
Confidence
must be earned

Amundi
ASSET MANAGEMENT

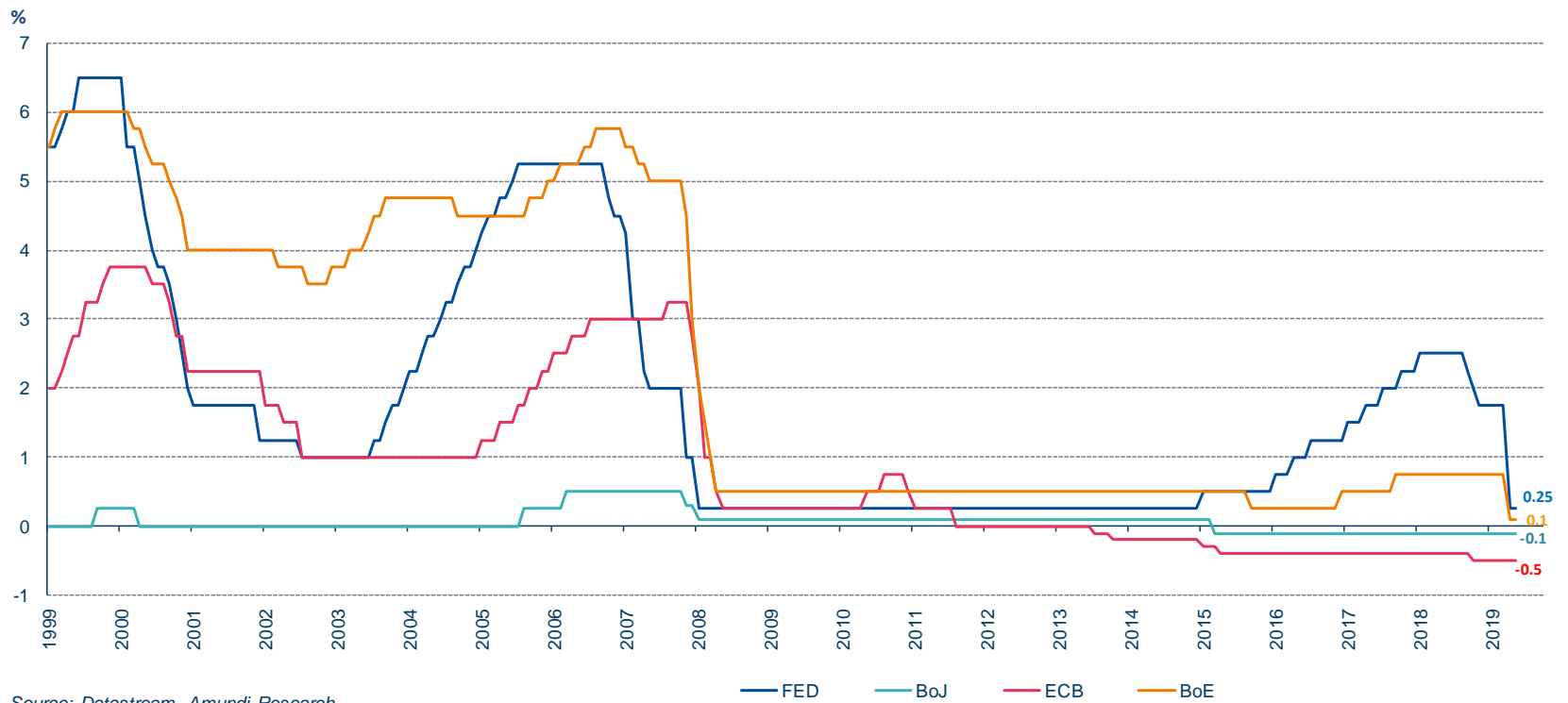
April 2020

ECB QE Monitor

Mickael Bellaïche, Fixed Income Strategist

Central Banks: interest rates near zero

- The Fed kept its interest rates unchanged.
- The ECB kept its interest rates unchanged.
- No movement on BoJ interest rates since 2016.

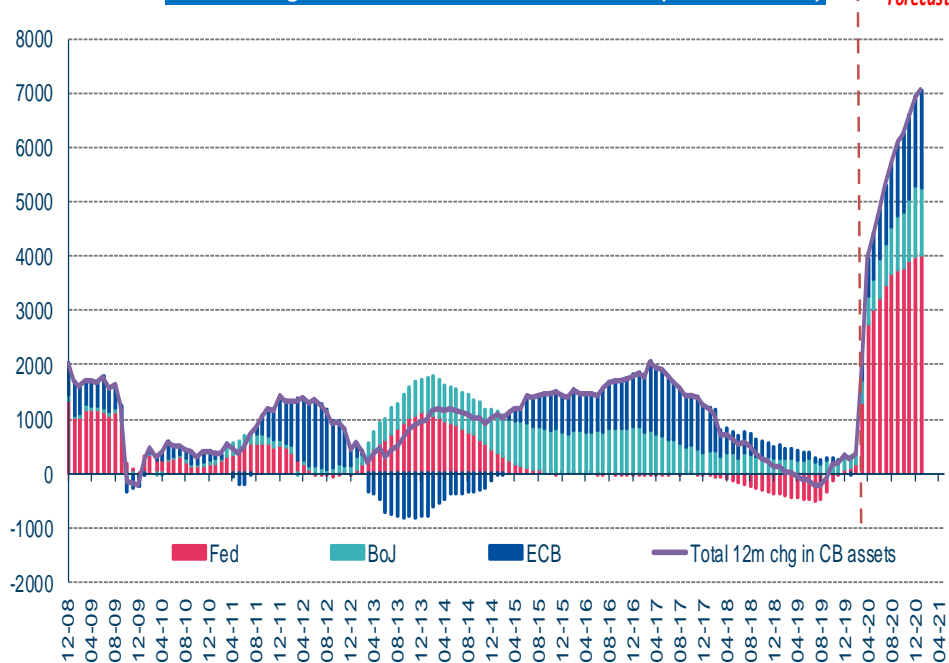


Source: Datastream, Amundi Research

Central Banks: massive extension of balance sheets

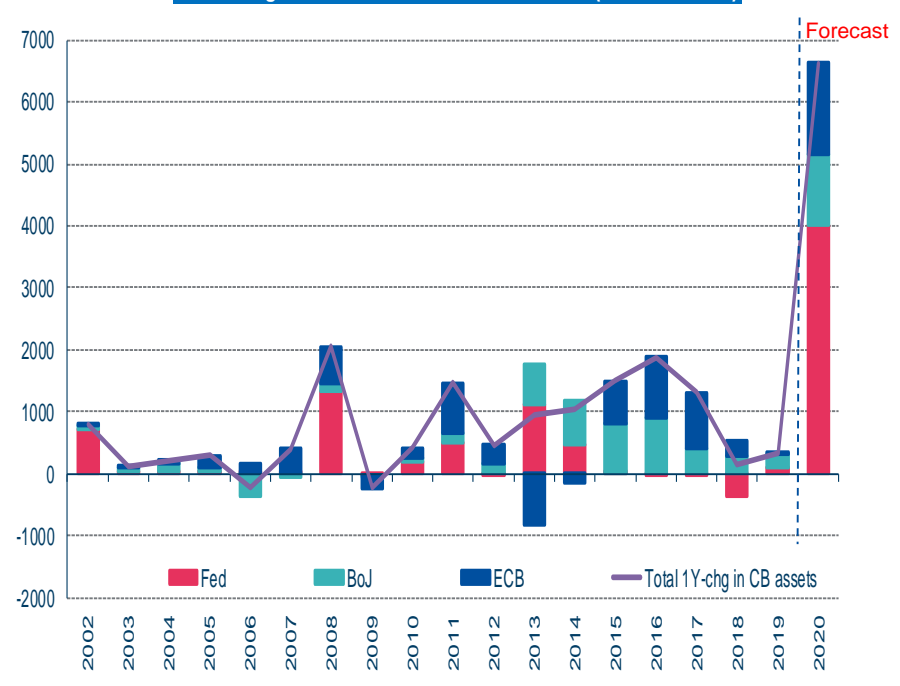
- In March, the ECB activated a “pandemic emergency purchasing program” (PEPP) for a an additional €750bn. In total, the ECB have approximately €1,110bn of purchasing power in 2020 or around €110bn/month.
- The Fed announced unlimited purchases of Treasuries and MBS. The Congressional Budget Office expects the federal budget deficit to hit \$3.7 trillion by the end of fiscal year 2020.

12M-Change in central banks assets in \$bn (with forecast)



Source: Datastream, Amundi Research

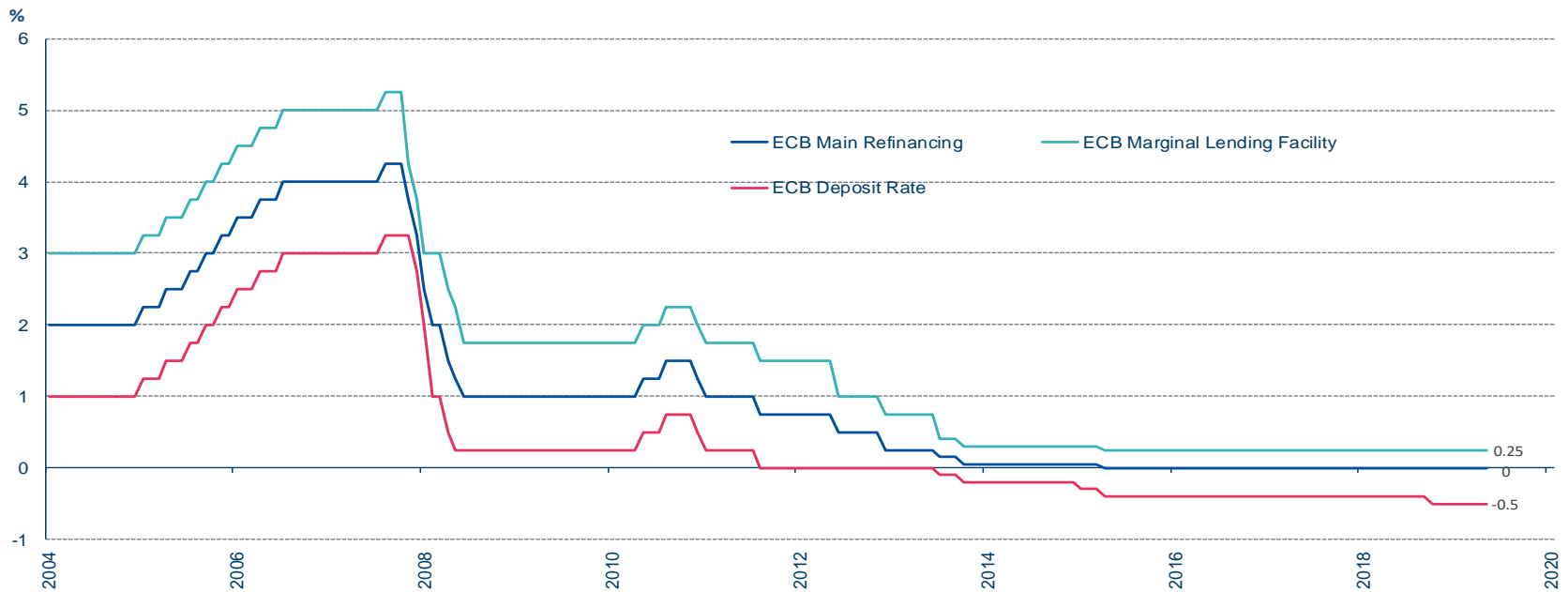
1Y-Change in central banks assets in \$bn (with forecast)



Source: Datastream, Amundi Research

ECB Policy Rates

ECB	30/04/2020
ECB Main Refinancing	0
ECB Deposit Rate	-0.5
ECB Marginal Lending Facility	0.25
Next ECB Meeting	04/06/2020

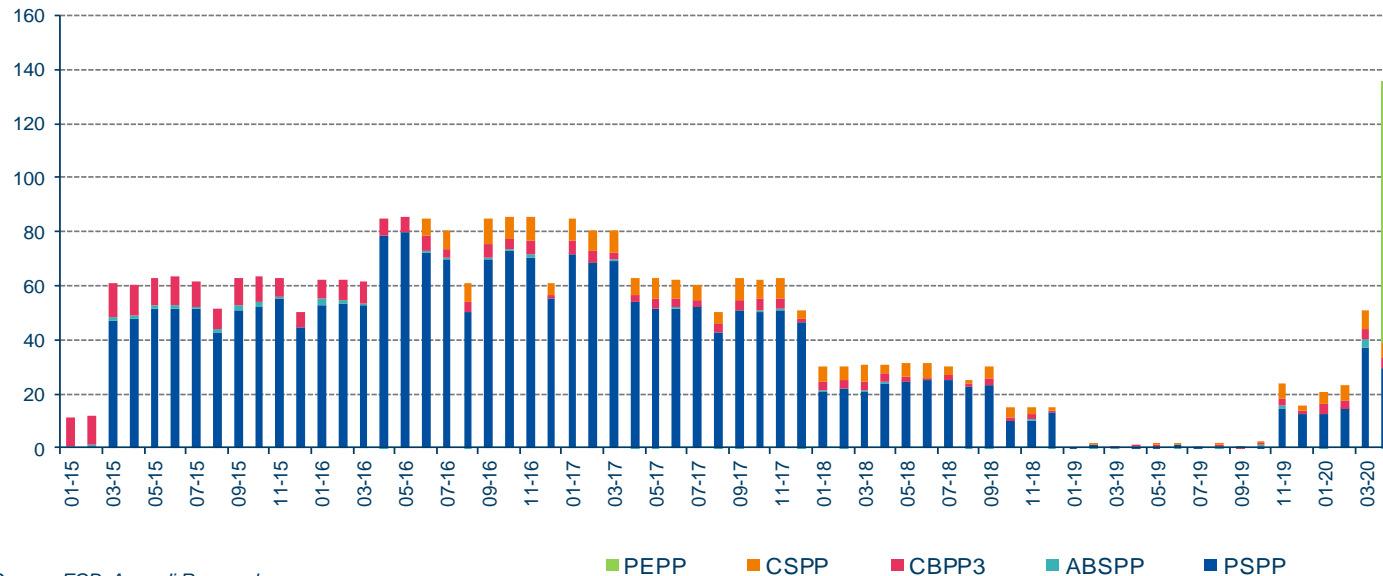


Source: Datastream, Amundi Research

APP and PEPP: breakdown by program

- In April, ECB net asset purchases reached €38.5bn under APP and €96.7bn under PEPP.
- In April APP by programme: PSPP (€29.6bn; 77% of total), CSPP (€5.6bn; 14.5%), CBPP3 (€3.6bn; 9.3%) and ABSPP (€-0.3bn; 0%).
- Sovereign (PEPP and CSPP): net purchases will be around €90bn/month up to end of the year.
- Corporate (PEPP and CSPP): net purchases will be around €10bn/month up to end of the year.

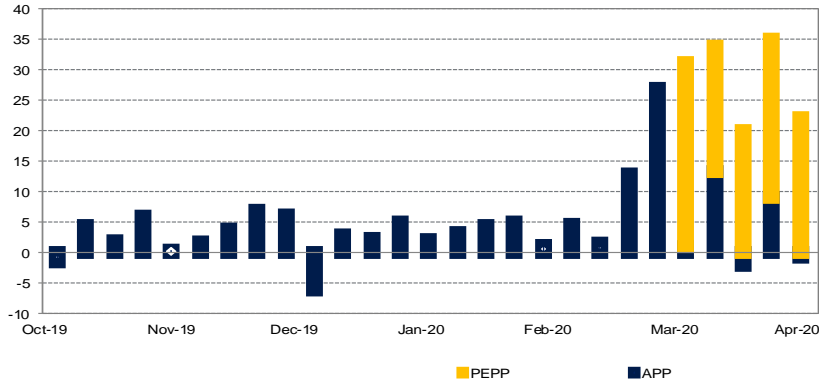
ECB APP + PEPP: monthly net purchases (€bn)



Source: ECB, Amundi Research

APP and PEPP: purchasing power until end of 2020

Weekly pace of net purchases (€bn)



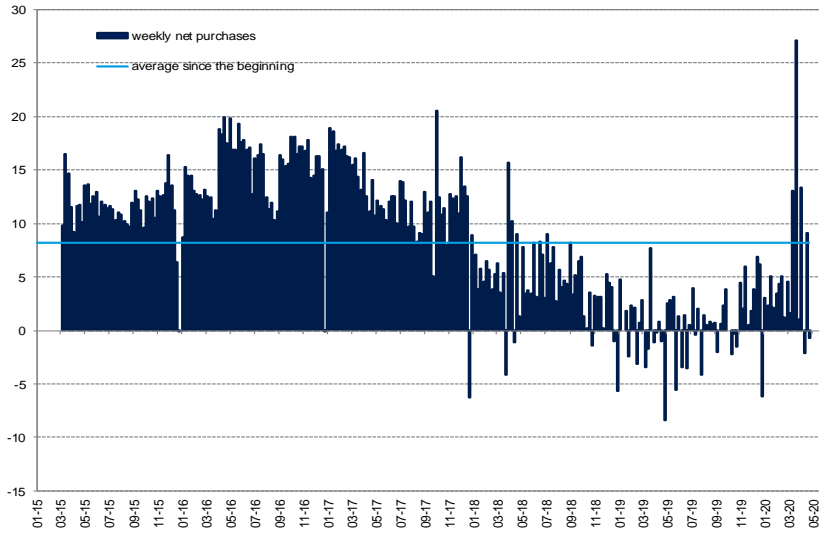
Source: Datastream, Amundi Research

- The ECB reported cumulative PEPP purchases through 1 May 2020 at €118.8bn on a settlement basis, leaving over €630bn remaining to be spent.

30/04/2020	Total	Remaining
Additional APP envelope	120	70.4
PEPP	750	631.2
Total	870	701.6

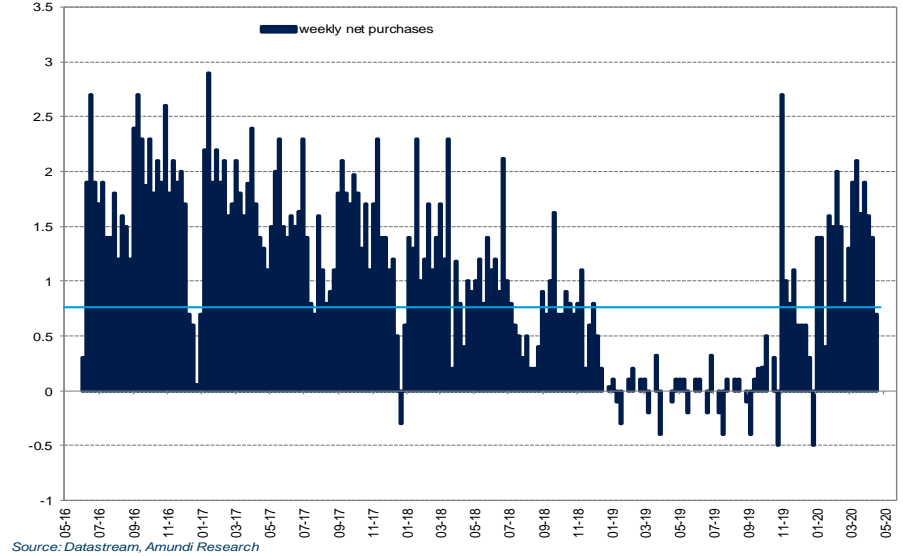
APP weekly Net purchases

Weekly pace of PSPP net purchases (€bn)



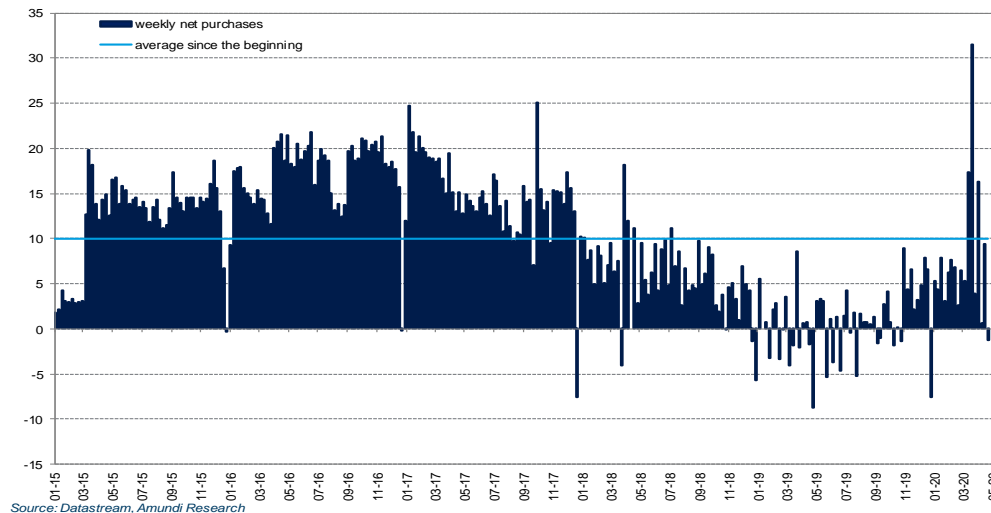
Source: Datastream, Amundi Research

Weekly pace of CSPP net purchases (€bn)



Source: Datastream, Amundi Research

Weekly pace of APP net purchases (€bn)



Source: Datastream, Amundi Research

PSPP: monthly purchases breakdown by country

Country	Net Purchases March 2020 (RHS)		Theoretical net purchases with capital key		Deviation from capital Key (€bn)
	(€bn)	% PSPP	(€bn)	%	
Germany	3.0	9.5%	7.8	24.3%	-4.7
France	8.3	26.0%	6.0	18.8%	2.3
Italy	10.9	34.1%	5.0	15.6%	5.9
Spain	4.3	13.3%	3.6	11.1%	0.7
The Nether	1.5	4.6%	1.7	5.4%	-0.2
Belgium	2.0	6.2%	1.1	3.4%	0.9
Austria	1.3	4.0%	0.9	2.7%	0.4
Portugal	0.5	1.4%	0.7	2.2%	-0.2
Finland	-1.3	-4.1%	0.5	1.7%	-1.9
Ireland	-1.1	-3.6%	0.5	1.6%	-1.7
Slovakia	-0.6	-1.8%	0.3	1.1%	-0.9
Slovenia	0.1	0.3%	0.1	0.4%	0.0
Luxembou	0.1	0.3%	0.1	0.3%	0.0
Latvia	0.1	0.2%	0.1	0.4%	-0.1
Lithuania	0.1	0.2%	0.2	0.5%	-0.1
Malta	0.0	0.0%	0.0	0.1%	0.0
Cyprus	0.1	0.4%	0.1	0.2%	0.1
Estonia	0.0	0.0%	0.1	0.3%	-0.1
Supranatio	2.9	8.9%	3.2	10.0%	-0.3
Total	32.0	100%	32.0	100%	

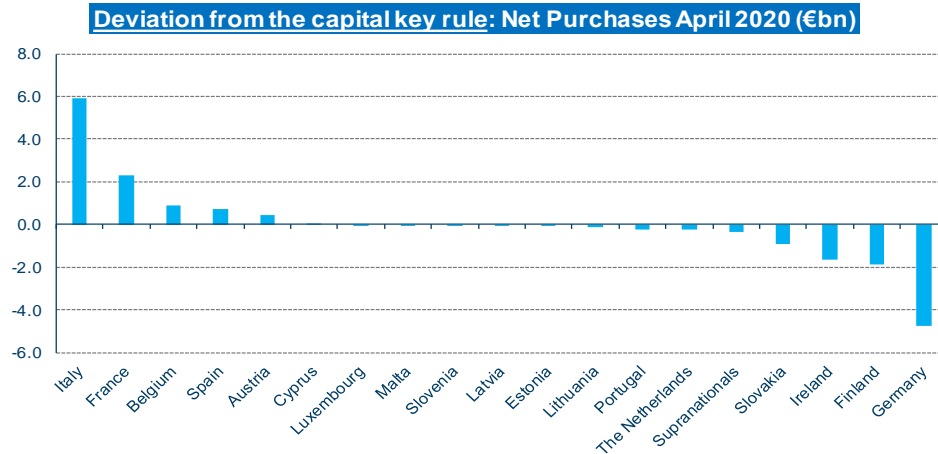
- In the April round, the largest upside deviation relative to the capital key was in Italy and the largest downside deviation was in Germany .
- The deviations may persist in the near future as the ECB and NCBs continue to use the program's flexibility to combat market fragmentation amid the Covid-19 outbreak.

PSPP: holdings breakdown by country

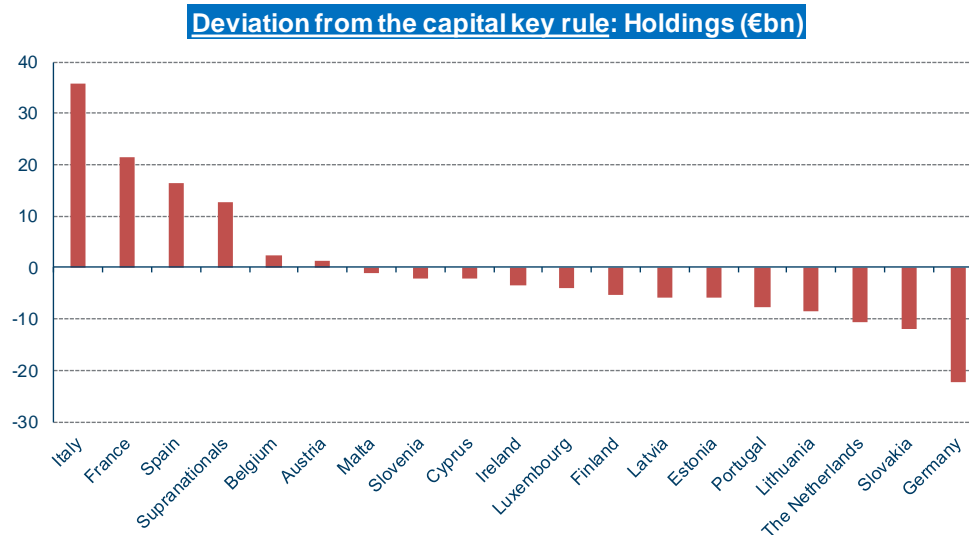
Country	Holdings		Holdings with New Capital Key		Deviation from capital Key (€bn)
	(€bn)	% PSPP	(€bn)	%	
Germany	534	23.3%	556	24.3%	-22.3
France	452	19.7%	430	18.8%	21.4
Italy	393	17.2%	357	15.6%	35.9
Spain	271	11.8%	254	11.1%	16.5
The Netherlands	113	4.9%	124	5.4%	-10.5
Belgium	80	3.5%	78	3.4%	2.5
Austria	63	2.8%	62	2.7%	1.4
Portugal	43	1.9%	50	2.2%	-7.8
Finland	34	1.5%	39	1.7%	-5.3
Ireland	33	1.5%	37	1.6%	-3.3
Slovakia	12	0.5%	24	1.1%	-11.9
Slovenia	8	0.4%	10	0.4%	-2.1
Luxembourg	3	0.1%	7	0.3%	-3.9
Latvia	3	0.1%	8	0.4%	-5.7
Lithuania	4	0.2%	12	0.5%	-8.4
Malta	1	0.1%	2	0.1%	-1.0
Cyprus	2	0.1%	5	0.2%	-2.2
Estonia	0	0.0%	6	0.3%	-6.0
Supranationals	242	10.6%	229	10.0%	12.8

- Holdings are supposed to converge towards the ECB capital key at the end of the program.

Monthly Deviation in the share of purchases relative to the ECB capital key

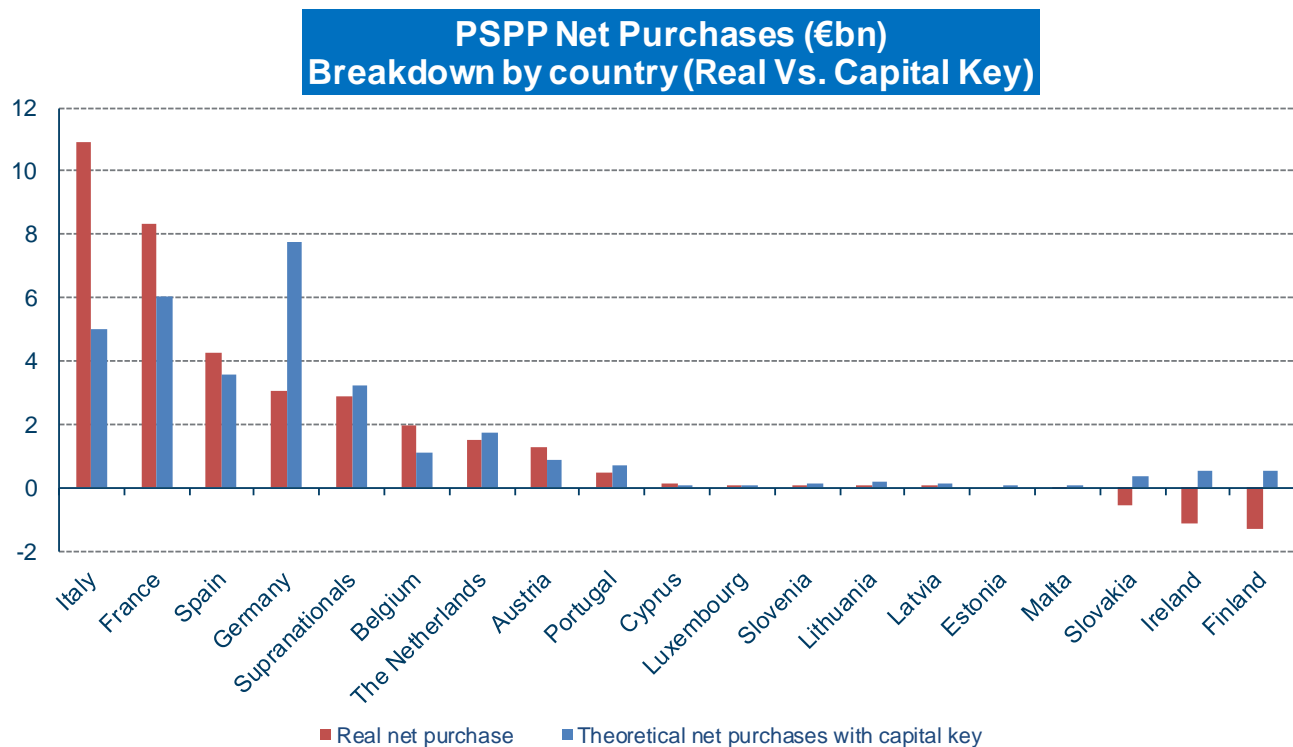


Source: Datastream, Amundi Research



Source: Datastream, Amundi Research

Total Deviation in the share of purchases relative to the ECB capital key

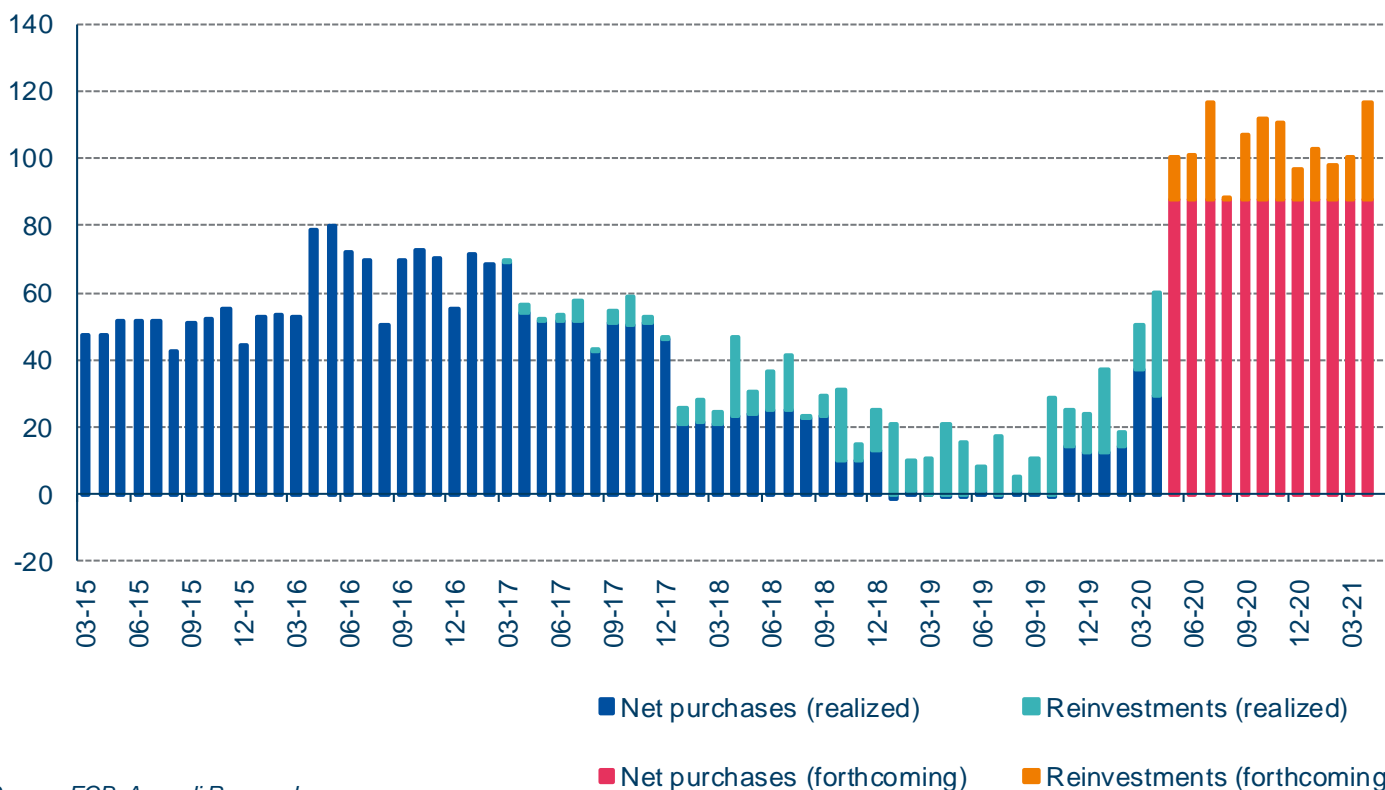


Source: Datastream, Amundi Research

APP: PSPP reinvestment

- PSPP reinvestment will average €16.3bn/month over the next 12 months, up from €14.9bn in the past 12 months.

Sovereign monthly gross purchases (€bn)

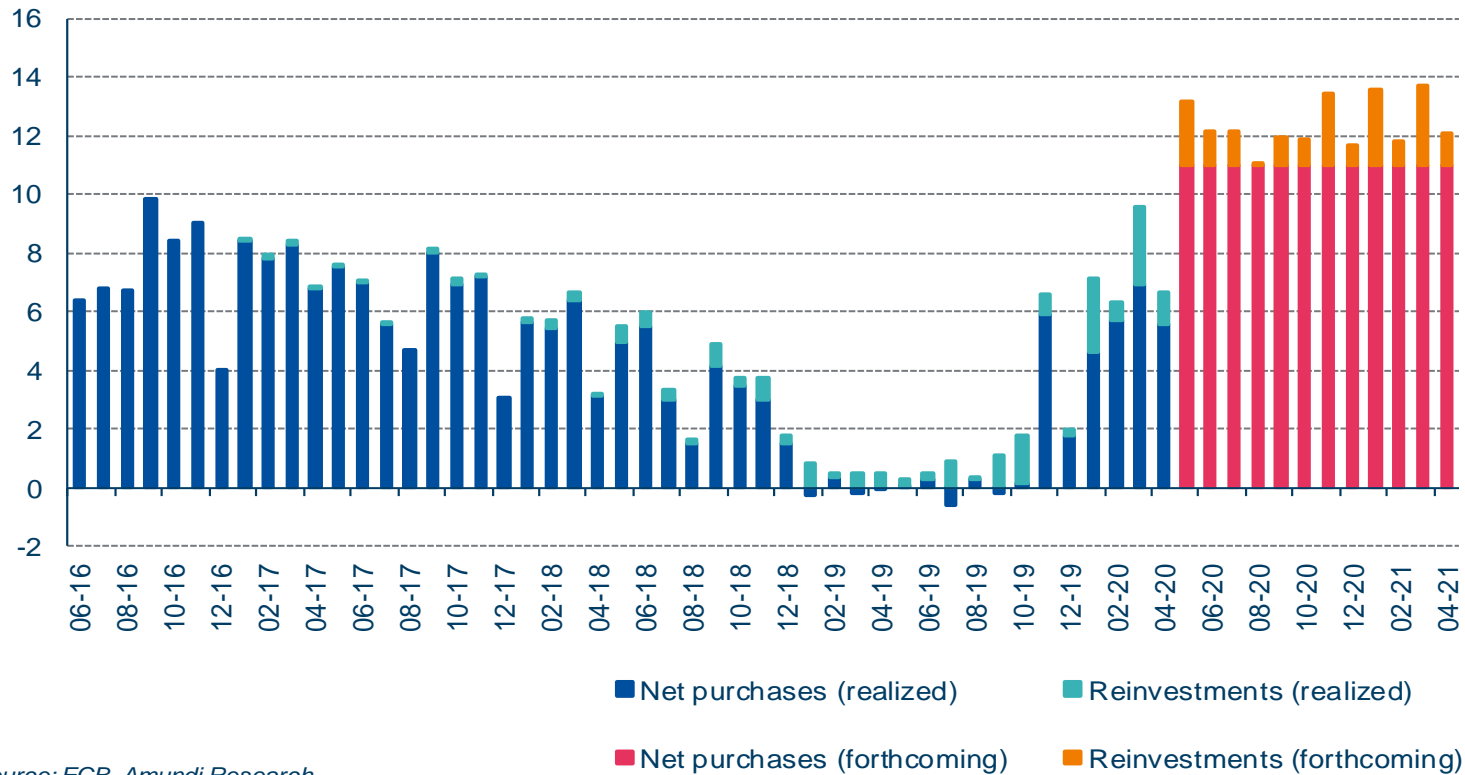


Source: ECB, Amundi Research

APP: CSPP reinvestment

- CSPP reinvestment will average €1.4bn/month over the next 12 months

Corporate monthly gross purchases (€bn)



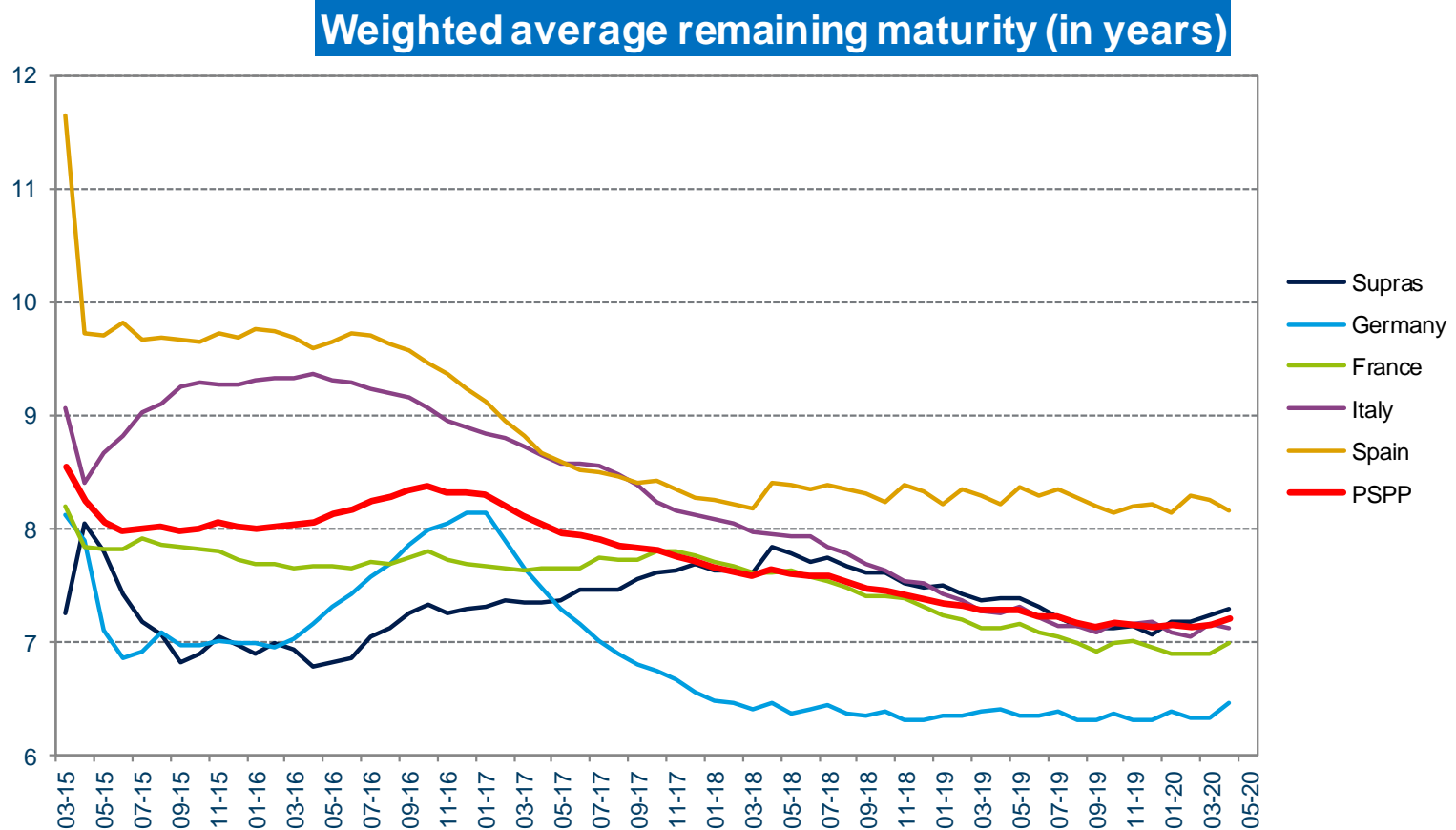
Source: ECB, Amundi Research

Weighted average maturities by jurisdiction for the PSPP

Country	Weighted Average maturity of PSPP Portfolio		
	Mar-20	Apr-20	Dec-19
Germany	6.3	6.5	6.3
France	6.9	7.0	7.0
Italy	7.2	7.1	7.2
Spain	8.3	8.2	8.2
The Netherlands	7.4	7.4	7.2
Belgium	8.4	8.4	8.6
Austria	7.6	7.6	7.6
Portugal	7.5	7.5	7.6
Finland	6.5	7.0	6.6
Ireland	8.4	8.9	8.2
Slovakia	8.3	8.9	8.5
Slovenia	10.1	10.0	9.9
Luxembourg	3.9	3.9	4.0
Latvia	10.7	10.6	10.6
Lithuania	9.3	9.1	9.4
Malta	10.2	10.3	10.3
Cyprus	8.9	9.2	8.7
Estonia	0.0	0.0	0.0
Supranationals	7.2	7.3	7.1
Total	7.1	7.2	7.1

- The PSPP portfolio average maturity has declined slowly since 2016.

Weighted average maturities by jurisdiction for the PSPP



Source: Datastream, Amundi Research

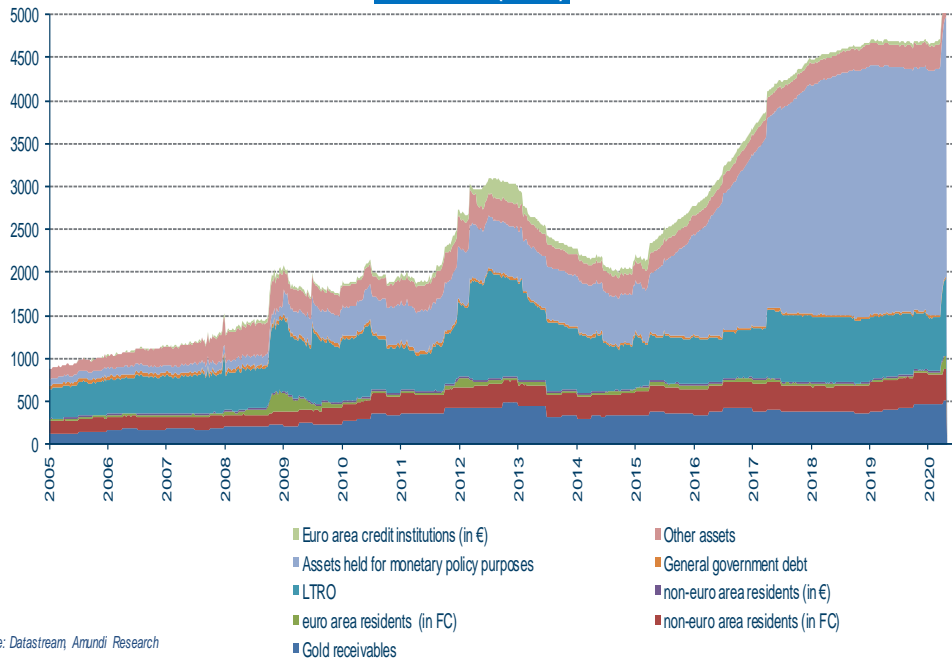
Stock of the Eurosystem's asset purchase program

- As of 31 March 2020, the Eurosystem's asset holdings reached €2,705bn. Breakdown by program:
 - PSPP: €2,189bn (81% of total holdings)
 - CSPP: €207bn (8%)
 - CBPP3: €278bn (10%)
 - ABSPP: €31bn (1%)
- The share of corporate debt purchases continues to increase since the program's resumption.
- Since November 2019 (Restart ECB QE), the proportion of PSPP purchases relative to the APP is 68% which is significantly lower than the proportion of 80% that the ECB bought until December 2018.

30/04/2020	Asset Purchase Programme (APP)	Public Sector Purchase Programme (PSPP)	Third Covered Bond Purchase Programme (CBPP3)	Asset-Backed Securities Purchase Programme (ABSPP)	Corporate Sector Purchase Programme (CSPP)
Holdings (€bn)	2 705	2 189	278	31	207
<i>Holdings (% APP)</i>	<i>100%</i>	<i>81%</i>	<i>10%</i>	<i>1%</i>	<i>8%</i>
Gross Purchases Mthly (€bn)	72.6	60.0	5.3	0.7	6.7
Redemptions Mthly (€bn)	34.2	30.3	1.7	1.0	1.1
Net Purchases Mthly (€bn)	38.5	29.6	3.6	-0.3	5.6
Net purchases since QE2 (€bn)	158	107	17	4	30
<i>Net purchases since QE2 (% APP)</i>	<i>100%</i>	<i>68%</i>	<i>11%</i>	<i>3%</i>	<i>19%</i>
Net purchases cum. on QE1	2618	2171	241	26	181
<i>Net purchases cum. on QE1 (%APP)</i>	<i>100%</i>	<i>83%</i>	<i>9%</i>	<i>1%</i>	<i>7%</i>

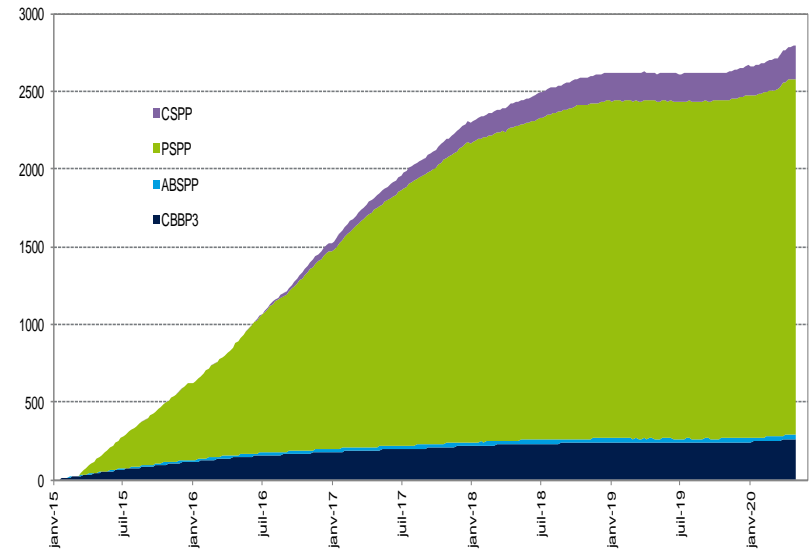
ECB Balance Sheet (1/2)

ECB: Assets (in \$bn)



Source: Datastream, Amundi Research

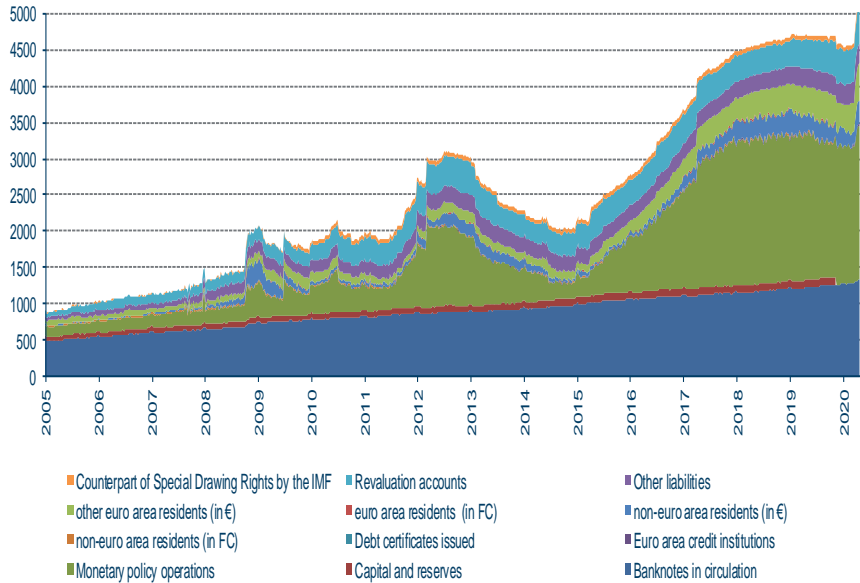
Amounts purchased by the Eurosystem under the expanded asset purchase programme (€ bn)



Source: Datastream, Amundi Research

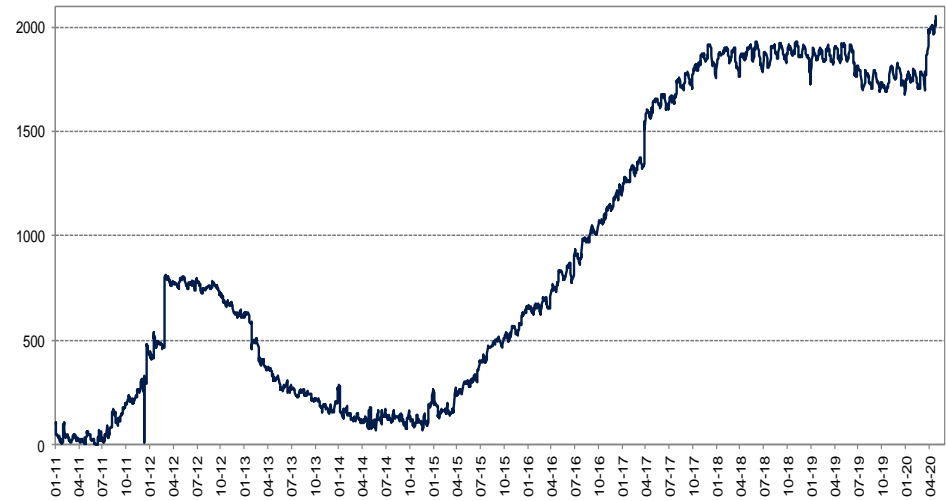
ECB Balance Sheet (2/2)

ECB: Liabilities (in \$bn)



Source: Datastream, Amundi Research

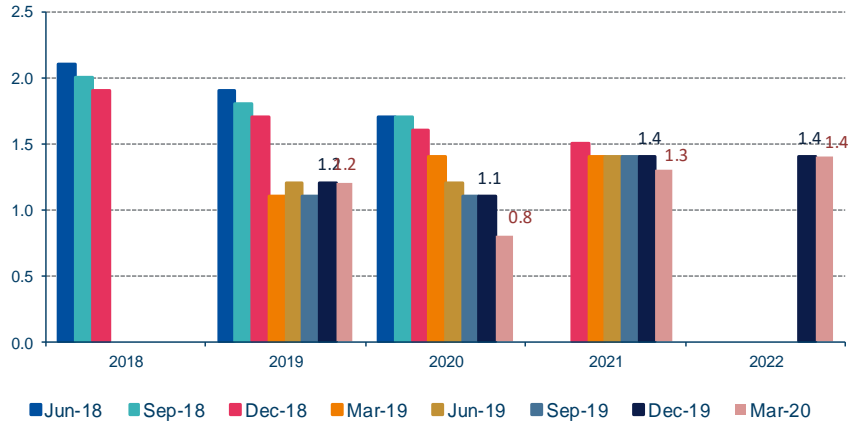
Eurosystem : excess reserves (€bn)



Source: Datastream Amundi Research, 05/12/2018

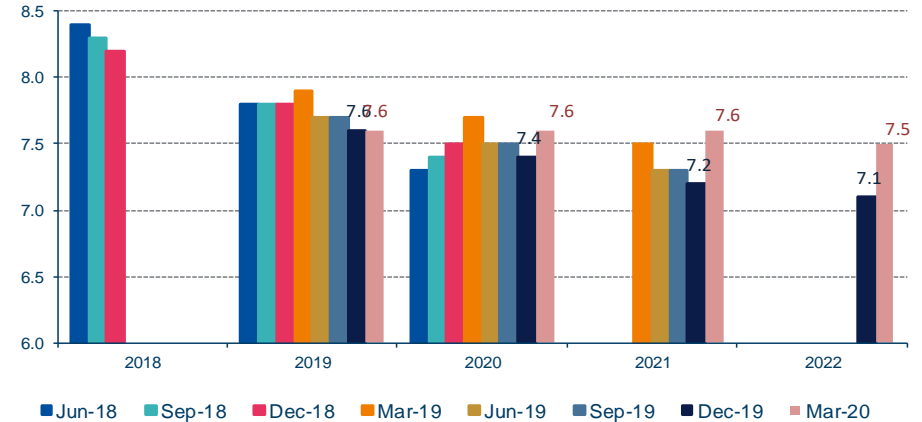
ECB Projections

ECB forecast: real GDP (yoy%)



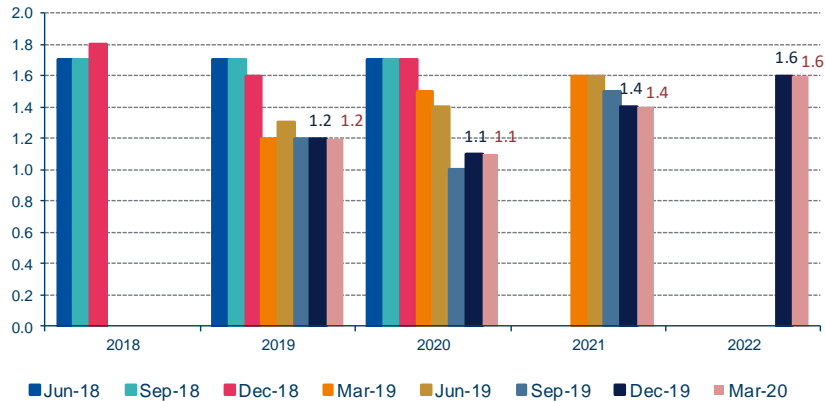
Source: Bloomberg, Amundi Research

ECB forecast: Unemployment (yoy%)



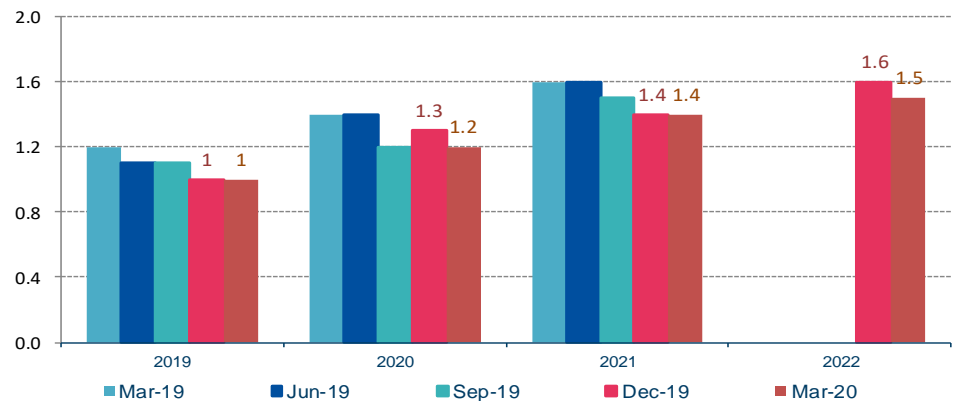
Source: Bloomberg, Amundi Research

ECB forecast: Inflation (yoy%)



Source: Bloomberg, Amundi Research

ECB forecast: Core inflation (yoy%)



Source: Bloomberg, Amundi Research

Appendix

- **The Eurosystem started its QE in March 2015. The seven main episodes were:**
 - March 9 2015 (decision to purchase €60bn of assets per month until Sept. 2016),
 - December 3 2015 (decision to extend the QE until March 2017),
 - March 10 2016 (decision to increase monthly purchases from €60bn to €80bn from April 2016),
 - December 8 2016 (decision to extend the QE until December 2017 at a reduced monthly pace of €60bn),
 - October 26 2017 (decision to extend the QE until September 2018 at a reduced monthly pace of €30bn)
 - June 14 2018 (decision to announce the end of QE in December 2018)
 - October 30 2019 (with the arrival of Christine Lagarde replacing Mario Draghi, decision announced to restart its QE: purchase €20bn of assets per month without end date)

- **Lexicon:**
 - **PSPP** : Public Sector Purchase Programme;
 - **APP** : Asset Purchase Programme;
 - **CSPP** : Corporate Sector Purchase Programme;
 - **CBPP** : Covered Bond Purchase Programme;
 - **SMP** : Security Market Programme;
 - **ABSPP** : Asset Back-Backed Securities Purchase Programme.

DISCLAIMER

Amundi Asset Management

Portfolio management company approved by the French Financial Markets Authority (Autorité des Marchés Financiers) under no.GP 04000036

Head office: 90, boulevard Pasteur, 75015 Paris – France

Postal address: 90, boulevard Pasteur, CS 21564, 75730 Paris Cedex 15 – France

Tel : +33 (0)1 76 33 30 30

Siren no. 437 574 452 RCS Paris