

4 July 2024 Credit Strategy

### Supply for June (€bn)

	Corporates	Financials
June	29	21

Source: ING, Dealogic

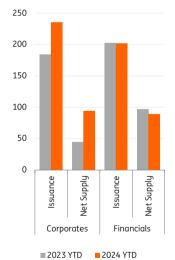
### Supply FY and YTD (€bn)

Corporates	FY	YTD
2018	282	159
2019	392	198
2020	444	301
2021	334	197
2022	252	155
2023	301	184
2024	-	236
Financials	FY	YTD
2018	226	129

Financials	FY	YTD
2018	226	129
2019	270	155
2020	234	156
2021	265	153
2022	289	164
2023	311	202
2024	-	202

Source: ING, Dealogic

### Supply and Net Supply YTD



Source: ING, Dealogic

# **Timothy Rahill Credit Strategist**timothy.rahill@ing.com

## **Euro Credit Supply**

### Large supply in 1H, expect slowdown in 2H



### Supply has surprised to the upside, we expect a more dramatic slowdown in 2H

- Supply thus far this year has been strong with YTD supply already at €236bn, ahead
  of previous years. This surprise to the upside has been met by very strong demand,
  with subscription levels at record-breaking highs (at an average of nearly 4 times
  versus the normal average of 3 times). New Issue Premia have been very low (at an
  average of 0-4bp).
- Supply has been significant in the first half of the year with front loading in order to take advantage of the large demand, relatively tight spreads and uncertainty on the horizon for the second half of the year with growing geopolitical concerns and multiple elections taking place. Normally we would see a 60-40 split between the first half of the year and the second. This year we expect the split could be closer to 70-30.
- We had forecast an increase, but not record-breaking supply for 2024. We are on track to see larger supply than last year, despite a slowdown expected in the second half. We may still see supply surprise slightly higher than previously expected. This comes on the back of a soft landing, and as such an increase in M&A activity. We expect supply will continue to be met by strong demand.

### We have seen slower senior unsecured supply YTD but subordinated debt is up.

- Unsecured bank bond supply is running at €159bn YTD, while banks had printed a
  total of €173bn in an unsecured format by the end of June 2023. It could be that
  banks have considered the uncertain market outlook and started with the more
  difficult tranches in their issuance programmes. The main segment driving the
  slower issuance to date is senior unsecured.
- Preferred senior unsecured debt is currently running c.€22bn below the level reached during the first six months of last year. In bail-in senior banks have issued c.€67bn for the first six months, compared with €76bn for last year.
- Subordinated debt issuance is well ahead of last year at €37bn YTD, vs €24bn last year. In particular Tier 2 issuance has remained very strong this year.
- We forecast full year unsecured bank debt issuance to reach €270bn, with another
   €111bn (43% of the total) in store for 2H.
- We remain comfortable with our full year covered bond supply estimate of €180bn, with €5bn of this issued in sub-benchmark format, €5bn in FRN benchmark format and €170bn in fixed coupon format.

Fig 1 Euro corporate supply overview (€bn)

	2020	2021	2022	2023	2023 Jun	2023 May	2024 Jun	2023 YTD	2024 YTD	% diff
Auto	38	32	26	50	6	13	5	38	138	269%
Consumer	66	39	25	50	1	6	3	31	139	352%
Healthcare	40	23	25	18	0	4	2	22	76	238%
Industrial & Chemicals	74	52	42	53	6	6	5	39	178	359%
Real Estate	39	61	24	8	1	2	2	11	93	730%
TMT	68	39	33	43	3	9	2	38	165	337%
Utility	52	53	57	54	5	3	9	41	166	302%
Oil & Gas	47	13	2	9	-	4	1	2	60	2567%
Others	19	23	17	16	4	2	1	14	58	318%
Corporate Hybrid	42	36	12	15	-	1	3	9	13	51%

Fig 2 Euro financial supply overview (€bn)

	2020	2021	2022	2023	2023 Jun	2023 May	2024 Jun	2023 YTD	2024 YTD	% diff
Bank Senior	138	143	200	227	18	28	9	148	122	-18%
of which Bail-in	77	51	73	97	9	9	6	57	50	-12%
of which Pref	61	92	126	130	10	19	3	91	72	-21%
Bank Capital	39	39	27	32	5	4	5	24	37	57%
Financial Services	37	61	42	39	6	3	5	21	29	38%
Insurance	20	21	20	12	2	1	2	9	14	48%
Covered	95	99	212	194	15	18	4	142	114	-19%

Note: Dealogic sorts some Banks into the Financial Services sector

Source: ING, Dealogic

Fig 3 Euro corporate supply and net supply by month (€bn)

Issuance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	28.7	35.5	49.1	68.3	62.2	62.9	21.7	6.4	49.6	28.7	21.2	9.7	443.9
2021	35.4	27.1	45.1	19.8	34.3	37.8	10.1	18.1	43.4	26.5	32.2	4.6	334.2
2022	37.5	14.2	45.7	10.2	31.6	16.4	2.7	14.8	24.5	23.2	30.3	1.0	252.1
2023	39.7	27.7	25.0	18.0	48.0	26.0	11.6	22.3	31.1	7.8	39.6	4.2	301.0
2024	36.1	41.3	40.8	34.0	54.1	29.4							235.7
Net Supply	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	7.4	27.4	18.8	52.5	41.1	52.6	4.9	-1.8	29.3	13.4	-4.2	-0.6	240.6
2021	13.3	11.1	14.1	3.6	16.7	19.3	-2.3	8.4	23.5	8.8	13.0	-9.5	119.9
2022	15.6	-3.0	17.2	-7.7	13.0	-8.9	-11.9	7.8	-2.8	13.3	8.4	-11.6	29.3
2023	18.3	4.3	-5.4	-4.1	26.6	5.1	-3.9	15.1	-5.6	-10.6	18.0	-1.6	56.1
Redemptions	29.1	17.0	23.3	24.7	28.0	19.3	25.8	1.4	29.7	23.9	18.8	16.3	257.2
2024	7.0	24.3	17.5	9.2	23.9	10.1							94.4

Redemptions shown for 2023 only

Source: ING, Dealogic

Fig 4 Euro financial supply and net supply by month (€bn)

Issuance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	45.2	18.7	14.7	26.1	24.8	27.9	13.2	8.7	13.2	16.6	22.6	2.7	234.3
2021	28.4	32.4	28.6	15.0	28.2	23.1	5.0	12.2	36.8	23.3	28.7	3.1	264.9
2022	38.9	22.4	30.9	22.1	30.6	20.0	6.1	25.1	27.5	17.2	44.1	4.0	288.7
2023	68.6	25.6	15.6	25.0	36.4	31.3	9.6	18.4	35.9	15.0	27.2	2.4	310.9
2024	57.1	26.7	34.3	28.7	30.8	20.8							201.9
Net Supply	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	21.0	-0.8	-2.6	10.8	14.6	6.0	-3.5	-3.1	-3.5	11.3	0.7	-8.7	42.0
2021	7.1	16.5	8.9	0.1	18.4	9.8	-3.3	6.6	10.7	12.7	13.5	-6.2	94.7
2022	4.4	1.7	7.6	4.3	16.8	5.6	-4.9	15.1	3.0	0.3	31.7	-8.0	77.6
2023	49.9	16.7	-11.0	11.6	18.5	11.3	-4.6	9.9	14.7	-2.4	12.5	-3.1	124.0
Redemptions	17.0	14.2	13.1	19.3	27.5	24.5	14.4	4.5	17.2	8.5	10.9	7.1	178.2
2024	40.1	12.5	21.2	9.4	5.5	-0.8							89.2

Covered Bonds excluded from aggregate throughout. Redemptions shown for 2023  $\,$ 

Fig 5 Corporate supply and redemptions by month, 2024 (€bn)

Supply	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Autos	12.6	2.3	6.2	4.3	6.1	4.9							37.5
Consumer	2.3	4.2	8.2	8.6	4.1	3.4							30.9
Healthcare	0.0	2.8	0.5	3.0	14.3	1.8							22.3
Industrial	2.7	7.2	9.0	4.1	9.5	4.8							38.7
Real Estate	1.1	1.5	0.9	2.9	3.0	1.8							11.2
TMT	4.3	12.5	8.0	3.3	7.3	2.4							37.8
Utility	11.0	7.5	5.7	5.5	3.5	8.6							41.3
Oil & Gas	1.0	0.0	0.0	0.0	0.8	0.5							2.3
Others	1.3	3.4	2.3	2.2	3.5	1.2							13.8
Redemptions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Autos	6.0	1.9	2.3	4.8	1.5	1.9	6.4	0.0	1.7	4.2	5.3	1.9	37.7
Consumer	4.0	1.3	4.3	4.8	7.5	1.2	2.5	0.0	5.0	4.5	3.9	1.2	39.9
Healthcare	1.2	0.5	0.9	0.9	5.0	2.1	1.7	0.0	1.0	1.6	3.0	1.9	19.7
Industrial	4.7	2.8	3.3	4.7	5.1	5.1	3.2	0.2	4.5	1.0	1.7	4.2	40.5
Real Estate	2.3	2.7	8.0	1.9	0.4	1.3	2.8	0.0	1.1	3.6	2.4	1.1	20.4
TMT	5.7	3.1	7.9	1.2	2.7	2.2	2.3	0.1	7.8	2.4	1.1	2.5	38.9
Utility	2.5	1.7	2.9	2.7	3.0	2.2	2.1	1.1	6.1	3.0	1.0	0.9	29.2
Oil & Gas	2.7	1.3	1.0	2.5	1.8	1.9	1.0	0.0	1.8	1.9	0.0	0.1	15.9
Others	0.0	1.7	0.0	1.2	1.0	1.4	4.0	0.0	0.8	1.8	0.6	2.6	15.0

Fig 6 Financial supply and redemptions by month, 2024 (€bn)

Supply	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Bank Senior	34.5	18.7	17.4	15.3	18.5	9.3							121.5
of which NPS	13.2	13.9	10.5	9.7	9.3	5.9							49.9
of which Pref	21.2	4.8	6.8	5.5	9.2	3.4							71.6
Bank Capital	11.7	2.9	5.2	3.1	7.9	4.7							37.0
Financial Services	7.9	5.7	4.3	2.5	2.8	4.9							28.7
Insurance	4.9	0.0	1.9	1.8	3.1	2.0							13.6
Covered	42.9	15.5	20.2	14.9	20.8	3.8							114.3
Redemptions	1												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Bank Senior	15.0	12.3	<b>Mar</b> 9.8	<b>Apr</b> 17.2	<b>May</b> 24.1	<b>Jun</b> 21.2	<b>Jul</b> 12.1	<b>Aug</b> 3.4	<b>Sep</b> 12.6	<b>Oct</b> 6.0	<b>Nov</b> 7.2	<b>Dec</b> 4.7	<b>Total</b> 145.4
· · · · · · · · · · · · · · · · · · ·				-									
Bank Senior	15.0	12.3	9.8	17.2	24.1	21.2	12.1	3.4	12.6	6.0	7.2	4.7	145.4
Bank Senior of which NPS	15.0 4.7	12.3 5.0	9.8 1.6	17.2 4.8	24.1 11.2	21.2 8.1	12.1 3.0	3.4 1.1	12.6 5.5	6.0 4.8	7.2 1.4	4.7 1.3	145.4 52.3
Bank Senior of which NPS of which Pref	15.0 4.7 10.3	12.3 5.0 7.3	9.8 1.6 8.3	17.2 4.8 12.4	24.1 11.2 12.9	21.2 8.1 13.1	12.1 3.0 9.2	3.4 1.1 2.3	12.6 5.5 7.1	6.0 4.8 1.2	7.2 1.4 5.8	4.7 1.3 3.5	145.4 52.3 93.1
Bank Senior of which NPS of which Pref Bank Capital	15.0 4.7 10.3 0.8	12.3 5.0 7.3 3.5	9.8 1.6 8.3 3.2	17.2 4.8 12.4 1.2	24.1 11.2 12.9 1.3	21.2 8.1 13.1 1.1	12.1 3.0 9.2 1.1	3.4 1.1 2.3 0.0	12.6 5.5 7.1 1.5	6.0 4.8 1.2 1.7	7.2 1.4 5.8 0.5	4.7 1.3 3.5 0.0	145.4 52.3 93.1 15.7

Source: ING, Dealogic

Fig 7 Euro supply, redemptions and net supply by year (€bn)

Corporates	YTD	FY	Reds	Net	Financials	YTD	FY	Reds	Net
2013	103	235	141	94	2013	98	206	341	-135
2014	114	267	165	101	2014	147	266	322	-56
2015	166	275	121	153	2015	145	259	321	-62
2016	158	306	143	162	2016	145	234	262	-28
2017	148	324	154	170	2017	127	229	270	-41
2018	134	282	159	123	2018	117	226	182	44
2019	155	392	171	221	2019	122	270	188	82
2020	244	444	203	241	2020	129	234	192	42
2021	162	334	214	120	2021	133	265	170	95
2022	139	252	223	29	2022	145	289	211	78
2023	158	301	245	56	2023	170	311	187	124
2024	236	236	257		2024	202	202	178	
2025			277		2025			231	
2026			294		2026			268	

Fig 8 Subordinated supply, 2023 and 2024 (€bn)

2023	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AT1	4.4	1.1	0.8	0.0	0.0	1.2	0.3	0.8	0.5	0.0	0.3	0.0	9.2
T2	5.1	2.7	0.2	0.0	4.0	3.1	0.1	2.3	0.8	0.2	1.7	0.0	20.0
Bank Capital	9.4	3.8	1.0	0.0	4.0	4.3	0.3	3.0	1.3	0.2	2.0	0.0	29.2
Corp Hybrids	5.9	0.0	0.7	1.0	1.3	0.0	0.0	2.5	1.8	0.5	1.4	0.0	14.9
2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AT1	3.0	1.1	0.5	0.6	3.3	3.4							11.9
T2	8.6	1.8	4.7	2.5	4.7	1.3							25.0
Bank Capital	11.6	2.9	5.2	3.1	7.9	4.7							36.8
Corp Hybrids	1.3	0.9	4.8	1.3	2.0	2.8							13.3

Fig 9 Reverse Yankee supply, 2023 and 2024 (€bn)

2023	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Corporate Financial Total	5.5 1.5 <b>7.0</b>	5.5 2.0 <b>7.5</b>	2.8 1.7 <b>4.5</b>	1.8 0.0 1.8	12.2 0.5 <b>12.7</b>	3.8 2.7 <b>6.4</b>	0.0 0.1 <b>0.1</b>	0.8 0.9 <b>1.7</b>	0.5 0.0 <b>0.5</b>	0.0 0.2 0.2	7.2 2.7 <b>9.9</b>	0.6 0.5 <b>1.1</b>	40.6 12.7 <b>53.2</b>
2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Corporate Financial Total	1.4 0.7 2.0	15.4 0.5 <b>15.9</b>	1.4 9.6 <b>11.0</b>	5.1 1.3 6.3	20.8 3.6 <b>24.4</b>	3.7 3.4 7.0							47.6 19.0 <b>66.6</b>

Source: ING, Dealogic

Fig 10 XCCY 5yr

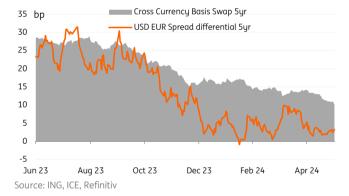


Fig 11 XCCY 10yr

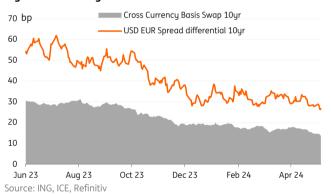


Fig 12 European, Yankee and Reverse Yankee supply (€bn)

,	•		11 5				
Corporates	European	Yankee (US\$)	Rev Yankee	Financials	European	Yankee (US\$)	Rev Yankee
2013	154.9	114.5	33.0	2013	145.2	78.1	15.4
2014	153.9	108.6	42.2	2014	174.3	124.6	32.5
2015	145.2	109.4	61.8	2015	145.7	127.1	28.8
2016	175.6	114.1	66.2	2016	133.8	114.4	45.6
2017	192.8	103.0	65.4	2017	133.0	112.6	35.8
2018	182.5	130.0	31.1	2018	127.8	133.0	17.7
2019	235.6	95.2	98.6	2019	176.5	95.8	28.5
2020	285.0	153.0	68.4	2020	152.3	124.9	24.2
2021	188.0	101.7	59.0	2021	140.2	167.1	40.6
2022	162.6	85.5	33.3	2022	174.0	147.5	28.6
2023	190.9	101.6	40.6	2023	213.4	149.2	12.7
2024	138.7	95.1	47.6	2024	124.4	103.2	19.0

Source: ING

Fig 13 ESG supply per month 2024 (€bn)

Corporate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Green	13.3	5.2	12.4	5.0	6.7	11.9							54.8
Social	0.0	0.0	0.0	0.9	0.3	0.0							1.2
Sustainable	0.8	1.2	0.0	0.0	0.0	0.0							1.9
ESG	14.1	6.3	12.4	5.8	7.0	11.9							57.8
Financial	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total
Green	4.3	5.6	4.8	3.0	10.0	2.5							30.6
Social	1.7	0.5	0.0	0.0	0.0	2.0							4.2
Sustainable	0.0	0.0	0.0	0.0	0.5	0.0							0.5
ESG	6.0	6.1	4.8	3.0	10.5	4.5							35.4
Covered	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total
Green	6.5	0.6	0.4	0.8	1.5	0.0							9.8
Social	0.5	0.0	1.5	0.5	0.0	0.1							2.6
Sustainable	0.0	0.0	0.0	0.0	0.0	0.0							0.0
ESG	7.0	0.6	1.9	1.3	1.5	0.1							12.4

Source: ING, Dealogic – classified as ESG under Dealogic

Fig 14 ESG supply per year and YTD (€bn)

Corporate	2020	2021	2022	2023	2024	2020 YTD	2021 YTD	2022 YTD	2023 YTD	2024 YTD
Green	34.9	54.6	61.7	64.1	42.6	16.9	24.5	32.4	30.8	42.6
Social	1.3	3.5	3.1	0.0	1.2	0.0	2.0	2.4	0.0	1.2
Sustainable	2.6	6.1	4.3	0.6	1.9	1.1	2.1	2.6	0.0	1.9
ESG	38.8	64.2	69.1	64.8	45.6	18.0	28.6	37.3	30.8	45.6
Financial	2020	2021	2022	2023	2024	2020 YTD	2021 YTD	2022 YTD	2023 YTD	2024 YTD
Green	18.2	42.5	49.5	50.4	27.6	4.1	16.3	18.6	23.3	27.6
Social	4.8	7.7	8.4	7.5	2.2	2.0	3.8	2.0	4.0	2.2
Sustainable	1.8	5.5	2.5	3.9	0.5	0.0	3.4	0.3	2.0	0.5
ESG	24.9	55.6	60.4	61.8	30.3	6.1	23.4	20.9	29.3	30.3
Covered	2020	2021	2022	2023	2024	2020 YTD	2021 YTD	2022 YTD	2023 YTD	2024 YTD
Green	5.1	10.8	16.0	15.9	9.8	2.6	4.0	7.0	6.8	9.8
Social	2.5	4.8	3.1	7.4	2.5	2.0	1.8	2.6	4.6	2.5
Sustainable	0.6	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESG	8.2	16.3	19.6	23.3	12.3	4.6	5.8	9.6	11.4	12.3

Source: ING, Dealogic - classified as ESG under Dealogic

Fig 15 Investment grade issuance by maturity, 2023 and 2024 (US\$bn)

2023	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2023
Corp 0-3yr	1.6	3.3	5.0	4.6	7.4	2.7	1.3	2.8	4.1	0.6	5.9	2.1	41.1
Corp 3-6yr	8.4	2.0	5.8	3.8	10.6	6.4	3.3	4.0	10.0	2.2	8.4	0.6	65.4
Corp 6-9yr	10.5	11.9	10.1	5.5	13.2	8.9	3.3	4.8	7.9	3.8	13.8	1.4	95.1
Corp 9-12yr	4.2	2.8	2.8	2.9	10.9	6.2	2.0	5.2	4.3	0.2	7.4	0.0	48.7
Corp 12yrs+	15.1	7.8	1.4	1.2	6.0	1.9	1.7	5.5	4.8	1.0	4.2	0.1	50.6
Fin 0-3yr	18.7	5.5	2.5	6.6	10.0	5.3	3.2	3.7	11.4	5.1	4.9	1.3	78.0
Fin 3-6yr	17.9	9.2	6.3	8.0	8.2	9.9	2.5	3.7	8.2	2.4	7.7	0.6	84.5
Fin 6-9yr	18.5	5.9	3.0	7.4	7.8	6.8	3.1	6.0	10.2	6.8	7.9	0.5	83.8
Fin 9-12yr	7.1	3.7	2.8	0.8	9.2	6.7	0.5	3.0	4.8	0.7	5.8	0.0	44.9
Fin 12yrs+	6.5	1.3	1.0	2.2	1.3	2.5	0.3	2.0	1.4	0.1	0.9	0.0	19.6
2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Corp 0-3yr	4.7	1.5	2.8	2.2	2.7	2.5							17.7
Corp 3-6yr	10.1	7.9	5.2	6.0	9.7	3.8							43.5
Corp 6-9yr	8.8	14.3	13.6	12.6	19.0	10.0							78.3
Corp 9-12yr	7.2	4.7	5.2	8.1	6.5	4.1							35.8
Corp 12yrs+	5.4	13.0	14.0	5.1	14.0	0.0							51.6
Fin 0-3yr	1.6	3.3	5.0	4.6	7.4	2.7	1.3	2.8	4.1	0.6	5.9	2.1	41.1
_				7.0	10.6	6.4	3.3	4.0	10.0	2.2	8.4	0.6	65.4
Fin 3-6yr	8.4	2.0	5.8	3.8	10.0	0.4	5.5	1.0			0. 1	0.0	
Fin 3-6yr Fin 6-9yr	8.4 10.5	2.0 11.9	5.8 10.1	5.8 5.5	13.2	8.9	3.3	4.8	7.9	3.8	13.8	1.4	95.1

Fig 16 Corporate supply per S&P rating (€bn)

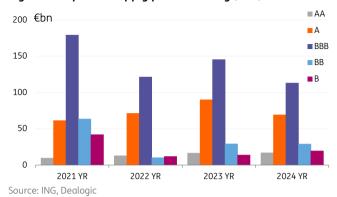
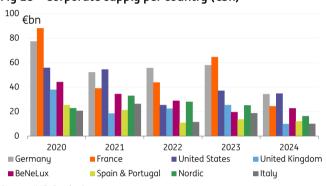
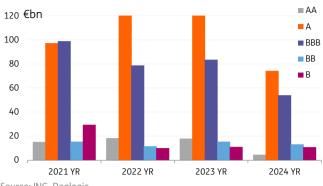


Fig 18 Corporate supply per country (€bn)

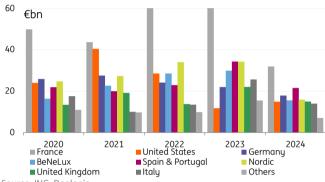


Financial supply per S&P rating (€bn)



Source: ING, Dealogic

Fig 19 Financial supply per country (€bn)



#### Disclaimer

This publication has been prepared by the Economic and Financial Analysis Division of ING Bank N.V. ("ING") solely for information purposes without regard to any particular user's investment objectives, financial situation, or means. ING forms part of ING Group (being for this purpose ING Group N.V. and its subsidiary and affiliated companies). The information in the publication is not an investment recommendation and it is not investment, legal or tax advice or an offer or solicitation to purchase or sell any financial instrument. Reasonable care has been taken to ensure that this publication is not untrue or misleading when published, but ING does not represent that it is accurate or complete. ING does not accept any liability for any direct, indirect or consequential loss arising from any use of this publication. Unless otherwise stated, any views, forecasts, or estimates are solely those of the author(s), as of the date of the publication and are subject to change without notice.

The distribution of this publication may be restricted by law or regulation in different jurisdictions and persons into whose possession this publication comes should inform themselves about, and observe, such restrictions.

Copyright and database rights protection exists in this report and it may not be reproduced, distributed or published by any person for any purpose without the prior express consent of ING. All rights are reserved. ING Bank N.V. is authorised by the Dutch Central Bank and supervised by the European Central Bank (ECB), the Dutch Central Bank (DNB) and the Dutch Authority for the Financial Markets (AFM). ING Bank N.V. is incorporated in the Netherlands (Trade Register no. 33031431 Amsterdam). In the United Kingdom this information is approved and/or communicated by ING Bank N.V., London Branch. ING Bank N.V., London Branch is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. ING Bank N.V., London branch is registered in England (Registration number BR000341) at 8-10 Moorgate, London EC2 6DA. For US Investors: Any person wishing to discuss this report or effect transactions in any security discussed herein should contact ING Financial Markets LLC, which is a member of the NYSE, FINRA and SIPC and part of ING, and which has accepted responsibility for the distribution of this report in the United States under applicable requirements.

Additional information is available on request. For more information about ING Group, please visit https://www.ing.com.