IMPACT OF THE PANDEMIC ON GROWTH-AT-RISK AND MITIGATING IMPACT OF THE MACROPRUDENTIAL MEASURES ADOPTED

The pandemic has severely impacted economic growth in recent quarters. That has impinged not only on expected average growth for the coming quarters, but also on the entire future distribution of GDP. A model recently estimated by the Banco de España enables the impact of the build-up of cyclical vulnerabilities, the bouts of financial stress and the use of macroprudential tools on GDP distribution to be assessed (see Box 3.1, 2020 Spring FSR).[1] The results of applying this model to the current crisis show a particularly significant impact on growth-at-risk, which is defined as the growth rate which would be observed under adverse scenarios that occur with a 5% probability.

Chart 1 shows the distribution of growth-at-risk over a one-year horizon in European Union countries[2] on three dates: before the pandemic (December 2019), at the end of the first quarter of the outbreak (March 2020) and after the first wave (June 2020). The purpose of this exercise is not merely to quantify the impact of the pandemic on growth-at-risk, but also to analyse the effect that macroprudential policy

might be exerting on mitigating this impact. Thus, the exercise considers, on the one hand, countries that have adopted countercyclical macroprudential measures (17 countries); and, on the other, countries that have not done so or could not (11 countries). The starting point for both groups of countries was similar in terms of pre-pandemic growth-at-risk. The effects of the pandemic on both groups of countries were comparable to March, with growth-at-risk deteriorating significantly in all the countries analysed. However, estimates as of June 2020 already show some differences between the two groups. In particular, the group of countries that have been able to fully or partly release their macroprudential buffers seems to have contained the deterioration in growth-at-risk better than those short on the necessary macroprudential space to do so.

That said, this lower impact on future growth-at-risk may be explained not only by the easing of macroprudential measures but by smaller GDP declines during lockdown, lower volatility in their financial markets or different positions in the financial cycle. Chart 2 analyses in greater

Chart 1
DISTRIBUTION OF GROWTH-AT-RISK OVER A ONE-YEAR HORIZON BASED ON THE USE OF MACROPRUDENTIAL POLICY IN RESPONSE TO THE PANDEMIC (a)
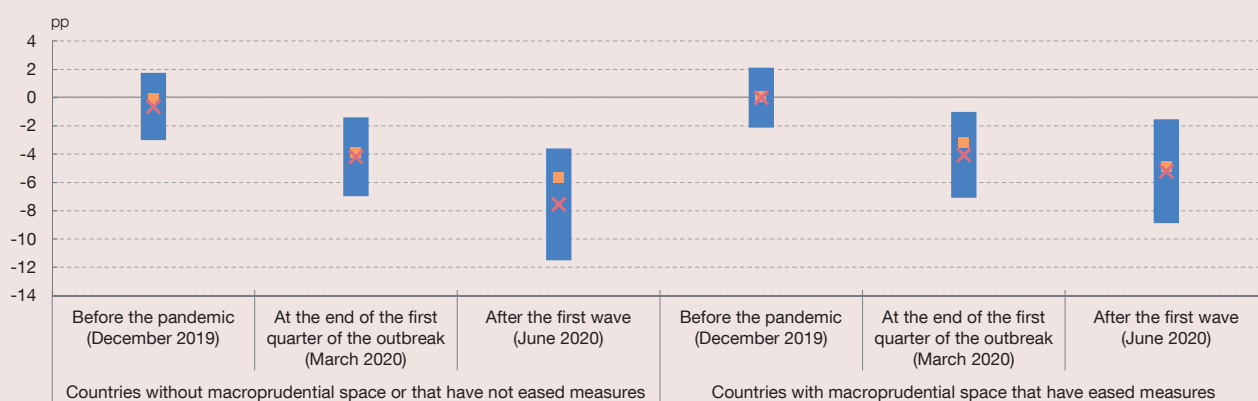
SOURCES: ECB, BIS and Banco de España.

a The vertical bars, the orange square and the pink cross represent the range between the 5th percentile and 95th percentile, the median and the mean, respectively, of the growth-at-risk values over a one-year horizon in countries that had macroprudential space and have eased measures in response to the pandemic and those that did not have such space or have not eased measures. For details of the methodology used, see J. E. Galán (2020) "The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk", Working Paper No 2007, Banco de España.

---

1   For further details, see Galán J.E. (2020). *The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk.* Working paper 2007. Banco de España.

2   The sample includes the 27 EU countries plus the United Kingdom.

Chart 2
BREAKDOWN BY FACTOR OF THE QUARTERLY CHANGE IN ESTIMATED GROWTH-AT-RISK IN COUNTRIES THAT HAVE AND HAVE NOT EASED MACROPRUDENTIAL MEASURES
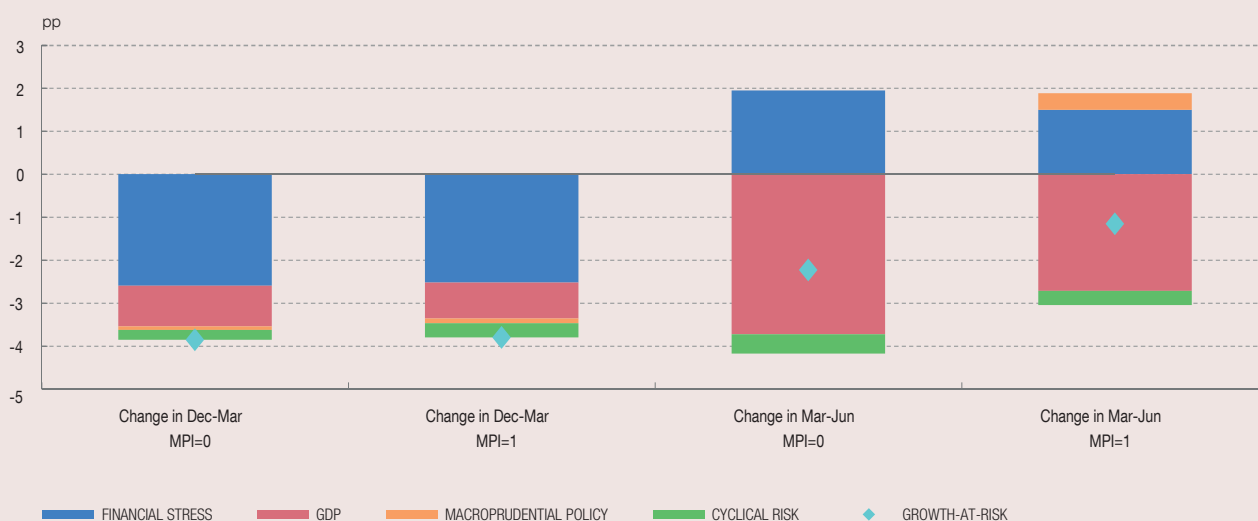
SOURCES: ECB, BIS and Banco de España.

a The bars represent the contribution (in percentage points) from each of the factors included in the model to the change in growth-at-risk between December 2019 and March 2020 and between March and June 2020. The results distinguish between countries that have eased macroprudential measures in response to the pandemic (MPI=1) and those that have not (MPI=0). Positive (negative) values represent a positive (negative) contribution to growth-at-risk. The diamonds represent the change in median growth-at-risk in each group of countries. For details of the methodology used, see J. E. Galán (2020) "The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk", Working Paper No 2007, Banco de España.

detail the drivers of the changes observed. It breaks down the factors behind the change in estimated growth-at-risk in the two groups of countries. First, it shows that the change in growth-at-risk between December 2019 and March 2020 can be attributed mainly to heightened stress in financial markets, followed by a drop in economic growth, and that these factors had a similar impact on both groups of countries. Second, the change in growth-at-risk in 2020 Q2 is mainly due to the sharp drop in economic growth. Conversely, improving levels of financial stress have acted as a mitigating factor, limiting the deterioration in growth-at-risk. The comparison between the two groups of countries shows that, for those that have been able to release macroprudential buffers, this decision has acted as an additional compensatory factor, improving growth-at-risk by around 0.4 pp over a one-year horizon.

Other factors may admittedly have allowed the group of least-affected countries in Q2 to post a smaller decline in GDP, but the release of macroprudential buffers would account for around one-third of the differences in the change in growth between both groups. These countries were able to adopt these measures because they had sufficient macroprudential space, arising from the use of macroprudential tools in previous years. There are several reasons why some countries had this macroprudential space. But a most notable one is the different financial cycle conditions, which warranted the tightening of macroprudential requirements in the pre-crisis years. In any case, this exercise shows that having macroprudential buffers for unexpected events can help mitigate, at least partially, the effects of these shocks.