Coordinating Monetary And Macroprudential Policies In Low Interest Rate Environment

Vladimir TOMSIK

Vicegovernor, Czech National Bank

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Outline

- The CNB and its policy framework
- Monetary and financial cycles in small-open economies
- Two case studies of CNB‘s policy challenges
- Recent issues in macroprudential policy making
- Concluding remarks

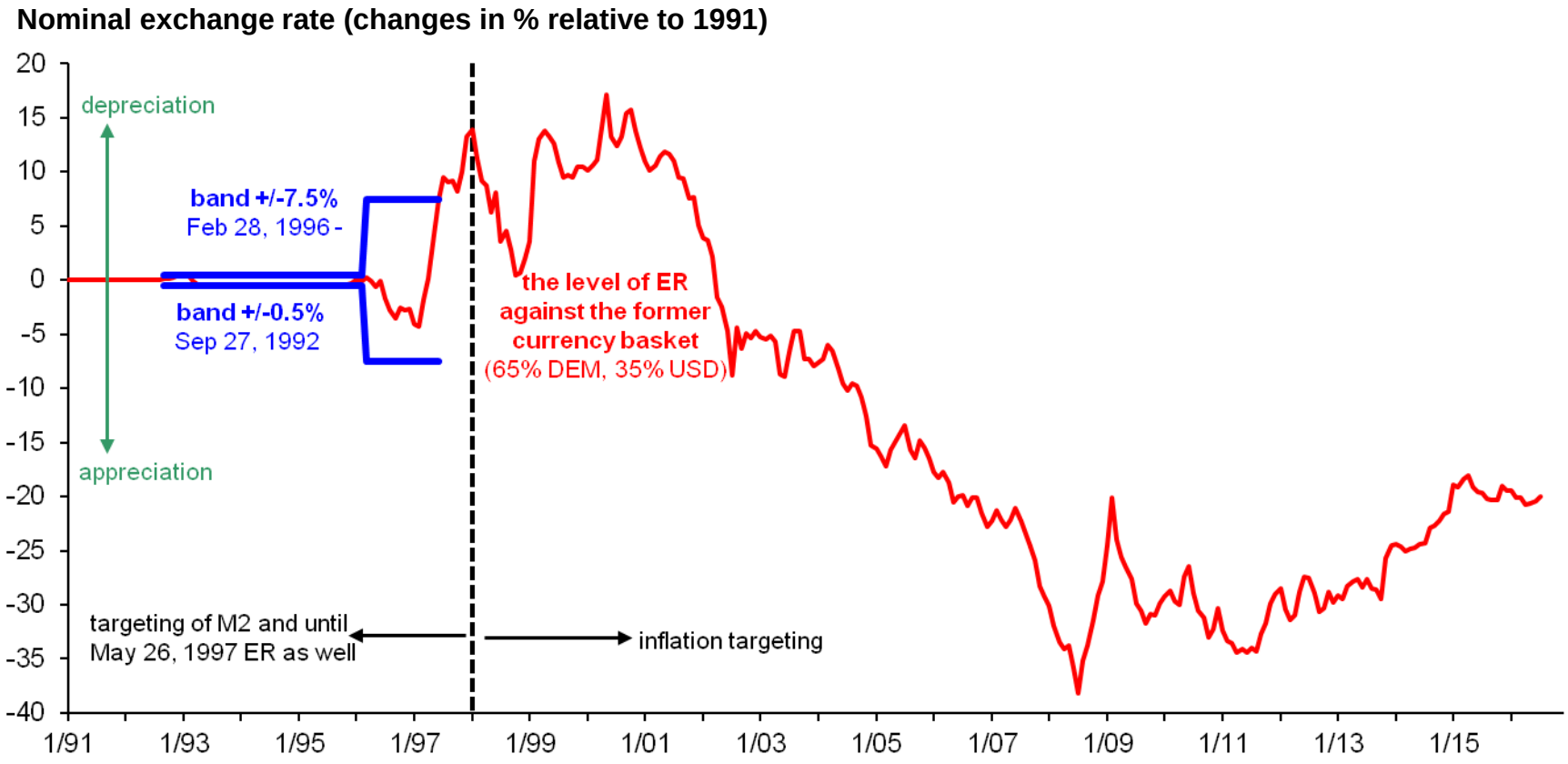
I.
The CNB and its policy framework

Czech National Bank mandates

- Monetary authority and bank supervisor (since its establishment in 1993).
- Integrated supervisor of financial market.
  - Mandate for supervising capital market, insurance companies and pension funds acquired in 2006.
  - New responsibility over non-bank credit provides given in charge in 2016.
- Macroprudential policy authority (since 2013).
- Resolution authority (since 2015).
- Authority responsible for consumer protection in financial market (since 2008).

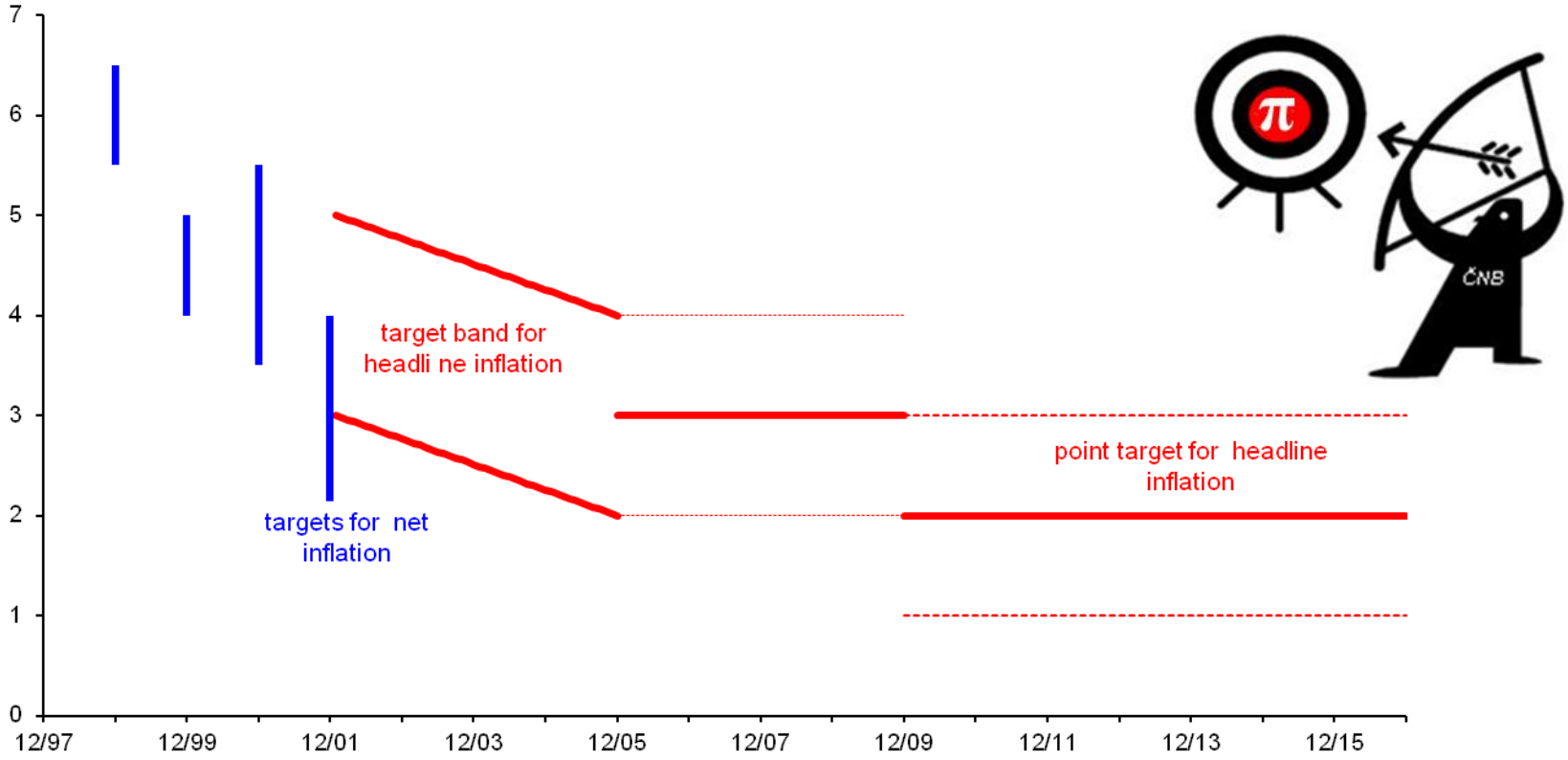
Monetary policy regimes

- Mix of monetary targeting and exchange rate peg between 1991 and May 1997.
- Inflation targeting since 1998 (with managed float enabling significant nominal CZK appreciation over time).



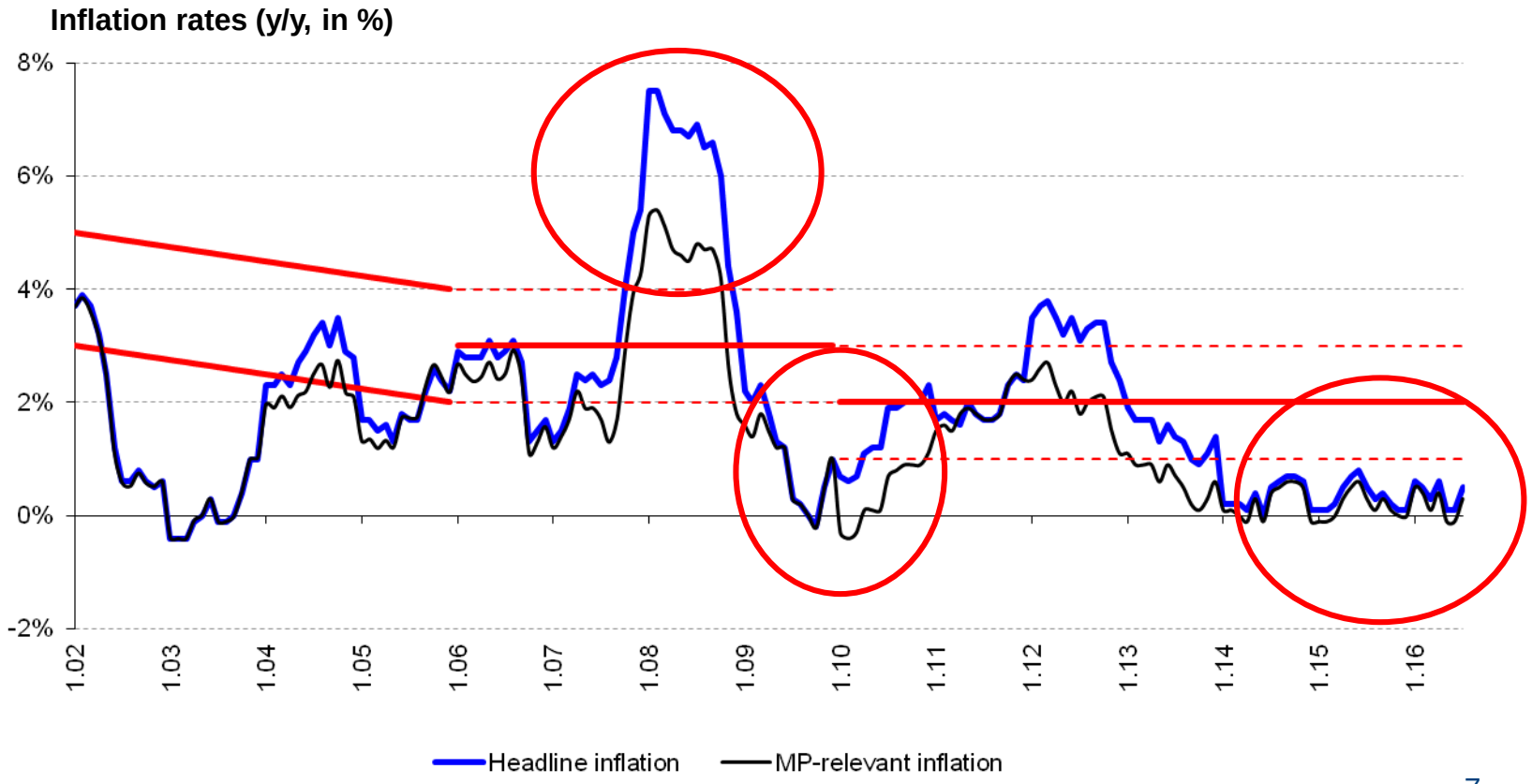
Evolution of inflation targets

- Targets originally set for “net inflation”, since 2002 for headline inflation.
- From January 2006 the target set at 3% with a tolerance band of ±1%, since January 2010 the point target of 2% established.



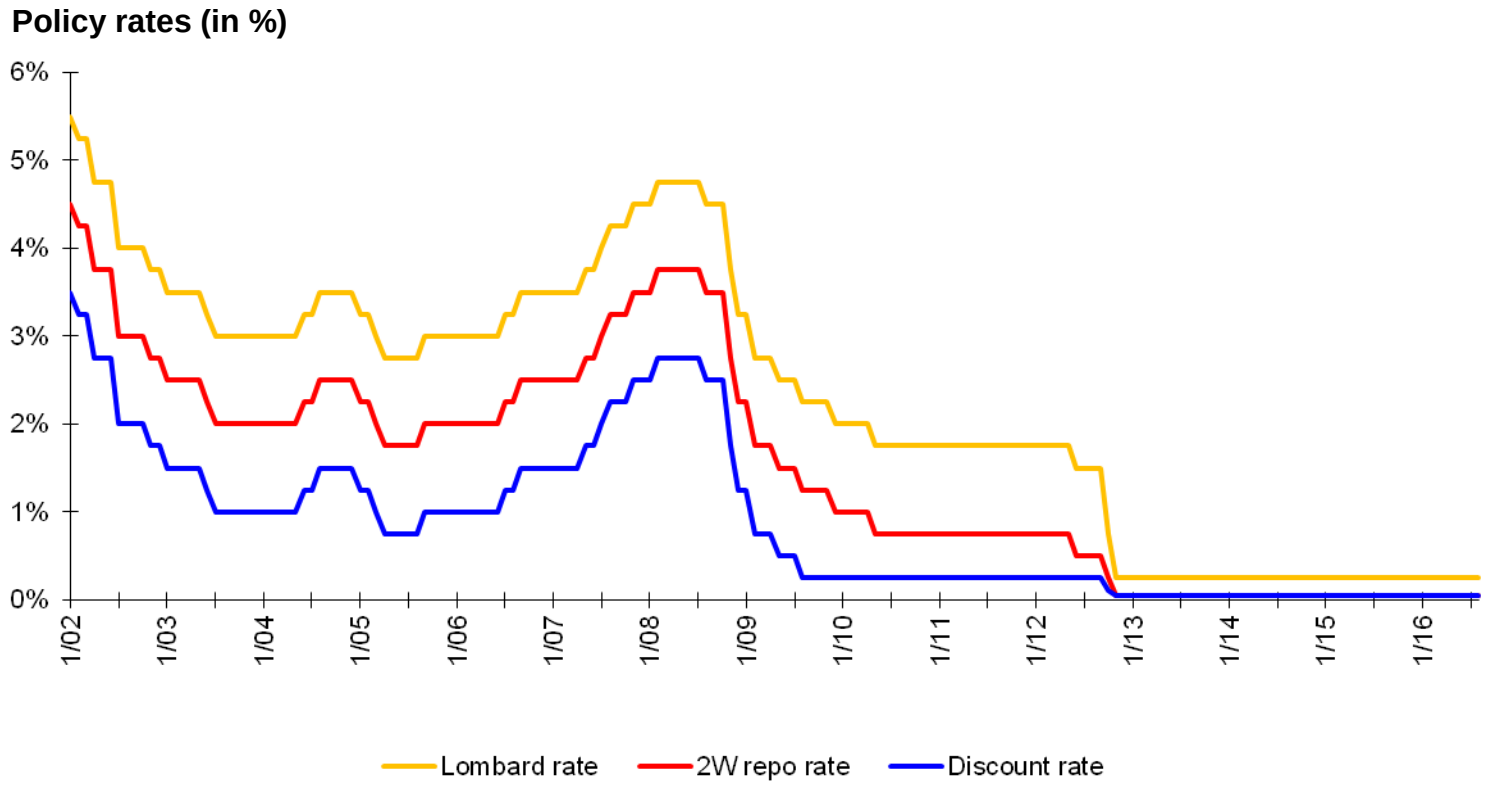
Inflation – actual vs. targets

- Inflation targets repeatedly undershot (often owing to CZK appreciation), only one period of overshooting.
- MP-relevant inflation falling towards zero following global financial crisis.



Main policy interest rates

- Main policy rate (2W repo) close to levels of key currencies (USD, EUR) since 2002.
- In November 2012, the CNB hit the zero lower bound (ZLB), since then, the policy rates set at "technically" zero level.



II.
Monetary and Financial Cycles in Small-Open Economies: The Case for Policy Coordination

Perils of policy-making in small open economies

- Monetary policy in a small open economy faces extra challenges relative to large advanced economies:
  - less autonomy (strong impact of external environment),
  - significant impact of exchange rate changes on monetary conditions,
  - impact of global financial cycle on lending rates and credit dynamics.
- Such challenges have strong implication for policy making:
  - need for more broadly defined flexibility,
  - necessity to coordinate monetary policy closely with (macro)prudential policies.
- CNB experienced two rather different periods from policy coordination perspective in the last decade:
  - inflationary pressures and credit boom (2006-2008).
  - deflationary pressures and credit growth recovery (2013-onwards).

Transmission mechanism (1)

- Monetary authority´s dream:

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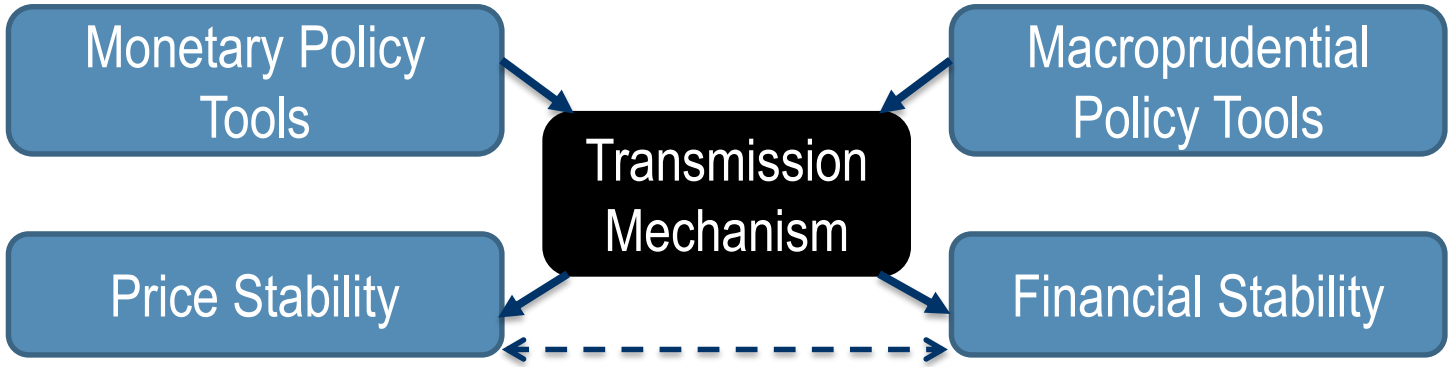
- The reality:



- The black box is always complex – various stages and channels.

Transmission mechanism (3)

- The models central banks currently use for monetary policy purpose work primarily with the interest rate and exchange rate channels.
- Changes to monetary policy tools also act via the credit demand and supply channels, the asset price channel and the risk-taking channel.
- Bank lending channel (also bank capital and bank regulation channels):
  - acts via the bank credit supply,
  - CB affects banks' access to funding sources and their price; clients' debt servicing cost and creditworthiness.
- Balance sheet channel:
  - acts via the credit demand,
  - affects the ability of households and firms to obtain credit through changes in collateral valuation.

- Asset price channel:
  - households (the wealth effect): $\downarrow i \rightarrow \uparrow P_A \rightarrow \uparrow W \rightarrow \uparrow C$
  - corporations (the "Tobin's q" effect) : $\downarrow i \rightarrow \uparrow P_E \rightarrow \downarrow$ Costs $\rightarrow \uparrow I$
- Risk-taking channel:
  - low rates (in the long-run) $\rightarrow$ incentive to expand the balance sheets of banks and invest in more risky assets (to attain the original target rates of return (Diamond and Rajan, 2012)),
  - $\rightarrow$ higher lending and softer lending conditions (Borio and Zhu, 2008),
  - $\rightarrow$ higher proportion of market-based funding with compressed risk premia and the amount of maturity transformation (Adrian and Liang, 2014).

- Macroprudential and monetary policy tools are not independent.
  - They affect both credit and monetary conditions via their effect on lending standards and credit growth.
  - Anything that affects the availability and price of credit also affects credit growth and thus also monetary policy transmission.
- Central banks therefore have to carry out analyses of policies interactions and strive for their coordination.
  - In some situations it may be desirable for them to act in the same direction.
  - In other situations the two can come into conflict because of a need for them to work in opposite directions.
- The right policy mix depends on the intersection of two different cycles – the business cycle and the financial cycle.
  - Different properties of both cycles makes coordination of both policies challenging (Frait, Malovaná and Tomšík, 2015).

Mutual support or conflict?

- In a perfect world, both policies are complementary and mutually reinforcing, in reality, one policy affects the playing field of the other and conflicts may arise.
- Working in the same direction (pursuing MP objective supports MaP goal):
  - financial crisis and recession → lower interest rates → support of credit and demand → debt service stabilization → asset price stabilization → economy back to normal.
- Opposite direction (pursuing MP objective harms MaP goal):
  - inflation below target → low policy interest rates → banks and their clients view risks as low → easing of lending standards → fast credit growth → asset price growth → rise in demand for credit to purchase assets → risk of excess credit and asset price boom.
  - elevated inflation pressures → high interest rates → client opt for „better priced“ loans in foreign currencies → FX currency appreciation → high debt service of unhedged borrowers → defaults and banking sector stress.

- The strength of potential conflict depends on:
  - position in the financial and business cycle (Borio, 2014b),
  - openness of the economy,
  - sort of shocks the economy is currently exposed to.
- Suitable combinations of responses of the two policies below:
  - in truly good or bad times the choice is obvious.
  - sometimes it can be very hard to decide on the right mix in reality.

		Inflationary pressures		Disinflationary pressures	
		Strong demand	Weak demand	Strong demand	Weak demand
Rapid credit growth and rising asset prices	Monetary pol.	Tightening > IT	Tightening	Easing < IT	Easing
	Macroprud. pol.	Tightening	Tightening	Tightening	Tightening
Decline in credit and falling asset prices	Monetary pol.	Tightening	Tightening < IT	Easing	Easing > IT
	Macroprud. pol.	Easing	Easing	Easing	Easing

- Example
  - During a period of financial boom, a reduction of interest rates to combat below-target inflation could further increase credit growth and demand for risky assets.
  - From the conceptual perspective, the right response is to tighten macroprudential policy
    - ..pre-emptively tighten the monetary conditions too?

		Inflationary pressures		Disinflationary pressures	
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- Proper coordination of the two policies might be very difficult due to different probabilities of failure to fulfill the two main objectives:
  - risk of not meeting inflation target in the short term implied by the forecast will be viewed as most likely development,
  - materialization of systemic risk that builds up will be seen as potential in the medium term only.
- Preference is unlikely to be given to the financial stability objective, as this would require a consensus that the risk of a future financial crisis has exceeded a critical level.
  - Such consensus was reached neither before the recent financial crisis, nor in economies facing credit/property boom today.
- Macroprudential policies overburdened these days?
  - Expected to constrain credit growth, contain asset price accelerations, keep the banks resilient...

III.
Two Case Studies of CNB‘s Policy Challenges

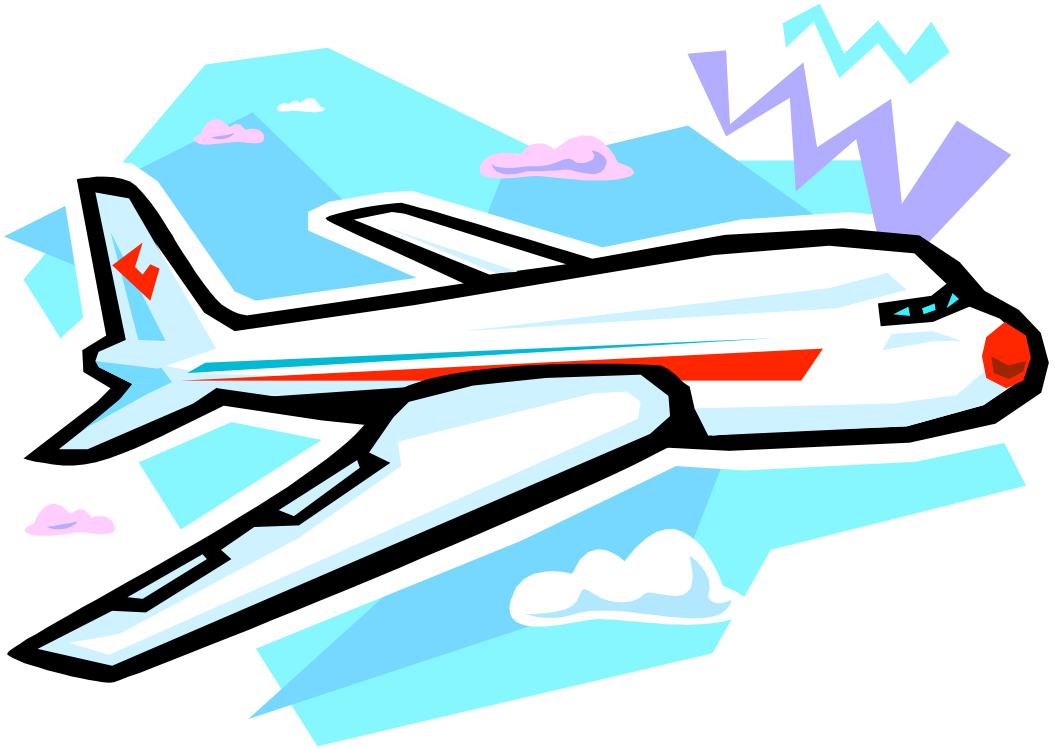
Policies in the pre-GFC period (I)

Foreign demand

Fiscal policy

Confidence

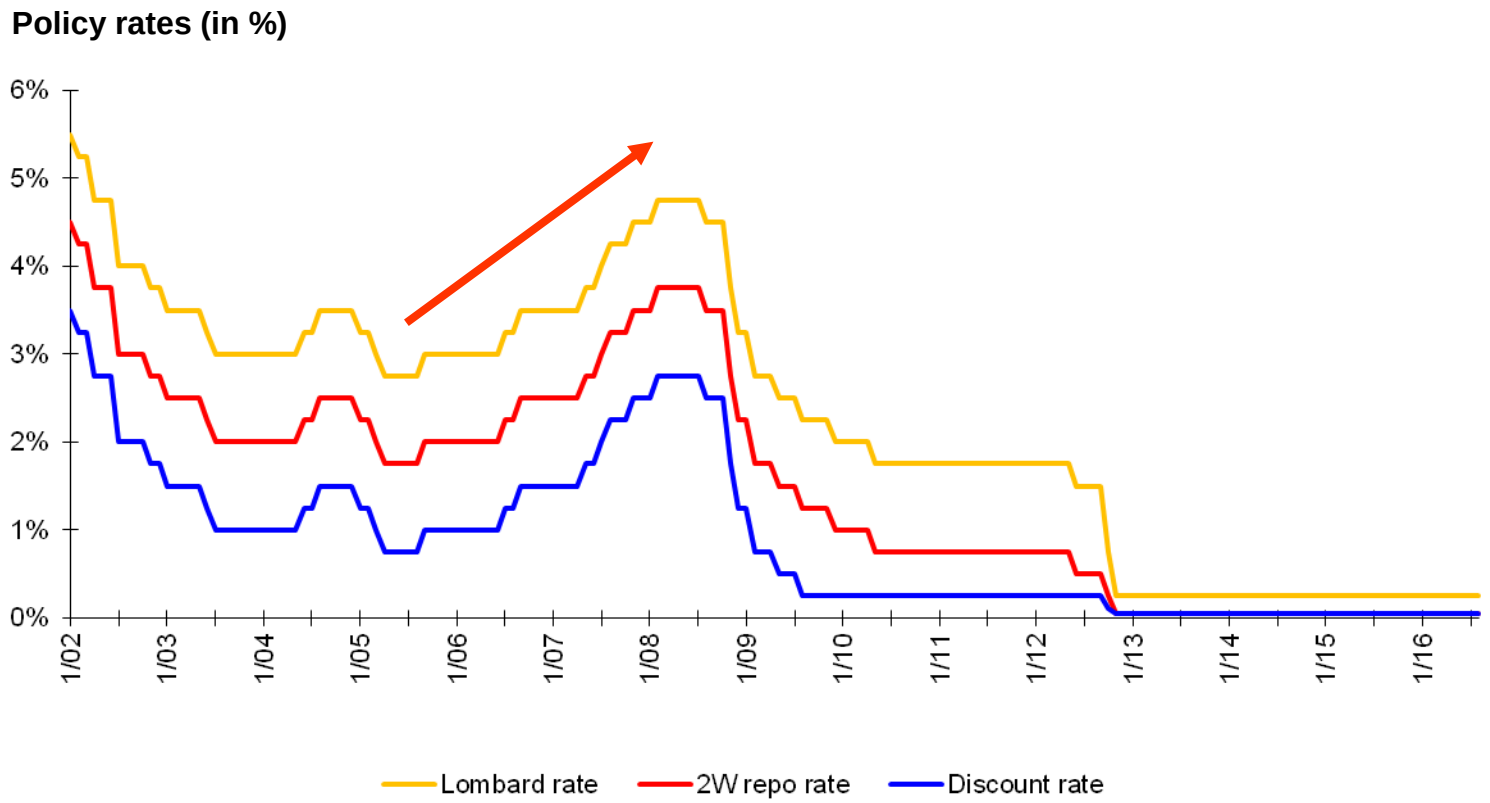
Recovery in bank lending



- In 2004-2008, the economy enjoyed tailwinds contributing to renewed supply of and demand for credit.
- Prudential stance and lending conditions were rather tough after previous banking crisis, but loosening gradually.

Policies in the pre-GFC period (II)

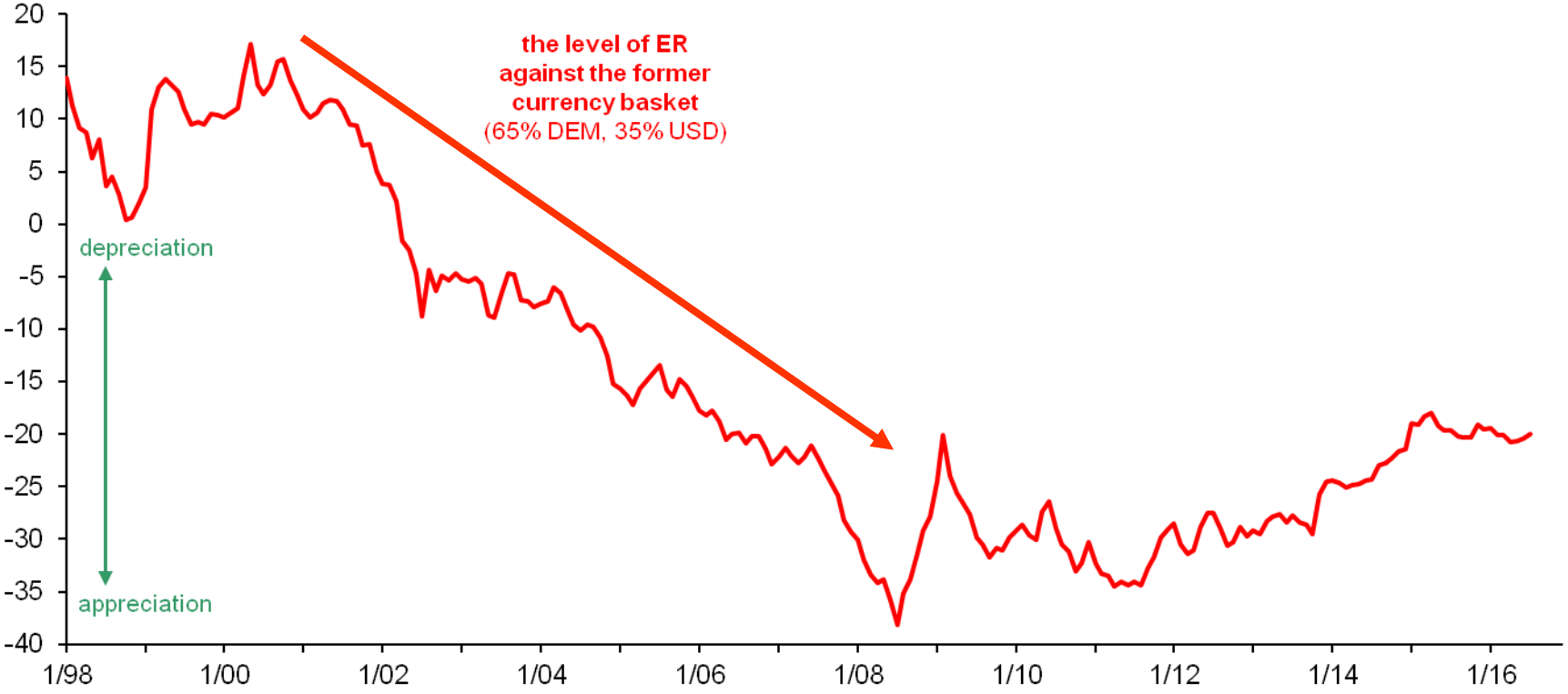
- Main policy rate (2W repo) was gradually increased, although staying at the lowest level in the region.



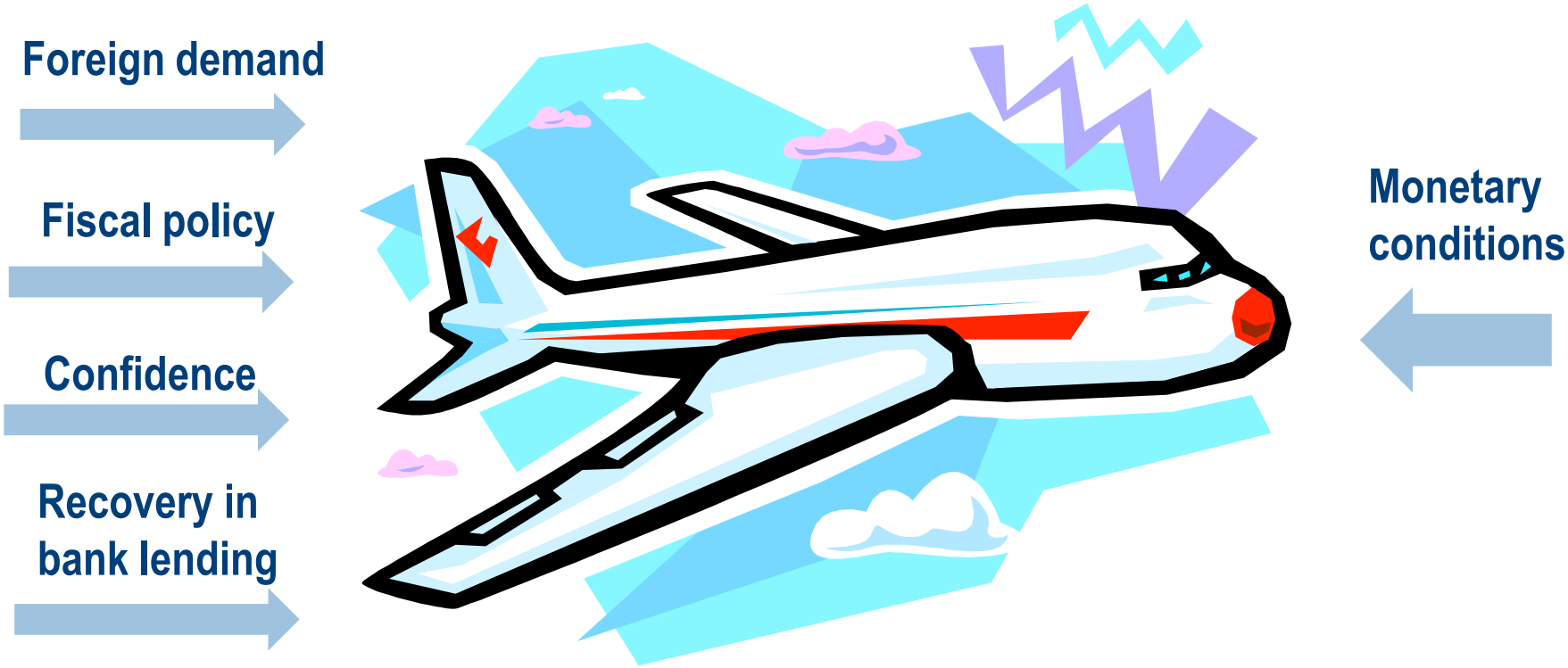
Policies in the pre-GFC period (III)

- Significant CZK appreciation took monetary conditions much less accommodative.
  - CZK was appreciating steadily between 2001 and summer 2008.

Nominal exchange rate (changes in % relative to 1991)

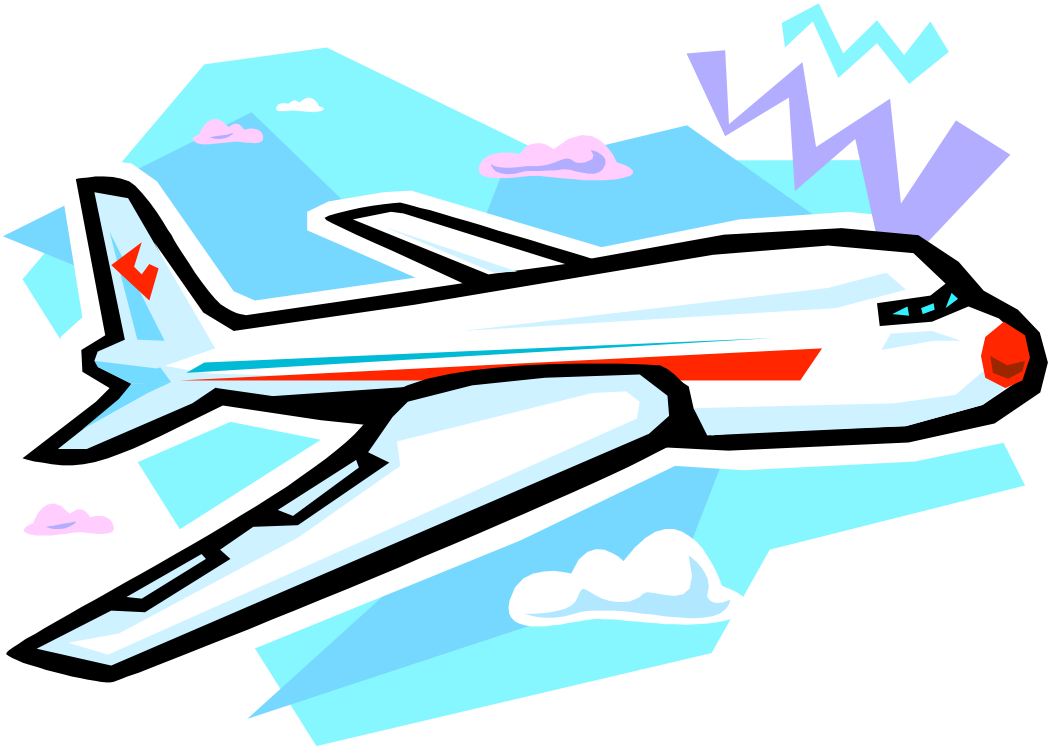


Policies in the pre-GFC period (IV)



- Measured nominal appreciation of the currency represented a textbook example of direct and effective mechanism for achieving the desired counter-cyclical monetary tightening in a small open economy.
- Such tightening contributed to the capacity of the Czech banking sector to withstand the pressures from subsequent global crisis.

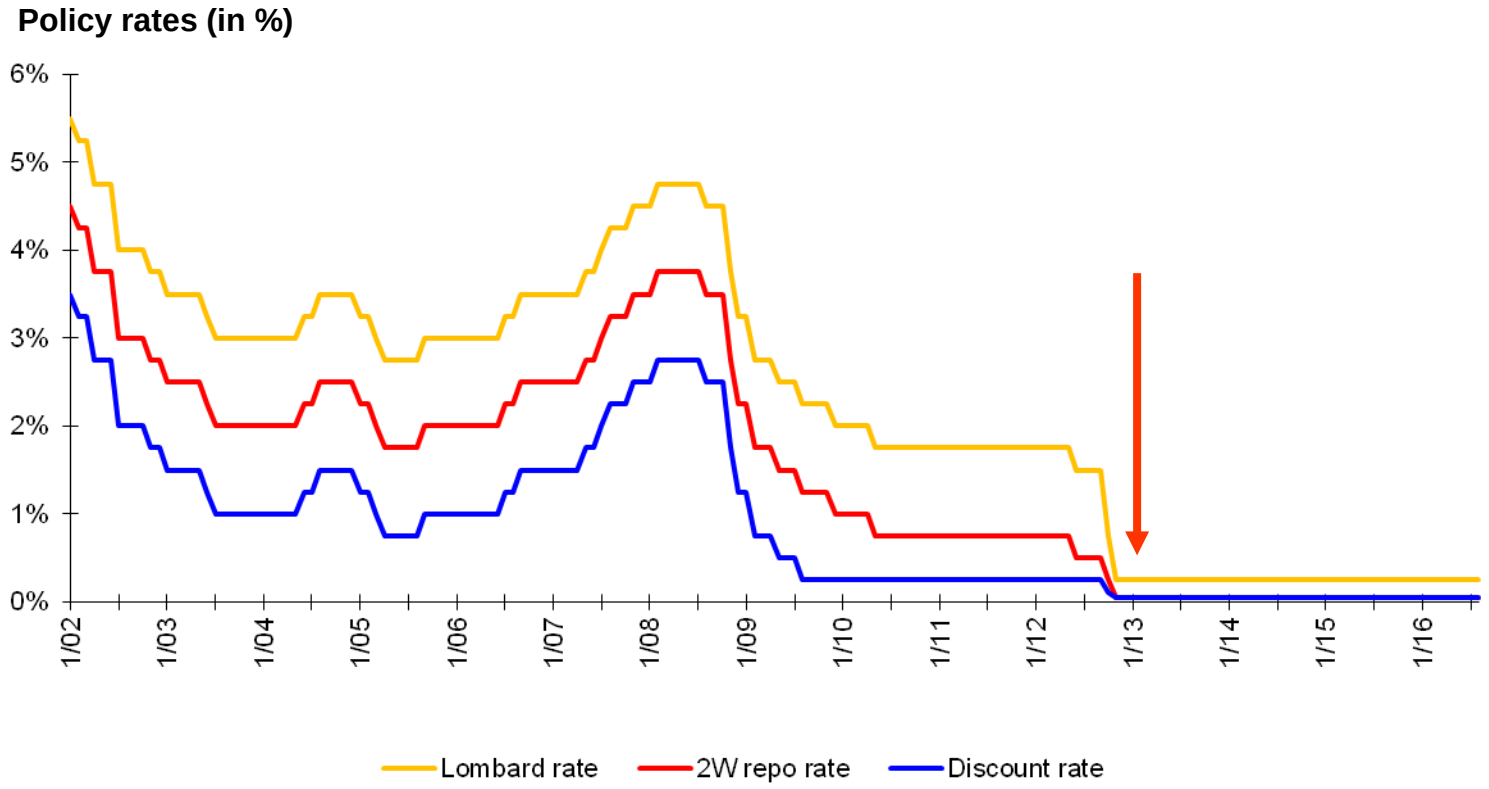
Coping with headwinds in the post-GFC period (I)



- In 2012-2013, the economy faced significant headwinds from foreign demand (EA sovereign crisis), domestic fiscal consolidation, as well as from very weak consumer and business confidence.
- Monetary conditions were loose: zero interest rates, forward guidance and verbal FX interventions, but not enough to offset the headwinds.

Coping with headwinds in the post-GFC period (II)

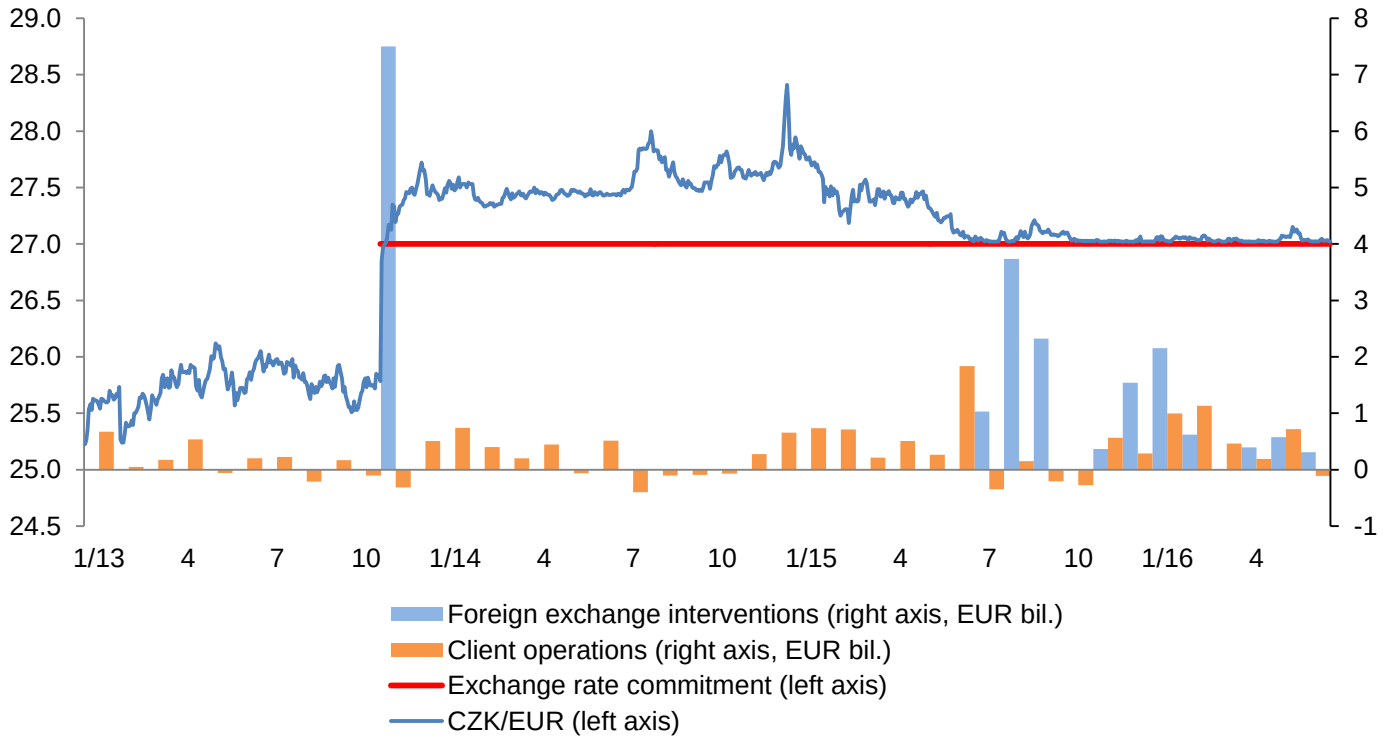
- In November 2012, the CNB hit the zero lower bound (ZLB).
- Since then, the policy rates have been set at "technically" zero level: 0.05 % for the 2W repo rate and O/N deposit (i.e. discount) rate, and 0.25% for the O/N lending (i.e. Lombard) rate.



- CNB's November 2013 decision:
  - The Board decided to start using the exchange rate as an additional instrument for easing the monetary conditions, stating that: "The CNB will intervene on the FX market to weaken the koruna so that the exchange rate is close to CZK 27/EUR."
  - The exchange rate level was chosen to avoid deflation or long-term undershooting of the inflation target and to speed up the return to the situation in which the CNB will be able to use its standard instrument, i.e. interest rates.
  - The exchange rate commitment is one-sided:
    - The CNB stands ready to prevent excessive appreciation of the koruna exchange rate below CZK 27/EUR.
    - On the weaker side of the CZK 27/EUR level, the CNB is allowing the exchange rate to move according to supply and demand on the FX market.

Coping with headwinds in the post-GFC period (IV)

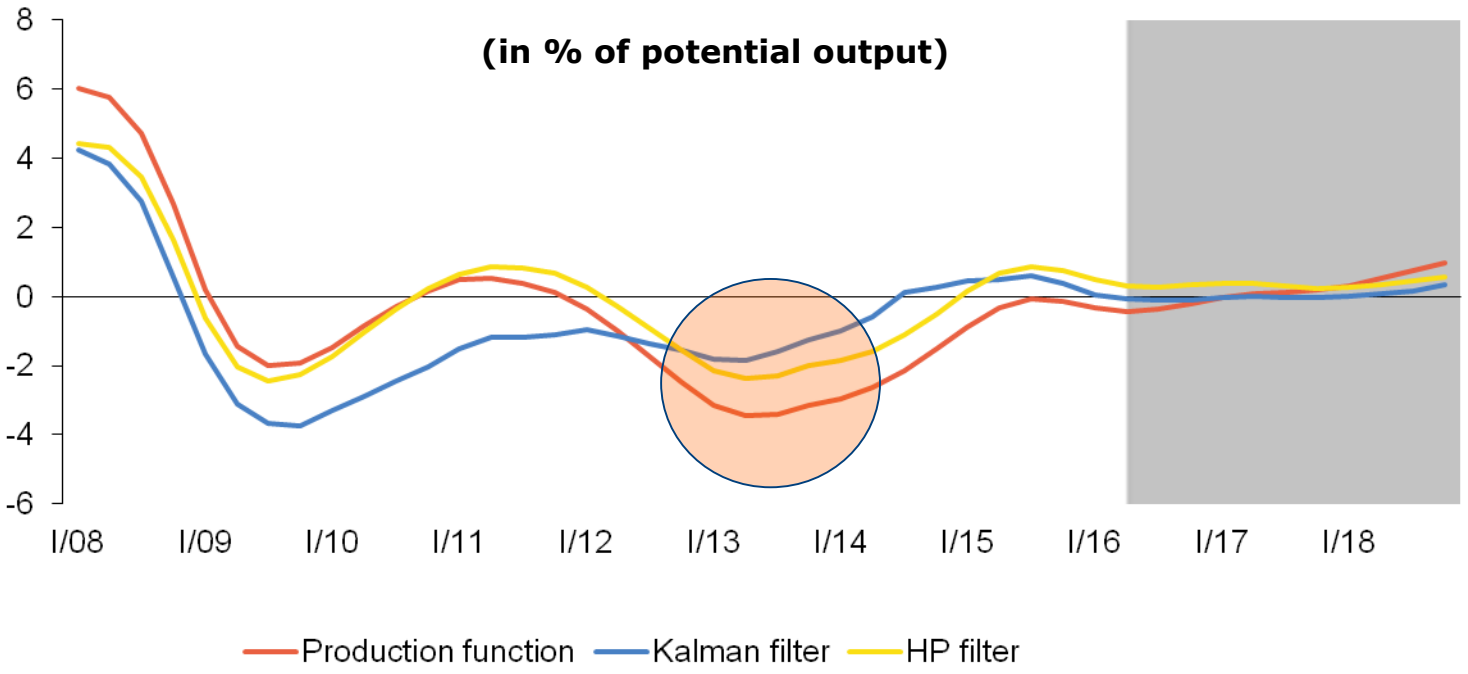
- The exchange rate weakened immediately and has moved with relatively low volatility above the level of CNB‘s commitment.
- Actual interventions were quite massive, but took place only for a few days after the policy decision of the CNB.
- Since July 2015, the exchange rate has stabilized close to the ”floor“. The volume of CNB‘s interventions varies over time.



Coping with headwinds in the post-GFC period (V)

- The output gap was estimated at -2 to -4%, i.e. according to some methods even deeper than in previous post-Lehman recession.
- The domestic economy was thus having a notable downward impact on prices associated with weak aggregate demand.

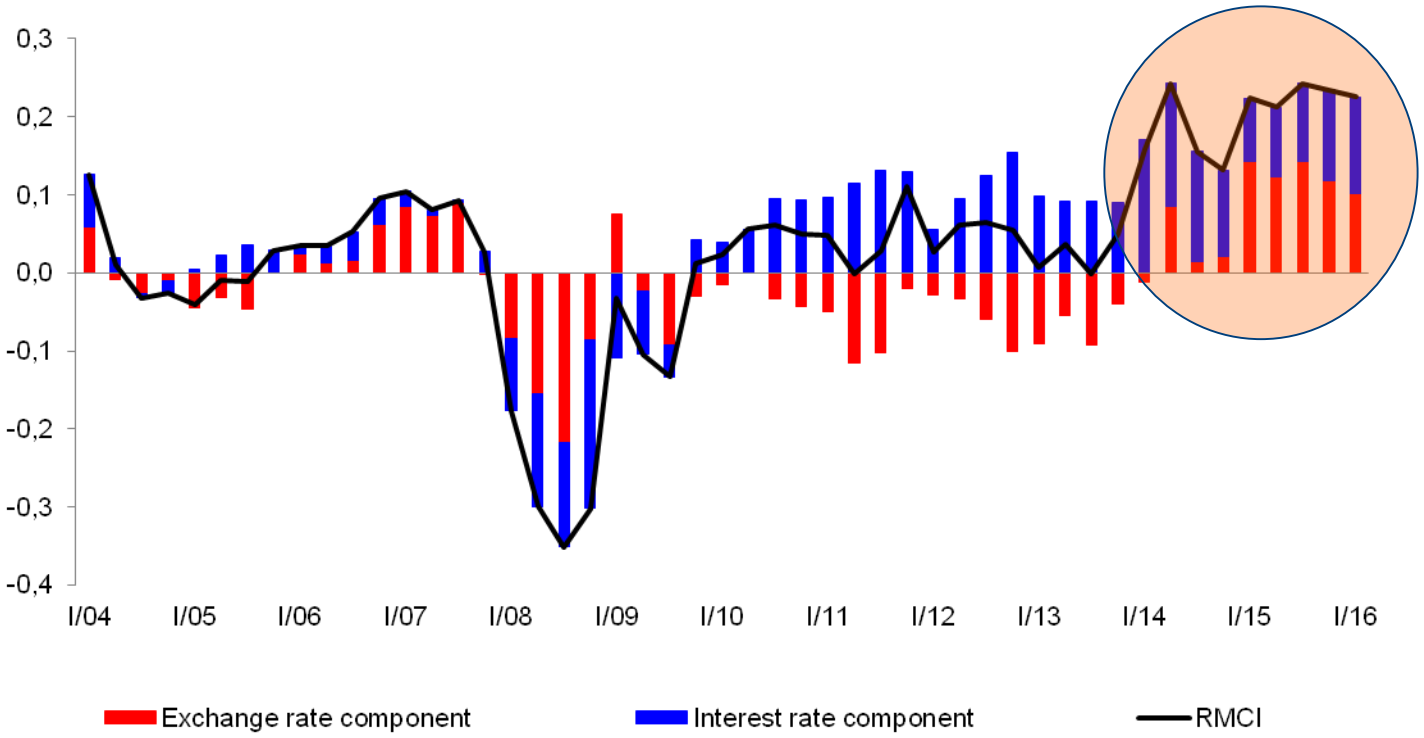
Output gap



Coping with headwinds in the post-GFC period (VI)

- The CNB's policy measure has significantly eased the overall monetary conditions, both in their interest rate (via higher inflation expectations) and exchange rate components.

Index of overall monetary conditions

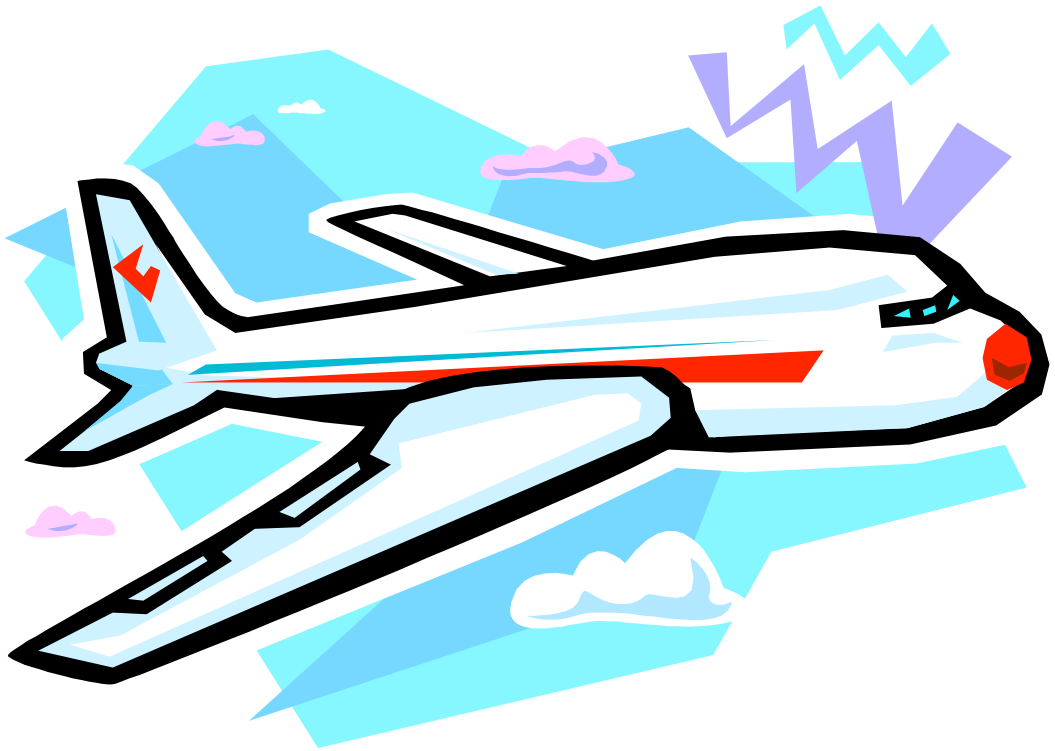


Coping with headwinds in the post-GFC period (VII)

Foreign demand

Monetary conditions

Confidence



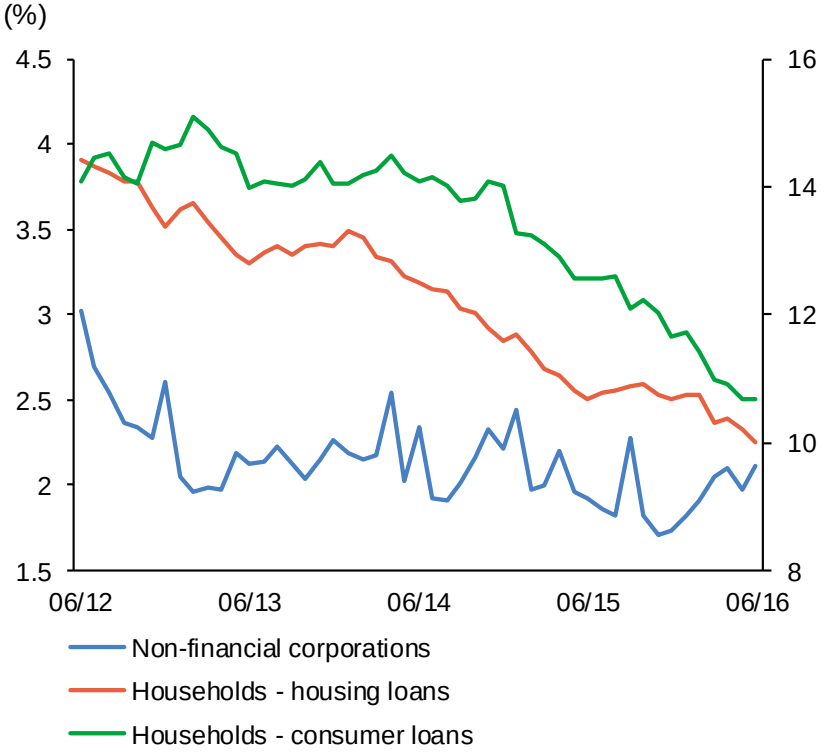
- Currently, fiscal policy has become broadly neutral, foreign demand has recovered and confidence has improved.
- Monetary conditions eased further via the depreciated exchange rate and the related decline in ex ante real interest rates.

IV.
Recent Issues in Making Macroprudential Policy

Bank credit growth

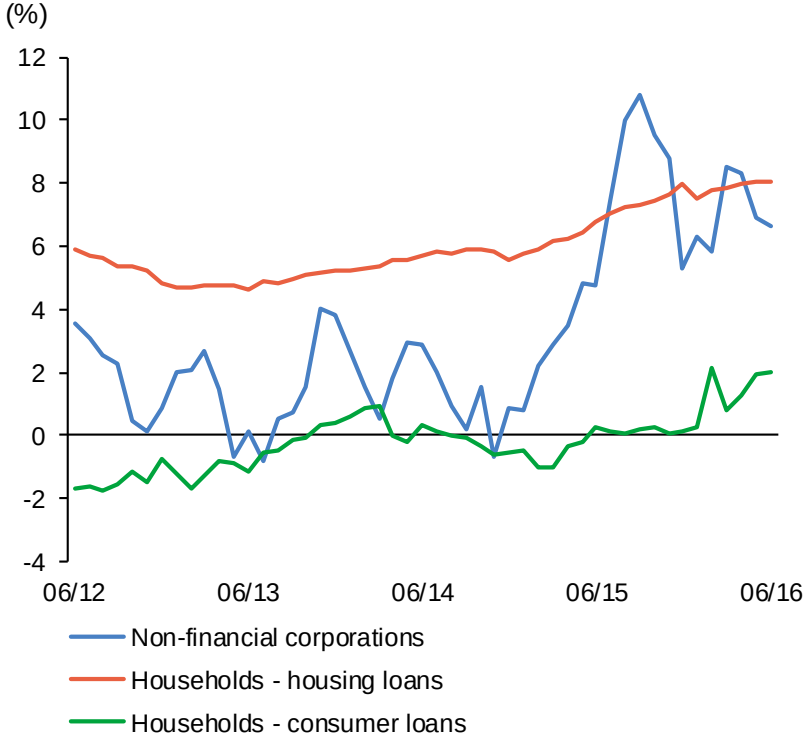
- Credit growth has responded to monetary impulse.
  - Decline in lending rates supports demand for credit.
  - Both corporate and mortgage loans going up considerably.
  - More lenient lending conditions observed.

Interest rates on new koruna loans to private non-financial sector



Source: CNB

Year-on-year growth in bank loans to private non-financial sector

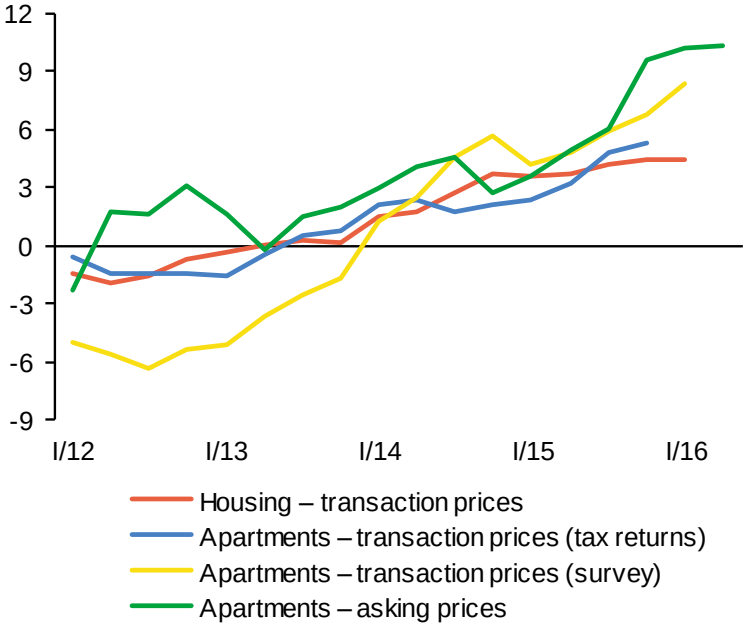


Source: CNB

Real estate prices in the Czech Republic

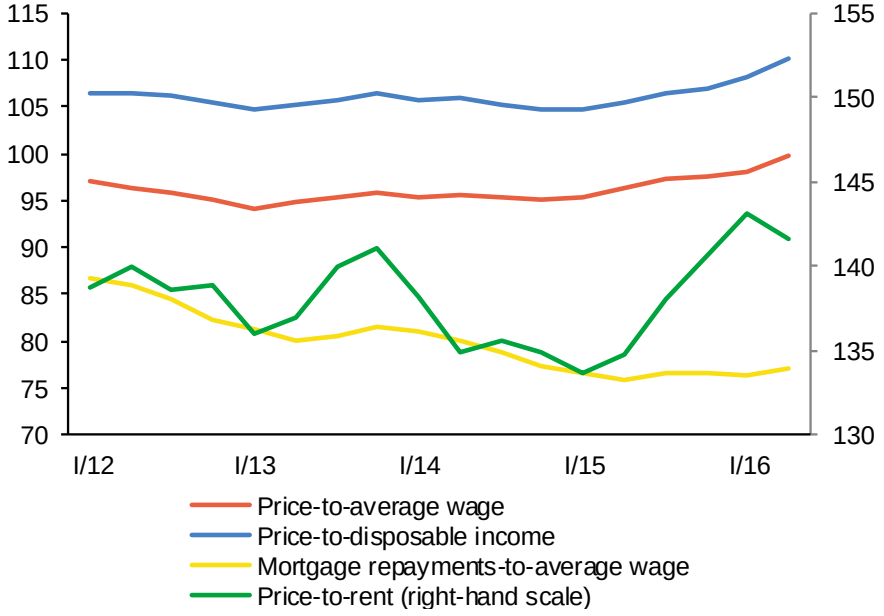
- The apartment prices in have been undergoing also considerable recovery.
- The indicators of affordability and the perceived profitability of buying an apartment have been deteriorating.

Transaction and asking prices of housing
(annual percentage changes)



Source: CNB, CZSO

Apartment price sustainability indicators
(average for 2000–2007 = 100[a])



[a] For the mortgage repayments-to-average wage ratio 2004–2007 = 100 due to limited availability of data on interest rates on new loans for house purchase.

Source: CZSO, CNB, Institute for Regional Information

Macroprudential policy response to regained momentum

- Macroprudential policy has to be pre-emptively counter-cyclical:
  - Targeting emerging risks in particular areas of concern and ensuring build-up of buffers.
- Guidance on the management of risks associated with the provision of retail loans secured by residential property.
  - Current **upper LTV limit** on individual loans of 100% will be reduced to 95% on 1 October 2016 and to 90% on 1 April 2017.
  - Current aggregate limit of 10% of new loans with an LTV of 90%–100% will change to a limit of 10% of new loans with an LTV of 85%–95% on 1 October 2016.
  - The aggregate limit will be set at 15% of new loans with an LTV of 80%–90% on 1 April 2017.
- **Systemic risk buffer** (SRB) applied to domestic systemically important banks set from 2017 onwards.
  - 5 major banks subject to SRB rate ranging from 1 to 3%.

CCyB buffer rate as set by the CNB

- The CNB set **CCyB** rate for local exposures at above-zero level for the first time at its December 2015 meeting on financial stability issues.
  - 0.5% rate will be applicable from January 2017.
  - 3rd European country doing so (after Norway and Sweden).
  - Bank credit growth essential for the decision – assessed stronger but not excessive (therefore only 0.5% rate set).
- Communicated grounds for decision:
  - Economy has shifted within the financial cycle to a phase of stronger credit recovery accompanied by an easing of bank lending standards.
  - Accelerated speed in which private sector accumulates debt leading to higher vulnerability to sudden economic shocks.
  - Increasing risk of a spiral between property prices and loans used to finance property purchases (with combination of an economic recovery and very low lending interest rates being a driver).

Some concluding remarks

- Policy making in a small open economy has to cope with extra challenges relative to large advanced economies.
- Being forward-looking and responsive to prospective risks is a key to success.
  - Hope is not the strategy.
- Should the action be controversial, unpopular or have high probability of internal/external resistance:
  - Start to signal the intention ahead (at best in good times).
  - Talk about it with all stakeholders and public.
  - Set the measures relatively soft at the start if necessary (you can make it tougher once people get used to it).

Thank you for your attention

www.cnb.cz

Vladimir TOMSIK

Vice-Governor

Czech National Bank

vladimir.tomsik@cnb.cz