The ECB monetary policy response to the Covid-19 crisis

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A paper to address the role of the ECB during the COVID-19 crisis

- The COVID-19 outbreak in the euro area has prompted a health and economic crisis that is unprecedented in recent history.

- The ECB has played a key role in addressing the initial tightening of financial conditions caused by the pandemic.

- This paper evaluates the impact of the Pandemic Emergency Purchase Programme (PEPP) announcements during the first weeks of the crisis.

- The quantitative analysis suggests that PEPP implementation had first-order positive effects on the euro area’s GDP and inflation.
This crisis occurs in a context of low inflation and extensive monetary stimulus

- In the past decade, the major economies have faced a period of low inflation leading the policy rates to their lower bound and to the implementation of “unconventional” measures

- In 2019, interest rates in the euro area were at record lows and were foreseen to remain low as inflation continued below target

- The ECB increased its expansionary stance by:
  - Cutting the deposit facility rate (DFR) by 10 b.p. (down to -0.5%)
  - Introducing a new series of targeted longer-term refinancing operations (TLTRO III)
  - Resuming the Asset Purchase Programme (APP)
The ECB has reacted swiftly and resolutely to the COVID-19 crisis

- The ECB response has focused on the purchases programmes and long-term refinancing operations to:
  - Ensure a sufficiently accommodative monetary policy stance
  - Stabilize financial markets and safeguard the monetary policy transmission mechanism
  - Provide liquidity to keep support bank lending to the real economy
The timely response of the ECB in the outbreak of the crisis

On 12 March, in the outbreak of the COVID-19 crisis the ECB adopted the following initial expansionary measures:

- More favorable conditions to TLTRO III (from June’20 to June’21) to encourage lending to SMEs (further improved on 30 April), reaching €1.3 tr
- Conduct LTROs to bridge liquidity needs until the June TLTRO III operation
- Announced additional net purchases of €120 bn in 2020 to reduce banks risks associated with duration and defaults
As the outlook of the crisis deepened the ECB hit harder

▶ On 18 March, the ECB announced the Pandemic Emergency Purchase Programme (PEPP) with a purchase envelope of €750 bn until the end of 2020 and later increased up to €1.350 bn on 4 June (and extended at the end of the year up to €1.850 bn)

▶ The new programme had greater flexibility in terms of distribution of purchases over time and across jurisdictions to avoid financial fragmentation

▶ Together with the new APP, the stock of purchases represented up to a 37% of the euro area GDP

▶ Collateral standards were also eased, and again during April, including a lowering of collateral haircuts and increasing the eligibility of assets
The PEPP unexpected announcement had an important impact on financial markets

**Figure:** Impact of the PEPP announcements using an event study. Source: Thomson Reuters Datastream
Beyond its immediate impact, the PEPP opened a period of gradual easing in euro area financing conditions.

**Figure:** Evolution of the sovereign bond yields and purchase programme. Source: ECB and Thomson Reuters Datastream
We evaluate the macroeconomic effects of the first announcements of PEPP

- 18 March, €750bn over nine months without reinvestment
- 4 June, €600 bn until the end of June 2021 and reinvestment of maturing principals at least up to 2022

The models are calibrated to replicate the estimated elasticity of the 10y sovereign bond yield observed in the APP/PEPP announcements
The DSGE model for Spain and the euro area

- Joint Spain Euro-Area (JoSE), Aguilar et al (2020), is a large-scale DSGE model suitable for simulating asset purchase programmes:
  - Micro-founded, containing nominal, real and financial frictions
  - Consists of a monetary union with two regions (Spain and the rest of euro area)
  - Different types of economic agents, some of them subject to borrowing constraints

- Incorporates a portfolio rebalance channel a la Harrison (2017) and Chen, Curdia and Ferrero (2012) to introduce the purchase programmes

- The PEPP announcements are simulated and a robustness exercise is built in the SVAR using these results
First-order effects from on GDP and inflation

Figure: DSGE simulations with low elasticity. Source: Banco de España
A flexible and global model to provide alternatives estimates of the PEPP impact

- Based on the SVAR model from Burriel and Galessi (2018), the global nature of the model takes into account cross-country interdependencies.

- The flexibility of the SVAR captures the interaction of financial assets and the macroeconomy for the euro area 19 countries with monthly frequency.

- Fewer structural assumptions but yet capable of distinguishing the macroeconomic effects of unconventional monetary policy (through innovations in the Eurosystem balance sheet).

- Forecast of the model under the PEPP are compared with the counterfactual of no PEPP.
The models results corroborate the first-order effects of the PEPP

Figure: Model range of simulations. Source: Banco de España
Final considerations

- The results suggest a first-order impact on GPD and inflation, however, they are subject to some uncertainty.
- The flexibility of the PEPP has played a major role in avoiding market fragmentation.
- The ECB response to the COVID-19 crisis has had a stabilizing effect on financial markets and a positive impact on the macroeconomy.
- The inflation medium-term outlook remains a challenge.