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● Topic of the week: ECB and its material impact on public debt

- The ECB has announced last week a further easing of monetary policy.
- The 500 billion increase in QE will result in the ECB purchasing more than the net issuance of sovereign bonds next year. We estimate the amount of net government issues after ECB purchases at -390 billion euros in 2021.
- In addition, and despite the large increase in debt next year, low interest rates will lead to a decline in debt service. Each of the four major Euro Area countries will save several billions in debt service next year.

● Market review: Volatility picks up despite ECB easing

- The ECB prolongs monetary accommodation
- Wobbly stock markets amid Brexit, US stimulus talks
- Sovereign spreads unchanged, Spain issues 10-year bonds at 0%
- iTraxx Crossover, high yield spreads move up

Chart of the week



The movements of inflation expectations tend to be in sync with the changes in oil prices. In this chart we look at the 5-year inflation swaps and the year-on-year change in Brent price in euro. Those two series have a historical correlation of about 70%.

If we assume that both oil prices and the Euro will not change, base effects will make inflation rise during the first two quarters of 2021. As a consequence, market expectations, and the inflation curve, could be affected. We can expect inflation expectations to trend upwards.

● Figure of the week

18

Source : Ostrum AM

18 trillion USD. That is, since the end of last week, the level of sovereign debt with negative yield. This is a new all time high.



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• Topic of the week

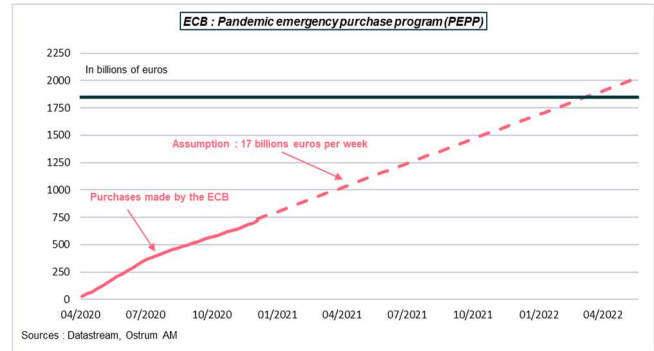
ECB and its material impact on public debt

The ECB has taken measures to maintain very accommodative financing conditions. We estimate that the net supply of sovereign paper after QE will be negative next year. On the other hand, despite the increase in debt, thanks to the maintenance of very low rates, the debt service will fall by several billion for each of the four big countries.

Thursday announcements

As announced at the October 29 meeting, the ECB took steps to maintain very favorable financing conditions for longer due to the second wave of Covid-19 and its negative impact on growth and inflation in the Euro area. The most important measures, taken on December 10, lie in the strengthening and extension of the two instruments most able to face the current crisis: the pandemic emergency purchase program (PEPP) and the targeted long-term refinancing operations (TLTROs).

The size of the PEPP has been increased by 500 billion euros, to 1.850 billion, and its duration has been extended by 9 months, until at least March 2022. This program will last as long as the Covid-19 crisis is over. Reinvestments of maturing securities acquired under the PEPP are extended for one year, until the end of 2023 at least. In order to reach a compromise between the different members of the Governing Council, the introductory statement indicates that the ECB couldn't use the whole envelope if very favorable financing conditions could be maintained without having recourse to the whole of it. It could, however, increase it otherwise. As of December 4, the ECB has purchased 717.9 billion euros under this program. The full envelope will be used at the end of March 2022 if the ECB buys 17 billion euros per week of assets (the average since July is 16.2 billion euros per week).



The ECB has also extended by one year, until June 2022, the period during which very favorable refinancing terms will be offered to commercial banks (TLTROs), on condition that they continue to lend to households and companies. They will then be able to borrow from the ECB at a rate of up to -1%. The ECB thus pays the banks so that they continue to lend to the private sector and more particularly to SME's, severely weakened by the Covid-19 crisis.

The four reasons

Deterioration in growth forecast in 2021

The resurgence of the pandemic since October and the negative impact of the containment measures adopted since November on activity and inflation naturally lead the ECB to extend its asset purchases as part of the PEPP. This was announced when it was launched on March 18: the PEPP will last as long as the Covid-19 crisis is not over.

The services sector is once again the most affected which will result in a contraction of the Euro area GDP in the last quarter, -2.2% according to the ECB, and an increase of only 0.6% in the first quarter of 2021. The ECB still considers the risks to growth on the downside but less pronounced than before due to the improved outlook linked to the upcoming availability of vaccines.

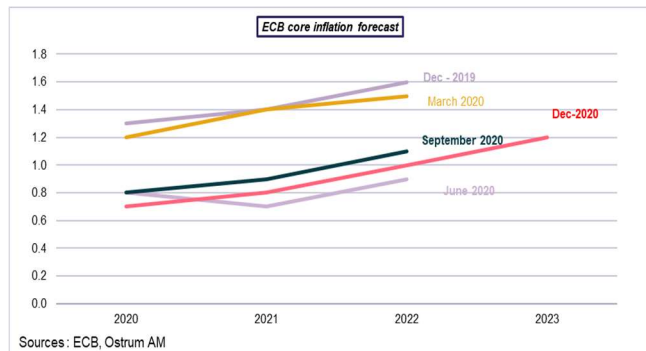
Growth forecasts have therefore been revised downwards in 2021 compared to those published by the ECB in September (3.9% against 5%). In 2020, they are revised slightly upwards due to a stronger rebound than expected in the 3rd quarter (-7.3% against -8%). In 2022, forecasts have been revised upwards (4.2% against 3.2%) and for 2023, growth is expected at 2.1%.

Lower inflation outlook across the horizon

This negative shock to activity again weakens the ECB's inflation outlook. Core inflation, excluding food and energy, has been revised downwards over the entire projection horizon. It's currently at an all-time low: 0.2% in November, due to the very weak contribution of the service sector, which was very affected by the crisis. This reflects the insufficiency of domestic demand and the lack of pressure on wages following the deterioration of the labor market. Added to this is the appreciation of the euro against all currencies which

weighs on the price of imported goods and thus contributes to low inflation. The ECB has thus reiterated that it is closely monitoring developments in the exchange rate.

In 2023, the ECB's inflation outlook is only 1.4% for headline inflation and 1.2% for core inflation. We are a long way from the ECB's objective of an inflation rate close to but below 2%, which calls for maintaining a very accommodative monetary policy for a very long time.



Tightening credit conditions

The ECB has extended TLTRO's operations on very favorable terms due to the tightening of credit conditions observed over the past 3 months for households and companies. These very attractive operations aim to encourage banks to continue their loans to the private sector and thus avoid a credit crunch, which would have serious consequences for growth and inflation.

Supporting the action of States to deal with the Covid-19 crisis

The strengthening and extension of the ECB's purchases under the PEPP come on top of the purchases made under the financial asset purchase program (APP) of 20 billion euros per month. They aim to continue to exert a lasting influence on the entire yield curve to foster the conditions for improving domestic demand and reduce deflationary pressures.

These massive purchases also aim to support the States which are very heavily indebted, in order to take the necessary measures to face the greatest recession since the Second World War, and thus enable them to finance themselves at very low rates.

To give an idea, we estimated the amount of net issues of the States in 2021 (gross issues – redemptions – coupons) and we compared it to the purchases that the ECB could make. These estimates should, however, be put in perspective, particularly given the uncertainty about the state's future financing plans, the syndications that will be carried out and any recourse to loans from the European Union.

In 2021, gross emissions of the States are estimated at 1 190 billion euros. Removing coupon payments and

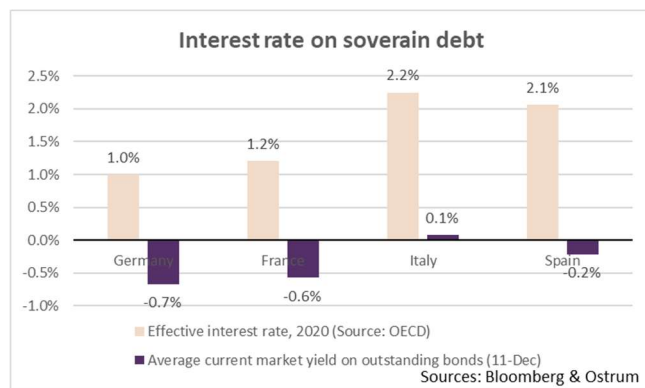
maturing debt, we estimate a level of the net emission at 565 billion.

We assume, in line with historical pattern, that the purchase of sovereign bonds by the ECB (excluding supra-nationals) will amount to 87% of the PEPP and 68% of the APP. We also take into account a certain seasonality in ECB purchases, as purchases tend to be frontloaded at the beginning of the year since issuance are as well. The total amount of ECB purchase could thus amount to 955 billion. Finally, the amount of net government issues after ECB purchases is estimated at -390 billion euros. In 2021, the ECB's purchases will be much larger than the net issues of governments, creating a vast excess of demand for sovereign bonds in order to maintain very advantageous financing conditions.

The crisis has accentuated the divergences between sectors, households and countries and fiscal measures are proving to be the most effective in that case. In this context, the agreement of the 27 on the European recovery plan and the multi-year European budget is excellent news after weeks of uncertainty linked to vetoes from Hungary and Poland. The European recovery plan indeed include a significant portion of subsidies intended for the countries most weakened by the Covid-19 crisis and with high public debt (Spain and Italy in the lead). This news allowed rates of peripheral countries to reach all-time lows last Friday.

A major effect on the cost of the public debt

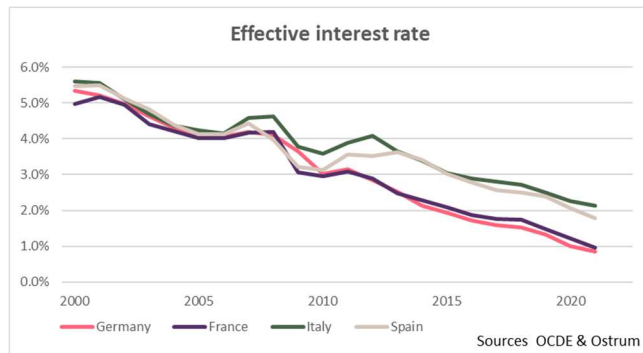
If ECB's action has an impact on the volume of paper available for investors, it also has important consequences in terms of funding costs for governments. To illustrate this idea we compare two interest rates in 2020 for the four largest economies of the Euro zone. First the « effective interest rate » defined as the ratio between the debt service and the level of existing debt. This can be viewed as the effective average rate paid on the outstanding public debt. Second, the average market yield on outstanding bonds. This would be the rate paid by a government if it was able to reissue all its debt. The difference between those two rates is striking.



The effective interest rates are thus bound to decline next year. First because the new debt will be issued at market rates, hence at a much lower yield than the existing one, which will drive down the average. Second, because the maturing debt, which has been issued in the past with high coupons, will be reissued and replaced by bonds that will carry a much lower coupon.

In the case of Germany, four bonds are maturing next year: they account for 54 billion euros and have an average coupon of 2.69%. There is little doubt that Germany will be able to issue at a much lower level: if we assume a zero coupon, this would shave-off 1.5 billion in interest payments for the Treasury.

This trend is nothing new. Using again the OECD data we can compute the trajectory of the effective interest rate for the four bid Euro zone countries, since the start of the century.



One effect of ECB's QE, as mentioned above is to keep rates low. But one should not underestimate also the fact that it has stabilized yield, hence provided visibility for governments' budgets. The low volatility of European peripheral throughout this year is in sharp contrast with the pre-QE period in 2009-2015.

What will be the effect of QE on the cost of funding in 2020? Because of this stability provided by the ECB, we assume that the curve will not move. This is obviously a simplification, but because of the ECB's action this will provide correct order of magnitude to our simulations.

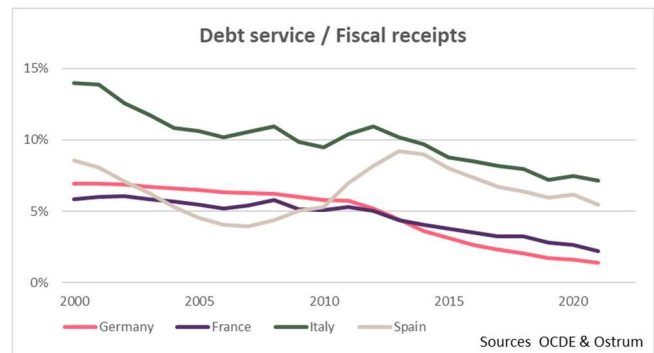
The result is surprising! Of course, our simulations lead to an effective interest rate that continues to head South rapidly. The drop is about 1/4 ppt, except for Germany as yield there is already very low. But the surprise comes from the level of debt service which goes down as well. The debt to be issued next year will accrue governments' debt service but the low level of yields means that the impact is minor. Meanwhile, the maturing of existing debt and its reissuance at much lower yields means a substantial saving for governments. Result: **debt service will decline by several**

billions for governments while their debt is still increasing fast!

	Germany	France	Italy	Spain
Effective interest rate				
2020*	1.00%	1.21%	2.25%	2.06%
2021**	0.82%	0.96%	1.98%	1.75%
Change	-0.17%	-0.25%	-0.27%	-0.30%
Debt service (Bn Euros)				
2020*	24.4	31.7	58.4	26.8
2021**	21.5	27.3	53.9	24.8
Change	-2.9	-4.4	-4.5	-1.9

* Estimations OECD
** Simulations Ostrum

The argument is important because it shows the impact of the ECB's policy. But it also has implications in terms of debt sustainability. The analysis of public finance sustainability heavily uses the ratio debt to GDP. We note, in passing, that this ratio divides a stock by a flow, which is pure heresy from a methodological point of view. Never mind... The point is that debt service will, in all likelihood, decline next year. It seems to us that it is more relevant to analyze the sustainability of the debt to look at the ratio debt service over fiscal receipts. This ratio tells us what part of the government's budget is swallowed by debt costs. If we take an extreme case: Japan. The undisputed champion for public debt, according to the OECD, will have at the end of this year a debt to GDP of 241.6%, but its debt service will also be one of lowest among OECD countries at a mere 0.18% of GDP. The trend is similar in Europe as demonstrated by the chart below.



There is no denial that the large level of public debt in Europe is an issue in many respects. **But in terms of financial cost, the action of the ECB has worked wonders and has more than compensated the increase in the stock of debt.** This has major consequences in terms of debt sustainability, but also, and more importantly, in terms of room for maneuver for governments' budgets.

• Market review

Volatility picks up despite ECB easing

The mostly uneventful ECB meeting sparked position unwinding and a volatility spurt across risky asset markets. Bond yields moved lower and higher Crossover spreads do hint at a reduction in risky positioning. The impasse of Brexit negotiations and budget talks in the US entail two difficulties for markets towards year-end as the Fed meets this week

The main takeaway from the ECB meeting is that monetary policy will remain broadly unchanged. The “temporary” PEPP tool is prolonged until March 2022 and capacity was raised by €500b. As regards bank funding, the three new TLTROs include a rate premium to provide incentives for banks to maintain credit until the end of 2021. The Central Bank appears worried about the possibility of a credit crunch, which would be a payback the extensive use of credit lines by corporate borrowers at the height of the pandemic. The bonus rate (-1%) may postpone TLTRO repayments and reduce covered bond issuance going forward. Furthermore, four unlimited liquidity-providing operations with one-year terms (PELTROs) have been added in 2021. In fact, in money markets, euro area banks no longer have borrowing interest at 3-6 months’ maturities. Monetary inundation reflects prevention of systemic risk. The ECB also tweaked its inflation forecasts lower. Consumer prices may rise by just 1.4% by 2023. In some ways, the lower price projections, in conjunction with additional easing, may simply reflect that the ECB is powerless. In parallel, Germany brokered a compromise deal with Hungary and Poland which had vetoed the EU budget including the €750b recovery plan. Talks between the UK and the European Union have however stalled again. A no-deal outcome appears indeed inevitable at this juncture.

In this context, the FOMC meeting will take place on Tuesday and Wednesday whilst, at this time, there is no budget agreement. A continuation resolution has been signed and talks may continue for up to 7 days. Steven Mnuchin’s \$916b proposal has similarities with the House’s bipartisan plan. Republican leaders in the Senate still oppose parts of the budget bill including financing of states. Time is running out as federal unemployment insurance will expire at year end. The Fed may leave its monetary policy unchanged. The zero-rate policy until 2023 will likely be confirmed as economic projections are updated. Asset

purchases will be unchanged at around \$120b a month as mortgage credit demand and higher house prices arguably reduce the chances of Operation twist in the near term.

Monetary status quo contributed to the bid for risk assets as equity markets went through a soft patch late last week. Recent steepening makes carry trades on US treasuries more attractive especially some investors bet on Fed twist. Activity in futures markets report buying along the yield curve leading to renewed flattening pressure late last week. The yield on 30-year T-bond lost some 12bp to 1.62% at last week’s close. The 2s10s spread shrunk by 4bp to 77bp. The yield on 10-year note dipped temporarily back below 0.90%. In the euro area, the markets’ knee-jerk reaction to ECB announcements was swiftly erased. The yield on 10-year Bunds closed last week near -0.63%. On short-term maturities, some investors had anticipated an increase in the reserve multiple for which bank liquidity holdings are sheltered from negative rates. As tiering multiples stayed unchanged, position unwinding sent 2-year swap spreads about 3bp wider. Sovereign spreads barely budged. The spread sold 10-year bond for the first time. Italian BTPs still trade below 120bp.

Credit spreads have broadly unchanged over the past week on both sides of the Atlantic. The Euro IG credit market is stable about 93bp against Bunds despite the accumulation of selling final investor flows. ECB buying is enough to maintain market spreads in equilibrium. Conversely, iTraxx crossover spreads (264bp high last Friday) increased in response to higher equity volatility. The spread correction suggests that high yield valuations are rich at present as, on our estimates, as spreads barely compensate investors for expected defaults on corporate credit.

As regards equities, the FTC’s antitrust case against Facebook sparked a sharp correction in the Nasdaq. This is a stark reminder of potential risks weighing on big technology companies under a Biden Administration. That said, IPO success namely AirBnB or DoorDash only highlight the importance of liquidity still to be invested. The beauty contest instantly sent AirBnB’s valuations above \$100b. In Europe, the fallback in bank stocks reflect disappointment as regards their ability to pay out dividends next year. The regulator is unlikely to allow a sharp increase in shareholder returns, at a time when monetary policy is being eased. In currency markets, the downtrend in the US dollar continues with the DXY index sliding towards 90 and sterling volatility is here to stay as Brexit headlines move markets. It is fair to say that additional ECB easing had little effect on the euro which keeps trading above 1.21\$.

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● Main market indicators

G4 Government Bonds	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
EUR Bunds 2y	-0.77 %	-1	-4	-16
EUR Bunds 10y	-0.62%	-3	-7	-43
EUR Bunds 2s10s	15 bp	-3	-3	-27
USD Treasuries 2y	0.12 %	-2	-6	-145
USD Treasuries 10y	0.92 %	-1	+2	-100
USD Treasuries 2s10s	80 bp	+1	+8	+45
GBP Gilt 10y	0.23 %	-5	-11	-59
JPY JGB 10y	0.01 %	-1	-1	+2
€ Sovereign Spreads (10y)	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
France	25 bp	+1	+1	-6
Italy	116 bp	-3	-5	-44
Spain	62 bp	-1	-4	-3
Inflation Break-evens (10y)	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
EUR OATi (9y)	82 bp	+13	+30	-
USD TIPS	189 bp	0	+16	+10
GBP Gilt Index-Linked	318 bp	-3	+15	+7
EUR Credit Indices	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
EUR Corporate Credit OAS	93 bp	+1	-4	+0
EUR Agencies OAS	43 bp	+2	+1	-1
EUR Securitized - Covered OAS	35 bp	+2	+3	-6
EUR Pan-European High Yield OAS	364 bp	+11	-34	+60
EUR/USD CDS Indices 5y	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
iTraxx IG	49 bp	+2	-1	+5
iTraxx Crossover	257 bp	+14	-29	+50
CDX IG	53 bp	+2	+0	+8
CDX High Yield	298 bp	+4	-31	+18
Emerging Markets	14-Dec-20	-1wk (bp)	-1m (bp)	YTD (bp)
JPM EMBI Global Div. Spread	365 bp	+7	-12	+75
Currencies	14-Dec-20	-1wk (%)	-1m (%)	YTD (%)
EUR/USD	\$1.213	-0.02	+2.44	+8.03
GBP/USD	\$1.334	-0.19	+1.08	+0.57
USD/JPY	¥104	-0.01	+0.52	+4.4
Commodity Futures	14-Dec-20	-1wk (\$)	-1m (\$)	YTD (\$)
Crude Brent	\$50.0	\$1.3	\$7.1	-\$10.5
Gold	\$1 826.5	-\$39.1	-\$63.0	\$303.7
Equity Market Indices	14-Dec-20	-1wk (%)	-1m (%)	YTD (%)
S&P 500	3 696	0.10	3.08	14.38
EuroStoxx 50	3 516	-0.40	2.44	-6.12
CAC 40	5 549	-0.43	3.15	-7.17
Nikkei 225	26 732	0.70	5.30	13.00
Shanghai Composite	3 369	-1.39	1.78	10.46
VIX - Implied Volatility Index	22.47	5.49	-2.73	63.06

Source: Bloomberg, Ostrum Asset Management

Additional notes

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