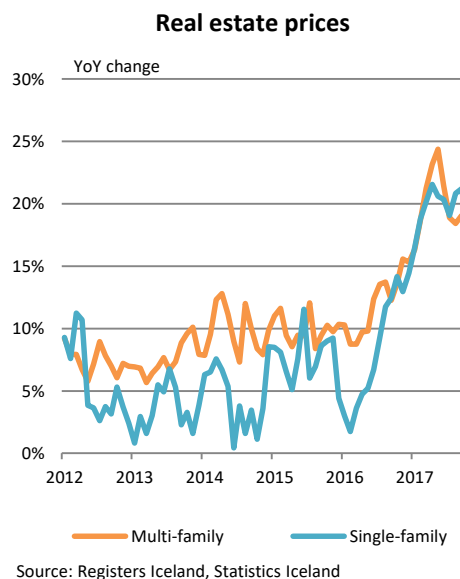
While purchasing power has seldom increased faster than in recent years, real estate prices have risen even faster. A look at the past 12 months, from October 2016 to October 2017, shows that the real price of real estate has risen by over 20% while purchasing power has grown by 5-6%. This comparison shows that real estate prices have far outstripped this underlying factor.

Fewer transactions

The number of transactions involving residential housing has fluctuated significantly in recent months. The number of transactions involving multi-family dwellings has been declining since November of 2016, albeit not uninterruptedly. A review of transaction numbers over a longer period shows fairly clearly that the period of continuous YoY growth has passed, at least for now.

The market to approach normalcy

For multi-family dwellings only, prices have risen by



4,5% over the past six months for October; by 12,5% for the six months before that. The wave of rising prices seems to be abating.

Apartments for sale in the capital region have grown more numerous this year following a near continuous decline in 2015 and 2016. The current volume is now approaching levels last seen in the latter half of 2015. The sale process duration for real estate has grown longer.

Data on apartment transactions over the past two years reveals that new apartments are generally both larger and have a higher per square metre price tag than older apartments. The unit price of new apartments is thus significantly higher than on older ones. As a result, an increased supply of new apartments is not likely to contribute to lower prices.

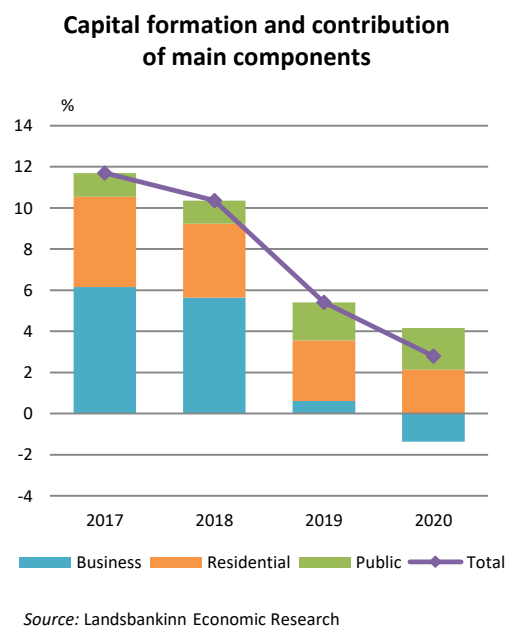
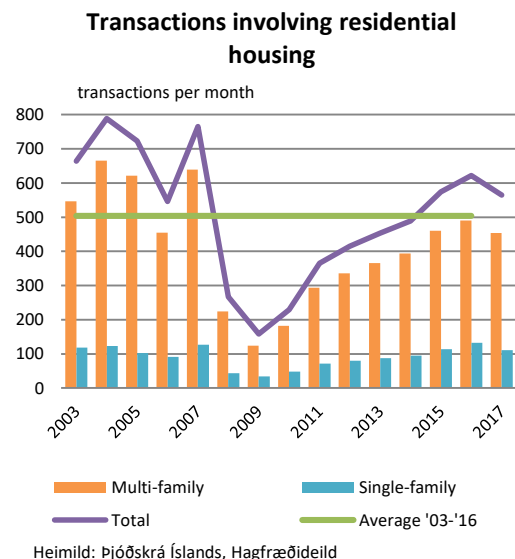
Economic Research forecasts a 19% increase in real estate prices between 2016 and 2017. We then expect the market to quieten down and for prices to increase by 8,5% in 2018, 7% in 2019 and 6% in 2020.

Robust investment activity continues

Total capital formation is expected to grow throughout the forecast period. The greatest growth will take place this year, dwindling slightly next year. Growth will then be significantly slower in 2019 and 2020 yet remain positive. Since industry investment forms the most weighty item in capital formation, total investment in the economy is dependent on developments in industrial investment. It is expected to grow somewhat this year, or by 8,6%, and by 8,1% next year. Growth will slow down considerably in 2019, just barely remaining this side of zero, or at 0,9%. In 2020, the bulk of investment activity in industry during this upswing will be over and we subsequently expect a 2,1% contraction in industrial investment.

Conditions for increased industrial investment have by various measures never been as favourable as now. Corporate equity ratios are at an all-time high and leveraging of underlying operations is low. Enterprises thus have considerable room to increase investment and finance it through gearing. Executives consider economic conditions to be favourable and little has change in that regard over the past two years.

The bulk of one of the most significant investments in fishing vessels by Icelandic fishing and seafood processing companies in these latter years, scheduled



to peak last year, has shifted to this year. We expect this investment to amount to around ISK 20 bn this year. Air plane investment will vary this year as compared with last year as both Icelandair and WOW air have adjusted their plans towards more renting than purchasing in recent months. Investment in heavy industry has been rather less pronounced than in the previous economic upswing in Iceland and has been concentrated almost exclusively on silicon plants. Construction by PCC at Bakki, Húsavík is in the final stretches and production is expected to start in January. As is so often the case with heavy industry, investment has been pushed forward. Thorsil plans to begin construction of its plant in early 2018.

Residential housing investment will increase in coming years

Construction has been characterised by a lack of public information about building volume. This was especially apparent in 2005-2008, when construction activity abounded and little effort was made to estimate demand or co-ordinate activity between municipalities.

It is generally accepted that the market demand for new apartments in the capital region lies between 1,800-2,000 apartments in an average year; the need is now higher due to accumulated demand. New apartments sold in the capital region each year are amazingly few in number.

According to initial figures from Statistics Iceland, investment in residential housing increased by 28.6% between H1 of 2016 and 2017; the increase between Q1 and Q2 of 2017 was 4.7%.

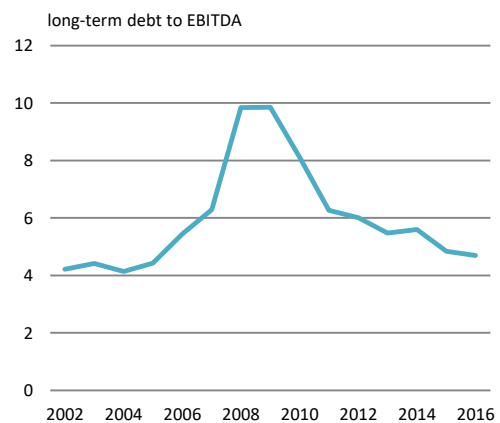
Economic Research forecasts a 28% increase in residential housing investment this year, 20% next year, 15% in 2019, and 10% in 2020. If this forecast proves correct, residential housing investment will exceed 5% of GDP in 2019.

Increased public investment expected

Public investment averaged 4-5% of GDP in 1998-2008. In recent years, it has been around 3% and was 2.6% in 2016. If we continue to consider this type of investment as a ratio of GDP, 2016 levels were only about half of 2000 and 2001 figures.

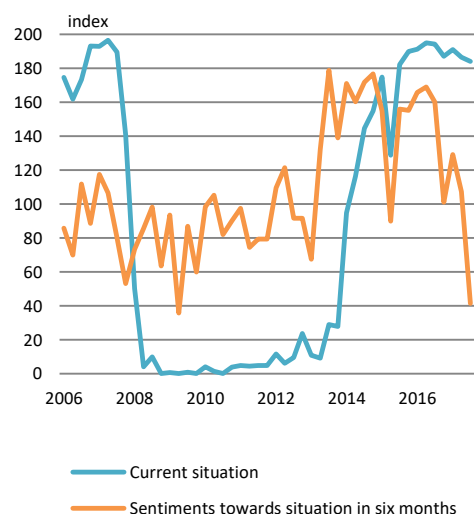
There has been a great deal of discussion of late about the necessity for maintenance and development of various infrastructure. The need for improvements and

Corporate debt



Source: Statistics Iceland

Corporation expectations towards the economic situation



Source: Central Bank of Iceland

maintenance is equally pressing on a municipality level as it is on a national basis.

We expect public investment to increase by 9% this year and next, and subsequently by 15% in 2019 and 2020.

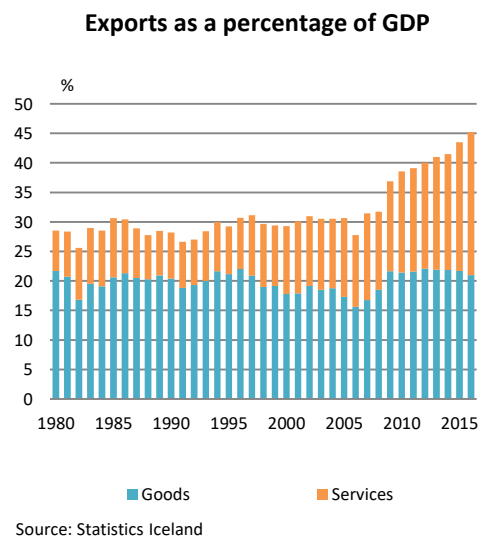
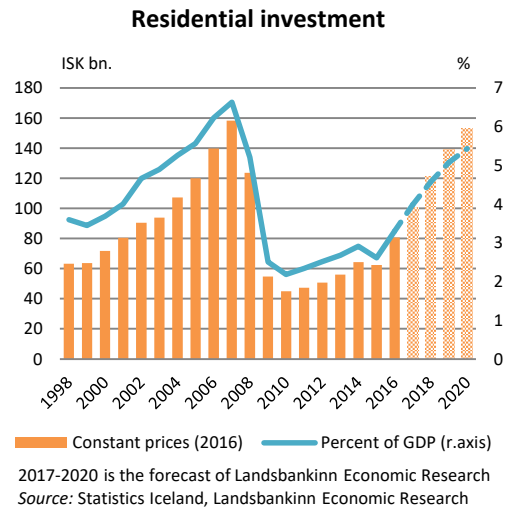
Export growth slows down

Our forecast assumes that increased export will be carried by expansion in the travel industry, as in recent years. We expect total exports to increase by just over 8.2% this year and then for growth to slow down to 3.1% towards the end of the forecast horizon.

The greatest uncertainty factor in export growth in coming years lies in the growth of the travel industry. While certain new areas of growth have emerged in other sectors, such as in aquaculture, they are relatively insignificant and too weak to have a material impact on total export growth in the period. The only factors significant enough to affect the forecast are the other two export pillars; heavy industry and fisheries and seafood. Growth potential in these two sectors is rather limited. Boosting the contribution of heavy industry to export growth would necessitate considerable investment. We do expect the contribution of heavy industry to export growth to remain positive throughout the forecast period. This is achieved through recent construction and expected development in coming years. The contribution to export from fisheries and seafood will be positive this year due to a much more favourable capelin season than last year yet the effect of the seamen's strike on cod fishing will be felt throughout the year and we expect cod export to contract in 2017.

We expect the growth in tourist arrivals to slow considerably next year in comparison to recent years. While the growth in tourist numbers has slowed recently, it is still significant. We expect an 8% increase in tourist arrivals in 2018 and 5% in 2019 and 2020. If the forecast proves correct, foreign tourists will number 2.6 million in the final year of the forecast as compared to 1.8 million last year.

In 2016, the export value of the travel industry for the first time exceeded the combined value of heavy industry and fisheries and seafood. We expect the relative weight of the travel industry against the other two export pillars to continue to increase throughout the forecast period. We expect the export value of the travel industry to be over twice that of the combined export value of heavy industry and aluminium in



2020.

Import growth also slows down

Import growth has been increasing at the same time as the economy has been expanding. Import growth was 14.4% last year and has not been that high since 2005 when it was 27%. In the first half of 2017 import growth was 10% YoY.

We forecast that import growth will be strong this year or 12.8%. The growth will then diminish as we go further into the future. We estimate that it will be 8.7% next year and 5.1% in 2019. In 2020 we forecast 4.6% growth.

Current account surplus throughout the forecast period

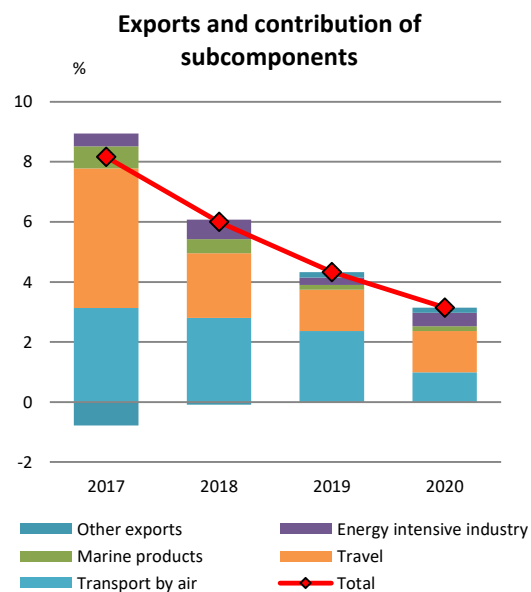
Current account surplus measured 190 bn.ISK last year, thereof 155 bn.ISK trade account surplus. Excluding the effects of DMBs in winding-up proceedings last year was the 8th in a row of current account surplus.

We forecast that import will grow faster than exports which means the surplus will diminish. We estimate that primary and secondary income will be slightly negative but rather steady in the forecast period. We forecast that the average current surplus will be 3.9% on average in the forecast period.

Improving public finances

The situation in government finances is rather singular at the moment. The current government collapsed shortly after submitting a budget proposal and no parliamentary process has been applied to the proposal since then. For the fifth time in a row, the proposal is for a balanced budget and a surplus of ISK 44 bn on the National Treasury next year. The budgeted proposes that the surplus on public finances be increased from 1% of GDP to 1.6% over the next two years, to offset demand growth, among other things.

In the first half of 2017, total debt of the National Treasury has decreased by around ISK 200 bn. Debt is expected to continue to decrease rapidly in 2018, or by ISK 75 bn. The National Treasury's indebtedness is expected to be 30% at year-end 2017, in accordance with legal provisions on public sector debt. Net public debt, i.e. including municipalities, will remain in excess of 30% but indebtedness is expected to reach 30% in 2019.



Source: Landsbankinn Economic Research

Most municipalities laboured under considerable debt burdens in the years following the financial collapse. The municipalities have since managed to achieve cost-efficiencies in their operation and pay off debt. The budget surplus of municipalities in the first half of 2017 amounted to ISK 1.6 bn as compared with an ISK 0.3 bn deficit in 2016.

Public consumption has not increased at the same pace as other macroeconomic values in recent years. At set prices, public consumption in 2016 was comparable to 2009, as the share of public consumption in GDP has decreased somewhat since.

Landsbankinn Economic Research forecasts a 2.2% increase in public consumption in 2017, a 2% increase in 2018 and a 2.5% increase in both 2019 and 2020. According to the forecast, the share of public consumption in GDP will continue to fall as GDP is expected to continue to increase more than public consumption.

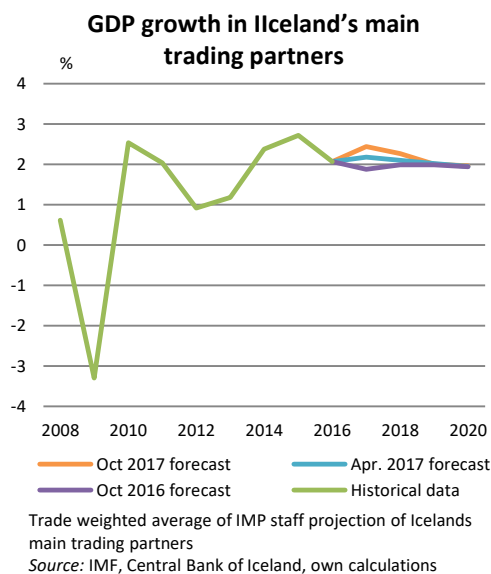
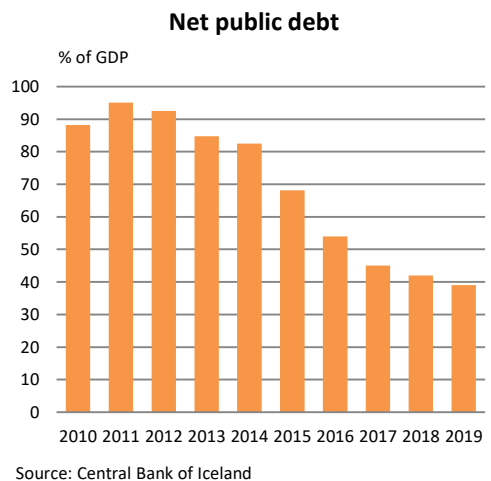
Brighter outlook in trading countries and rising inflation

Economic growth prospects in Iceland's main trading countries have improved since April. We now expect 2.4% economic growth this year and 2.3% growth next year in main trading countries, or 0.2 percentage points higher growth for both years compared to earlier this year.

Inflation is expected to be considerably higher this year and next in Iceland's trading countries than in recent years. The IMF's forecast holds that inflation in Iceland's trading countries will be 1.7% this year, rising to 1.8% next year and 2% in 2019, remaining around that level in 2020-2022. If the forecast proves accurate, this will be the highest inflation in Iceland's main trading countries since 2012, when it peaked at 2.2%. Increased inflation in trading countries will, all things remaining equal, result in higher inflation domestically.

Five-year peak in aluminium prices; two-year peak in oil

Aluminium prices have trended upward in recent months and averaged USD 2,149 per tonne in October. Prices have not been this high since March 2012 or for over five and a half years. Aluminium prices hit a certain bottom in January of last year at USD 1,480. At the time, it had not been lower since at the height of



the financial crisis in early 2009. World oil prices have also risen lately. The price of Brent oil was USD 57.5 per barrel in October and has not been higher since June of 2015, or in over two years. Prices rose significantly between August and September, or by 10%, and then by 1% between September and October. In the past two years, oil prices have been fairly low, historically speaking. Nevertheless, most forecasts expect but little increases in coming years. There is as before considerable uncertainty about the development of global commodity prices; overall, we expect Iceland's terms of trade to remain fairly stable throughout the forecast period.

Two forces pull in opposite directions in inflation developments

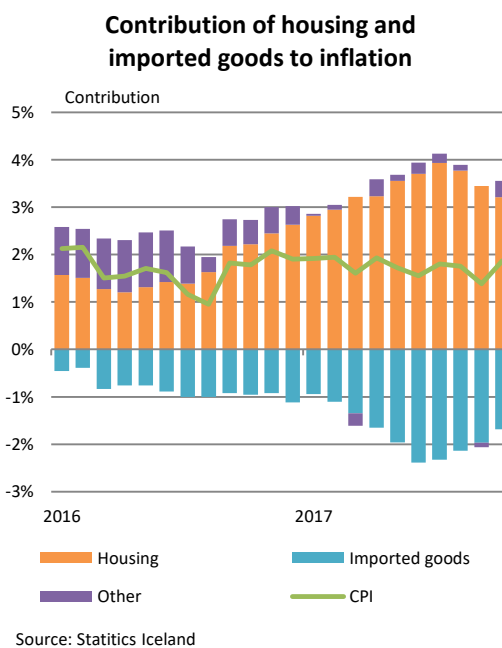
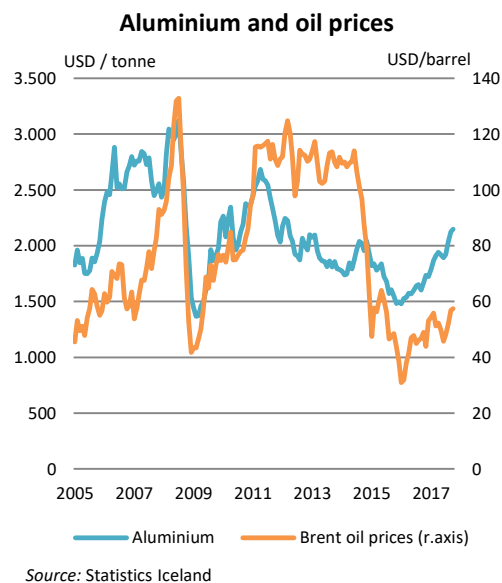
In recent years, two forces have pulled in opposite directions in inflation development - the ISK exchange rate and real estate prices. Appreciation of the ISK, low inflation in trading countries and increased competition, alongside the appearance of foreign retailers in the domestic market, counteract the substantial increase in housing prices. Inflation measured 1.9% in October. Disregarding the housing component of the index results in 2.3% deflation.

The weight of imported goods in the CPI is 30%. The 12-month change in imported goods has yielded deflation since June of 2014. In summer of 2017, deflation on imported goods was 7% and its contribution to change in the CPI was -2½%.

Housing cost weights 26% in the CPI. At its highest this summer, the 12-month increase of the component was just under 20% and its contribution to the 12-month change in the CPI was 4%.

It is extremely unlikely that such significant price increases in real estate can coincide with such intense deflation in imported goods for the long term. Inflation development in the next two years will depend largely on which component gives way first and more rapidly.

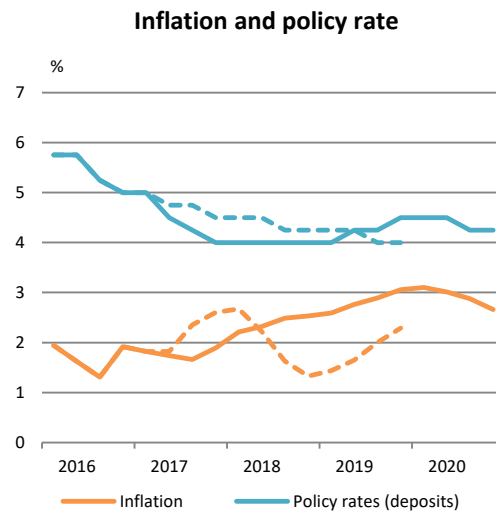
Real estate price increases have begun to slow, the ISK is not appreciating as powerfully as before and inflation in trading countries appears to be picking up. This October was the third month in a row in which the contribution of housing in inflation decreased between months and the fourth month running that the contribution of imported goods in deflation fell MoM.



Our forecast assumes that the negative contribution to the CPI from imported goods will recede fairly rapidly and disappear as soon as next year. The contribution of housing to 12-month inflation will decrease and we expect it to be around 1-2% in coming years as opposed to 3-4% in 2017. We also expect other domestic items to pressure the CPI upward in coming years. In conclusion, we expect inflation to pick up somewhat in the next two years. We expect inflation to peak at 3.1% in Q1 of 2020 and trend back to target towards the end of the forecast period.

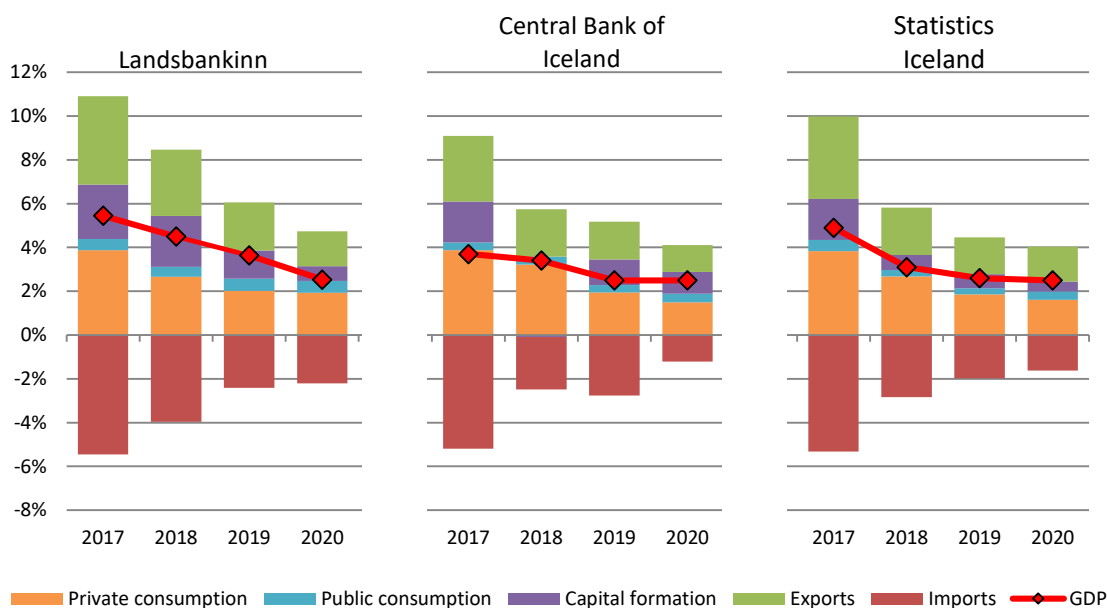
Forecasts unanimous about continuing economic growth

Economic Research's forecast is for 4% average economic growth during the period, rather more than the 3% average growth forecast by the Central Bank. The forecast from Statistics Iceland assumes 3.3% growth. Economic Research's forecast for the first three years is the highest. That can be explained by higher forecasted growth of exports and capital formation than the Central Bank forecasts. The forecasts of the three entities is unanimous for 2020, 2.5% economic growth. The forecasts are fairly similar in the expected composition of economic growth in coming years, i.e. that it will be driven by growth in domestic demand, private consumption, investment and public consumption.



Dotted line represents May 2017 forecast.
Source: Statistics Iceland, Central Bank of Iceland, Landsbankinn Economic Research

Economic growth forecasts



Source: Central Bank of Iceland, Statistics Iceland, Landsbankinn Economic Research

Overview of macroeconomic forecast of Landsbankinn Economic Research.

GDP and key components	ISK bn	Volume change from previous year			
	2016	2017	2018	2019	2020
Gross Domestic Product	2,422	5.5 (6.7)	4.5 (3.5)	3.6 (2.6)	2.5
Private consumption	1,187	7.9 (7.2)	5.3 (4.3)	4.0 (4.1)	3.8
Public consumption	559	2.2 (2.0)	2.0 (2.0)	2.5 (2.0)	2.5
Capital formation	514	11.7 (12.6)	10.4 (8.7)	5.4 (1.2)	2.8
Industrial investment	368	8.6 (9.3)	8.1 (6.2)	0.9 (-4.0)	-2.1
Investment in residential housing	81	28.0 (25.0)	20.0 (20.0)	15.0 (15.0)	10.0
Public sector investment	66	9.0 (16.0)	9.0 (7.0)	15.0 (8.0)	15.0
Total national expenditure	2,263	7.2 (7.0)	5.7 (4.8)	4.0 (2.9)	3.3
Exports of goods and services	1,189	8.2 (10.0)	6.0 (4.6)	4.3 (3.6)	3.1
Imports of goods and services	1,030	12.8 (11.4)	8.7 (7.6)	5.1 (4.3)	4.6

Policy rates and inflation	2017	2018	2019	2020
Policy rates (year-end, %) - lending rates	4.75 (5.25)	4.75 (5.00)	5.25 (4.75)	5.00
- interest rate on deposits	4.00 (4.50)	4.00 (4.25)	4.50 (4.00)	4.25
Inflation (annual average, %)	1.8 (2.1)	2.5 (2.0)	2.8 (1.8)	2.93
EUR exchange rate (annual average)	121 (114)	120 (108)	118 (106)	119
Real estate prices (change in annual average, %)	20.0 (20.0)	8.5 (10.0)	7.0 (8.0)	6.0

Labour market	Annual average			
	2017	2018	2019	2020
Purchasing power of wages (change from previous year, %)	5.0 (5.0)	5.2 (4.0)	2.7 (3.6)	2.0
Unemployment (% of labour force)	2.1 (2.2)	2.0 (2.0)	2.1 (2.0)	2.3

Trade balance	% of GDP			
	2017	2018	2019	2020
Goods and services balance	5.4 (6.7)	4.3 (5.5)	3.8 (5.1)	3.1
Trade balance	5.0 (6.3)	4.1 (5.0)	3.6 (4.7)	3.0

Numbers in brackets are from Economic Research's May 2017 forecast

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Head of Research: Daníel Svavarsson

Report authors: Ari Skúlason, Arnar Ingi Jónsson, Daníel Svavarsson, Gústaf Steingrímsson, Magnús Stefánsson, Hallsteinn Arnarson and Sveinn Þórarinnsson.

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