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Monitoring ECB balance sheet expansion (November 2015)

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- In November, the purchase programme involving both public and private assets exceeded the stated monthly target of EUR60bn, with EUR62.6bn of assets acquired and still a clear bias in favour of purchasing public sector bonds (88%).
- At its December monetary policy meeting, the ECB decided to take more measures, much as expected after its October meeting. Thus it: i) cut the deposit facility rate to its historic low of -0.3%; ii) extended the APP for six months, and iii) confirmed its forward guidance, including the reinvestment of the principal of securities acquired under the APP.
- Both interest and exchange rate movements in the euro area have been at the mercy of monetary policy expectations and the ECB's ultimate decision to act in more restrained fashion. All of this has led to high volatility in both interest and exchange rates in the euro area. Around 30% of the bonds eligible for purchase by the ECB under the APP even came to show negative IRRs, money market rates out to nine months moved into negative terrain and the euro's dollar rate came down as far as USD1.053, while subsequent, more moderate, action by the ECB helped to reverse this slide.
- Better financing conditions have encouraged an extension of maturities for new issues among the periphery countries.
- The central bank began 2015 by embarking on a larger-than-expected government bond purchase programme, aimed at heading off a worsening of inflation expectations, and is closing the year by announcing a six-month extension of the programme. In our view, given that the changes in the economic scenario have only been minor, more aggressive action by the ECB, such as the markets were expecting, was unwarranted. We do not foresee the ECB implementing any new measures in the short term.

ECB monetary expansion measures

a) Asset purchase programme: The public and private asset purchase programme beat the set target with EUR62.6bn for the month in November, just as it also exceeded the stated target over May to July and over September to October, which will serve to make up for the lower purchases with a view to the year-end.

In the first nine months of the programme, the ECB acquired EUR448.7bn of public sector bonds under its Public Sector Purchase Programme (PSPP), EUR87.3bn¹ in securities as part of its Covered Bonds Purchase Programme (CBPP3) and EUR12bn² via its Asset-Backed Securities Purchase Programme (ABSPP). Specifically, in November the ECB purchased slightly more than the set target, as it had done over

^{1:} EUR138bn since the programme came into effect in October 2014.

^{2:} EUR15.2bn since the programme came into effect in November 2014.



May to July and over September to October, buying EUR62.6bn, of which 88% was in sovereign bonds. This step-up in purchasing affords the ECB some margin to make fewer purchases in December³ and still ensure that it meets its monthly target of EUR60bn.

At its 3 December policy meeting, the ECB announced that it will extend the APP to run for six more months, to at least March 2017. This implies that, without raising the monthly amount, the ECB will achieve a balance sheet increase of some EUR1.5trn by March 2017. Besides the extension of the programme, it also announced other measures: i) it cut the deposit facility rate by 10bp, to -0.30%, which is a historic low, ii) it broadened the range of assets purchased (regional and local governments) and, in a bid to underscore its forward guidance, it iii) announced the reinvestment of the principal of securities acquired under the asset purchase programme as they fall due and for as long as may be necessary, and finally iv) it extended the Fixed Rate and Full Allotment (FRFA) tender procedure to at least the end of 2017.

a.1) Public sector purchase programme

In November, the ECB purchased sovereign bonds (including bonds of supra-national organisations and agencies) to the value of EUR55.1bn, with a share by country that was practically in line with the ECB's capital key, although this is taking account of a marginal adjustment to allow for not purchasing bonds from Greece⁴. This amount is in line with what was acquired over May to July and September to October (EUR51.5bn on average), when the monthly target was also topped.

In this situation, besides extending the programme for a further six months, at its December policy meeting the ECB reiterated that the PSPP provides sufficient flexibility in terms of adjusting the scale, structure and duration of the programme to allow it to be adapted, if this should be called for.

With respect to the maturity of the debt securities acquired up to November, this is similar to that in purchasing over previous months, with the average standing at 8 years, which is below that for euro area bonds that are eligible under QE (9.1 years). By country, maturities were still noticeably longer in the sovereign bond purchasing in the periphery countries, such as, for example, Portugal (10.6 years) and Spain (9.7 years), with longer maturities compared to those on their eligible debt (8 years in Portugal and 9.1 years in Spain). This trend is partly due to the PSPP's own limitations, as, with respect to the periphery countries, the ECB has bonds that were acquired under a previous securities purchase programme (SMP, or Securities Market Programme) with shorter maturities (2-3 years), and thus the current purchasing has become skewed towards the longer terms.

As regards the buying of bonds issued by supra-national organisations and agencies, purchases last month were EUR6.6bn, which represents 12% of the total bonds acquired, meaning that the ECB has once more used up its maximum purchasing allowance established under the programme's initial conditions.

³ The ECB has announced that it will not carry out any purchasing between 22 December 2015 and 1 January 2016. It will resume purchase activity on 4 January 2016.

^{4:} For the moment, according to what Draghi said at the July policy meeting, Greece does not meet the criteria for starting bond purchases.



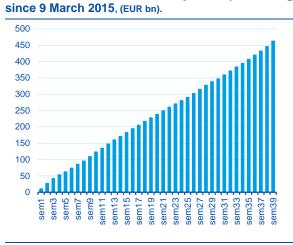
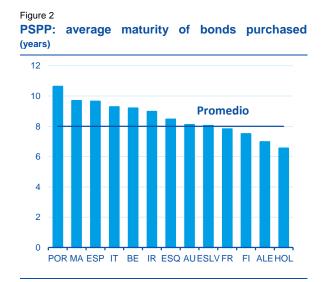


Figure 1PSPP: cumulative weekly bond purchasing

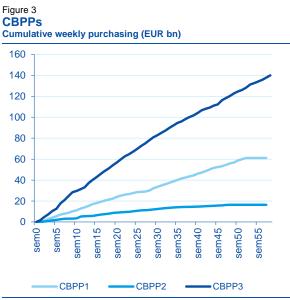


Source: ECB and BBVA Research

Source: ECB and BBVA Research

a.2) Private sector asset purchase programme

In November, under the private sector asset purchase programme, the ECB acquired securities worth EUR7.5bn, which is below the monthly average of EUR11.5bn for purchasing since both programmes (ABSPP and CBPP3) have been in effect. November buying under CBPP3 amounted to EUR6.9bn, while purchases under ABSPP came to EUR0.6bn. Within the programme to date, covered bonds worth EUR138bn have been acquired (the programme began in October 2014), and EUR15.2bn in asset-backed bonds (the programme started in November 2014). According to the way these programmes were designed (ABSPP and CBPP3), the ECB can carry out its purchasing activity in both the primary and the secondary markets, although the bulk of the purchasing (80%) under both programmes has taken place in the secondary market.



Source: ECB and BBVA Research



Source: ECB and BBVA Research

b) Targeted longer term refinancing operations (TLTROs) associated with lending

In the sixth TLTRO, demand was EUR18.3bn from 55 institutions (an average amount of EUR0.33bn). This figure represents only 5% of the potential maximum amount that could have been taken up according to our estimates (EUR380bn), which is in line with what we were estimating (in the range of EUR15bn-20bn), bearing in mind the low take-up in the fifth auction. This low take-up appears to be mainly due to the market being awash with available liquidity (and depositing it with the ECB is now more costly (-0.3%), while it could also be an indication of the poor prospects which banks entertain of increasing credit in the future (remember that if they do not use the funds to grant loans, they will have to pay the credit back two years early, in September 2016.)

This all means that, over the six initial TLTROS, some EUR418bn has been taken up, of which around 60% is estimated to have been demand from periphery country institutions. Monitoring these auctions is important, as they are a potential indicator of a recovery of lending into the real economy.

| | Sept-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Jul-15 | Aug-15 | Sept-15 | Oct-15 | Nov-15 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|
| TLTRO | 82.6 | | - | 130 | | | 97.8 | | | 73.8 | - | | 15.5 | | |
| СВРРЗ | | 4.8 | 13 | 11.8 | 10.6 | 11 | 12.4 | 11.5 | 10 | 9.9 | 9 | 7.5 | 10.1 | 10.0 | 6.9 |
| ABSPP | | 0 | 0.4 | 1 | 0.6 | 1.1 | 1.2 | 1.2 | 1.4 | 1.6 | 0.9 | 1.3 | 1.9 | 1.6 | 0.6 |
| PSPP | | | | | | | 47.4 | 47.7 | 51.6 | 51.4 | 51.4 | 42.8 | 51 | 52.2 | 55.1 |

Table 1 QE measures (EUR bn)

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Source: ECB and BBVA Research

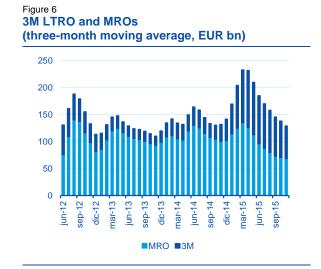
c) The Eurosystem's regular open-market operations

In November, as in the last seven months, the liquidity allocated in the weekly main refinancing operations (MROs) and monthly auctions (3M LTROs) has fallen off. On average over last month, bidding in the weekly auctions came down to around EUR70bn, which is significantly below the average for the year (EUR95bn). On the other hand, bids in the three-month auctions (3M LTROs), also dropped off. The stock in auctions of this type is EUR52bn and has also fallen below the average for the year (EUR80bn). Liquidity in such auctions has diminished considerably since the second quarter of the year, following the rise seen mainly in January and February owing to the falling due of the three-year LTROs (institutions switched to regular operations).

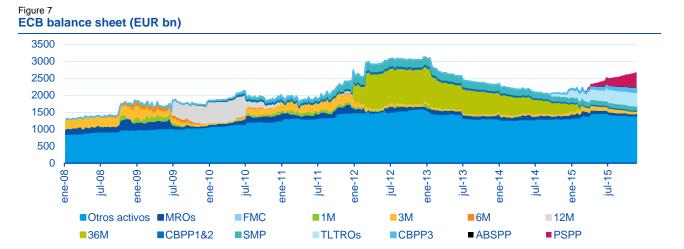
Figure 5



TLTROs (EUR bn) 140 0,80 peticiones medias (esc. drch) 0.70 120 0,60 100 0,50 80 0,40 60 0.30 40 0,20 20 0 10 0 0,00 1 TLTRO2 TLTRO3 TLTRO4 TLTRO5 TLTRO6 TLTRO (sept 14) (dic14) (mar 15) (jun 15) (sept 15) (dic 15)



Source: Bloomberg and BBVA Research



Source: ECB, Bloomberg and BBVA Research

Impact on assets

Source: ECB and BBVA Research

a.1) Impact on sovereign bond interest rates

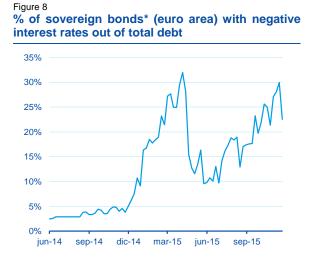
Movements in interest rates on sovereign debt in Europe have been at the mercy of the messages conveyed by the central banks, which has given rise to high interest-rate volatility. In the first week of November, European long-term interest rates were pushed up by the upsurge of rates on US debt after the probability implied in the market of a Fed rate hike rose to well over 50%. This time, it was the sections at the long end of the European curve which suffered most upward pressure and, among these, the interest rates of periphery countries were those which registered the sharpest rises. Even so, once again the ECB's communication managed to contain and even reverse this trend. The market began to price in a package of aggressive measures, partly on the dovish message from ECB members (a cut of over 15 basis points in the deposit facility rate, an extension of the horizon and a higher monthly amount for sovereign bond purchases). After this, interest rates went back over their previous rises and beyond, while around 30% of bonds eligible under the ECB purchase programme began to exhibit pricings that showed a negative IRR. Moreover, the

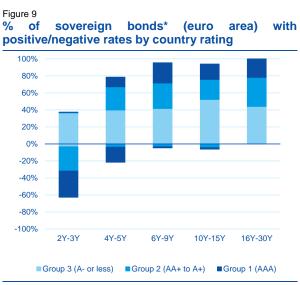


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rise in risk-taking worked in favour of the rates on the European periphery registering the heaviest falls, which helped the risk premium down. Finally, the measures implemented by the ECB were less convincing than the market had been expecting and euro area interest rates showed upturns again, although these are below the level of early in November, in spite of the fact that the probability of a Fed lift-off in December had by then reached practically 80%.

Money market rates were steered by expectations of the ECB making a very decisive deposit rate move and cutting it to under -0.3%. All Euribor maturities up to nine months moved into negative terrain in the market. 12-month Euribor held on positive ground, although it did hover at around 0% while, on top of this, 12-month futures did actually move into negative territory. This movement was reversed, however, after the ECB cut the deposit rate to only -0.3%.



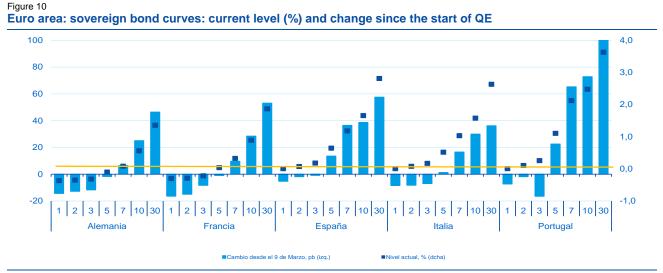


*Eligible under the PSPP

Source: Bloomberg and BBVA Research

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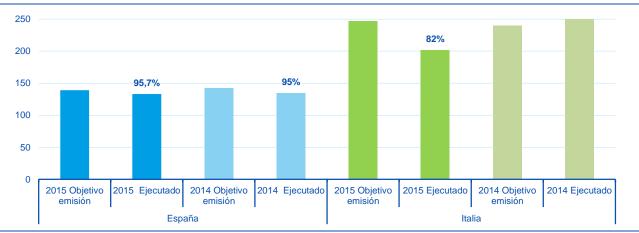
Source: Bloomberg and BBVA Research

Figure 13

Source: Bloomberg and BBVA Research

a.2) Sovereign bond issuance: Italy has stepped up its issue rate slightly

As of November, the Spanish Treasury had executed 95.7% of the required gross issuance of medium and long term debt (EUR139bn). In Italy's case, execution is rather more behind schedule but, even so, it has reached over 80% of its issuance target.



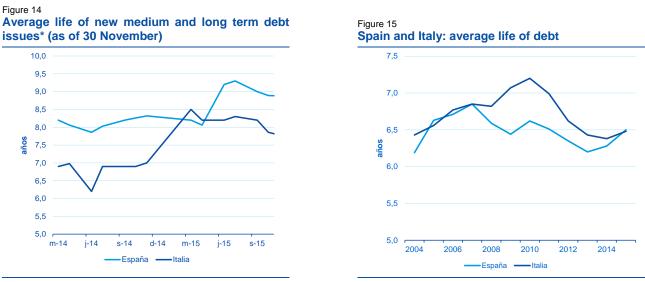


Source: National treasuries and BBVA Research

So far this year, the average life of new bond issues has remained virtually unchanged in November with respect to October (8.9 years in Spain and 7.8 years in Italy), while the average life of all debt issued by Spain and Italy has lengthened in 2015 (Spain 6.5 years, Italy 6.48 years). Nonetheless, the positive market conditions that have been brought about by the prospects of an extension to the ECB's bond purchase programme have meant that it has been possible (for Spain mainly) to issue over longer terms in November (14.5 years in Spain and 7.3 years in Italy). In November too, the cost of financing new issues has come down all along the curve, although in Spain's case the fact that it has lengthened the maturity on the debt

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issued has caused the average weighted cost of new issues to rise marginally over the month (1.39% vs. 1.29% in October), whereas this has come down slightly in Italy (0.7% vs. 0.78% in October).



Source: National treasuries, Bloomberg and BBVA Research

b) Impact on the euro exchange rate

The euro's movements have also been shaped by the monetary policy divergence between the ECB and the Fed. Specifically, over November and up to the day before the December ECB meeting, the euro weakened to a low of USD1.056, in line with the increase in the negative two-year rate spread between Germany and the United States. Yet after the ECB implemented tamer measures than the market was counting on (and failed to provide any hint of implementing more aggressive measures in the future, the euro firmed and practically reversed its trend. The net result is that the euro has only depreciated by 0.5% against the dollar, and 0.7% against the Swiss franc since 30 October, while it has gained 1% against sterling.

> Figure 17 **EUR/USD**



monetary policy positions (Fed/ECB) 3.0 1 70 1,60 2,5 1,50 1,40 2,0 1,30 1.5 1,20 1.0 1,10 1,00 0.5 0,90 0,80 0,0 S ene-07 sne-08 ,-au ene-1 -e-u--eu e u -aue Total activo Fed/ total activo BCE -- EURUSD (drch)

and

Source: National treasuries, Bloomberg and BBVA Research

Source: Bloomberg and BBVA Research

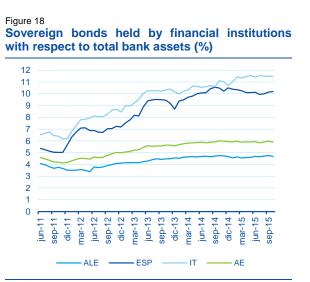
Source: Bloomberg and BBVA Research

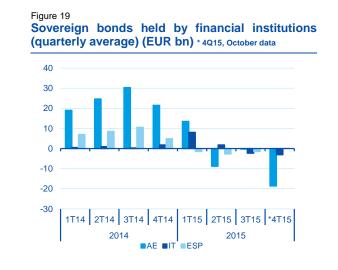




c) Holdings of sovereign bonds by financial institutions

According to data published by the ECB, most euro area financial institutions offloaded sovereign bonds in October. Thus, for the euro area as a whole, financial institutions pared down their holdings of sovereign bonds by some EUR18.7bn, unlike in September, when they increased them by EUR6bn. The reduction in October was mainly by French and German institutions, which brought down their respective holdings by EUR4.4bn and EUR3.8bn, while their Italian counterparts did so by EUR3.1bn. For their part, Spanish institutions kept their holdings of sovereign bonds virtually unchanged.





Source: ECB and BBVA Research

Source: ECB and BBVA Research

Are the ECB's measures working?

The euro area continues to grow at a modest pace, with signs of improvement in the final quarter of the year. The figures from the National Accounts revealed that euro area GDP grew by 0.3% QoQ in 3Q15, after 0.4% QoQ in 2Q15, underpinned by sound private (and higher public) consumption. Investment remained at a virtual standstill for the second quarter in a row, but was partly offset by inventory accumulation (0.2pp) and a larger-than-expected increase in public sector consumption (that was associated with mildly expansive fiscal policy) and higher public spending owing to the refugee crisis, which should both continue into next year. All of this led to a contribution to quarterly GDP growth by domestic demand of 0.6pp. The slowdown in global demand over the summer made itself felt in a sharp deceleration for growth of sales abroad and, in combination with the relatively stable advance of imports, net exports drained 0.3pp from growth.

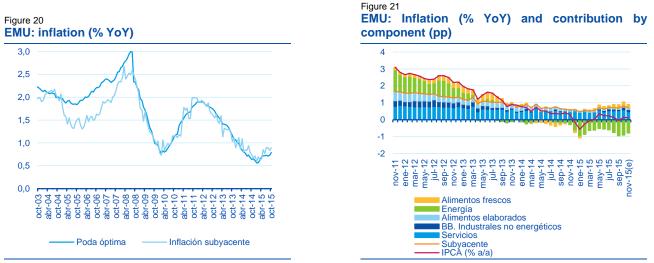
The latest figures suggest that the recovery is advancing at a relatively faster rate in the final quarter of the year, propped up by domestic factors, but also with somewhat more optimistic signs for sales abroad. Both the European Commission's confidence survey and, above all, the PMIs indicated a rise in orders from abroad, reversing the worsening trend of the last few months to levels seen before the summer. Added to this, there was an increase in world trade to September (after the falls registered in the two previous quarters) which, together with the euro's depreciation, should sustain activity via an increase in exports to other developed countries, although also to the emerging economies in Asia and Europe. Even so, the high confidence readings both in the services sector and among consumers suggest that it will continue to be domestic demand that is the main driver of growth, although retail sales indicate a certain easing up by private consumption, for which reason investment's recovery will continue to be the key factor in the coming months in determining whether the recovery manages to consolidate properly. Although the information for





4Q15 is practically wholly confined to confidence data, our MICA-BBVA model estimates year-end growth of around 0.4% QoQ.

With respect to prices, inflation surprised on the low side in November, as it held steady at 0.1% YoY (compared to the 0.3% estimate), since the smaller fall in energy prices was offset by the 0.1pp slowdown in core inflation to 0.9% YoY. However, this smaller rise in prices for the core component, particularly in those of services, does not seem to be across all countries, but could instead be mainly due to the sharp slowdown for readings in Italy compared to likely stabilisation in Germany and Spain. Stripping out services volatility from inflation in recent months, this would have fluctuated at around 1.1% YoY and no change of trend is discernible, while the smaller fall of energy prices was in line with expectations, given the anticipated base effect. For this reason, we continue to expect inflation to flip up in December (by 0.5pp, to around 0.8%), based on the fading of this base effect (after the sharp fall in late 2014), meaning that inflation could reach an annual average of around 0.1% for 2015 as a whole. The negative surprise last month, on top of plummeting commodity prices and the pattern of exchange rate movements, tilts risk to the downside as regards the path of short-term inflation and our forecast for next year (of about 1% on average).





Source: Bloomberg and BBVA Research

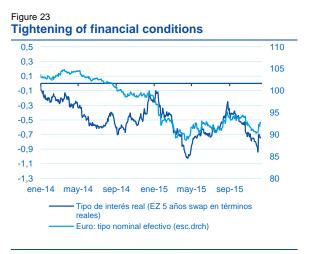
According to our composite indicators which monitor inflation (and which include measures of inflation ranging from the current figure to expectations 10 years out), in November convergence on the mean has continued, especially in the case of the long-run indicator, although this might come to a halt or reverse in December, in line with the commodity price correction (where the falls have become heavier).

On the other hand, financial conditions in November continued to ease (due to lower real interest rates and the euro depreciation) in relation to the tightening that occurred in the summer months. Yet, so far in December they have tightened on disappointment in the market, which expected more from the measures implemented by the ECB. On the other hand, the transmission of monetary policy measures through to the real economy has continued to give rise to lower interest rates on lending transactions, mainly since the second quarter of the year.



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Source: Bloomberg and BBVA Research

Source: Bloomberg and BBVA Research

Figure 24

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Composite indicators to monitor inflation* Standard deviations from the mean



*These indicators are constructed using principal component analysis. To combine these diverse variables in each sub-index, a Z-score is calculated for each one and then the first principal component for the Z-scores. The variables included for the short term are: headline and core inflation and the GDP deflator. For the medium term: ECB inflation forecasts two years out, the two-year inflation swap and inflation two years out published by the *Survey ot Professional Forecasters*. For the long term: the five-year inflation swap, long-term inflation published by the *Survey of Professional Forecasters* and the 5y5y forward inflation swap. An economic watch will be posted on the website that explains the indicators.

Conclusion: the assessment of the last month of sovereign bond purchases by the ECB continues to be positive. In November the central bank beat its monthly buying target (EUR62.6bn), as it did in May to June as well as September and October. This rise in purchasing affords the ECB some margin in the coming month (in view of the lower liquidity at the year-end), and thus to be sure of achieving its monthly target of EUR60bn.

At its 3 December policy meeting, the ECB took a series of measures (as might have been expected after the October meeting) aimed at keeping in check those factors that are delaying inflation's return to the central bank's target level, of under (yet close to) 2%. The central bank opened 2015 by embarking on a larger-than-expected government bond purchase programme designed to head off a decline in inflation expectations, and it is ending the year with the announcement of a six-month extension to the programme. In our opinion, and given that the changes in the economic scenario have been minor, more aggressive action by the ECB such as the market had been expecting was uncalled for. We expect the ECB not to implement any further measures in the short term.

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