The ECB monetary policy response to the Covid-19 crisis

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*The views expressed in this presentation are those of the authors and **do not** necessarily represent the views of the Bank of Spain and the Eurosystem.*

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 JuneTLTRO 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 jurisditions 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

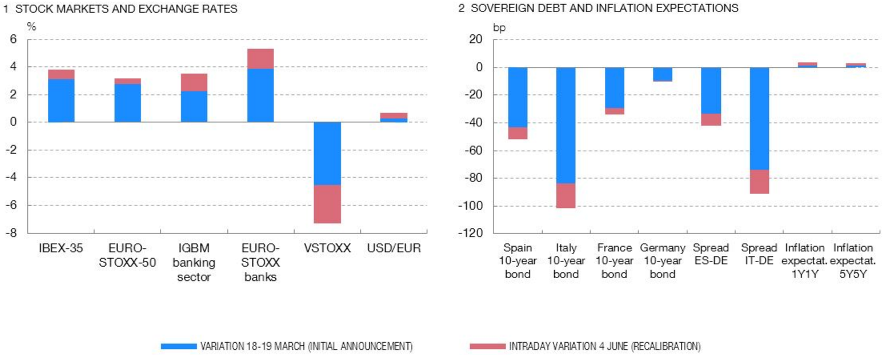

Figure: Impact of the PEPP announcements using an event study. Source: Thomson Reuters Datastream

Beyond its immediate impact, the PEPP opened a period of gradual easing in euro area financing conditions

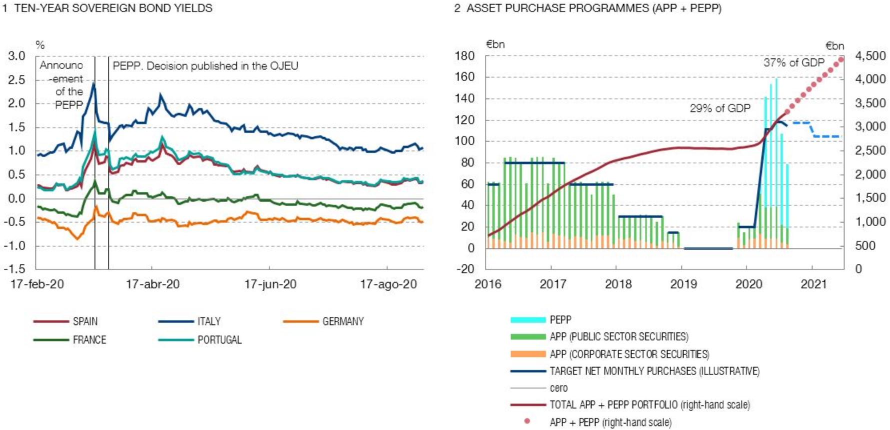

Figure: Evolution of the sovereign bond yields and purchase programme. Source: ECB and Thomson Reuters Datastream

A DSGE and SVAR to evaluate the macroeconomic impact of the PEPP

- 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 2021and 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

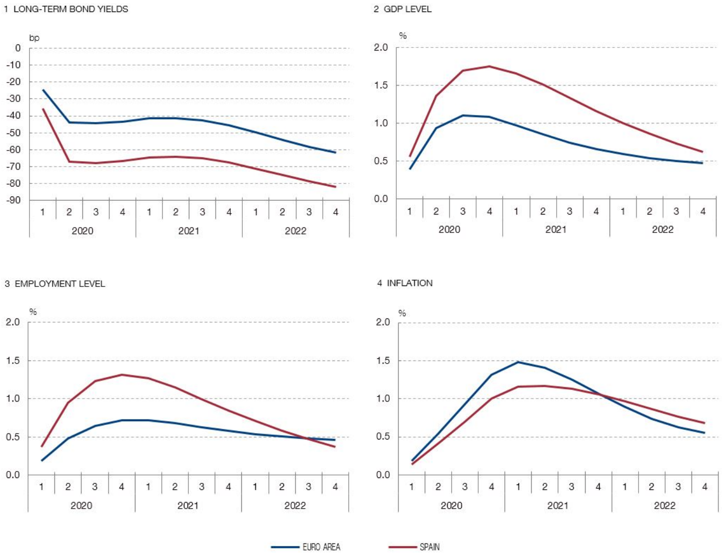

Figure: DSGE simulations with low elasticity. Source: Banco de España

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

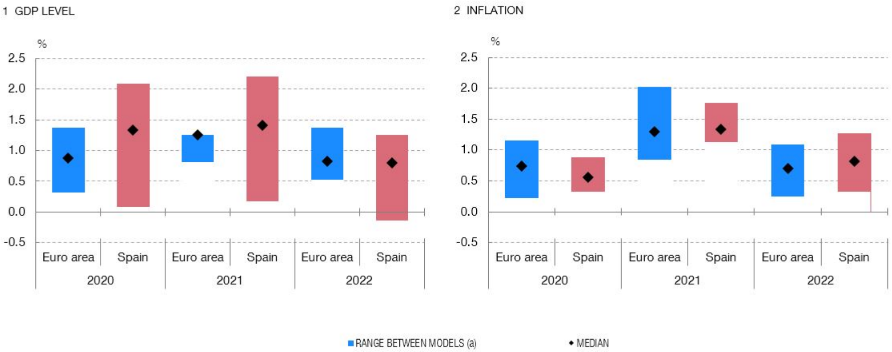

Figure: Model range of simulations. Source: Banco de España

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