The single monetary policy: 20 years of experience

ECB Forum on Central Banking
Sintra, 18 June 2019
1. The price stability mandate and monetary policy in practice

2. Monetary policy effectiveness in unconventional times

3. Macroeconomic stabilisation beyond monetary policy
1. Price stability mandate

Price stability as the primary objective of monetary policy

- Article 127 of the Treaty: “The primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union...”

- Governing Council’s definition of price stability: “year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term”. (October 1998)

- End of dot com bubble already elicited discussion about lower bound and asymmetry of reaction function. This led to a clarification of the strategy: “below, but close to 2% over the medium term”. (May 2003)

Euro area inflation and inflation expectations (percentages per annum)

Sources: Bloomberg, Eurostat.
1. Price stability mandate

The long view

- Consumer prices evolved broadly in line with a 2% trend until the sovereign debt crisis.
- Core consumer prices evolved along a lower trend already well before the crisis.
- Downward pressures on both headline and core inflation built up in the aftermath of the sovereign debt crisis.

Euro area HICP
(Index, January 1999=100)

Sources: Eurostat, ECB calculations.
Notes: Core HICP is HICP excluding food and energy. Latest observation: May 2019.
1. Establishing credibility

The pre-crisis years

- The euro was a response to persistent monetary disorders that undermined the Single Market

- Need for newly established ECB to acquire credibility in the context of repeated oil price increases in the run-up to the GFC

- The quantitative definition of price stability has contributed to strong anchoring of inflation expectations

- No signs of second round effects from energy inflation

**Euro area**
*(year-on-year % change)*

Sources: Eurostat, ECB calculations.
Notes: Core inflation is HICP inflation excluding food and energy. Latest observation: May 2019.
1. The evolving role of the monetary pillar

- In the run-up to the GFC, strong monetary and credit dynamics signalled “upside risks to price stability”.

- Economic and monetary pillars were originally conceived as two complementary paradigms with different time horizons to be reconciled by cross-checking their indications for the risks to price stability.

- The 2003 clarification of the strategy gave more prominence to the economic pillar, and deemphasised the reference value of money.

- Lack of macroprudential framework.

- In the crisis years the monetary and credit analysis was deepened with a view to understanding the transmission from central bank facilities to private sector credit.

![M3 growth and credit to the private sector (percentages per annum)](chart)

Sources: ECB.
A dual assessment: policy stance and transmission through the banking system

- **Policy stance**: significant loosening following GFC, but tightening in April-July 2011 amid concerns about second-round effects from energy inflation

- **Transmission**: Generous liquidity provision to banks to prevent disorderly deleveraging (FRFA, VLTROS, ...) and SMP to support monetary policy transmission

- Rising fears of debt restructuring following Deauville

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**1. GFC marked dramatic change in the policy environment**

Source: Bloomberg, Eurostat. Notes: Euribor = Euro Interbank Offered Rate; € OIS = Euro Overnight Index Swap Rate. The euro area's 10-year yield is a GDP-weighted average of euro area member countries’ government bond yields. Latest observation: 04/06/2019.
1. 2012: redenomination fears

- 29 June 2012 euro area summit: “it is imperative to break the vicious circle between banks and sovereigns.”

- 26 July 2012 Mario Draghi’s speech: “Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.”

- 2 August 2012 Introductory statement: “Risk premia that are related to fears of the reversibility of the euro are unacceptable, and they need to be addressed in a fundamental manner. The euro is irreversible.”

- 6 September 2012 Introductory Statement: Outright Monetary Transactions (OMT) “aim at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy.”

Redenomination risk in selected euro area countries at 3-yr maturity
(basis points, 20-day forward moving average)

Sources: Thomson DataStream and De Santis (2018).
Notes: Redenomination risk is measured as a difference between Quanto CDS for Italy/Spain/France and for Germany. The Quanto CDS is computed as difference between the sovereign CDS quotes in dollars and euros. Latest observation: 26 May 2019.
1. Low inflation recovery with lower bound constraint

- Rising risks of disanchoring of inflation expectations

- Policy response combining a set of mutually reinforcing instruments
  - Negative rates and forward guidance on rates
  - Asset purchases and forward guidance
  - Targeted Long-term Refinancing Operations (TLTROs)

![Option-implied distribution of average inflation over the next 5 years](chart)

**Sources:** Bloomberg, Thomson Reuters and ECB calculations.
**Notes:** Probabilities implied by five-year zero-coupon inflation options, smoothed over five business days. Risk-neutral probabilities may differ significantly from physical, or true, probabilities.
**Latest observation:** 31 May 2019.
1. The lower bound: from the ZLB to the ELB

Option-implied density of 3-months OIS rate in 12 months’ time on selected dates
(percentages per annum)

- 29 January 2013
- 5 September 2014

Source: ECB calculations.
Notes: Risk-neutral densities of 29 Jan 2013 and 5 September 2014 derived from options on Euribor Futures. The option-implied density of the 3-months OIS rate in 12 months’ time is obtained by shifting the density of the 3-months EURIBOR in 12 months’ time by the spread between the density mean and the forward 3-months OIS rate in 12 months’ time.

Long term interest rates in the euro area and the US
(percentages per annum)

Sources: Bloomberg.
Latest observation: 05/06/2019.
1. Balance sheet policies

Extensive use of central bank balance sheet capacity, size and composition

- Credit contraction starting in 2013: banks reimbursed central bank term liquidity
- From demand-driven to supply-driven creation of central bank reserves: quantitative easing
- Funding for lending (TLTROs)

Mutually reinforcing instruments (signalling and portfolio rebalancing)

ECB monetary policy assets

( EUR billions )

Sources: ECB, ECB calculations.
Notes: Excess liquidity is liquidity provided in excess of autonomous factors and reserve requirements.
Latest observation: 06/06/2019.
1. Mutually reinforcing instruments

Forceful monetary policy response resulted from combining mutually reinforcing instruments

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<td></td>
<td>-25bps</td>
<td>+50bps</td>
<td>-20bps</td>
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<tr>
<td></td>
<td>EURIBOR 4.25%</td>
<td>DFR 0.25%</td>
<td>DFR -0.29%</td>
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<td>-32bps</td>
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<td>DFR 0.75%</td>
<td>DFR 0%</td>
<td>DFR -0.40%</td>
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**Credit operations**
- Overnight FTOs
- “Front-loading” Maturity extension Dec07
- $ swaps
- Oct08 FRFA
- Expand collateral LTROs (6m)
- Oct11 LTROs Dec11
- VLTRO I (3y) Feb12
- VLTRO II (3y) July14
- TLTRO I Oct17
- TLTRO II Jun18

**Asset purchases**
- May09 CBPP I May10 SMP I Aug11 SMP II Oct11 CBPP II Sep12 OMT
- Jun14 ABSSP CBPP III Jan15 PSPP Dec15 APP I Dec16 APP III (60bn)
- Oct17 APP IV (30bn) Jun18 APP V (150bn)

**Forward guidance**
- Jul13 FG I: Policy rate extended period Jan15 FG II: APP date and SAPI
- Mar16 FG III: Policy rate well past APP Mar16 FG IV: Exp. APP and rate and SAPI
- Jun18

2. Policy effectiveness: transmission to financial conditions

**Term structure of OIS spot rates**

*percentages per annum*

Sources: ECB, Moody's and Merrill Lynch Global Index.

**Composite indicators of NFCs’ cost of borrowing from MFIs**

*percentages per annum*

Sources: ECB, ECB calculations.
Notes: The indicator is computed by aggregation of short and long-term rates, using a 24-month moving average of new business volumes. Vulnerable countries are IE, GR, ES, IT and PT. Non vulnerable countries are BE, DE, FR, LU, NL, AT and FI. Within each country group, national rates are aggregated using 24-month moving averages of new business volumes as weights.
2. Policy effectiveness: transmission to wages and prices

**Wage Phillips curve**

(x-axis: percentage; y-axis: annual percentage changes)

- 2006Q1-2008Q1
- 2008Q2-2014Q3
- 2014Q4-2018Q4
- Simple fitted Phillips curve

**HICP services excluding travel related items and services compensation per employee**

(annual percentage changes)

- CPE services
- Services producer prices
- Services
- HICP services

Sources: Eurostat, ECB staff calculations.
Notes: Broad measure of labour underutilisation is the ratio of the (i) total unemployed, (ii) underemployed part-time workers who currently have jobs, although not at the optimal weekly hours they would like, and (iii) inactive persons marginally attached to the labour market, to the labour force plus all marginally attached workers. The black line represents a simple fitted Phillips curve. The fitted curve is based on data from 2006Q1 to 2018Q4. Latest observation: 2018Q4.

Sources: Eurostat, ECB staff calculations.
Note: Travel-related items comprises airfares, package holidays and accommodation services.
Note: based on quarterly data.
Latest observation: 2019Q2 (based on April and May flash estimate) for HICP services, 2019Q2 (based on April) for HICP services excluding travel-related items, 2019Q1 for CPE services, 2018Q4 for services producer prices.
Headwinds to stabilisation policies

Fiscal policy in EMU

- National fiscal policies were supposed to cushion country-specific economic shocks in the euro area
- Procyclical fiscal tightening (catch 22 situation) in a number countries resulted in a tight euro area fiscal stance
- This has put an excessive burden on monetary policy for macroeconomic stabilisation

Source: Eurostat, ECB calculations.
Notes: The chart shows the standard deviation of CPI inflation and real GDP growth over 1999Q1-2018Q4.
3. Macroeconomic stabilisation beyond monetary policy

Headwinds to stabilisation policies

The incomplete institutional setting of EMU

- Stabilisation policies need to be supported by strong institutions
- Treaty established a sound institutional framework for monetary policy
- EMU lacked institutions to ensure financial and fiscal stability (e.g., banking union, macroprudential policy framework, crisis management framework, euro area fiscal capacity,...)
- Crisis opened the road to completing the institutional framework, but EMU is still work in progress

Source: The Five President’s Report: Completing Europe’s Economic and Monetary Union

The Five President Report’s Table of content

1. The Nature of a Deep, Genuine and Fair Economic and Monetary Union
2. Towards Economic Union - Convergence, Prosperity and Social Cohesion
3. Towards Financial Union - Integrated Finance for an Integrated Economy
5. Democratic Accountability, Legitimacy and Institutional Strengthening
Annex 1: Roadmap Towards a Complete Economic and Monetary Union
Annex 2: A More Integrated European Semester
Annex 3: Advisory European Fiscal Board - Guiding Principles

Source: The Five President’s Report: Completing Europe’s Economic and Monetary Union
Concluding remarks

• The monetary policy framework has served us well. The ECB could act in difficult circumstances, against both upside and downside risks to price stability.

• Clarifying the strategy further could support monetary policy making in an environment characterised by a persistently lower natural rate.

• The quantitative definition of price stability was instrumental in establishing credibility in the first decade, but its asymmetric formulation may lead to misperceptions in a low inflation environment.

• With the passage of time, the role of the monetary pillar has evolved, requiring a clarification of the role of cross-checking in policy deliberations. This also raises the question of the role of financial stability considerations and macroprudential tools.

• European political leaders should urgently address the remaining institutional weaknesses of EMU, thereby enhancing the effectiveness of stabilisation policies. In this respect, the role of fiscal policy in macroeconomic stabilisation for the euro area as a whole has to be enhanced.