### SEĐLABANKI ÍSLANDS



Rannveig Sigurðardóttir Deputy Governor Central Bank of Iceland Reykjavík University 12 October 2018

### Roadmap for presentation



1

• The Central Bank; objectives by law and staffing

2

• Monetary policy; mandate, governance, implementation and performance

3

• Financial stability; macroprudential framework and tools

4

Recent and future decisions



### The Central Bank of Iceland

### The Central Bank of Iceland



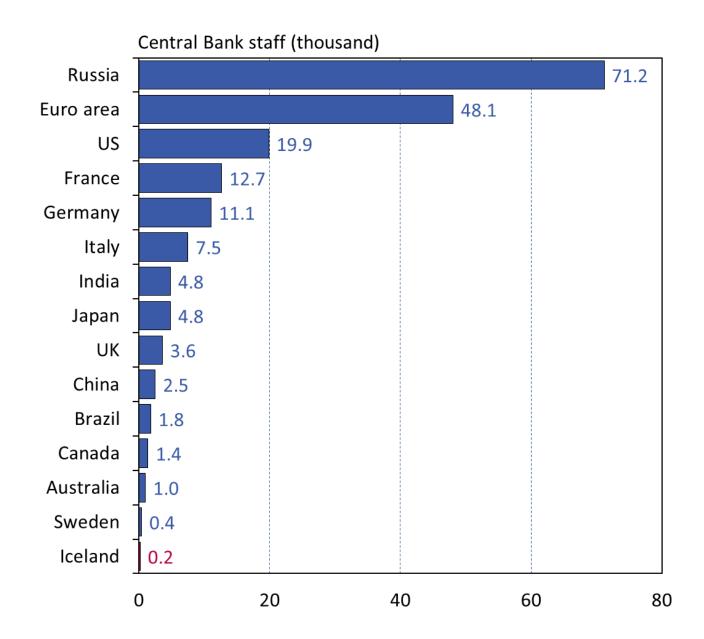
### The Bank

Established in its current form in 1961

#### Its staff

• Its staff level of 180 makes it one of the smallest central banks in the world ...

#### Central Bank staff



### The Central Bank of Iceland



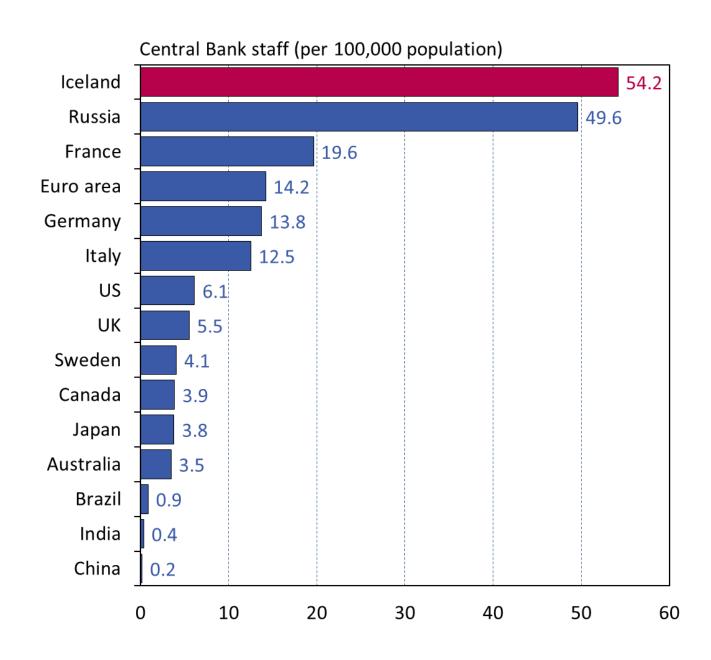
### The Bank

• Established in its current form in 1961

#### Its staff

- Its staff level of 180 makes it one of the smallest central banks in the world ...
- ... but not per capita

#### Central Bank staff



### Objectives and tasks according to law



#### The principal objective of the CBI

- is to promote price stability (2001)
- It shall also promote the implementation of the Government's economic policy as long as it does not consider this inconsistent with its main objective of price stability

It shall also promote financial stability (2013)

#### And undertake standard central banking tasks

- promote an efficient and safe financial system
- including payment systems domestically and with foreign countries
- maintain international reserves



## Monetary policy

Mandate and governance

### The inflation target



Formal inflation target adopted in March 2001

Agreement between the Government and the CBI

CBI given full independence to apply its instruments to achieve its inflation target

Price stability defined as a 2½% rise in the consumer price index (CPI) over a twelve-month period

Keep inflation as close to the target as possible, on average

ullet Deviation by more than 1½ percentage points in either direction, the Bank must submit a public report to the Government

### The Monetary Policy Committee



#### **Monetary Policy Committee**

- Five member MPC with two external members
- Individual responsibility
- Majority voting

#### Accountability - transparency

- Minutes
- Submit reports to Althingi
- Parliamentary hearings

#### Monetary policy instruments

- Decisions on interest rates
- Transactions with credit institutions
- Reserve requirements
- Foreign exchange market transactions

#### MPC decisions based on

- Bank's objectives
- A thorough assessment of the current situation of and outlook for the economy and monetary issues and financial stability

### Inflation targeting plus



More flexible inflation targeting

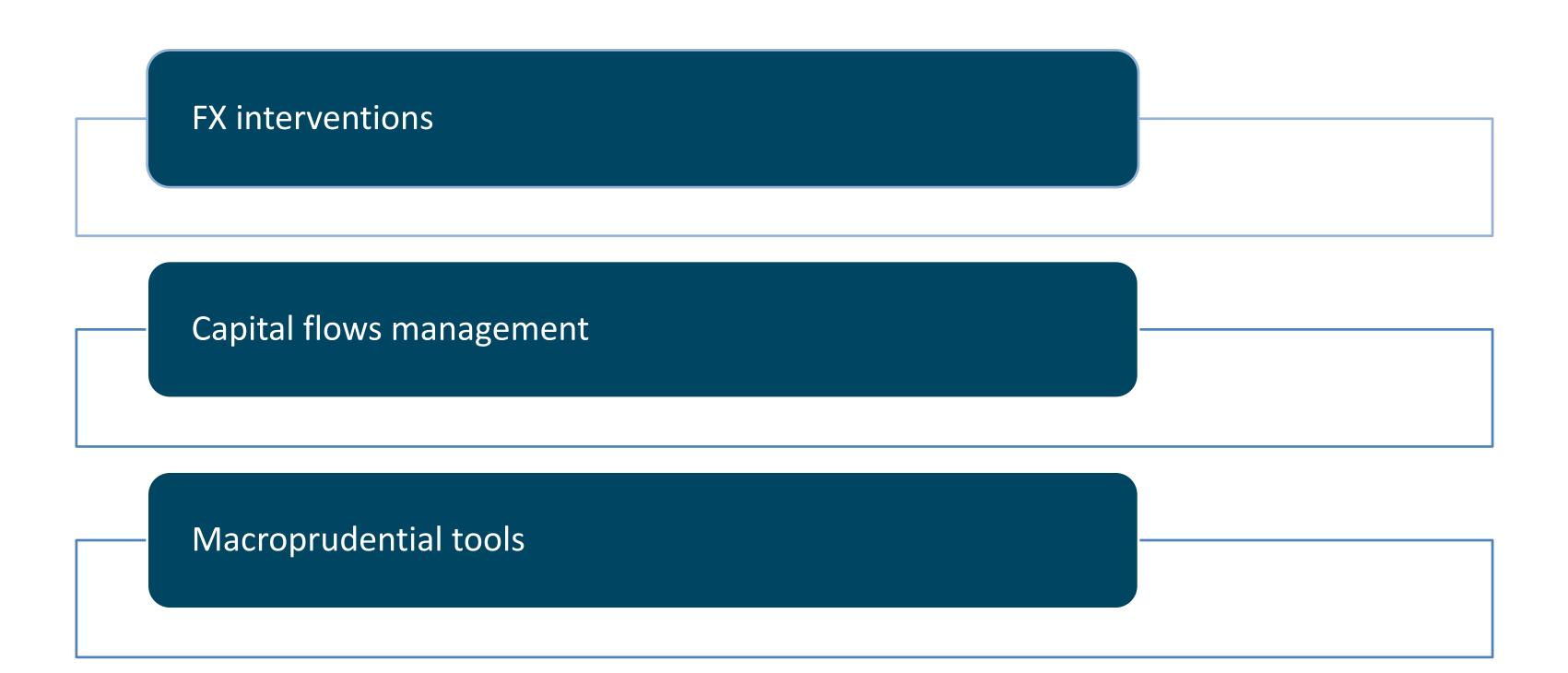
Managed rather than free floating ISK

#### Greater focus on

- financial system,
- capital flows, and
- BoP vulnerabilities

### Expansion of the toolkit







# FX intervention can be an important auxiliary tool for monetary policy

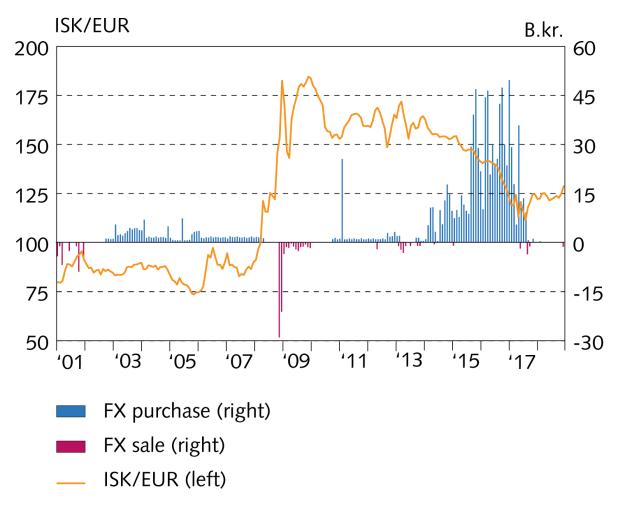
# Temporary factors 2014-2017

- Build up the Bank's foreign exchange reserves
- Lean against appreciation of the króna before capital account liberalisation

## Main objective of FX interventions

 Reduce short-term exchange rate fluctuations EUR/ISK exchange rate and Central Bank transactions in the foreign exchange market

January 2001- October 2018



Heimild: Seðlabanki Íslands.

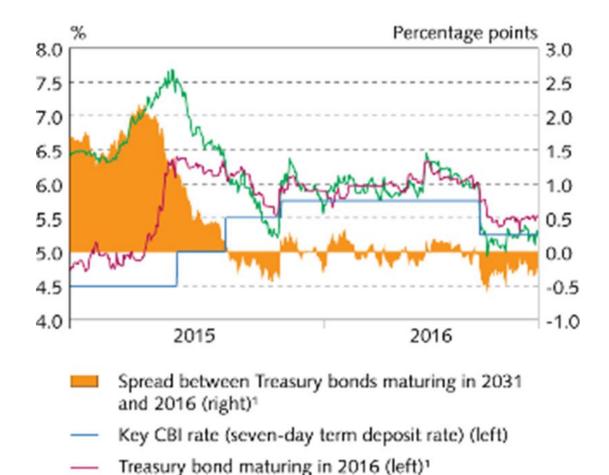


STAND STAND

- Promote more effective monetary policy transmission
- Impede the build-up of systemic risks

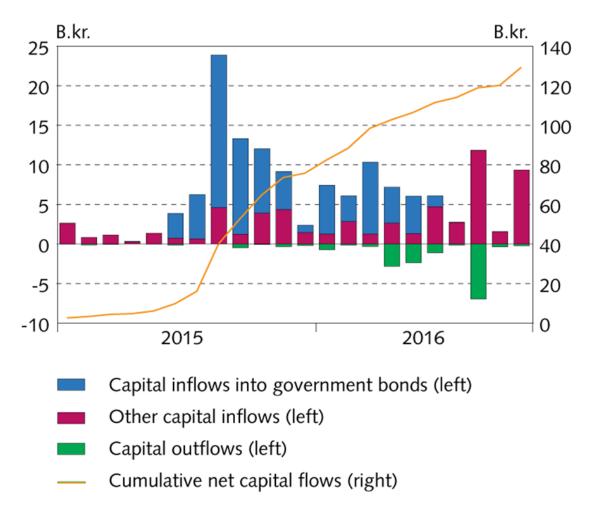
Key Central Bank rate and nominal Treasury bond yields

Daily data 2 January 2015 - 11 November 2016



Treasury bond maturing in 2031 (left)

Capital flows
January 2015 - October 2016



Source: Central Bank of Iceland.

From 14 April 2016, Treasury bond maturing in 2017 instead of 2016.
 Source: Central Bank of Iceland.



# Monetary policy

Implementation

### Monetary policy instruments



The principal monetary policy instrument is the Bank's interest rates on transactions with credit institutions

#### Other policy instruments

- Decisions on minimum reserve requirements
- Intervention in the foreign exchange market
- Special reserve requirements on capital inflows

#### Eligible for access to Central Bank facilities

• Commercial banks, savings banks, and diverse credit institutions

#### Primary instruments eligible as collateral

• Securities issued in Icelandic krónur by the Republic of Iceland

### The interest rate corridor



- The key Central Bank interest rate i.e., the rate that is most important in determining short-term market rates – may vary from time to time
- As a general rule, the Bank does not offer its counterparties deposits and loan facilities at the same time
- Deposit rates are the key rates when the system is rich in krónur while lending rates bite the most when the system is short in krónur

Overnight lending rate 6%

7-day collateralised lending rate 5% (not offered today)

1-month term deposit rate 4.73% (rate of accepted bids)

7-day term deposit rate 4.25% - the Banks key rate

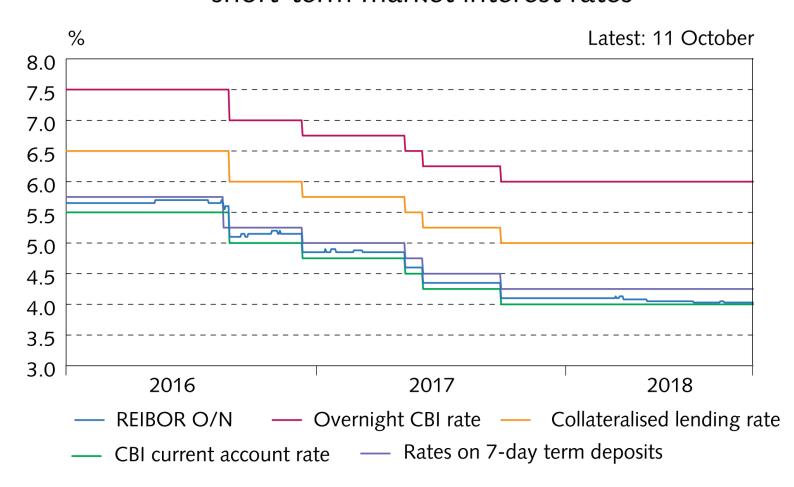
Current account rate 4%

200 bp

### Money market interest rates

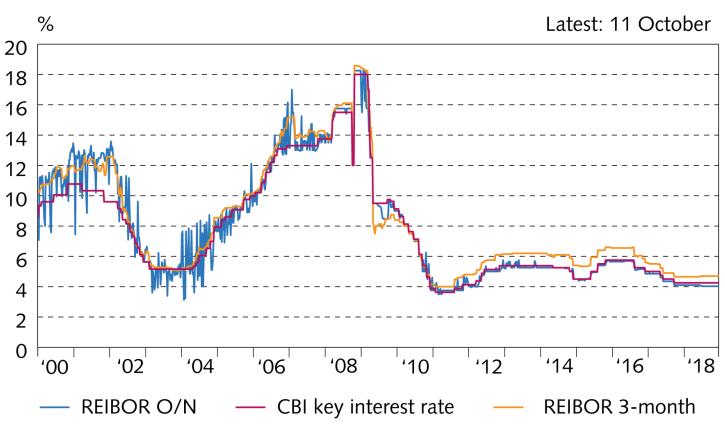


### Central Bank of Iceland and short-term market interest rates



Source: Central Bank of Iceland.

### Central Bank key interest rate and money market interest rates



Until April 2009, the Bank's effective policy rate was the seven-day collateralised lending rate, and from April to September 2009 it was the current account rate. From September 2009 to May 2014, the effective policy rate was the average of the current account rate and the maximum rate on 28-day CDs. From May 2014, the effective rate is the Bank's seven day term deposit rate. Weekly data. *Source:* Central Bank of Iceland.



# Monetary policy

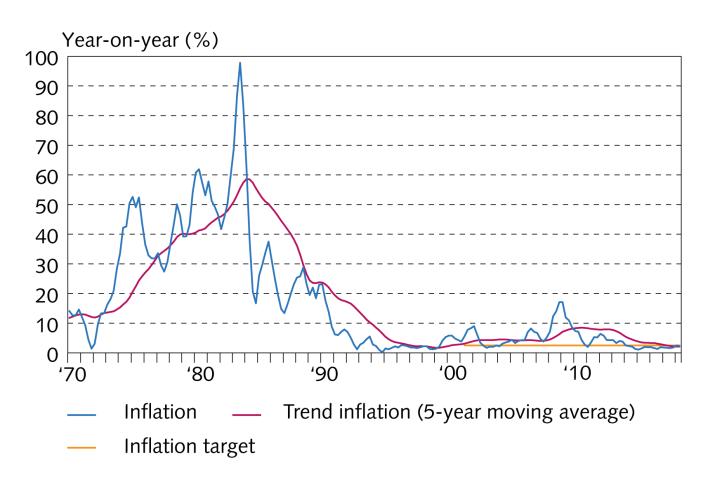
Performance

### Average inflation since 2001 - 4.8%



- Inflation more than 1 percentage points above target for roughly 60% of the period
- Inflation more than 2 percentage points from target in nearly 40% of instances

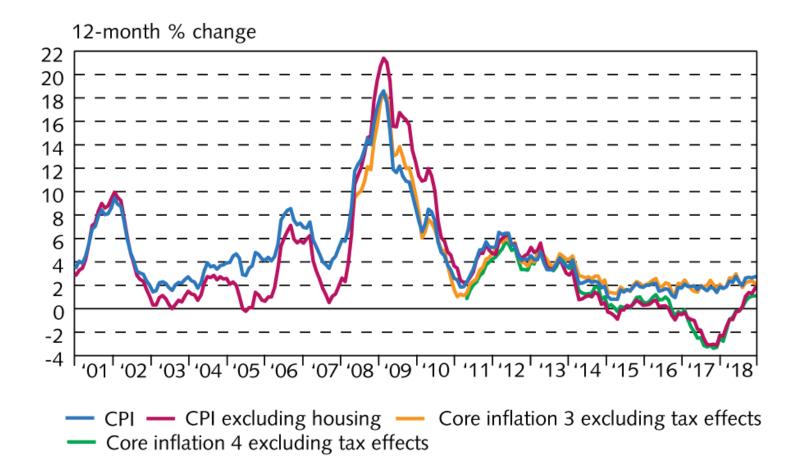
Inflation in Iceland 1970-2018



Sources: Statistics Iceland, Central bank of Iceland, Petursson (2018).

Note: Inflation is measured as the year-on-year change in the headline consumer price index. The shaded area shows the 5-year ±1 standard deviation of inflation. Data for 1970Q1-2018Q2.

Sources: Central Bank of Iceland, Statistics Iceland, author's calculations.



Inflation: various measures

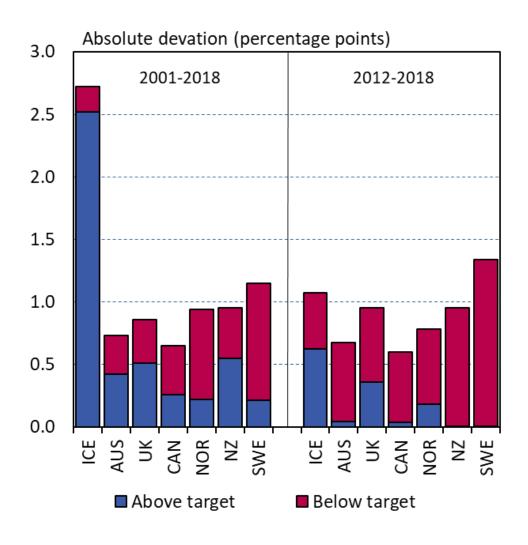
Core index 4 is the consumer price index excluding prices of agricultural products, petrol, public services and owner-equivalent rent. Monthly data.

Source: Statistics Iceland.



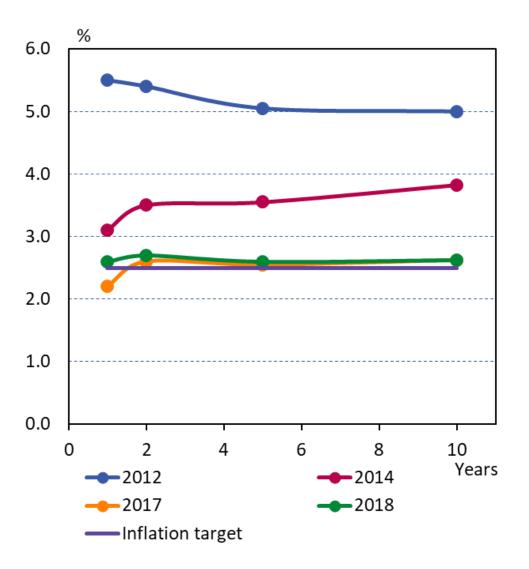
# Less frequent target misses, better anchored inflation expectations, and increased real stability

Average deviation from inflation target<sup>1</sup> Q1/2001 - Q2/2018

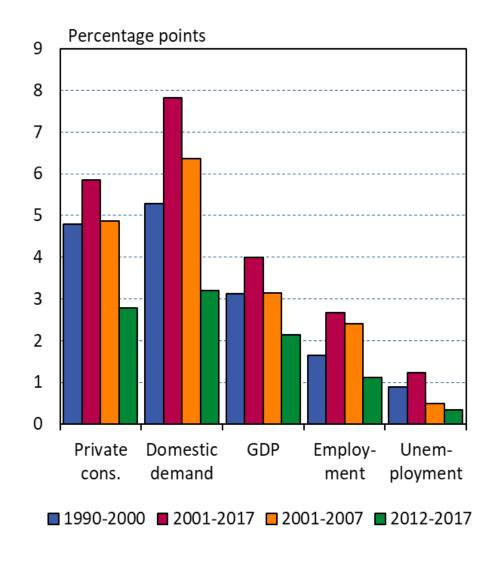


Iceland Working Paper no. 77.

One- to ten-year inflation expecations<sup>2</sup> Observations for Q2 in 2012, 2014, 2017, and 2018



Volatility of key macro variables in different periods<sup>2</sup>



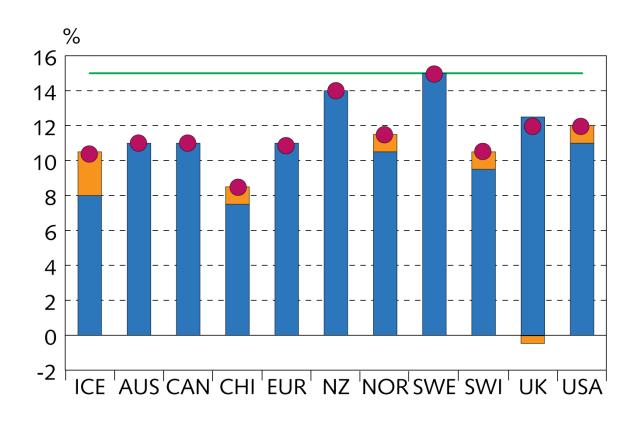
<sup>1.</sup> Average absolute deviation from inflation target (based on inflation target measure used by each country) and relative contribution of above- and below-target deviations. 2. 1-10 year inflation expectations from surveys among financial market participants. 3. Smoothed probability of being in a low-inflation regime based on an open economy, forward-looking Phillips curve, estimated with a two-regime Markov switching model.

Sources: Central bank websites, OECD, Statistics Iceland, Central Bank of Iceland, Thórarinn G. Pétursson (2018), "Disinflation and improved anchoring of long-term inflation expectations: The Icelandic experience", Central Bank of

### Greater transparency of monetary policy



Central bank transparency: Iceland and 10 other inflation-targeting central banks



2008

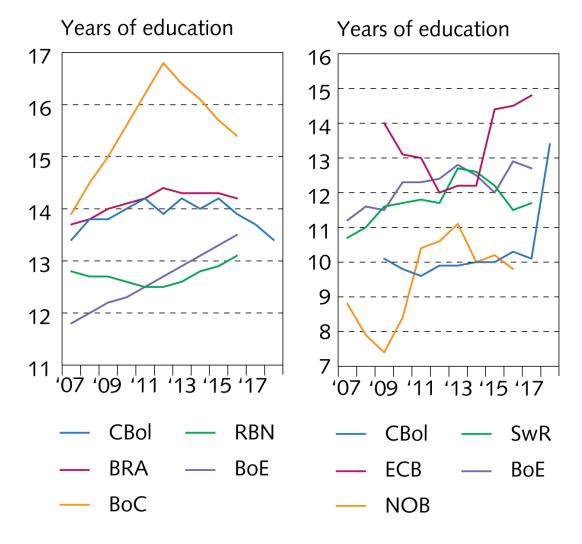
**2014** 

2008-2014 change

— Maximum score

Reading grade level of inflation report

Reading grade level of minutes



Sources: Qvigstad and Schei (2018), Haldane (2017), Pétursson (2018).

Source: Dincer and Eichengreen (2014).



## Financial stability

Macroprudential framework and tools



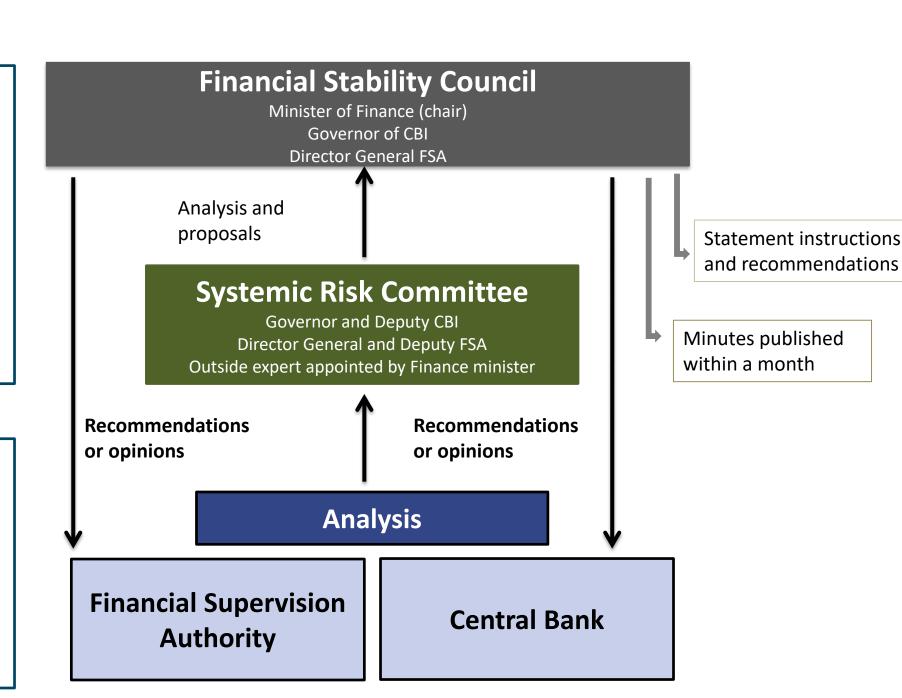


#### Macroprudential policy

- system-wide supervision overseeing the financial system as a whole
- and the interactions between the units it comprises
- and the connections between the financial system and other parts of the economy

#### Formal cooperation between

- Central bank of Iceland
- Financial Supervision Authority
- Ministry of Finance and Economic Affairs



### Macroprudential toolkit



#### Capital buffers have all been activated

- Countercyclical buffer: 1.25% (1.75% May 2019) (FSA after FSC recommendation)
- Systemic risk buffer: 3%/2% (FSA after FSC recommendation)
- Capital buffer on systemically important institutions: 2% (FSA after FSC recommendation)

#### Borrower based measures

- Loan to value LTV (FSA after FSC opinion)
- Debt service to income DSTI (FSA after FSC opinion)
- Restrictions on lending in foreign currencies (CB after FSC opinion)

#### Other tools

- Net open position in FX, LCR (Liquidity Coverage Ratio) in FX, NSFR (Net Stable Funding Ratio) in FX (CB)
- Capital Flow Management tool (CB by approval from Minister of Finance and Economic Affairs)

### Capital buffers in action

### Capital buffers are intended

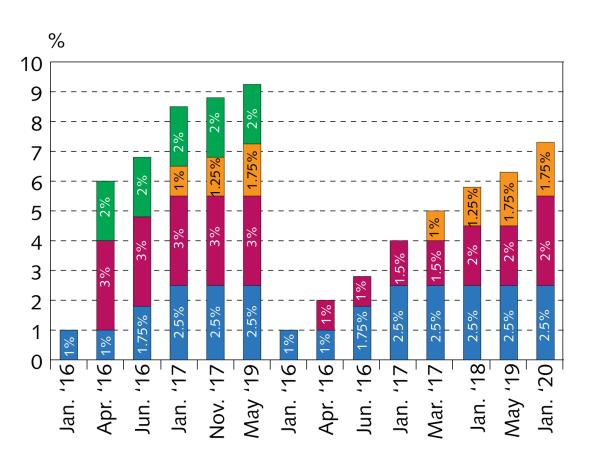
- Financial institutions must hold additional capital to other minimum capital requirements (8%)
- and a bank specific buffer set by FSA (3.2-4.9%)
- Capital buffers are intended to counter systemic risk and mitigate the impact of financial cycles on the real economy

#### Four capital buffers

- Capital conservation buffer
- Systemic risk buffer
- Countercyclical capital buffer
- •Capital buffer for systemically important institutions



#### The introduction of capital buffers in Iceland



Systemically important banks Other deposit taking institutions

Capital conservation buffer

Systemic risk buffer

Countercyclical buffer

Capital buffer on systemically important institutions

Source: Central Bank of Iceland.



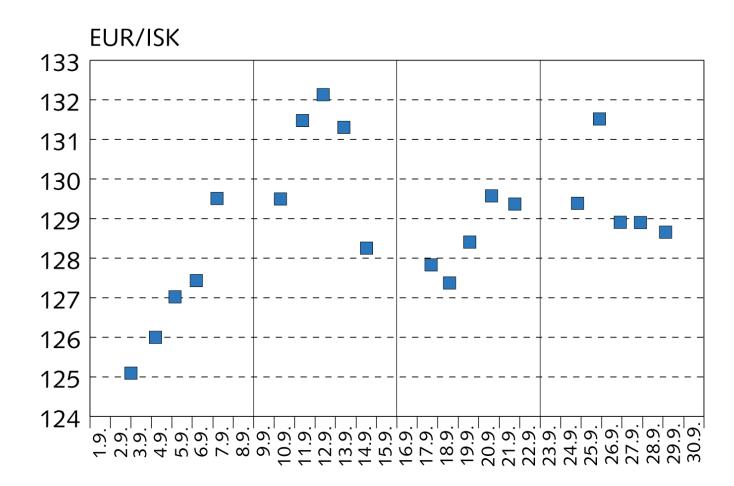
### Recent and future decisions



# FX-intervention What would you have done on 11 September?

#### Official exchange rate of the króna

3 September - 28 September



Source: Central Bank of Iceland.

## Iceland's interbank market for foreign exchange

10 September - 14 September



Source: Central Bank of Iceland.

### Key Risk Factors – Financial stability report 2018/1

SLANO

- Risk in the financial system is still within moderate limits
- Signs of increasing risk appetite
- Residential real estate market: Although the pace has somewhat eased, real house prices are still at historical highs and households' housing debt continues to rise
- Commercial real estate market: Real prices are high in historical context and have risen well in excess of other economic indicators
- Tourism: As growth eases more uncertainty arises regarding possible overinvestment in the sector
- Risk attached to developments in tourism is closely connected to a disruption in the housing market
- Icelandic households' and businesses' financial position is still strong, and the banks are strong
- Monitoring risk arising from a renewal of core infrastructure elements in the financial system and the ability to defend against cyberattacks

### Key risks

Current situation and changes from 2017/2

Real estate market

**Tourism** 

1





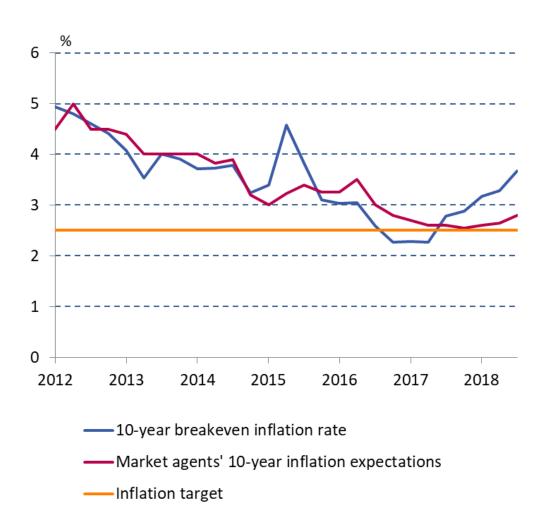
Possible systemic risk

Imminent systemic risk

### Inflation expectations – properly anchored?

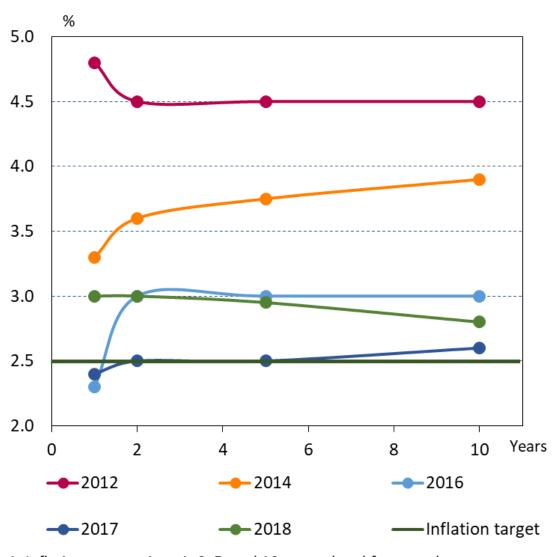


Long-term inflation expectations Q1/2012 - Q3/2018



Source: Central Bank of Iceland.

One- to ten-year inflation expectations<sup>1</sup> Q3-measures each year



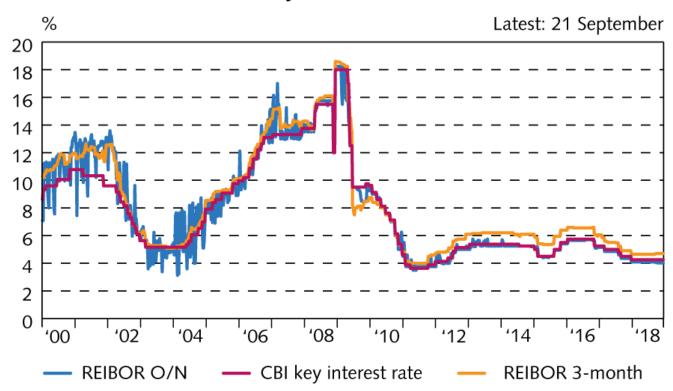
1. Inflation expectations 1, 2, 5, and 10 years ahead from market survey responses.

Source: Central Bank of Iceland.



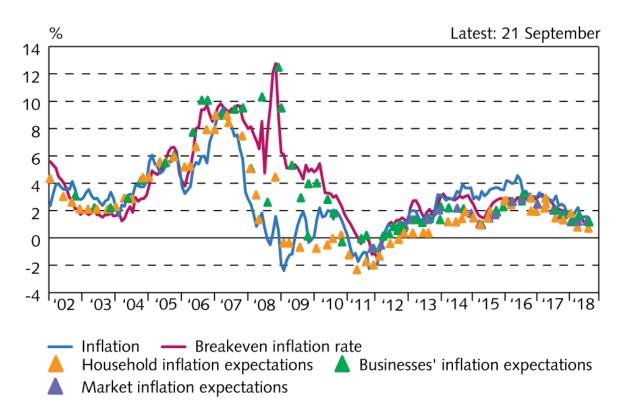
# Unchanged CBI rates since October 2017 - but the Bank's real rate has fallen by 0.7 percentage points

### Central Bank key interest rate and money market interest rates



Until April 2009, the Bank's effective policy rate was the seven-day collateralised lending rate, and from April to September 2009 it was the current account rate. From September 2009 to May 2014, the effective policy rate was the average of the current account rate and the maximum rate on 28-day CDs. From May 2014, the effective rate is the Bank's seven day term deposit rate. Weekly data. *Source:* Central Bank of Iceland.

#### Central Bank of Iceland real interest rates



According to 12-month inflation and 1-year inflation expectations. Real interest rates according to breakeven inflation rate on Treasury notes are calculated based on Treasury note (RIKB 13 0517) and Treasury bond (RIKS 15 1001) yields until June 2004, and on the difference between the nominal and indexed yield curves onwards (monthly average). Until April 2009, the Bank's effective policy rate was the seven-day collateralised lending rate, and from April to September 2009 it was the current account rate. From September 2009 to May 2014, the effective policy rate was the average of the current account rate and the maximum rate on 28-day CDs. From May 2014, the effective rate is the Bank's seven day term deposit rate. Monthly data. *Sources:* Gallup, Statistics Iceland, Central Bank of Iceland.

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