

A New Era of Monetary Policy: The Case of Israel

CNB Research Open Day

Prague

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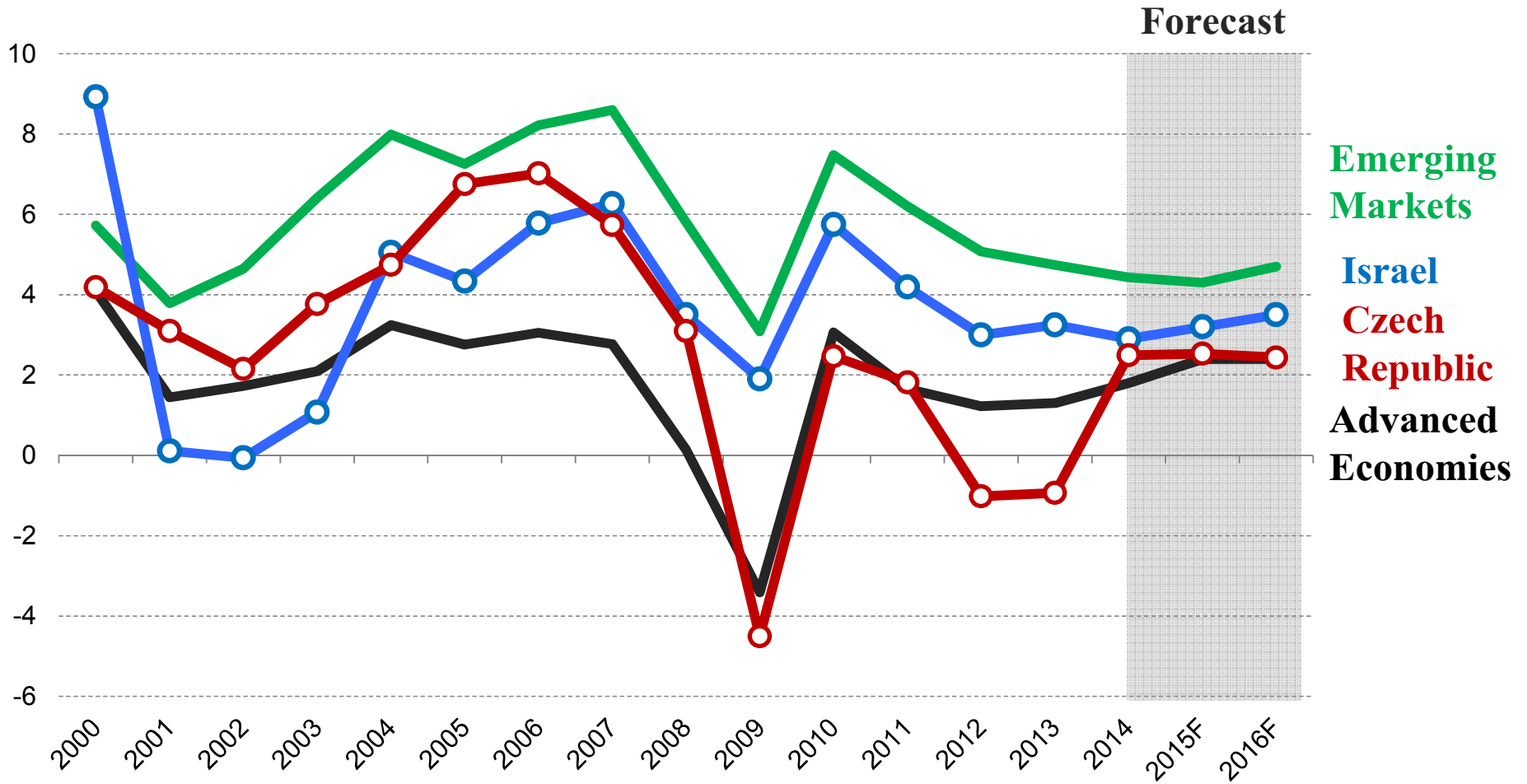
Governor of the Bank of Israel

May 18, 2015



GDP Growth

2000-2016F





Israel & Czech Republic: General Comparison

	Israel	Czech Republic
Population (millions)	8	10.5
GDP (\$US billion, 2013)	290	200
GDP per Capita (PPP, 2013)	32,700	27,350
Annual Growth (2004-2014)	4.1%	2.3%
Unemployment (25-64)	5.1% (2014)	6.2% (2013)
Inflation (12 months)	-1.0%	0.1%
Government Expenditure (2014, % of GDP)	39.4%	42.5%
Tax Burden (% of GDP)	31% (2014)	34.1% (2013)
Government Gross Debt (% of GDP)	67.8%	44.4%



**Since the Crisis, Monetary
Policy Has Changed
- Worldwide and in Israel**



Central Banks' Objectives

Before the financial crisis

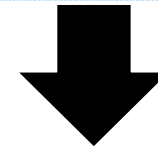
*“One target, one instrument
simplicity”*

One major objective:

Maintaining price stability, and supporting economic activity.

Using one monetary tool:

Interest rate.



Since the financial crisis

*“Multiple instruments should
increase the extent to which
multiple objectives can
simultaneously be pursued”*

Multiple objectives:

- Maintaining price stability, and supporting economic activity.
- Ensuring financial stability

Using multiple policy tools:

- Interest rate (incl. negative level)
- Quantitative easing.
- Capital flow management measures.
- Foreign exchange intervention.
- Macroprudential measures.
- Forward guidance.



Monetary Policy Dilemmas and Considerations of SOEs Since the GFC

- ❑ Monetary policy under inflation targeting: Set interest rate to target inflation and output gap.
- ❑ During a recession at the “economic core” addressed by monetary easing, a small open economy may experience **exchange rate appreciation** and lower demand for its exports.
- ❑ Global monetary easing may directly and/or indirectly, via monetary policy reaction, affect **asset prices** and raise domestic **financial stability concerns**.
- ❑ Balancing growth, inflation and financial stability calls for macroprudential policy and the use of multiple tools



Unconventional Monetary Tools Since The Global Financial Crisis

	Forex Intervention	Forward Guidance	QE	Negative Interest Rate	MAP
USA		+	+		
Euro		+	+	+	
England		+	+		+
Japan	+	+	+		
Denmark	+			+	
Switzerland	+		+	+	+
Sweden		+	+	+	
Canada		+			+
New Zealand	+				
Poland	+				+
Israel	+		+		+
Czech Republic	+	+			

■ Exchange rate floor
■ Fixed exchange rate

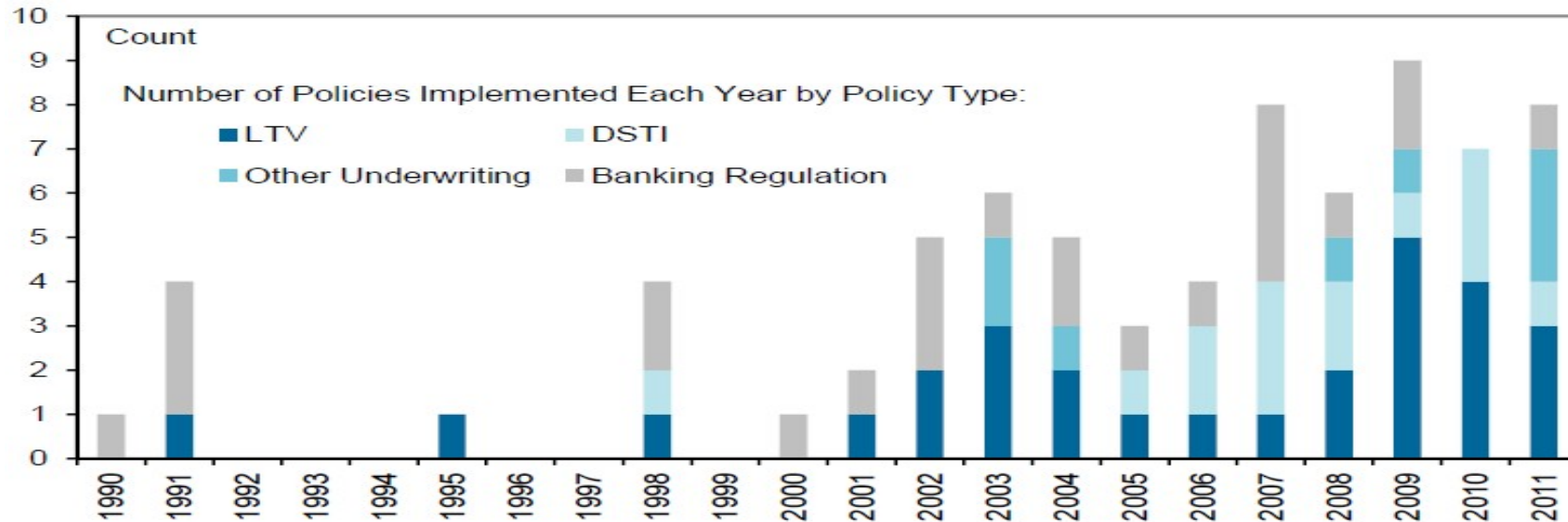
*Not all MAP measures were implemented by the central bank; some were by other entities.



Macroprudential

“Quite simple to describe but quite difficult to implement...”

The number of macroprudential policies in the housing market used by OECD countries has increased



(BIS, Goldman Sachs Global Investment Research, April 2014)

“The broad goal of these policies (MAP) is to limit the risk of financial system disruptions”



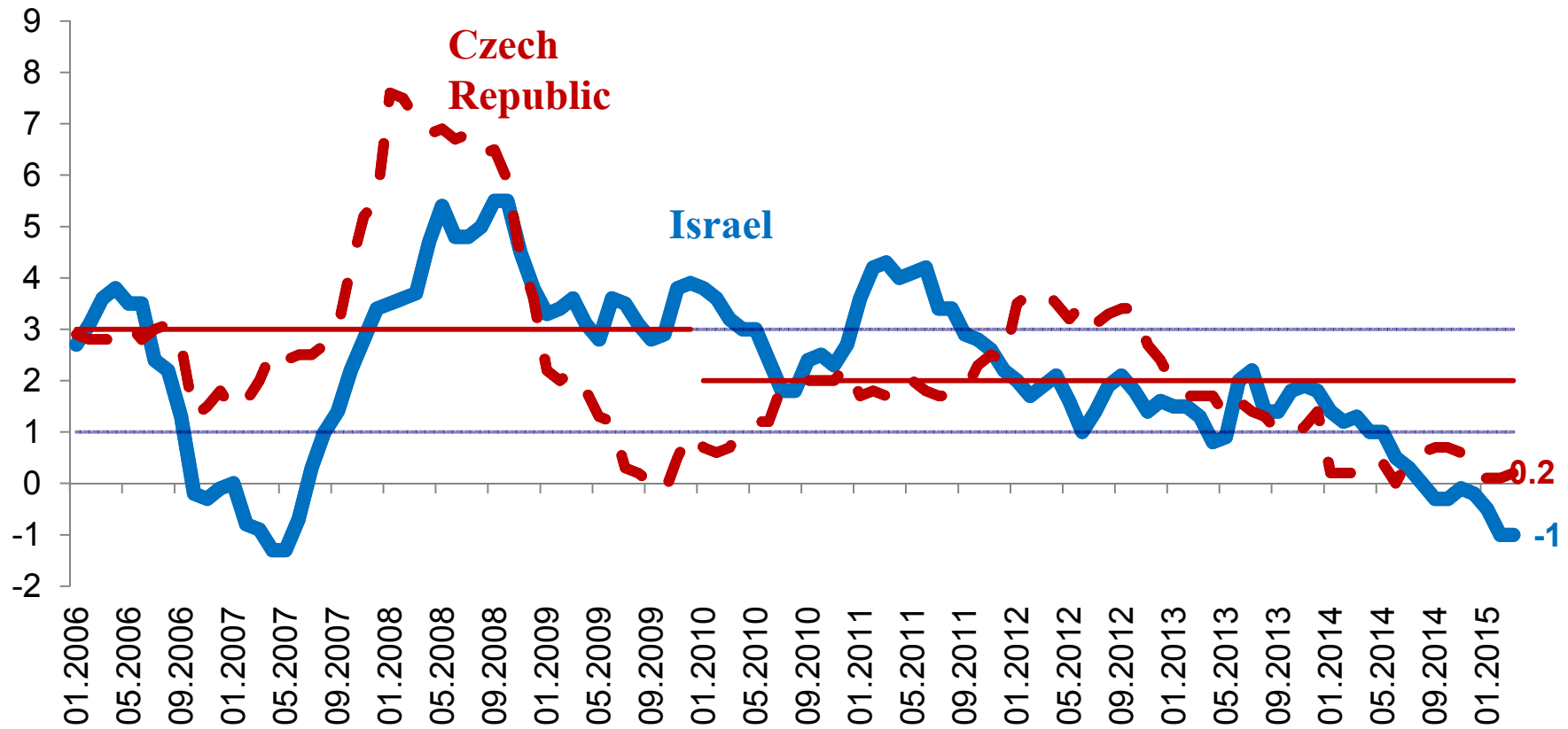
BOI's Policy Objectives:

- **Maintain price stability, as the central goal.**
- **Support for economic policy, primarily growth, employment and reducing social gaps.**
- **Support the stability and orderly activity of the financial system.**



Inflation Environment

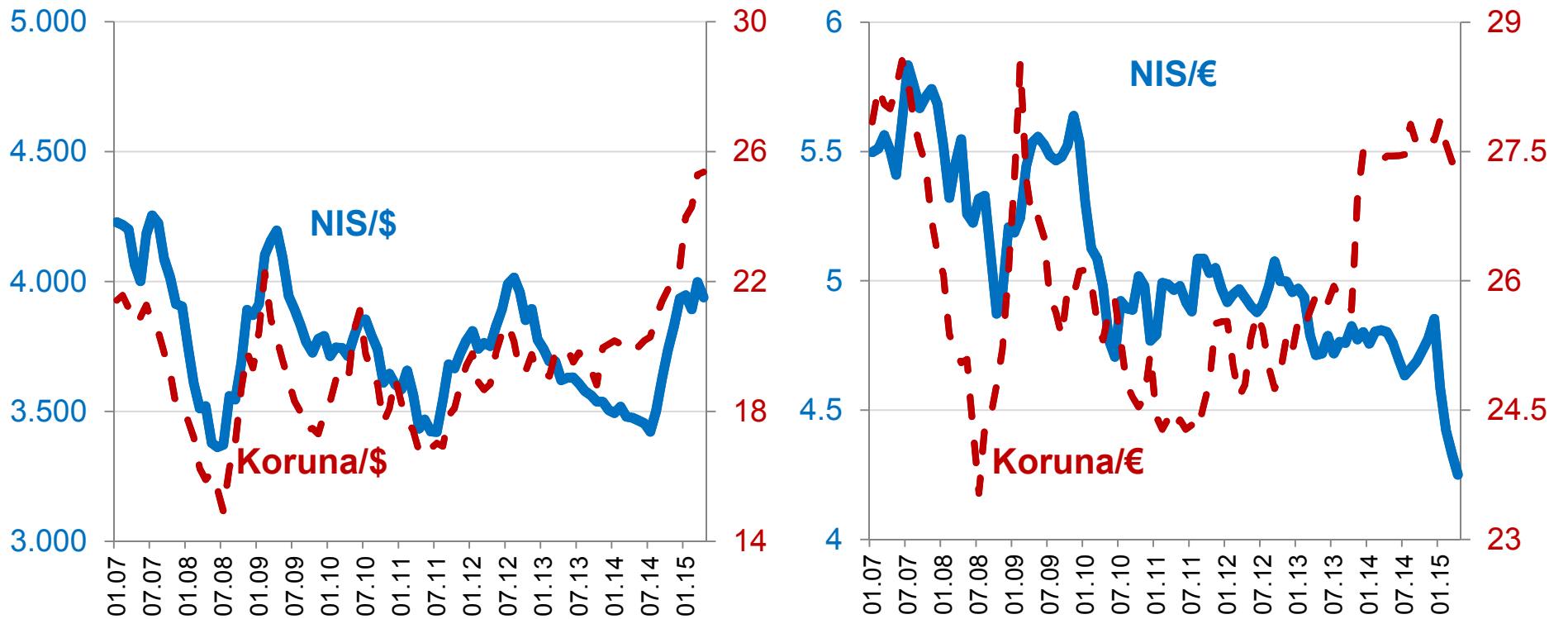
2006-2015





Exchange Rates

2007-2015





Nominal Effective Exchange Rate

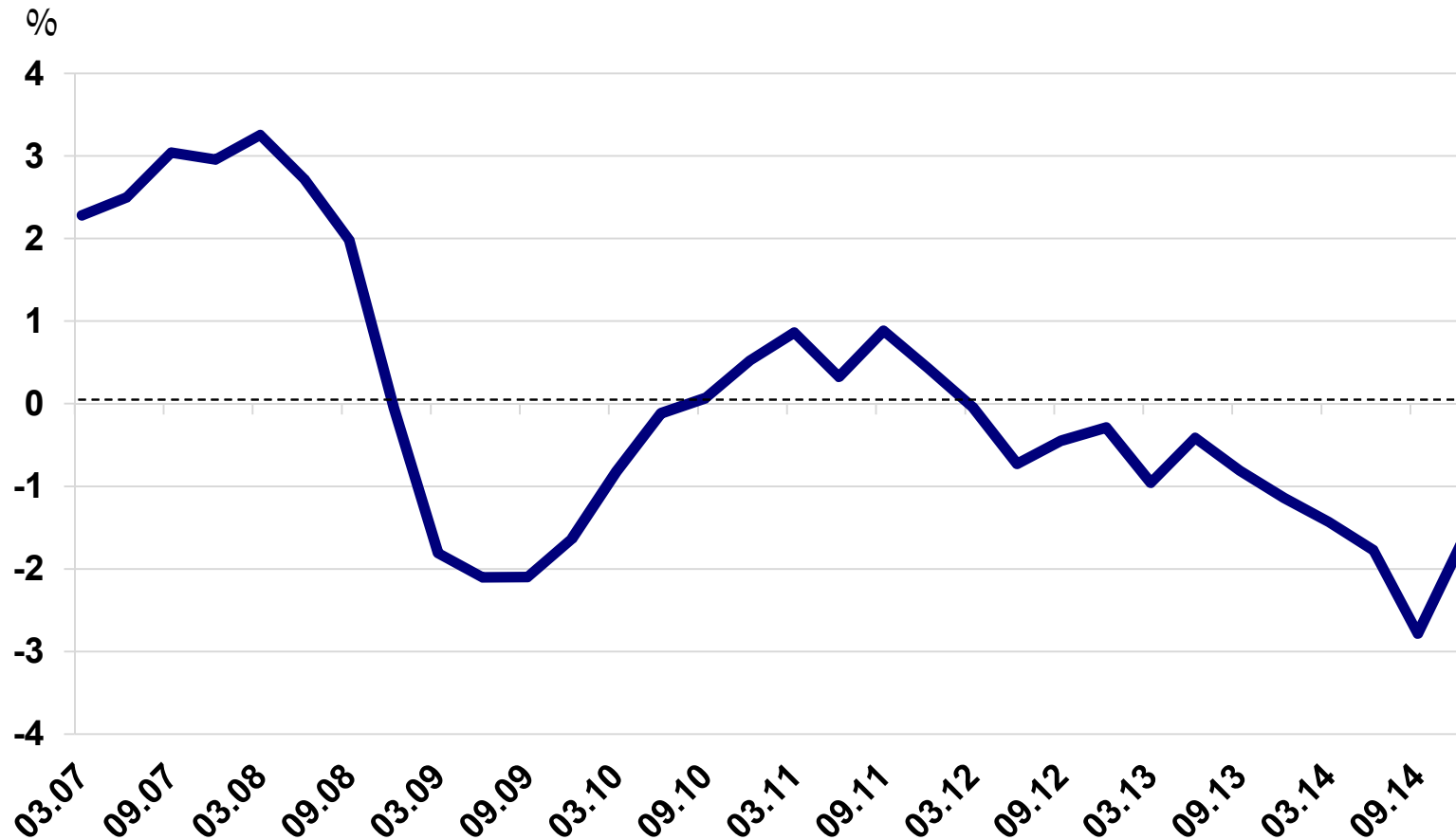
2007-2015, Index 01/2007=100





Development of Business Output Gap*

Quarterly, 2007-2014



*Deviation (in %) of actual GDP from potential GDP. Potential GDP is based on production function approach.



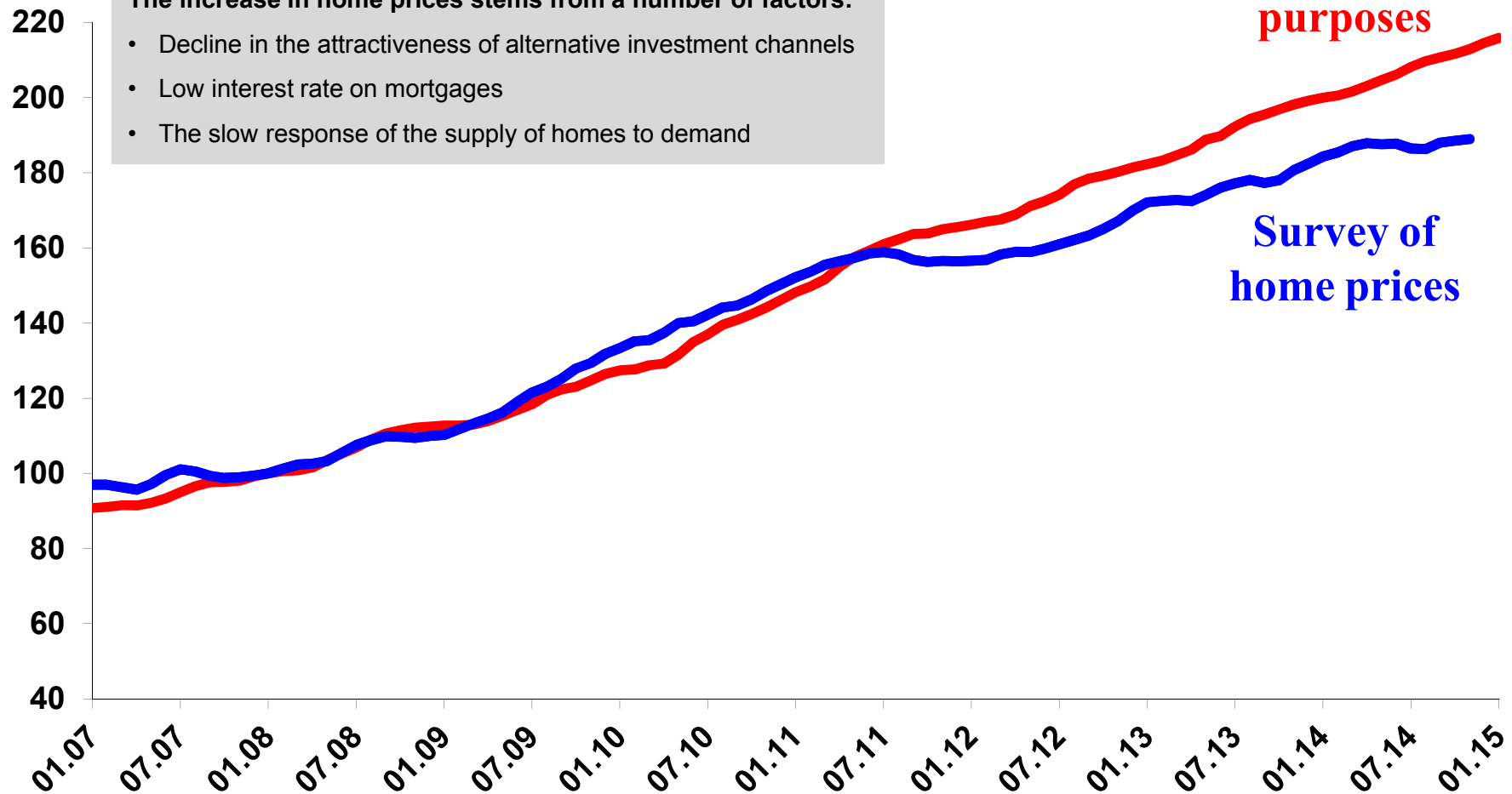
Home Prices and Residential Loans

2007-2014, monthly, 01/2008=100

Index

The increase in home prices stems from a number of factors:

- Decline in the attractiveness of alternative investment channels
- Low interest rate on mortgages
- The slow response of the supply of homes to demand





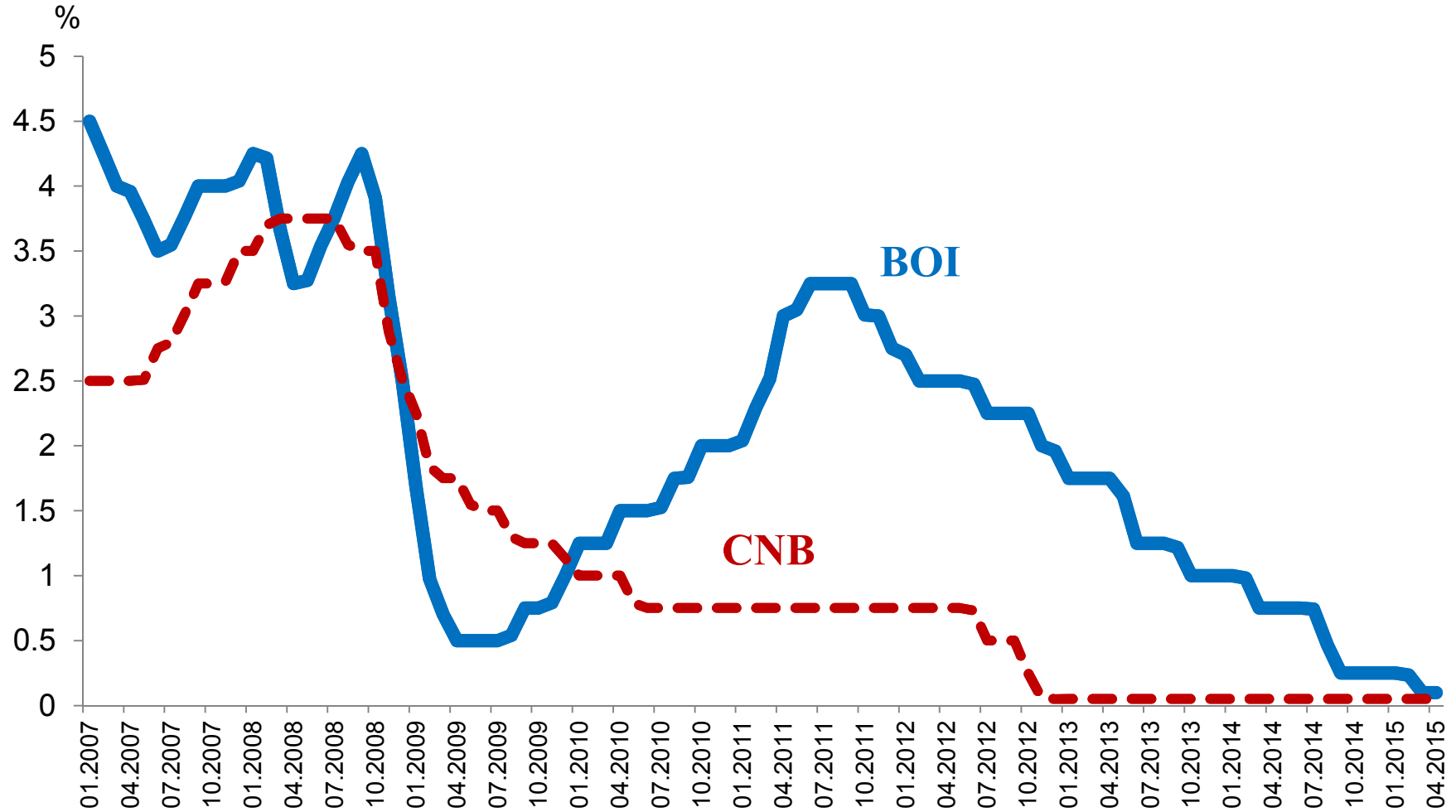
The Policy Challenges In Israel

1. Expansionary global monetary policy causes appreciation and affects exports.
2. Appreciation pressures intensified by natural gas finding.
3. Conventional monetary policy- reducing interest rates which led to: (i) lower cost of credit; (ii) reduced interest rate differentials; and (iii) diminished appreciation pressures on NIS.
4. However, lower interest rates affect asset prices, and in particular housing prices, and volume of mortgages.
5. Therefore: Macroprudential measures to reduce risk and reduce transmission of interest rate policy to asset markets.
6. Therefore: FX intervention from macroprudential considerations to economize on interest rate changes.



Central Bank Interest Rate

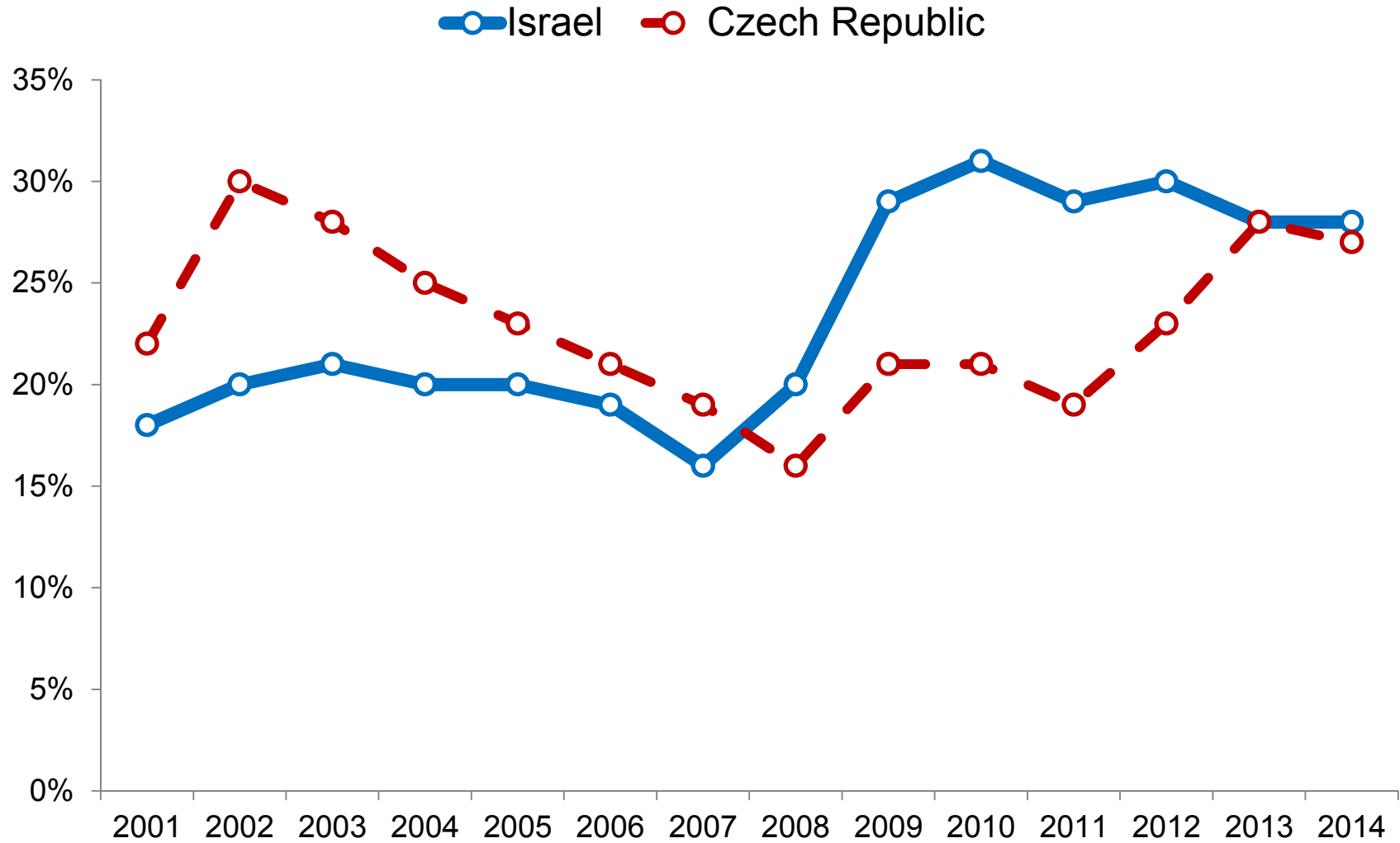
2007-2015





Reserves

% of GDP, 2001-2014





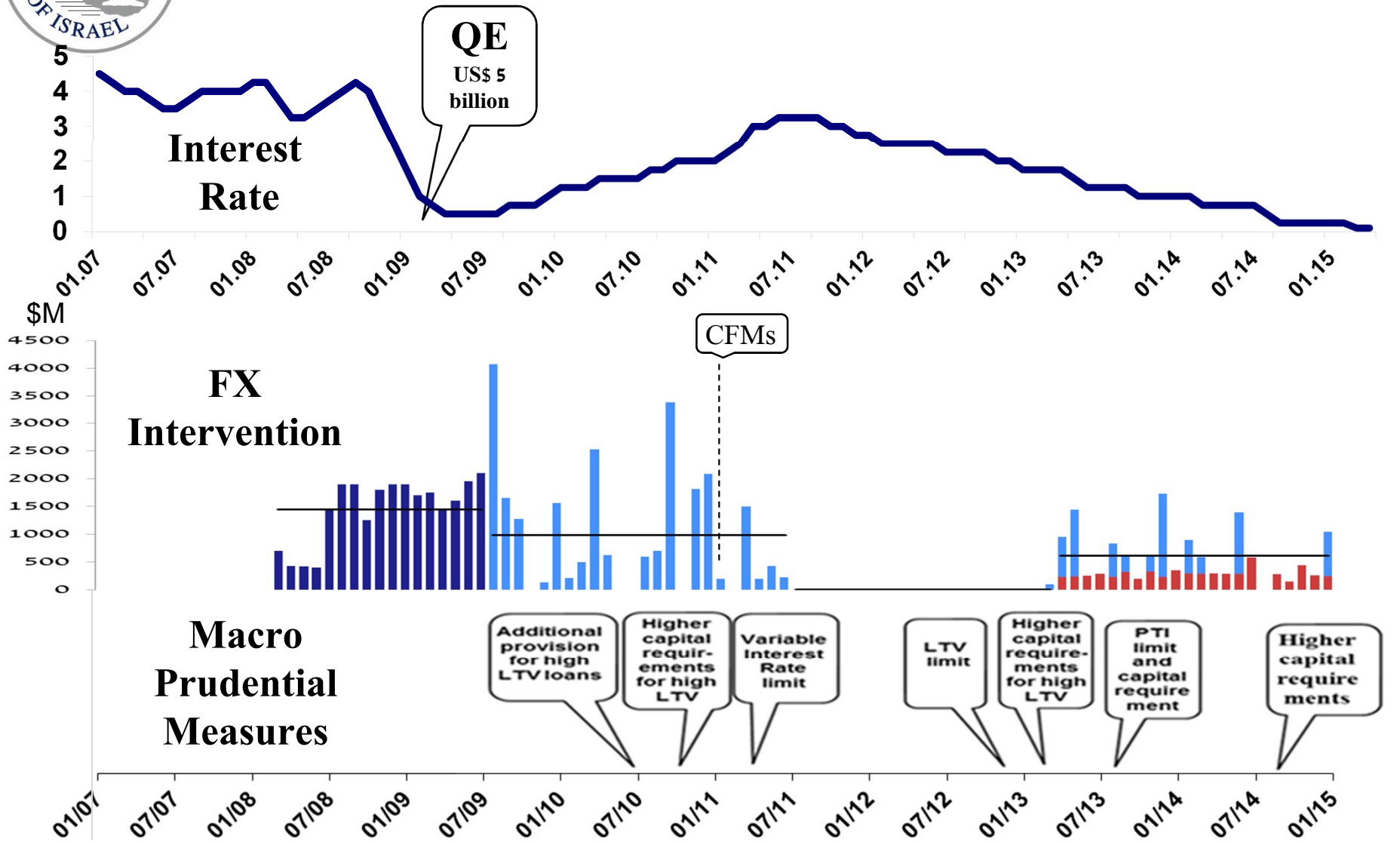
Macroprudential Measures: Main Steps in Mortgage Market

- ❖ **Limiting variable-interest-rate component:**
 - to 1/3 of the total loan, (for variable IR which changes within 5 years) (May 2011);
 - to 2/3 (for all variable IR) (August 2013).
- ❖ **Limiting LTV ratio :** up to 75% for first-home buyers, up to 50% for investors, up to 70% for those upgrading their homes (November 2012).
- ❖ **Limiting PTI ratio:** up to 50% (August 2013).
- ❖ **Limiting maximum term:** 30 years (August 2013).
- ❖ **Higher capital requirements:**
 - for housing loans with LTV exceeding 45% (March 2013);
 - for housing loans with $40\% < PTI < 50$ (August 2013).
- ❖ **Supplemental reserve** for housing loans (March 2013).
- ❖ **Capital buffer:** requiring banks to increase their Common Equity (September 2014).



Bank of Israel Policy Tools

2007-2015





Some Tentative Lessons for CBs in SOEs

- ❑ The burden on CBs has increased dramatically since the GFC
- ❑ Monetary policy in major central banks affect SOEs via the exchange rate & asset prices, thus affecting inflation, growth and financial stability.
- ❑ There is more CBs can do, even when they reach an interest rate of zero.
- ❑ Using MAP measures allows focusing monetary policy on its main objectives: inflation and growth



Some Tentative Lessons for CBs in SOEs (continued)

- ❑ Using a combination of policy instruments allows using each at lower dosage; this “buys time”.
- ❑ Using various MAP measures reduces diminishing return of each, and reduces incentives for circumventing.
- ❑ Each of the unconventional measures has risks that need to be recognized and managed.



Thank you