

Bond Market Outlook

ECB Bond Market Contact Group, 25th June 2020

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1. Macro, Liquidity, EGBs and € Credit

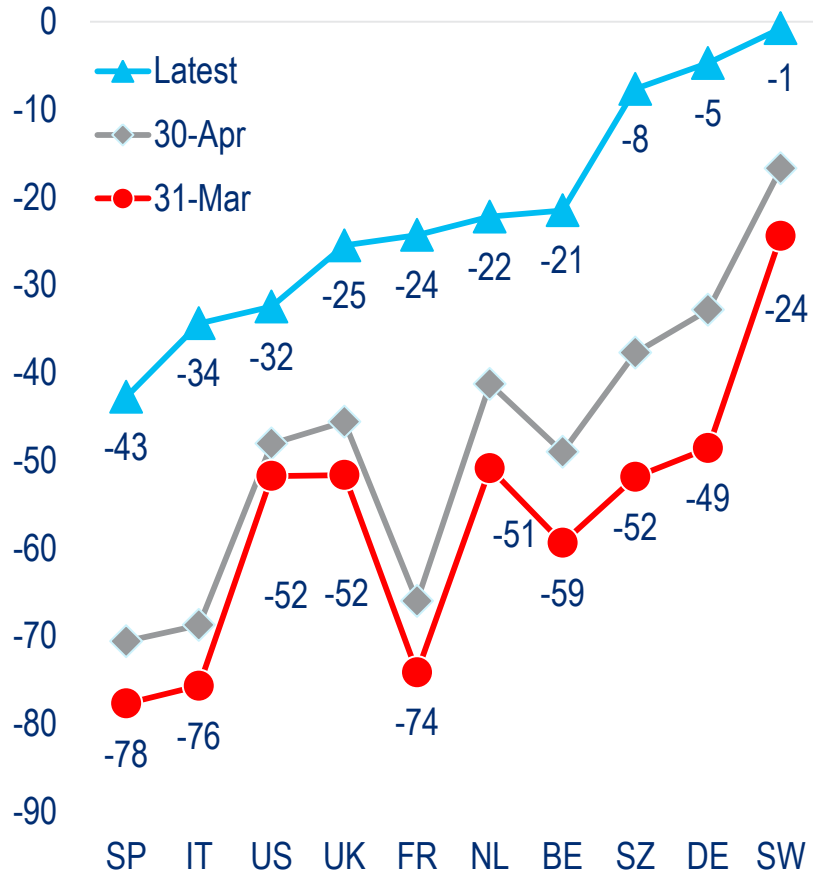
2. The EU as a major issuer

Economic Activity Rebounding Slowly After Shutdown

Mobility trends showing steady improvement. Some are almost back to pre Covid-19 levels, others still far behind. Largest (smallest) delta is Germany (US). Sentiment remains very fragile, implying large GDP hit

Google and Apple Mobility Trends

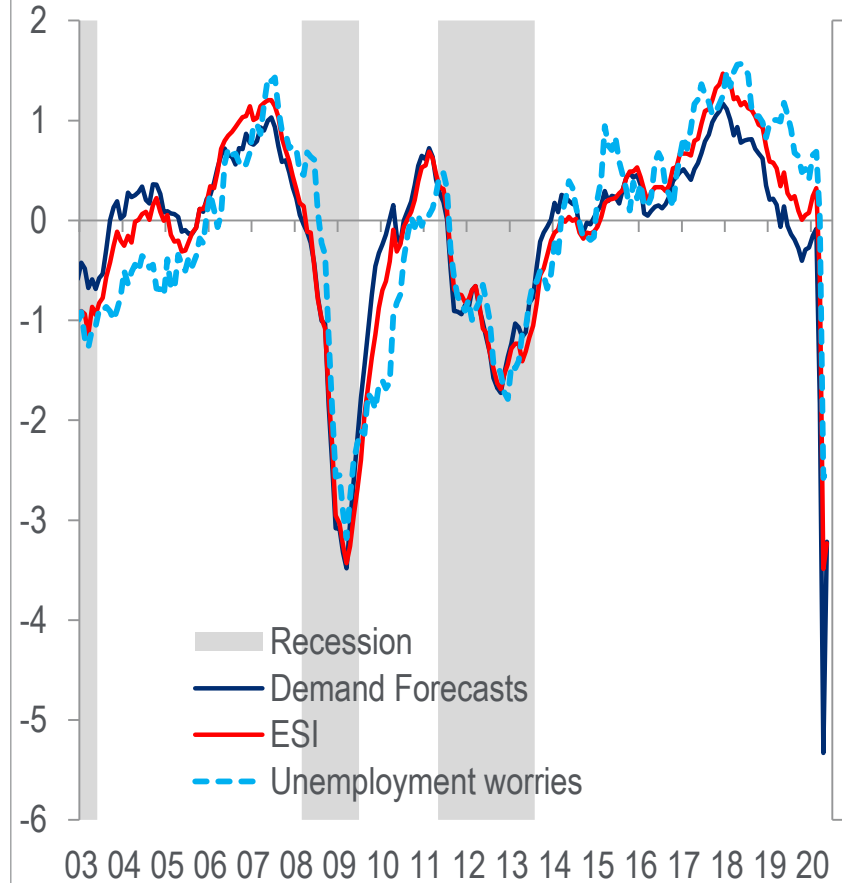
(% Change from Pre-COVID-19 Levels), Jan-20 to Jun-20)



Sources: Google, Apple and Citi Research

ESI, Demand Forecasts and Unemployment Worries

(Standard deviation from long-term average, Jan-02 to May-20)



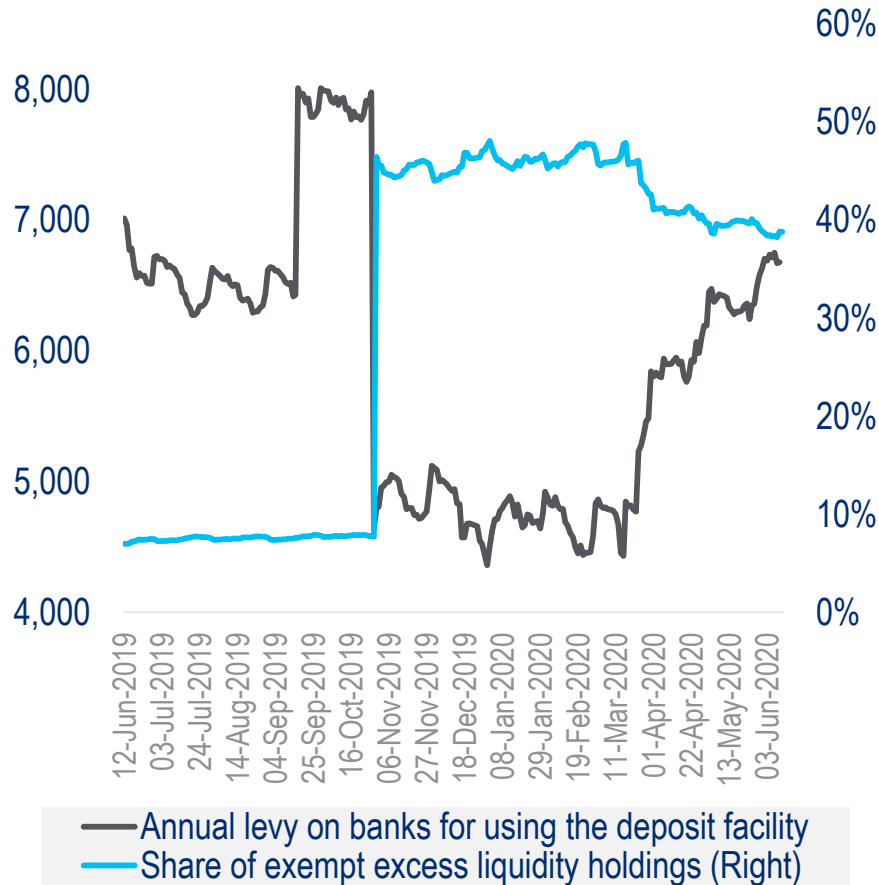
Sources: European Commission, Eurostat and |Citi Research

ECB Involvement Remains Essential to Support the Upswing

Excess liquidity rising steadily, soon requiring hike in tiering multiplier. With 2022 HICP forecasts for 2022 at record lows, asset purchases must continue beyond Jun-21, pointing to another upscaling of PEPP by year-end.

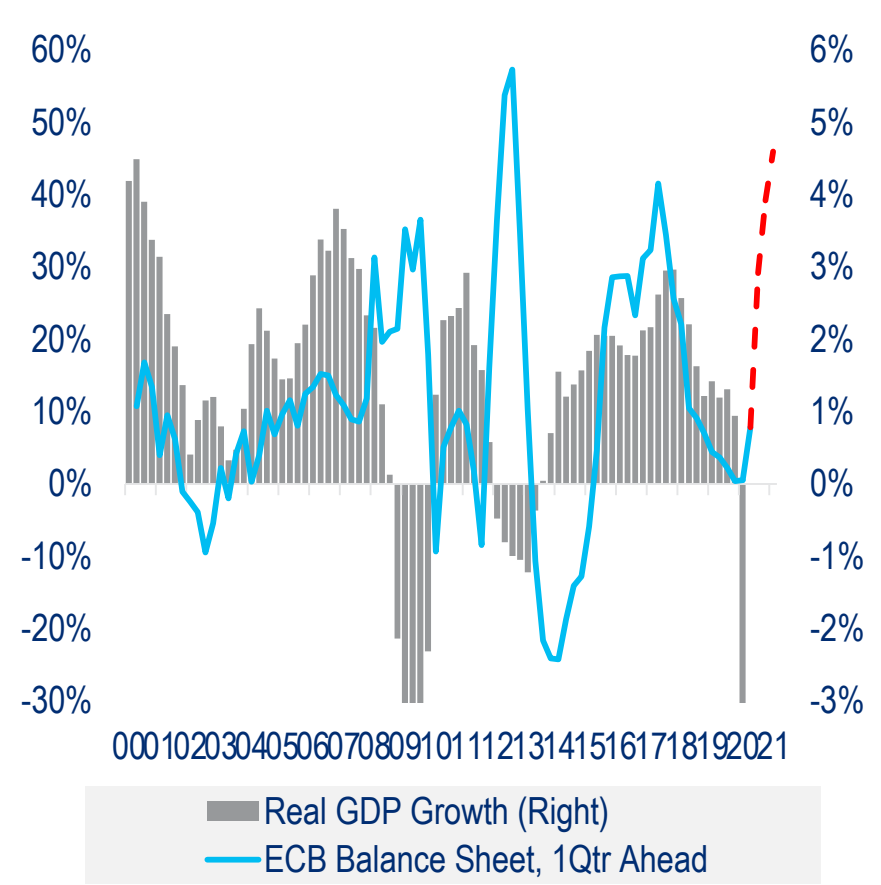
Eurosystem – Excess Liquidity & Implied Annual Levy

(EUR Millions and Share of exempt excess liquidity holdings, Jun-19 to Jun-20)



Euro area – Real GDP and Eurosystem Balance Sheet

(% YY , 2000-2020)



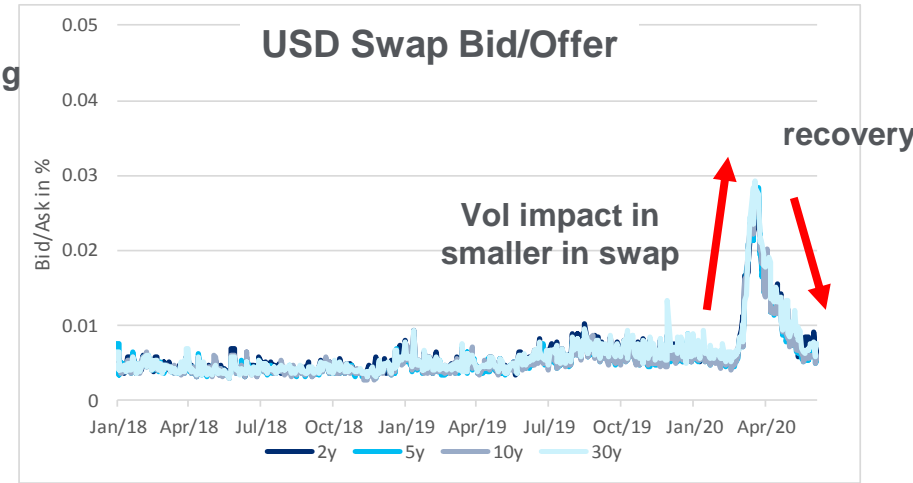
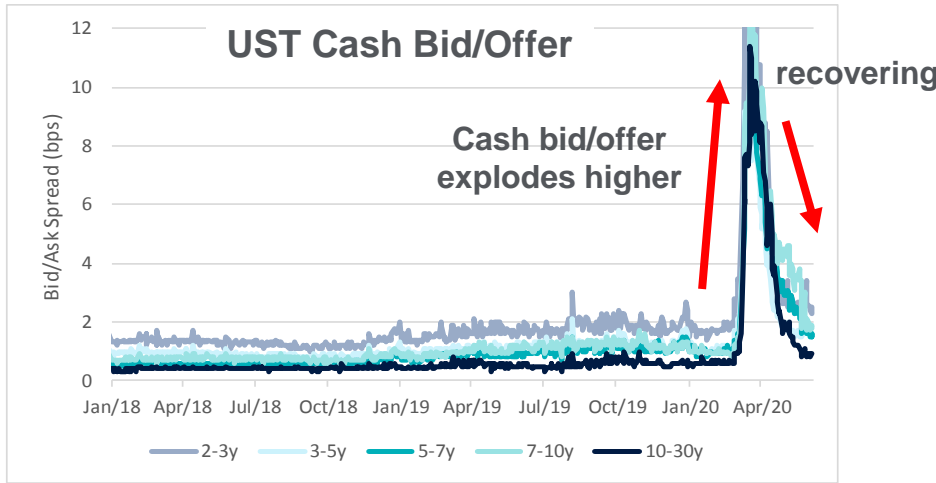
Sources: European Central Bank and Citi Research

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US Drives Liquidity Meltdown ... and Recovery...

Into the March volatility shock market function was significantly tested in US treasuries

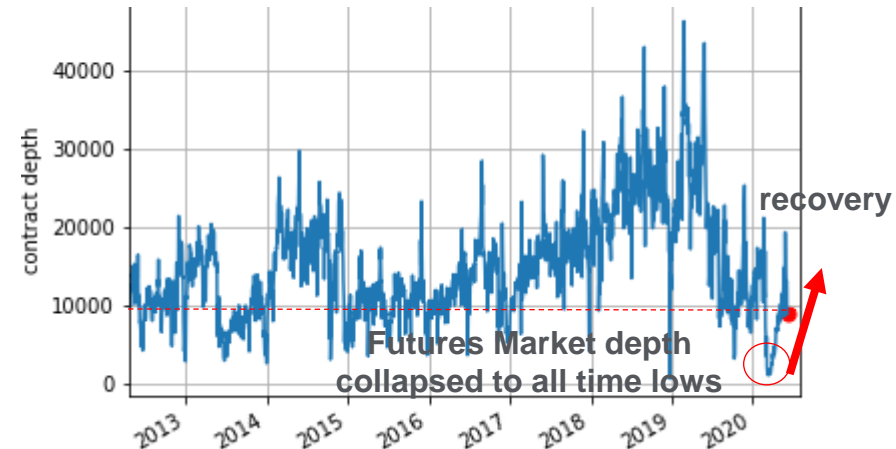
- with UST cash liquidity collapsing (broker bids/ask widening by x10) ...
- swap bid/offer widening, collapse in future market depth and a spike in impact execution cost
- ... but on FED support, liquidity is recovering



Cost to Execute in UST 10y Futures



Market Depth in 10y TY UST Futures

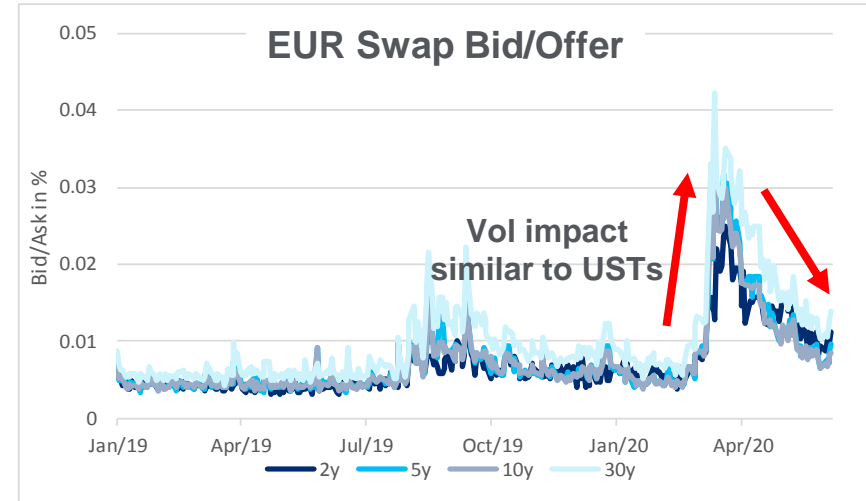
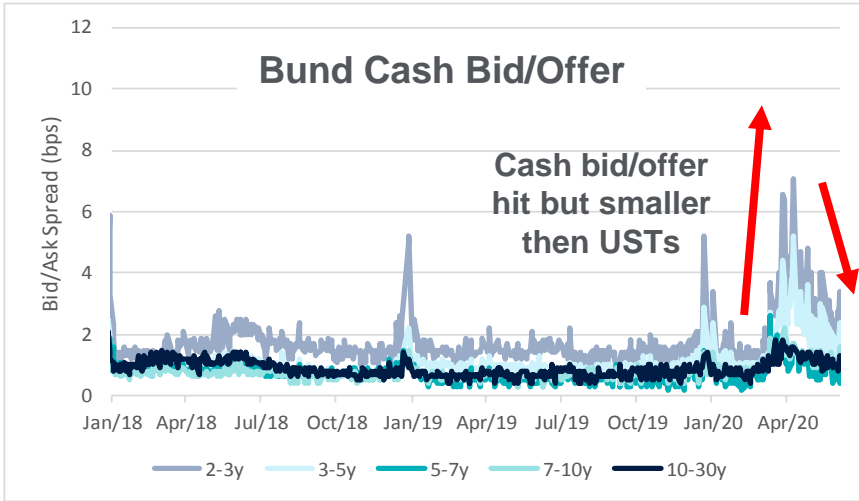


Source: Citi Research. As of close 12June20.

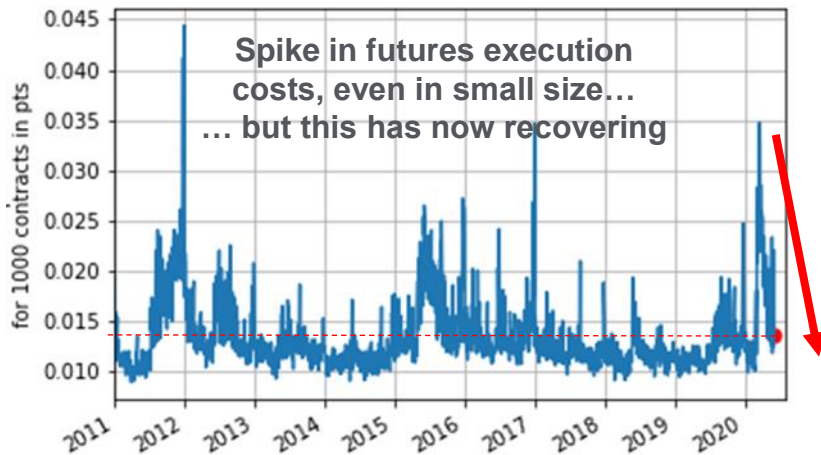
... Bunds Liquidity Follows USTs ...

Bunds liquidity was also hit into the March volatility shock, but to a lesser extent...

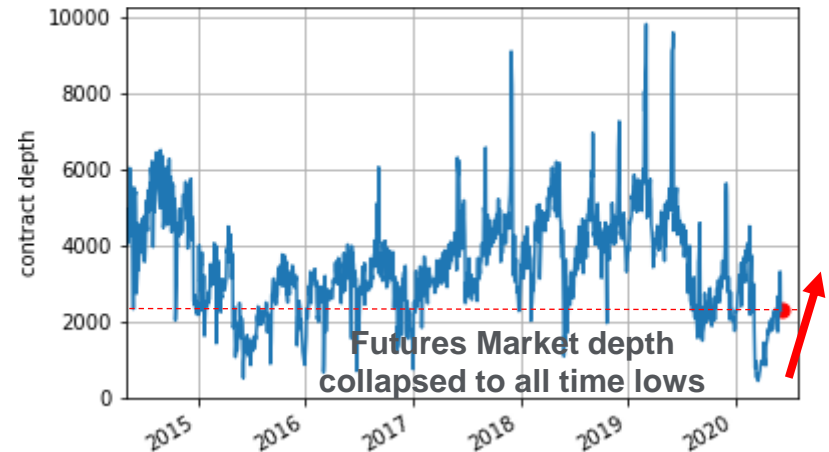
- Cash bid/offer widened but not to the levels seen in USTs
- But swaps, futures similarly impacted with spike in costs and collapse in depth



Cost to Execute in Bund 10y Futures



Market Depth in 10y Bund Futures



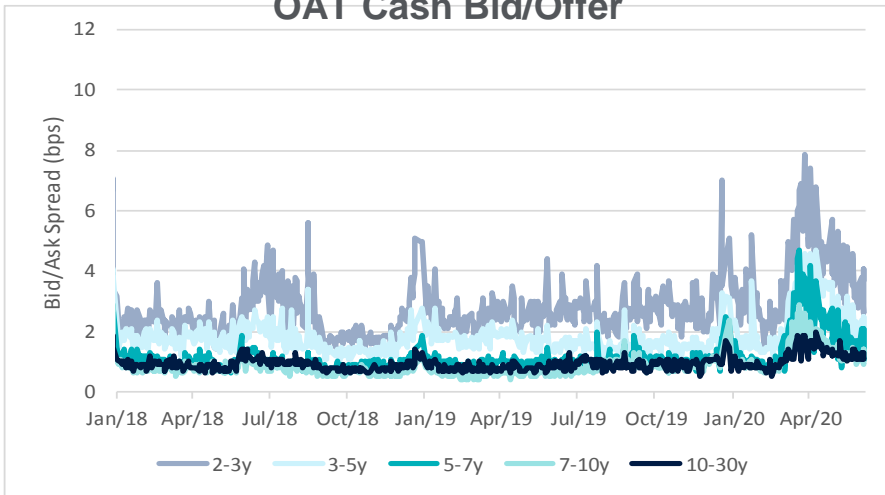
Source: Citi Research. As of close 12June20.

... and EGB Contagion

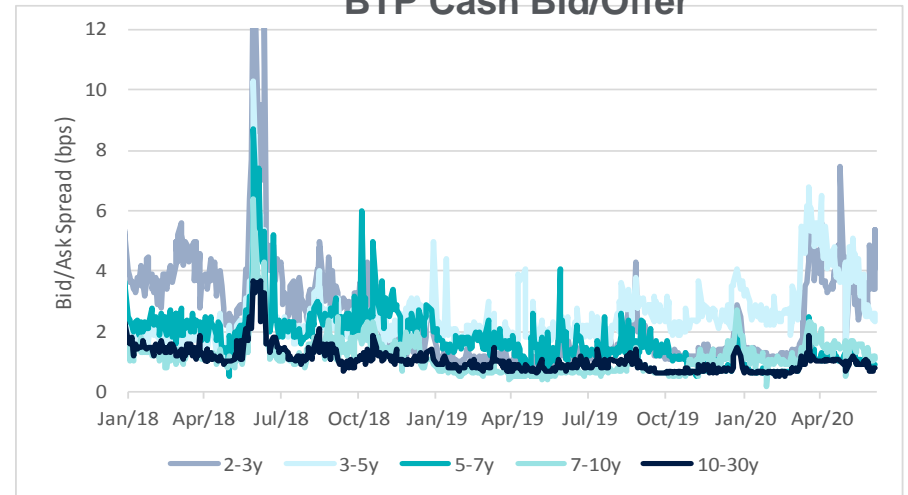
In EGB core markets (OATs) liquidity dynamics followed Bunds...

... with wider cash bids/offer, collapse in order book depth and spike in execution costs ... which are recovering
While in periphery markets (BTPs) bid/offers still raised at the short end and market function still impaired

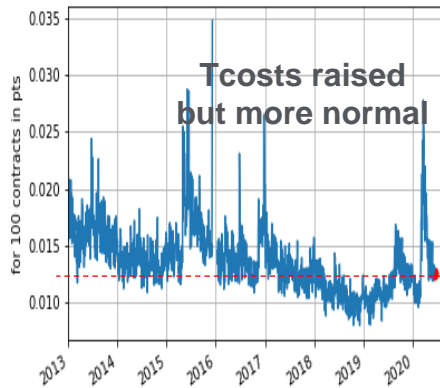
OAT Cash Bid/Offer



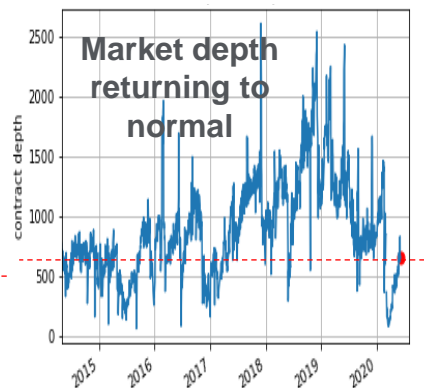
BTP Cash Bid/Offer



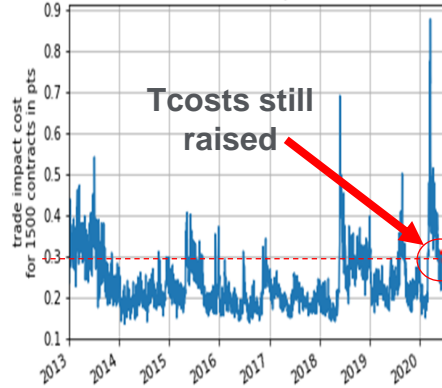
Trade Impact OAT



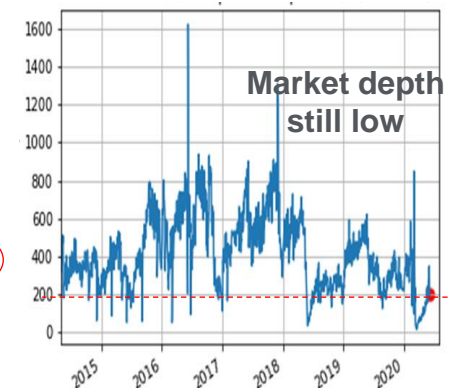
Market Depth OAT



Trade Impact BTP

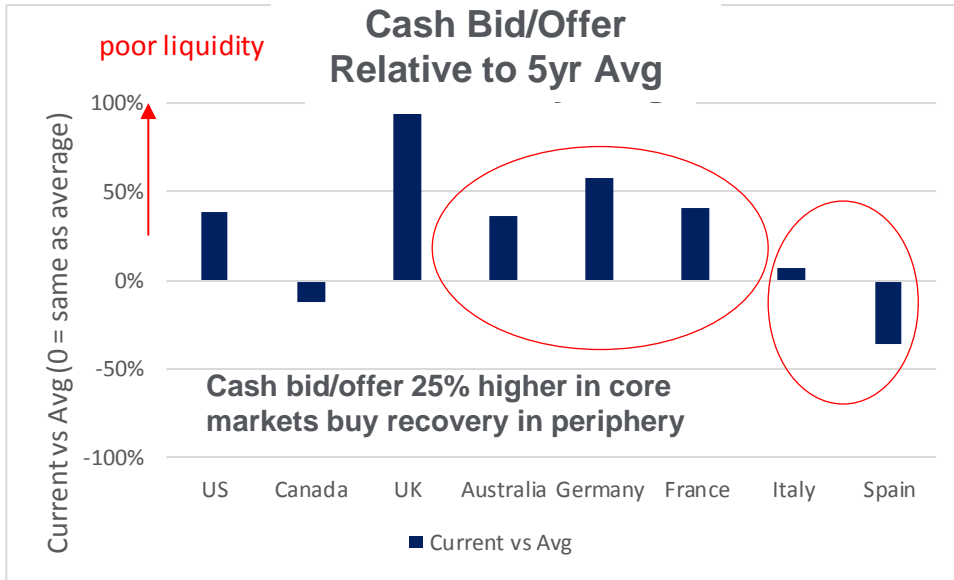


Market Depth BTP

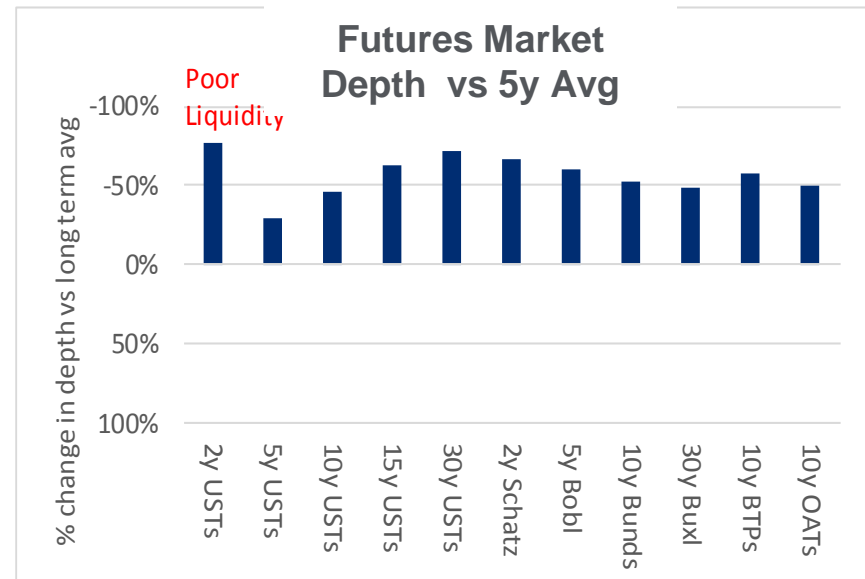
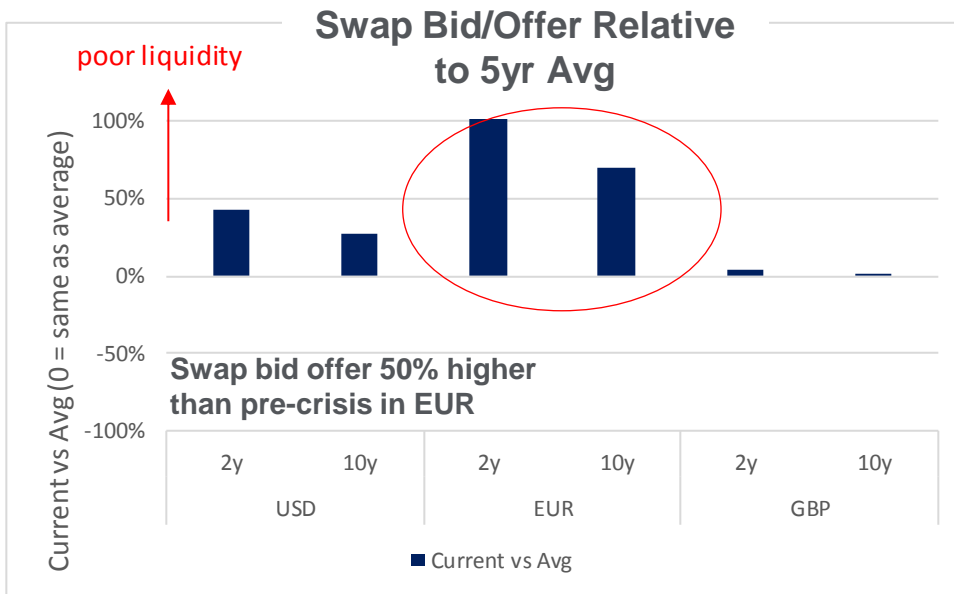


Source: Citi Research. As of close 12June20.

Recovery Yes... Fully Recovered... Not Yet



- Market depth has dramatically recovered from the market lows, with a rapid tightening of bid/offers and reduction in transaction costs over the last 2 months ... but market function has not fully recovered
 - Cash bid/offers still 25% higher than pre-crisis in core markets, swap bid/offer
 - Swap bid/offer still 50% higher than pre-crisis
 - And futures depth 50% lower than the historical average across global contracts.

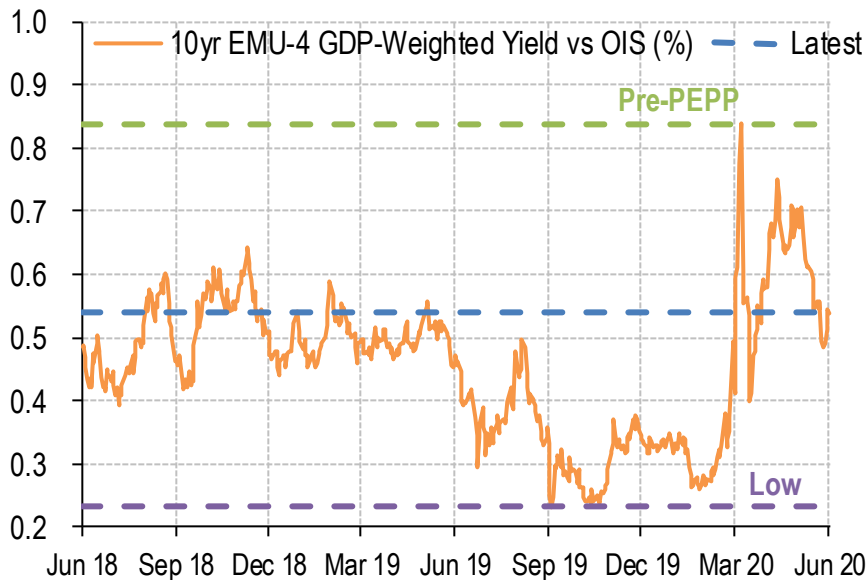


Source: Citi Research. As of close 12June20.

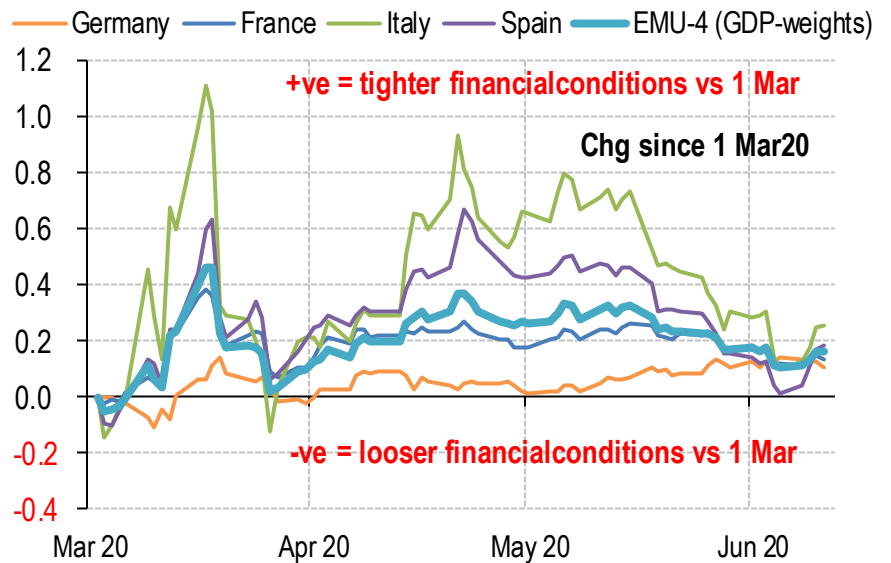
EGBs as a guide to financial conditions

The ECB monitors GDP-weighted EGB yields as an indicator of financial conditions. Some of the recent loosening – thanks to lower periphery yields – has been offset by rising Bund yields vs OIS.

EMU-4 GDP-weighted EGB yield vs OIS



Periphery volatility driving average conditions, but Bund cheapening playing a role more recently



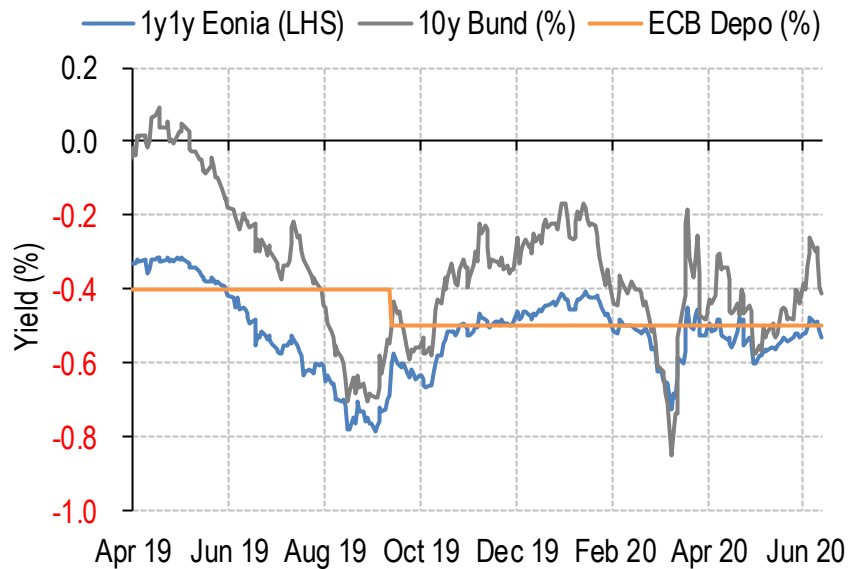
Source: Citi Research, Bloomberg. As of close 11 June 20.

Financial conditions still tighter than pre-Covid, whereas the economic backdrop justifies looser

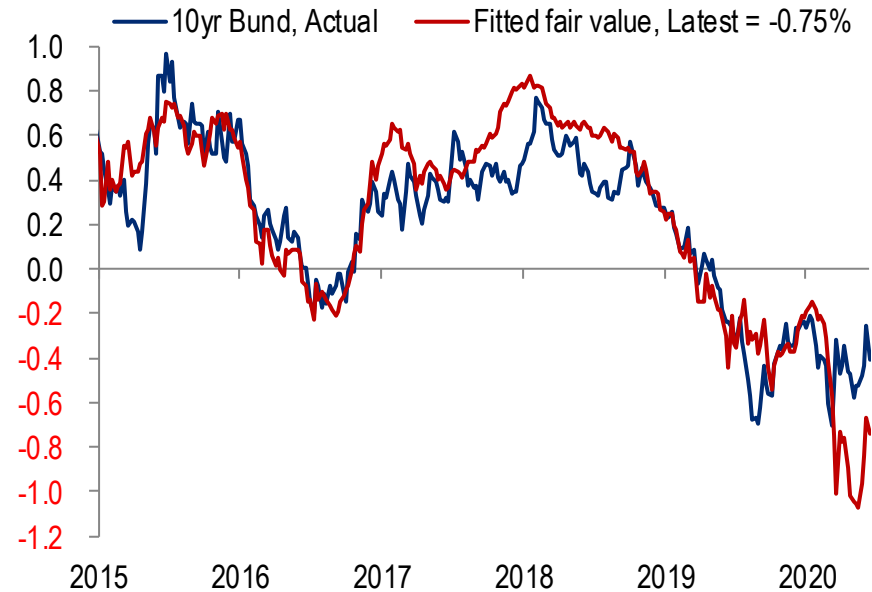
Bund outlook – 10yr yields likely to stay negative

10yr Bund yields are likely to remain negative and close to the depo rate given little prospect for policy normalisation. Higher issuance is likely to be easily absorbed given lack of risk-free assets.

Bund yields anchored close to depo rate



Citi Bund FV model: FV is lower on economic collapse: market is pricing recovery



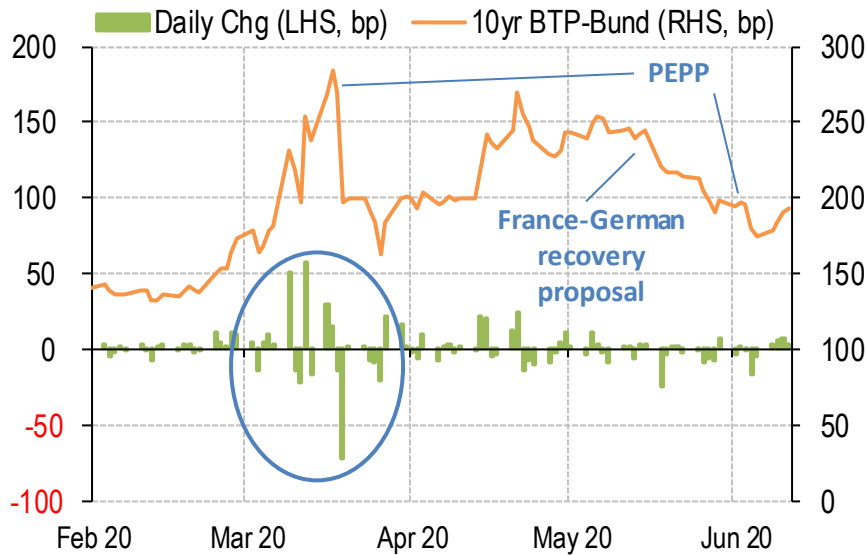
Source: Citi Research, Bloomberg. As of close 11 June 2020.

Never-normalisation themes make front-end rates the anchor for the long-end

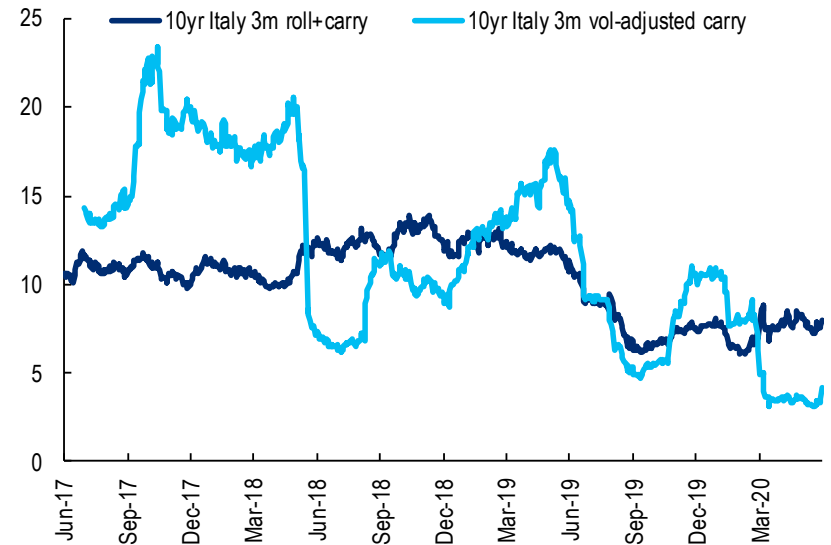
EMU spread outlook – stability ahead?

PEPP upsizing has added resilience to EMU spreads despite huge issuance pressure, but economic/debt fragility warns against further tightening. Spreads may settle into a new, wider range.

PEPP upsizing has added resilience, but EMU spread tightening may require fresh positive headlines



Vol-adjusted carry currently unattractive, but stability may bring back yield/carry-seekers



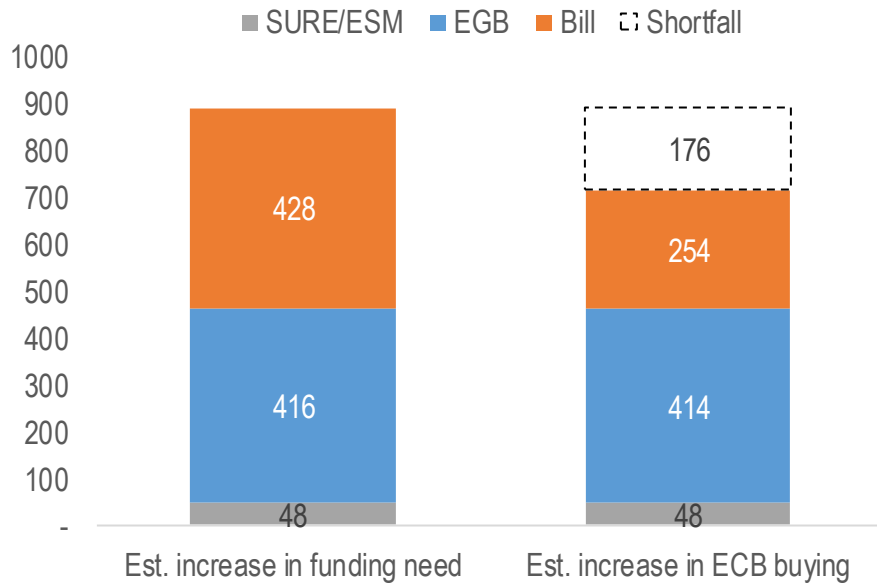
Source: Citi Research, Bloomberg. As of close 11 June 2020.

PEPP has added resilience to EMU spreads, but a new catalyst may be needed to drive further tightening

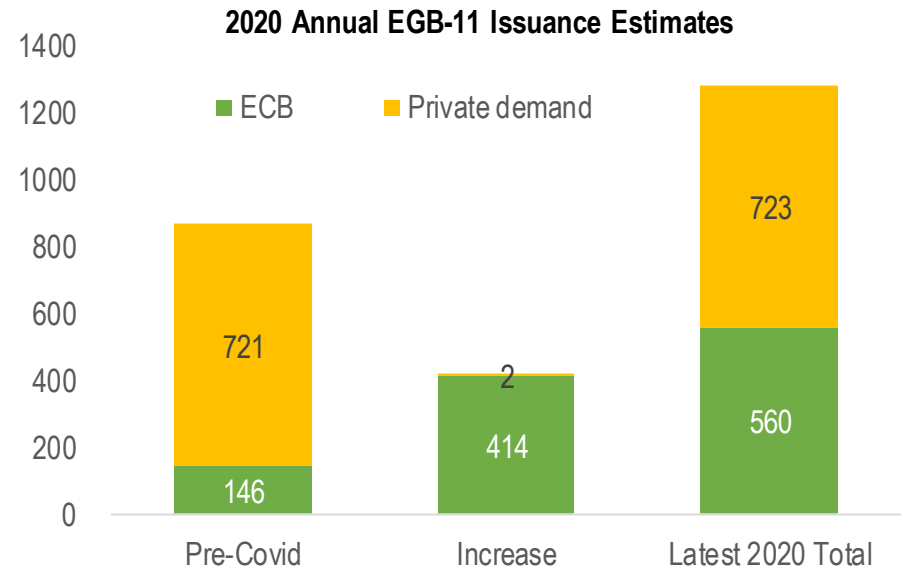
ECB buying soaking up the increase in EGB issuance

On our estimates for 2020, ECB buying won't fully offset the additional sovereign funding need, but looks well matched vs the EGB-funded portion

Increase in EMU-11 funding vs increase in ECB buying (Citi estimates)



2020 EGB issuance split between ECB and private demand (Citi estimates)



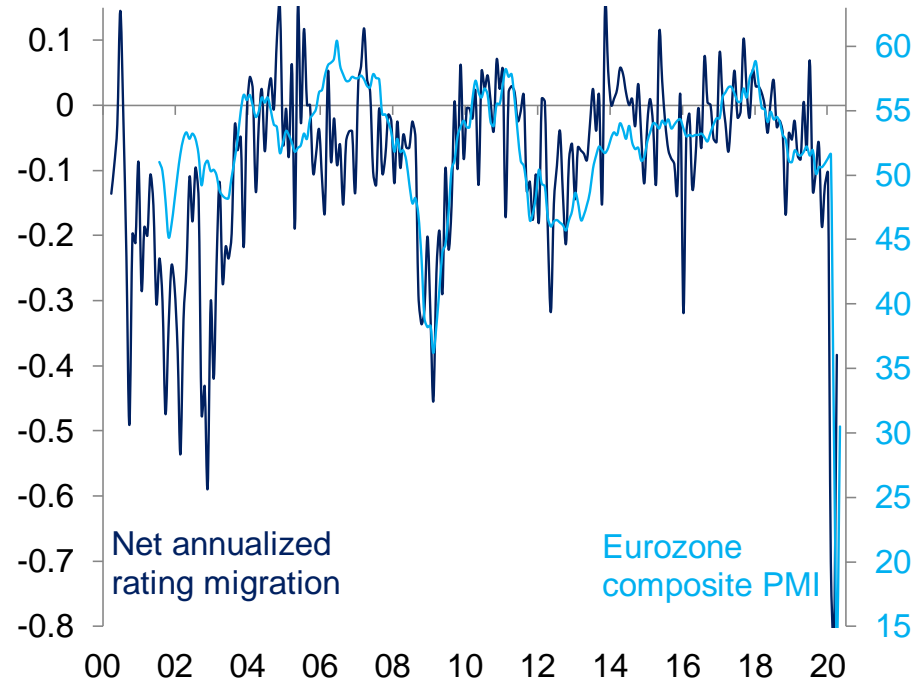
Source: Citi Research, DMOs, ECB.

Required private demand for EGBs in 2020 similar to pre-Covid

€ Credit: Unprecedented rating migration & record issuance

Rating migration: improving but still very negative

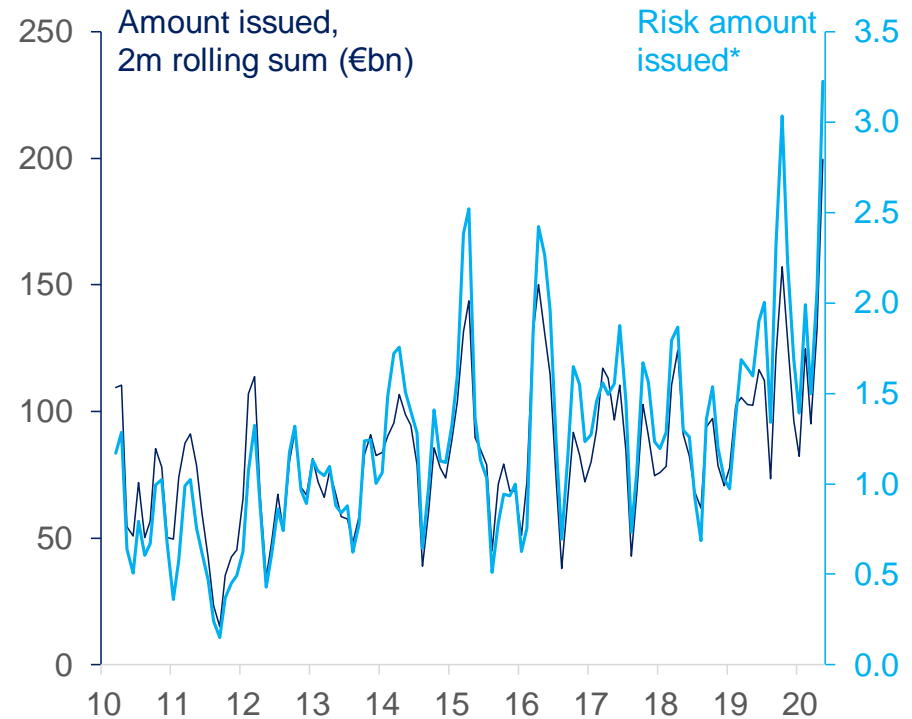
European corporate rating migration vs Eurozone composite PMIs



Source: Citi Research, rating agencies, Bloomberg.

Record issuance – also in risk-adjusted terms

€ IG & HY corporate bond issuance



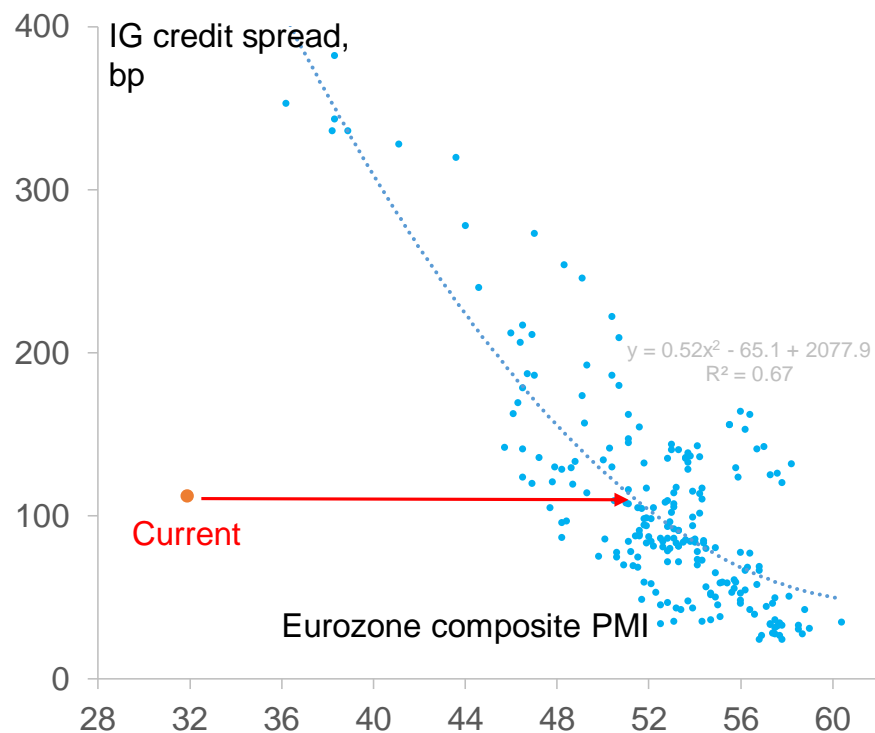
Source: Citi Research, Markit. *: [Amount issued] x [log of Weighted Average rating factor] x [Time to maturity]

Both fundamentals & supply technical have been unfavourable ...

€ Credit: “Crisis? What crisis?”

€ credit consistent with PMIs > 50

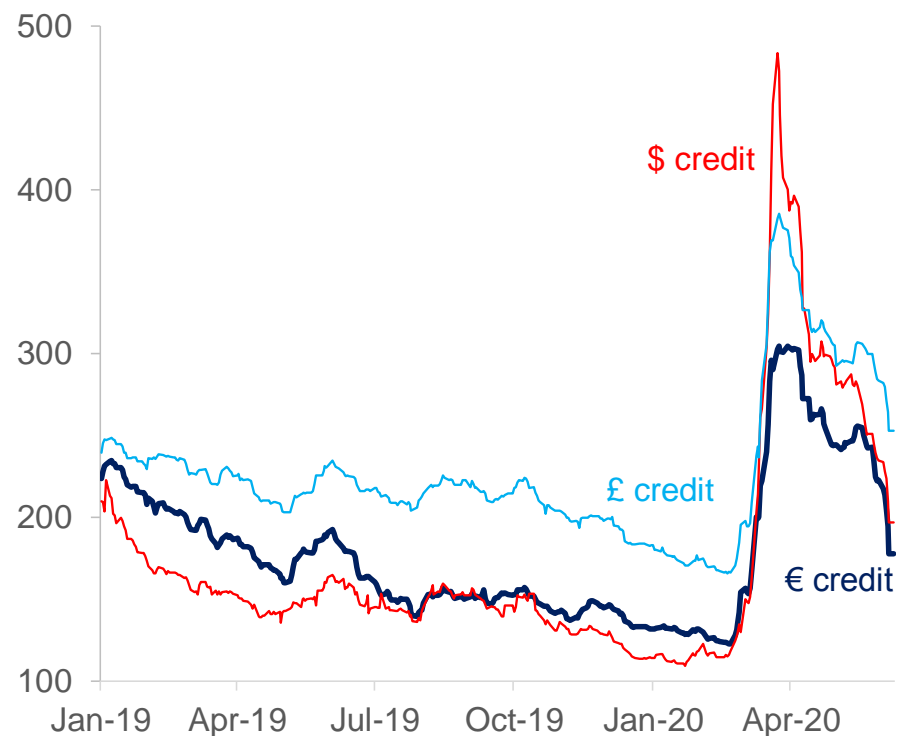
iBoxx € IG credit spread, bp, vs. Eurozone composite PMI



Source: Citi Research, Markit, Bloomberg.

€ credit outperforming

5-7 year BBB z-spread to gov't, bp



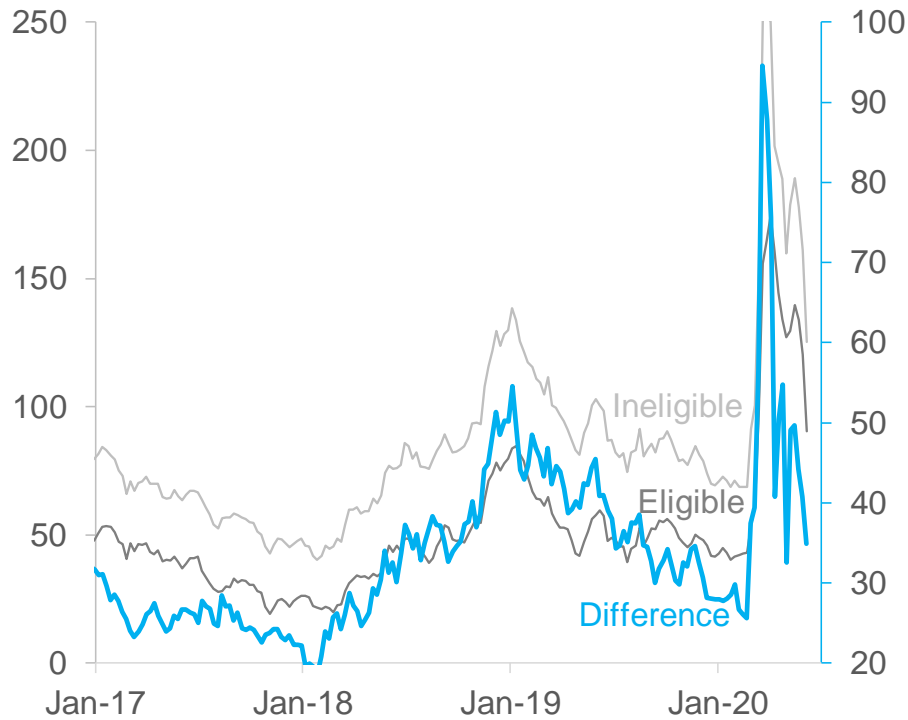
Source: Citi Research, Markit.

... yet credit is pricing out recession already

€ Credit: Low-quality is tighter in range than high-quality credit

CSPP is lifting all assets

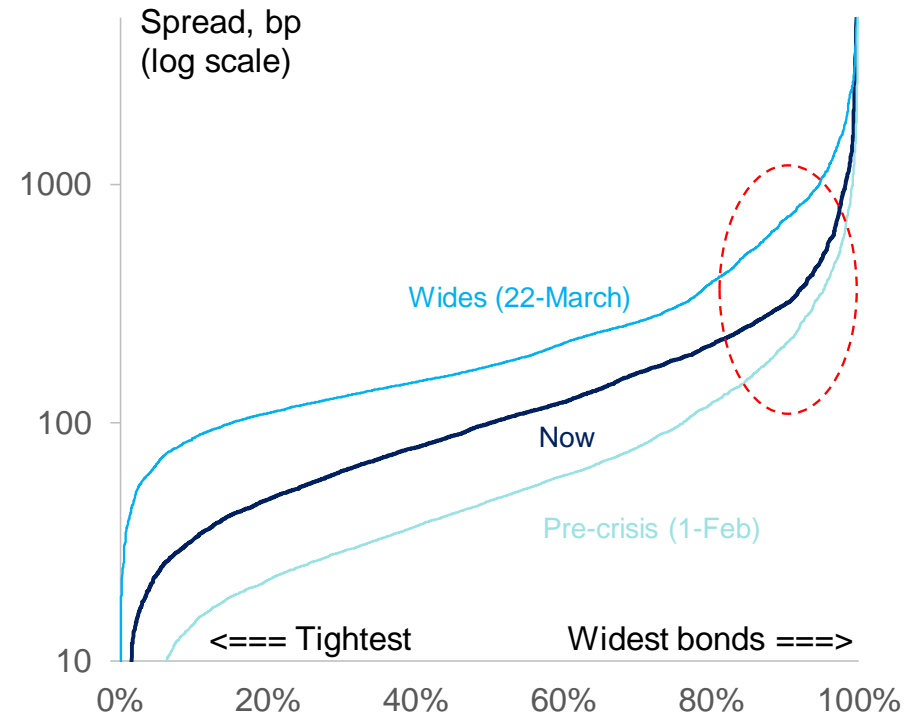
CSPP-eligible & ineligible asset spreads, bp



Source: Citi Research, Bloomberg.

Low-quality tighter in its range than HQ credit

iBoxx IG & HY spread by percentile, now, at wides and pre-crisis



Source: Citi Research, Bloomberg.

**Trickle-down still works but
indiscriminate buying is concerning**

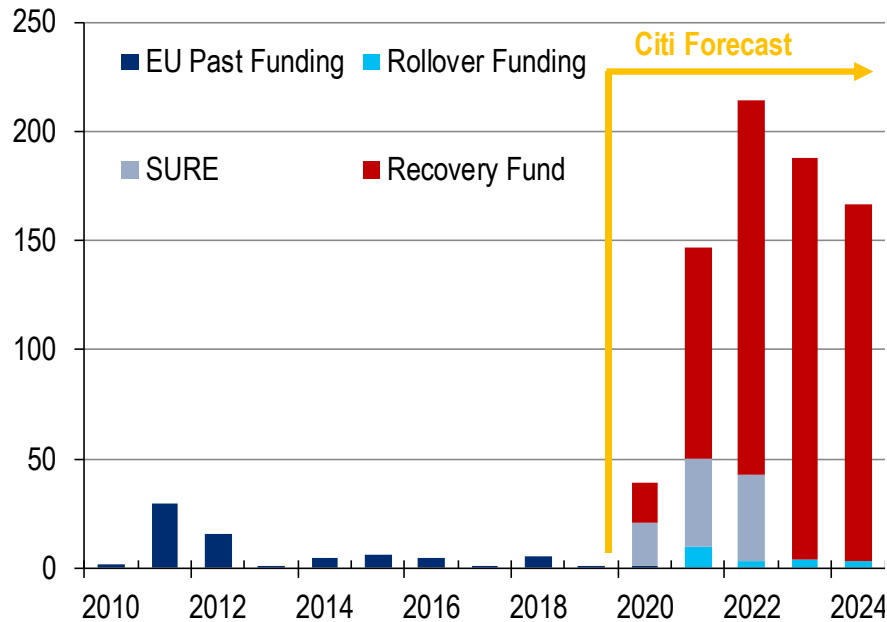
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2. The EU as a major issuer

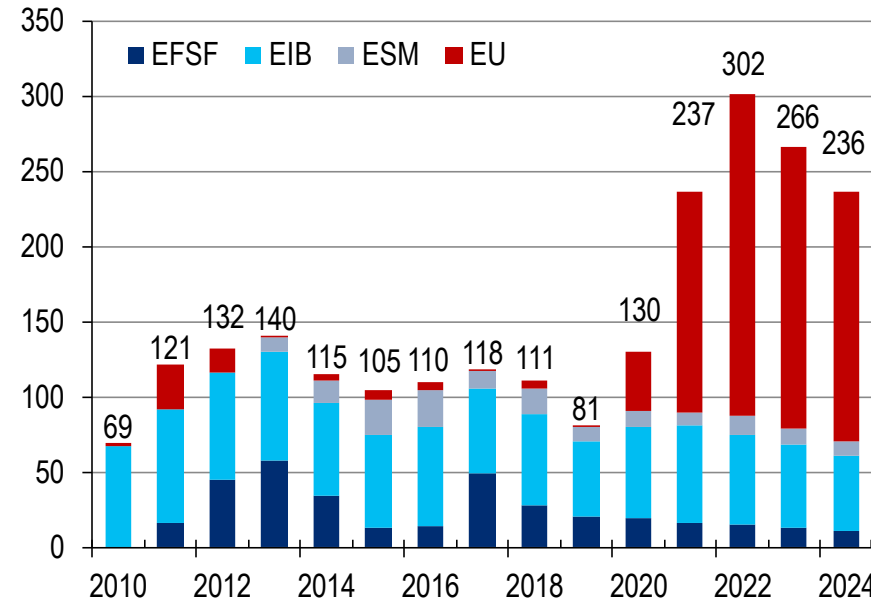
The EU may become a major player in euro high-grade markets

Financing SURE and the Recovery Fund imply EU issuance of up to €150bn in 2021 and nearly €230bn in 2022. The euro supra primary market will face a regime change amid the sheer volumes it faces.

Previous EU supply and expected funding needs until 2024, €bn



Gross supply of the Big-4 'E-names' in supra space and supply projections for the coming years, €bn



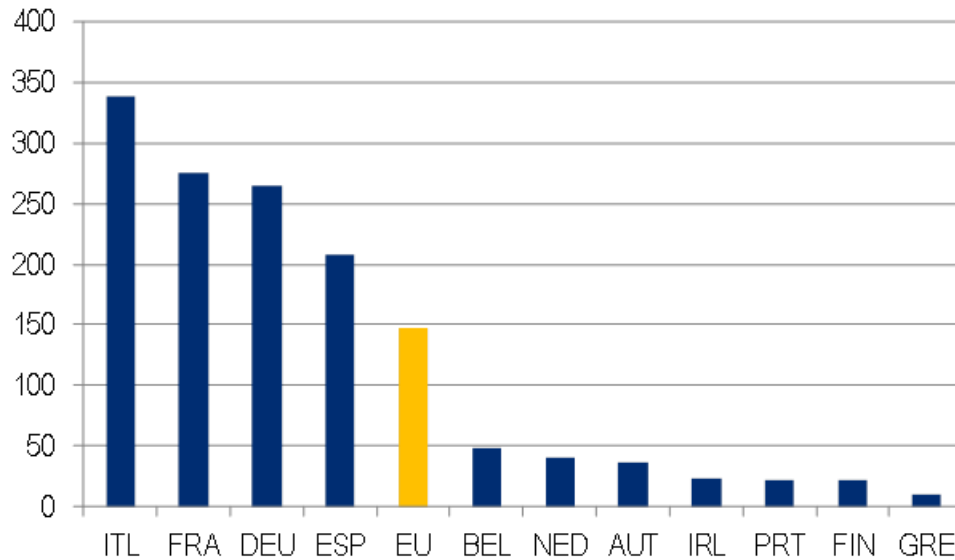
Source: Citi Research, ECB

Peak supra supply in 2022 will be more than 2x the volumes after the European debt crisis

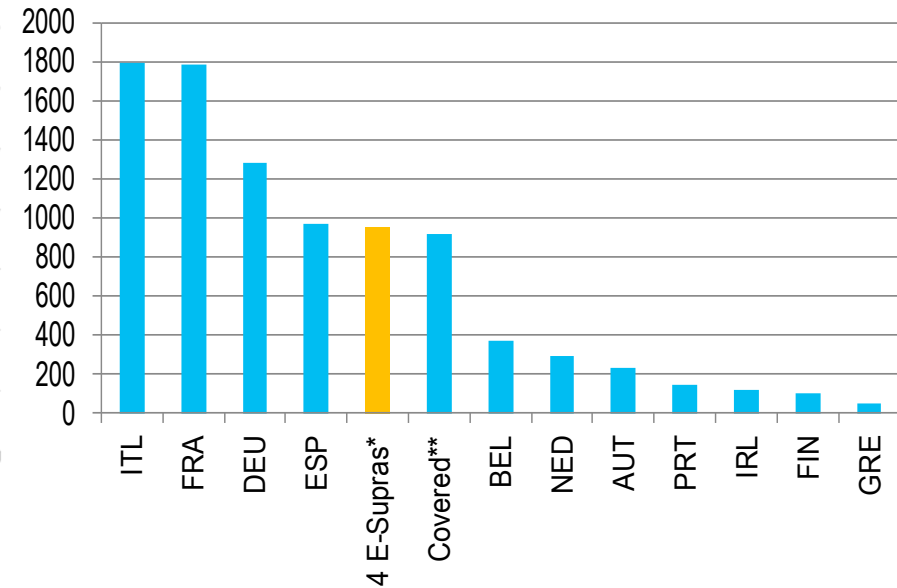
The EU may become a major player in euro high-grade markets

The EU will compete with major euro sovereigns for demand on high-grade bonds going forward. The volume outstanding of the four big 'E-names' will be similar to the Spanish sovereign bond market.

2020 gross bond supply projections of EMU-11 versus EU's 2021 supply expectations, €bn



Outstanding sovereign debt of EMU-11 countries (current volumes) versus outstanding volumes of the 4 E-supras in FY21, €bn



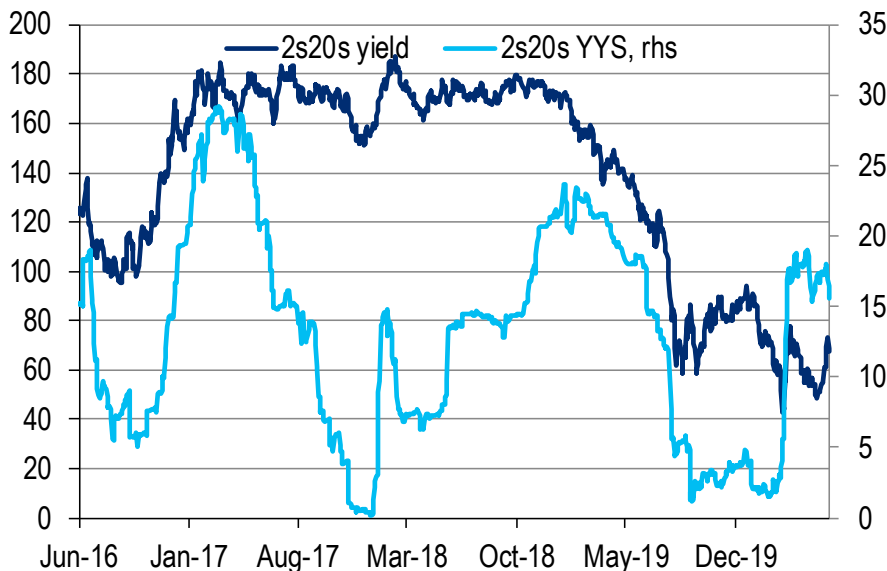
Source: Citi Research; *all currencies, ** euro benchmark bonds

The four big 'E-Names' could have outstanding debt of nearly €1tn at the end of 2021

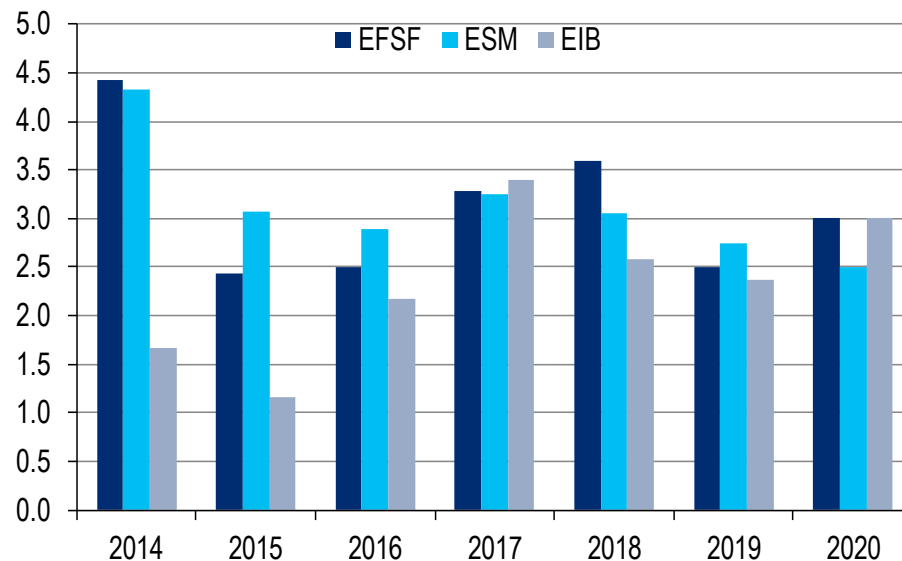
The EU may become a major player in euro high-grade markets

The EU will raise debt between 3 and 30 years. But many questions remain. Is auctioning more sensible than syndications? Does a multi-currency approach make sense? Will the EU conduct rate locking?

The euro supra curve is still near historically flat levels, supporting long-end EU issuance



Given the sheer volume of funding needs, the EU may have to issue much larger bonds than their peers in the past - or turn to auctions (average size of new euro benchmark bonds issued by peers)



Source: Citi Research. As of close 12Jun20.

Multi-currency and auction based funding may be appropriate for the EU primary market activity

Appendices

Citi Economic Forecasts Detailed Overview 2018-2021F

Uncertain forecast, uncertain future. Myriad of uncertainties surround the pace of recovery after economic re-opening. Cut of 0.5pp to global 2020 GDP forecast, adding 0.2pp to 2021, mainly driven by EMs.

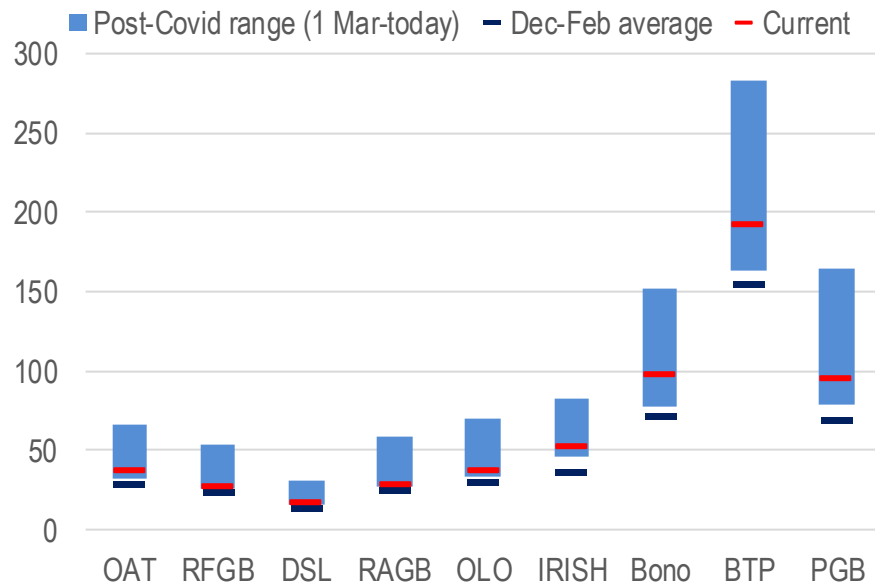
	GDP Growth				CPI Inflation			
	2018	2019F	2020F	2021F	2018	2019F	2020F	2021F
Global	3.2	2.7	-3.6	3.1	2.7	2.5	2.0	2.5
Advanced Economies	2.2	1.7	-5.4	5.2	1.9	1.3	0.7	1.6
United States	2.9	2.3	-3.3	4.1	2.1	1.4	0.9	2.0
Japan	0.3	0.7	-7.1	4.2	1.0	0.5	0.0	-0.1
Euro Area	1.9	1.2	-7.0	7.3	1.8	1.2	0.6	1.5
- Germany	1.5	0.6	-5.4	6.7	1.9	1.4	1.2	1.8
- France	1.7	1.3	-8.8	9.4	2.1	1.3	0.6	1.5
- Italy	0.7	0.3	-9.6	7.6	1.2	0.6	-0.1	0.9
- Spain	2.4	2.0	-9.3	9.0	1.7	0.8	-0.2	1.4
- Greece	1.9	1.9	-7.8	7.3	0.8	0.5	-0.2	0.4
- Portugal	2.6	2.2	-7.7	8.8	1.2	0.3	0.4	1.1
- Netherlands	2.5	1.8	-4.3	4.1	1.6	2.7	0.9	1.4
- Belgium	1.5	1.4	-5.7	6.2	2.3	1.3	0.6	1.7
Sweden	2.3	1.3	-5.5	5.8	2.1	1.7	0.3	1.5
Norway	2.5	2.4	-6.6	7.5	2.8	2.2	1.1	2.8
Switzerland	2.8	0.9	-5.6	4.1	0.9	0.4	-0.5	0.1
United Kingdom	1.3	1.4	-10.4	6.1	2.5	1.8	0.7	1.4
Emerging Markets	4.5	3.8	-1.3	6.3	3.8	4.0	3.7	3.6
China	6.7	6.1	2.4	8.2	2.1	2.9	3.2	2.2
Korea	2.7	2.0	0.2	3.1	1.5	0.4	0.5	1.4
India	6.1	4.7	-3.5	9.2	3.4	4.8	3.9	4.1
Poland	5.3	4.1	-5.0	3.8	1.6	2.3	3.0	1.6
Russia	2.5	1.3	-4.3	3.9	2.9	4.5	3.2	3.4
South Africa	0.8	0.2	-10.1	2.9	4.5	4.1	2.7	3.5
Brazil	1.3	1.1	-6.5	4.0	3.7	3.7	2.5	3.4

Sources: Citi Forecasts (20 May 2020)

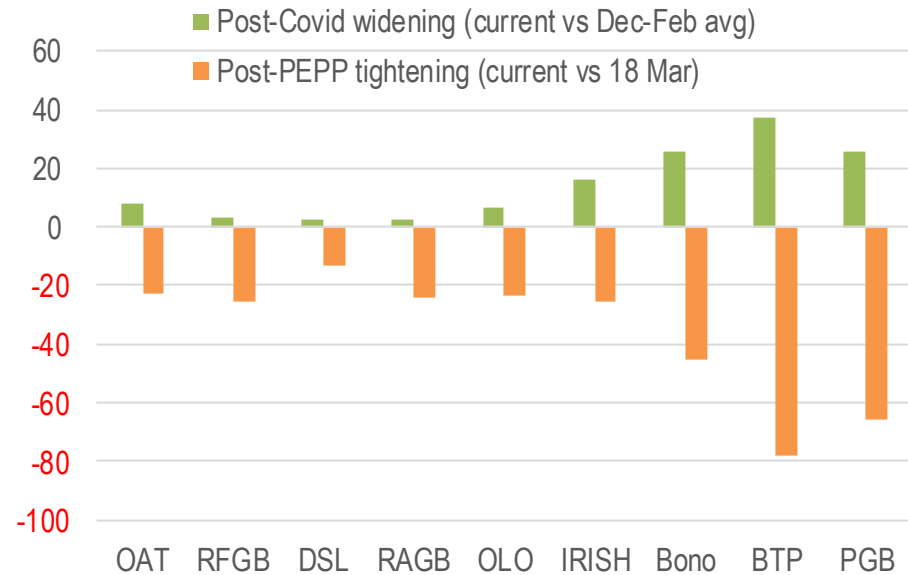
EMU spreads closer to pre-Covid than pre-PEPP

Core and semi-core spreads are within touching distance of pre-Covid averages. Periphery spreads are also closer to pre-Covid averages than the pre-PEPP wides.

10yr EMU spread barometer



EMU spreads: current vs pre-Covid and pre-PEPP



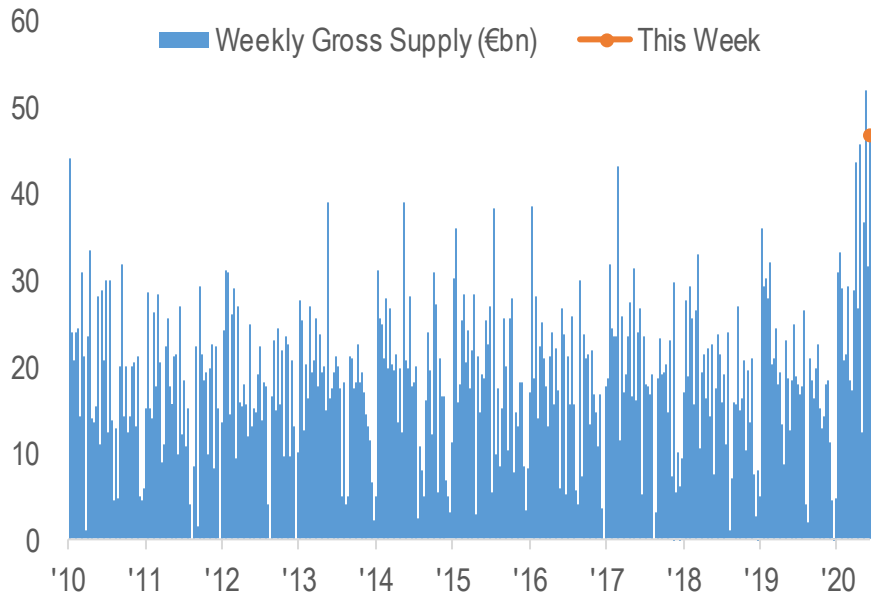
Source: Citi Research, Bloomberg. As of close 11 June 2020.

Covid-impact almost fully reversed in semi-core spreads, but not in the periphery

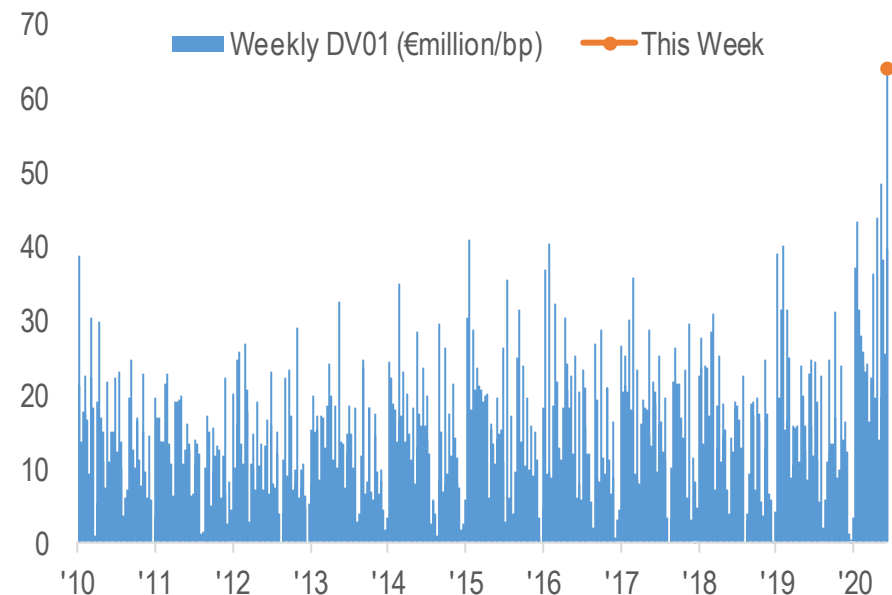
The supply rush: PEPP upsizing has prompted a rush to issue

Issuers continue to upsize funding with weekly issuance still rising.

Weekly EGB Gross Issuance



Weekly EGB Issuance, dv01



Source: Citi Research, DMOs.

8-12 June: highest dv01 EGB supply for at least 10 years, by a distance

A full breakdown: 2020 Funding vs QE purchases (Citi estimates)

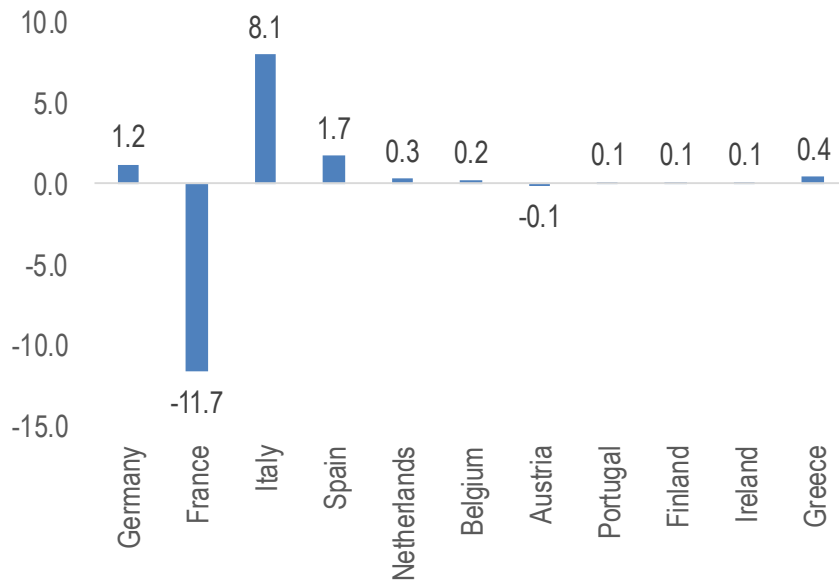
	Pre-virus 2020 supply target		Pre-virus ECB buying		Estimated increase in funding needs	Of which:		Estimated increase in supply		Estimated increase in ECB buying		Increase in supply - ECB buying	New 2020 supply estimate		New ECB buying estimate	
	EGBs	Bills	EGBs	Bills		SURE support	ESM support	EGBs	Bills	EGBs	Bills		EGBs	Bills	EGBs	Bills
DEU	156	62	38	0	300	-	-	103	197	19	100	181	259	259	57	100
FRA	240	283	29	0	103	-	-	35	68	93	25	-15	275	351	121	25
ITA	241	172	29	0	160	20	-	97	43	149	37	-46	338	215	178	37
ESP	117	79	21	0	138	15	-	91	32	83	17	24	208	111	103	17
NLD	24	47	8	0	68	-	-	17	51	5	27	36	41	98	14	27
BEL	28	47	6	0	26	-	-	20	6	21	14	-9	48	53	27	14
AUT	20	5	4	0	29	-	-	17	12	17	7	5	37	17	21	7
FIN	11	11	4	0	18	-	-	11	7	0	10	7	22	18	4	10
IRL	12	10	4	0	20	3	-	12	5	4	7	6	24	15	8	7
PRT	15	13	4	0	15	3	4	7	2	8	7	-7	22	15	12	7
GRC	4	17	0	0	15	3	-	0	6	15	4	-7	10	23	15	4
EMU-11	867	746	146	0	892	44	4	416	428	414	254	176	1283	1175	560	254

Source: Citi Research, DMOs, ECB

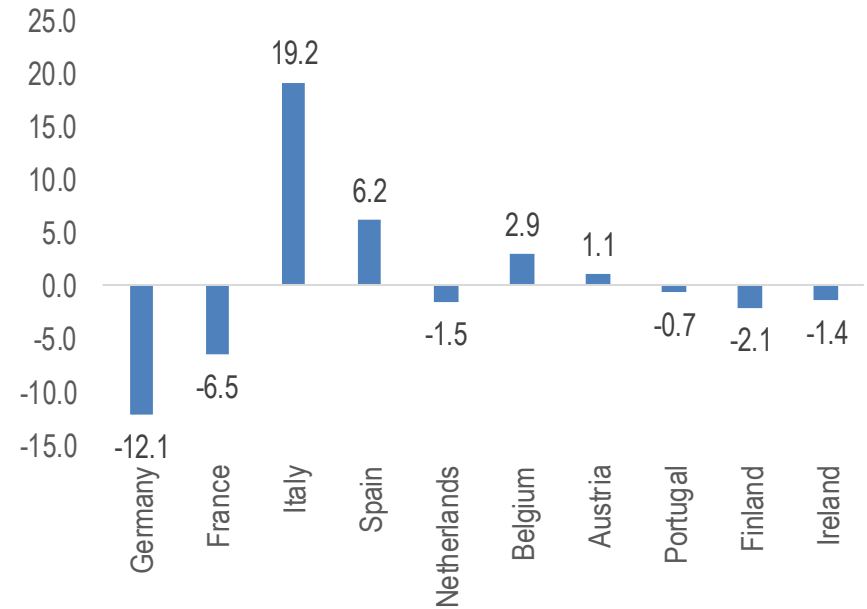
The funding picture continues to evolve, but looks well balanced overall in EGBs vs ECB buying, with ESM take-up a possibility for the periphery

Capital key deviation helps to cap EMU spreads

Capital key deviation in PEPP over March-May (€bn)



Capital key deviation across PEPP+PSPP over March-May (€bn)



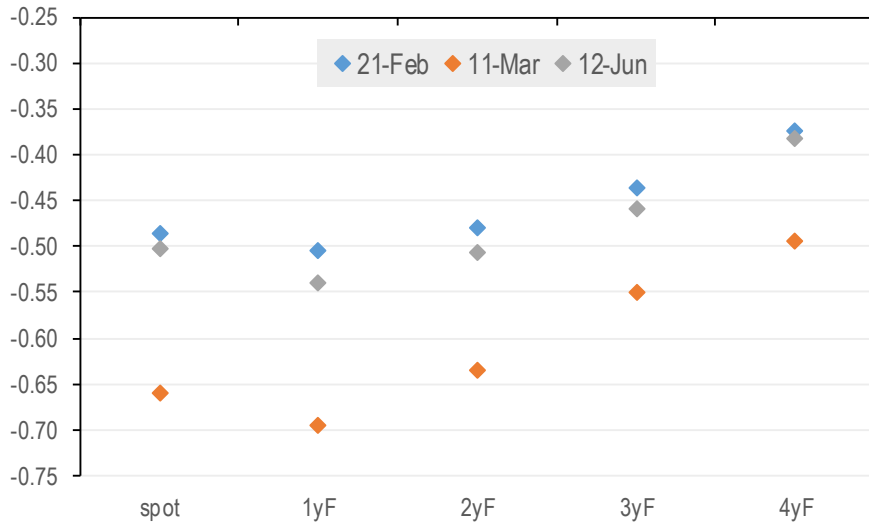
Source: Citi Research, ECB.

BTPs the main beneficiary of capital key deviation, helping to stabilise all EMU spreads

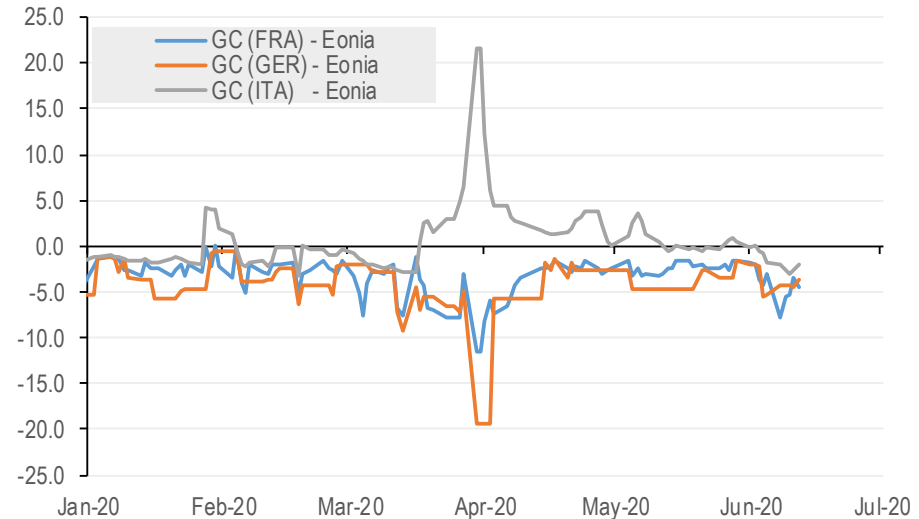
Front-end: back to (almost) normal

Both unsecured and secured funding conditions are broadly back to February levels

1y Eonia pricing in line with pre-Covid levels



Stress in O/N GC repo market has subsided



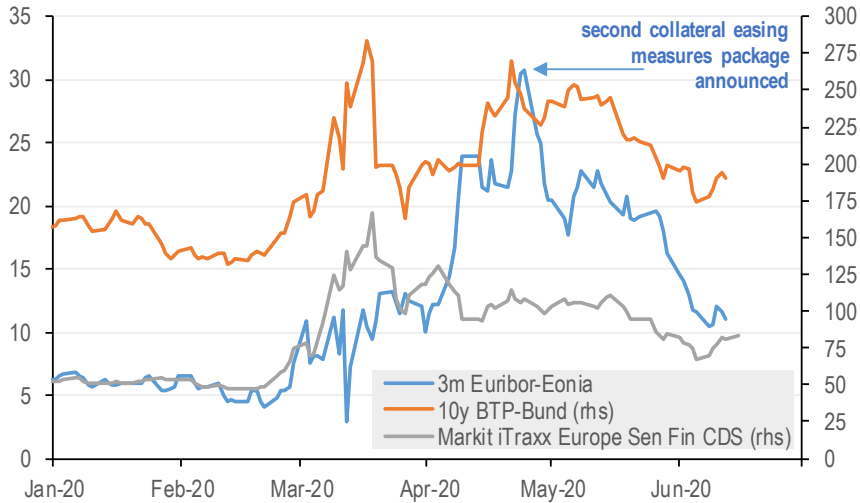
Source: Citi Research. As of close 12June20.

Monetary and fiscal policy measures successful at addressing front-end dislocations

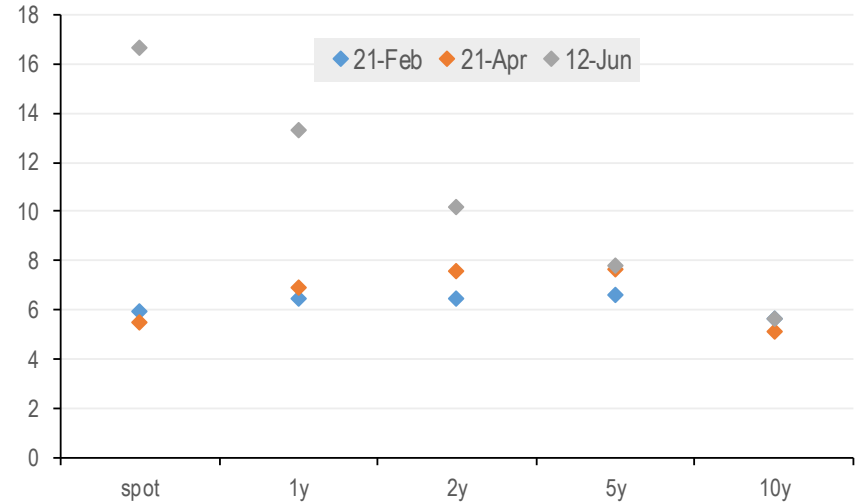
Front-end: back to (almost) normal

Tightening momentum in 3s/OIS hasn't spilled over to 6s/3s yet

Interbank lending conditions markedly improving



But 6s/3s basis points to persisting risk premia in longer tenors



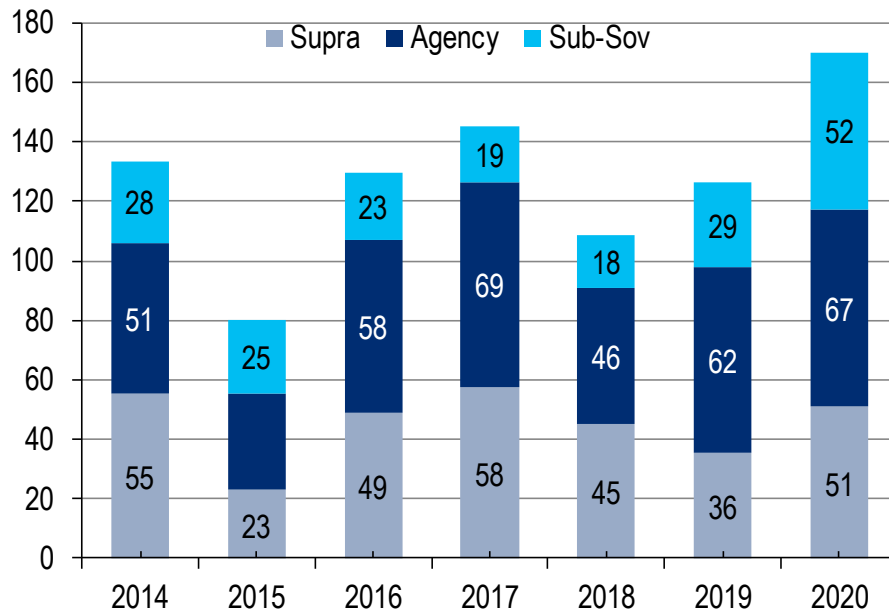
Source: Citi Research. As of close 12June20.

Collateral easing measures enough to address stress in 3s/OIS; 6s/3s waiting for TLTRO?

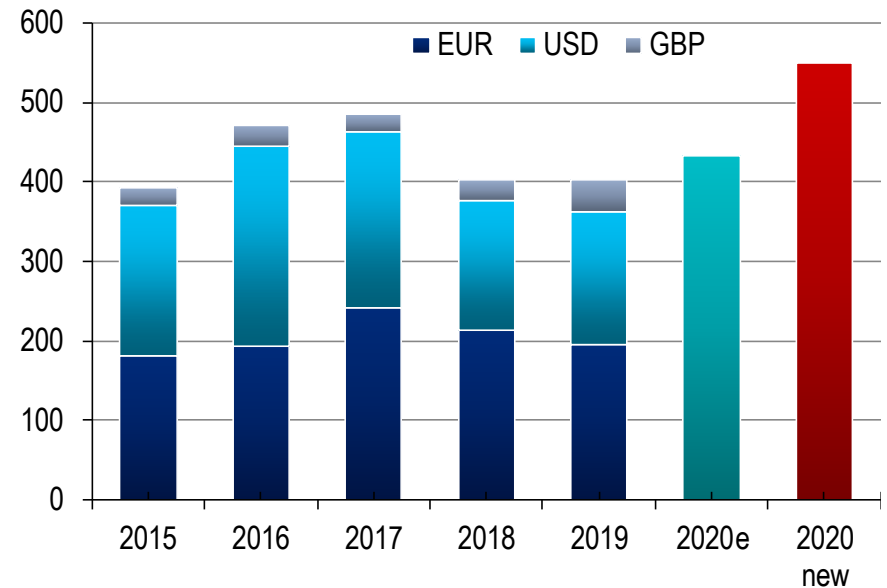
SSA Supply in 2020 is a surprise to the upside

Various supras, agencies and sub-sovereigns are part of national international and national fiscal responses or have to fund their own COVID19 related budget deficits.

Euro gross SSA supply until the end of May exceeds average volumes by 40%



Current supply projection is more than €100bn above our original supply forecast for 2020



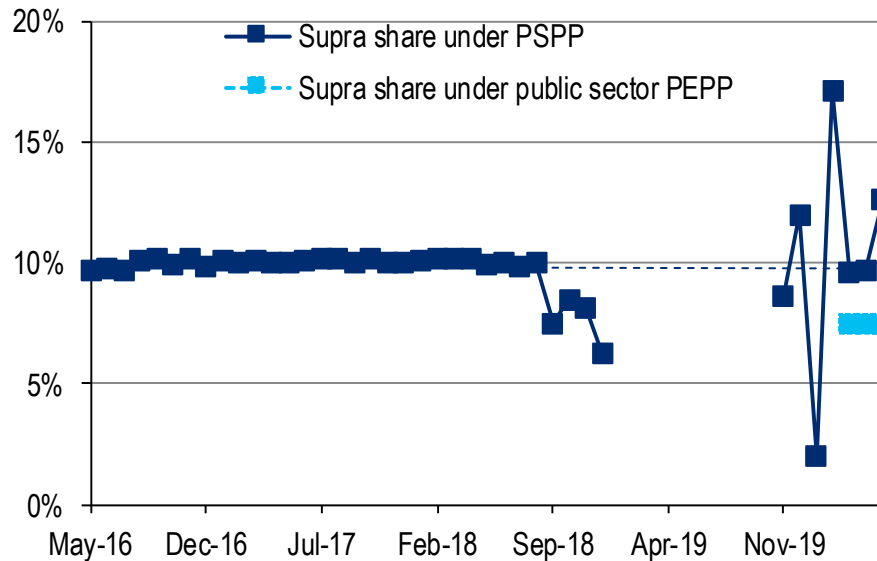
Source: Citi Research, Bloomberg

Further upward revisions of 2020 funding needs are likely across all segments

QE supports the SSA market strongly

While we are lacking insight on agency and sub-sovereign purchases, supras are heavily sought by the ECB, also under PEPP. The ECB may already risk passing the 50% holding limit in supras.

While sticking to 10% under PSPP, supra purchases were good for only 7.5% of public sector purchases under PEPP. But the absolute number is much higher



How much supras of the eligible universe will the ECB hold at year-end under different purchase dynamics against current supply projections? €bn, %

Share of public sector assets	Monthly QE Purchases (APPs & PEPP)						
	95	110	125	140	155	170	185
	Monthly net supra purchases (8.5% of public sector assets)						
70.0%	5.65	6.55	7.44	8.33	9.22	10.12	11.01
75.0%	6.06	7.01	7.97	8.93	9.88	10.84	11.79
80.0%	6.46	7.48	8.50	9.52	10.54	11.56	12.58
85.0%	6.86	7.95	9.03	10.12	11.20	12.28	13.37
	% share held at year-end						
70.0%	55.2%	56.3%	57.5%	58.6%	59.8%	60.9%	62.1%
75.0%	55.7%	56.9%	58.1%	59.4%	60.6%	61.9%	63.1%
80.0%	56.2%	57.5%	58.8%	60.2%	61.5%	62.8%	64.1%
85.0%	56.7%	58.1%	59.5%	60.9%	62.3%	63.7%	65.1%

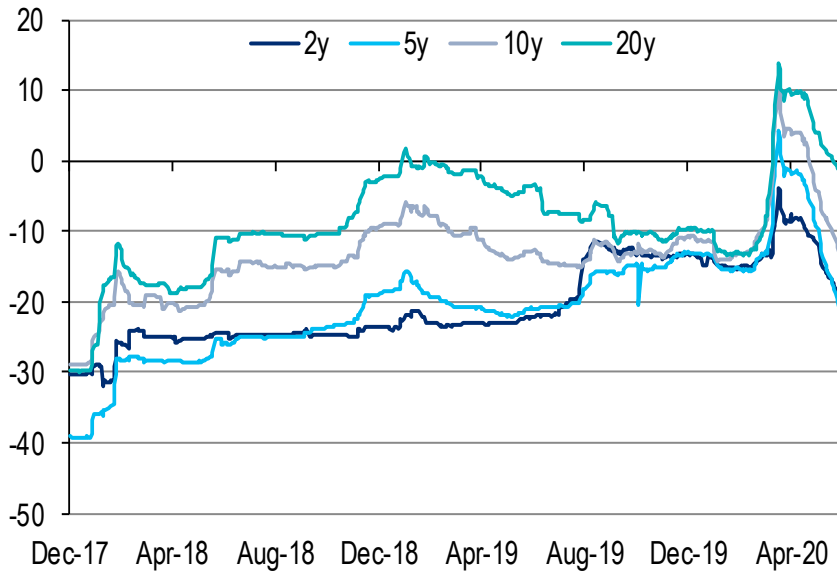
Source: Citi Research, ECB

The ECB may have to raise the 50% supra purchase limit or hope for a wave of EU supply in H2

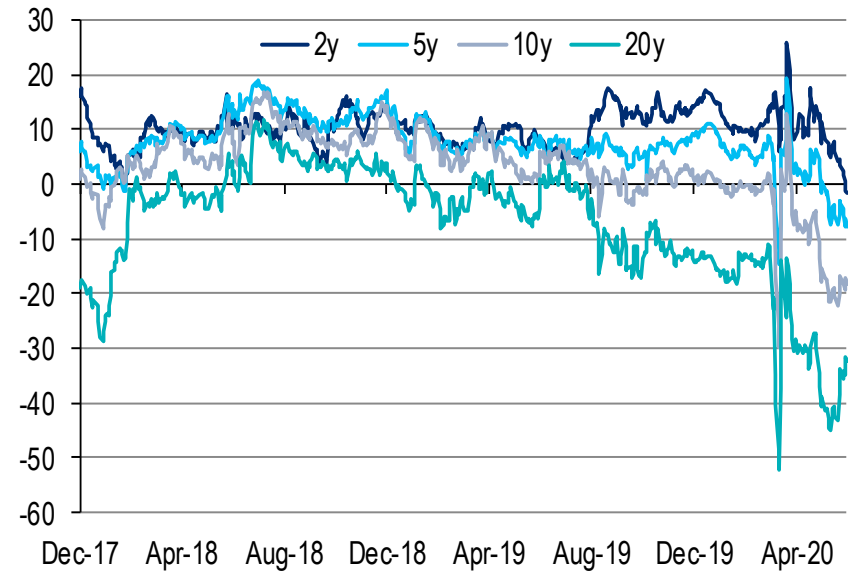
QE supports the SSA market strongly

The strong bid for supras under the ECB QE programs may help explain why they trade tighter to swaps than before COVID-19. And as supras have so far not revised up funding needs while sovereigns have, the latter look historically rich to sovereign benchmarks in most tenors.

EIB generic spreads to euro swap for selected tenors, bp



Generic EIB yield spreads to France for selected tenors, bp



Source: Citi Research, ECB. As of close 12Jun20.

Current supra spreads look vulnerable if full EU fiscal capacity is activated

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