NORD/LB
Creating true value.

Dear readers,

We shall be taking a brief break from our weekly publication due to our hybrid **NORD/LB Capital Market Conference** (German only this year). As such, we wanted to let you know that we will **not** be producing an edition of our weekly publication on 14 September. Nevertheless, we look forward to welcoming you back on **Wednesday, 21 September**, when our Covered Bond & SSA View will be published via the familiar channels.

Your Markets Strategy & Floor Research team

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

7 September 2022 ♦ 28/2022

Marketing communication (see disclaimer on the last pages)

Agenda

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Melanie Kiene, CIIA
melanie.kiene@nordlb.de

SSA/Public Issuers

Dr Norman Rudschuck, CIIA
norman.rudschuck@nordlb.de

Jan-Phillipp Hensing
jan-phillipp.hensing@nordlb.de

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

Cross Asset
On our own account

Authors: Dr Norman Rudschuck, CIIA // Dr Frederik Kunze

NORD/LB Capital Market Conference 2022

We cordially invite you to our (German only) hybrid event entitled "**A turning point for Europe – are we rewriting our future?"** on 15 September in Hanover. You will receive the dial-in data for the online session from your sales or DCM contact. It seems clear that 2022 will go down in history as the year of a turning point. We are not only thinking of the dramatic developments in Ukraine, but also of the change in course taken by central banks around the world in connection with their monetary policy in the context of the capital market. Above all, inflation rates that have not been seen for decades, coupled with climate change, are triggering social and regulatory rethinking. Are we already seeing structural breaks compared with the past? As part of our NORD/LB Capital Market Conference, our aim is to discuss these and other topics together with you, Prof. Marcel Fratzscher and Prof. Dr. Andreas Loeschel. Both will present their very personal view of this historic situation as keynote speakers. Together with colleagues from the NORD/LB Markets Floor Research and other invited experts, we will also touch upon potential scenarios for the global capital markets. As a team, we will be holding a presentation on the topic "Harmonization or minimum standards – what has the new covered bond directive brought us?", a panel discussion centred on the question "Asset class for turbulent waters – how will covered bonds get us through this turning point?" as well as a combined interview-discussion with KfW covering the SSA segment. We hope that you are looking forward to discussing these contentious issues related to the turning point we have all now embarked upon during our one-day event.

Speaking of a turning point: a second rate hike approaches…

Expectations in the financial markets of an interest rate hike have strengthened once more in recent weeks. In some places, a rise of +50bp is now seen as the bare minimum and +75bp as the whole nine yards. Figuratively speaking, what would a hike of +100bp then be? We are curious to see what the ECB will give the markets and when. Moreover, as we encourage freedom of thought: what would happen, for example, in the event of a stalemate (so to speak), where a rise of +60bp is agreed? Not least the ECB's premature predetermination of the path to be pursued reveals an unclear picture. From now on, the meeting-by-meeting approach will be adopted in order to be able to act with greater flexibility. Do the markets like so much uncertainty? After the clear communication in June and the extraordinary meeting shortly afterwards, which was low on content, action is now required not just with regard to the three key interest rates. We also remain critical of the enthronement of the new anti-fragmentation tool, or TPI for short. As the first line of defence is PEPP reinvestments (cf. separate article in this edition of our weekly publication), in our opinion there was no need for the TPI given that the OMT remains unused to date. There are also permanent discussions about the exchange rate (key word: parity) and naturally potential carry earnings for banks from unintended favourable and contradictory conditions. The press conference could once again be probing for President Lagarde. The journey to a "new normal" in 2023 or 2024 (aim: 2.5% for MRO) is still a long one, and we will therefore focus first of all on the forthcoming discussions and decisions.

Market overview Covered Bonds

Author: Dr Frederik Kunze

Primary market: an impressive nine benchmarks from six jurisdictions …

In the last five days’ trading, a total of eight EUR benchmark issuers from six jurisdictions appeared on the primary market and placed nine bonds totalling EUR 10bn. This level of issuance is quite remarkable. We have taken account of the previous and current momentum as well as those issuers that we still expect to see on the primary market in 2022 and have consequently amended our supply forecast. We look at this adjustment in detail within the framework of a covered bond focus article and also discuss possible effects on spreads. Back to the primary market: last Wednesday, another issuer from France, namely HSBC SFH (France), approached its investors. The bank opened the books for the transaction of EUR 500m (WNG; 10y) at a guidance of ms +30bp area. Ultimately, the reoffer spread stood at ms +25bp; the order book reached EUR 1.9bn. The NIP was in the ballpark of two to three basis points. With regard to HSBC SFH (France), it is also worth mentioning that as a result of the takeover of the retail activities of HSBC Continental Europe by the My Money Group (also French), which was agreed in November 2021, the covered bond issuer will also be transferred. On the same day, we also witnessed a primary market project that can be seen as extraordinary for several reasons: Spain’s Banco Santander placed a dual tranche with a total volume of EUR 3.5bn on the market (EUR 2.25bn; 5y & EUR 1.25bn; 10y). A volume of this size has not been seen in the benchmark segment since 2014. Additionally, these were the first two issues from Spain that were placed under the new legislation revised as part of the European covered bond harmonisation project. Moreover, this was the first time a Spanish EUR benchmark was placed as a soft bullet covered bond. As a covered bond jurisdiction, Spain ranked among the last “bastions” of hard bullets. The bonds were priced at reoffer spreads of ms +20bp (5y; guidance: ms +25bp area) and ms +42bp (10; guidance: ms +45bp area), respectively. The order book for the dual tranche was reported to have reached EUR 6.2bn, with the shorter maturity accounting for the larger share of the orders. The bonds were primarily allocated to investors from France (28%), the DACH region (26%) and the Nordics (22%). In terms of investor groups, fund managers (35%) and banks (32%) predominated. Insurance companies and pension funds accounted for 19% while 13% was attributable to central banks/OI. Following this new transaction, issuance volume in Spain has reached EUR 5bn in the current year (2021: EUR 700m; 2020: EUR 3.5bn) and we expect to see other issuers on the primary market over the rest of the year. The month of August therefore closed with an issuance volume of EUR 14.75bn in total. Compared with previous Augusts, this figure is the highest amount of new deals for more than eight years. Solely on a monthly basis, the net supply was EUR 10bn. With a range of one to twelve basis points, the new issue premium averaged +5.2bp, which is less than the level of July (+7.7bp) and June (+8.9bp).

… and another "September to remember"?

Following high levels of issuance activity in August, there are signs after a few days' trading that this strong momentum will continue into September. At this point, we would like to look back at the issue of our weekly publication dated 22 September 2021, in which we talked of a "September to remember". Ultimately, new benchmarks totalling EUR 21.3bn were issued in this month alone. This year, HYPO NOE AG from Austria (see NORD/LB Issuer View) kicked off September's issuance activity last Thursday with a benchmark of EUR 500m (WNG; 7.8y). The final re-offer spread for the deal was ms +19bp (initial guidance ms +20bp area) and received orders from 45 accounts in total. The first deal in the current trading week came from France's CFF on Monday. Here, EUR 1.25bn with a maturity of 7.5 years was allocated at ms +11bp (guidance: ms +15bp area). Yesterday (Tuesday), further issuers crowded onto the market, hot on CFF's heels. Danske Mortgage Bank offered a new benchmark with a short maturity (3y) and placed EUR 1.25bn at ms flat (guidance: ms +5bp area). From Germany, both Bausparkasse Schwäbisch Hall (ticker: BAUSCH) and ING-DiBa (ticker: INGDIB) approached their investors with a mortgage Pfandbrief. Both banks are among those issuers whose mortgage cover pools contain a high proportion of residential cover assets (see NORD/LB §28 Report). Following its ESG debut in September 2021, INGDIB placed its second Green Pfandbrief (EUR 1bn; 8y) at ms +2bp, which was four basis points below the initial guidance. The BAUSCH bond (EUR 500m; 7y) also started the marketing phase at ms +6bp area and was placed at a reoffer spread of ms +2bp. Another issuer from Canada also appeared on the market yesterday. Royal Bank of Canada (RBC) opened the books for its new benchmark at ms +20bp area. In the course of marketing, the spread tightened to ms +17bp. With a deal of EUR 1.5bn and an order book of around EUR 2bn, the bid-to-cover ratio was 1.3x. On 6 September, issuance had therefore already reached EUR 6bn for the month of September 2022. Following 2021, we may possibly be targeting another "September to remember" in 2022. Nevertheless, at this point, we should not forget that anticipated maturities for the month as a whole total EUR 20.3bn.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
RBC	CA	06.09.	XS2531567753	5.0y	1.50bn	ms +17bp	AAA / Aaa / -	-
ING-DiBa	DE	06.09.	DE000A2YNWB9	8.0y	1.00bn	ms +2bp	- / Aaa / -	X
BAUSCH	DE	06.09.	DE000A30VN02	7.0y	0.50bn	ms +2bp	- / Aaa / -	-
Danske Mortgage Bank	FI	06.09.	XS2531929094	3.0y	1.25bn	ms +0bp	- / Aaa / -	-
CFF	FR	05.09.	FR001400CM22	7.5y	1.25bn	ms +11bp	- / Aaa / AAA	-
HYPO NOE AG	AT	01.09.	AT0000A305R9	7.8y	0.50bn	ms +19bp	- / Aa1 / -	-
Banco Santander	ES	31.08.	ES0413900855	10.0y	1.25bn	ms +42bp	- / Aa1 / -	-
Banco Santander	ES	31.08.	ES0413900848	5.0y	2.25bn	ms +20bp	- / Aa1 / -	-
HSBC SFH (France)	FR	31.08.	FR001400CK81	10.0y	0.50bn	ms +25bp	- / Aaa / AAA	-

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research, (Rating: Fitch / Moody's / S&P)

Secondary market: the picture differs

The significant momentum on the primary market was not without consequences for the secondary market. Nonetheless, the latest deals from August, in particular, still performed well. This is also true for the covered bonds issued by Banco Santander, which restarted the Spanish market. Our impression is that the general state of affairs, where there is more demand for shorter maturities, is continuing. We also expect – as we discuss as part of our adjusted outlook – greater differentiation with regard to jurisdictions. Sustained high issuance levels in conjunction with a deplorable fog of uncertainty on financial markets is also likely to have a negative impact on the momentum in trading books in future.

EUR sub-benchmark segment: DekaBank successfully places its fourth issue in 2022

Last Wednesday, DekaBank placed its fourth issue in the EUR sub-benchmark segment in the current year. Following initial guidance of ms +2bp area, the public sector Pfandbrief worth EUR 250m was priced at a final reoffer spread of ms -3bp. The final order book totalled a sizable EUR 1.45bn. In terms of investor groups, banks predominated (88%), while investors from Germany constituted the largest group geographically speaking with a share of 88%. Following this transaction, this year's issuance volume in the EUR sub-benchmark segment now just exceeds the figure of EUR 6bn at EUR 6.1bn.

European Covered Bond Council presents its Factbook for 2022

Last Thursday, the European Covered Bond Council (ECBC) presented the current issue of the ECBC Factbook. The 17th issue of the handbook for international covered bond markets again focuses on covered bond legislation around the world, regulatory classifications and market-relevant developments such as the sub-segment for sustainable covered bonds. The handbook covers the implications of changes to framework conditions, caused, in particular, by monetary policy and the after-effects of the coronavirus crisis. Together with the handbook, the ECBC also presented updated annual statistics for the covered bond market, which we will examine in greater detail in the next issue of our weekly publication on 21 September.

Market overview SSA/Public Issuers

Authors: Dr Norman Rudschuck, CIIA // Jan-Phillipp Hensing

S&P revises positive outlook for Austria to stable

On 26 August, the rating agency S&P revised the outlook for Austria from “positive” to “stable”. Meanwhile, the long-term rating remains unchanged at AA+. The change in outlook also has a direct impact on our coverage of Austrian bonds: explicit guarantees from the Austrian government mean that the ratings of Österreichische Kontrollbank (ticker: OKB), ÖBB-Infrastruktur (ticker: OBND) and Autobahnen- und Schnellstraßen-Finanzierungs-AG (ticker: ASFING) are linked to Austria’s rating. We reported on these issuers in depth in our recently published Issuer Guide 2022 – Austrian Agencies. The revision of the outlook reflects the agency’s views that the risks to economic output are increasing due to further potential tensions with the energy supply, especially the gas supply. Admittedly, Austria is trying to reduce its dependency on Russian gas. However, this will take time to protect the economy completely from disruptions to the gas supply. In view of the geopolitical environment, the rating agency sees this as a key economic weakness. Although the country’s direct trading exposure to Russia is relatively low (3% of total imports and 1% of total exports), it is heavily dependent on Russian gas – around 80% of annual consumption stems from Russia. The Austrian government has adopted the following specific measures to reduce dependency: 1) Introduction of a strategic gas reserve of 20 terawatt hours (TWh), which equates to approximately 20% of annual domestic consumption. 2) Freeing up of reserves that remained unused in the past. 3) A mandatory conversion – currently under negotiation – from gas to alternative energy sources, such as district heat for bulk purchasers, and government compensation for the costs faced by companies and households. Austria’s largest energy supplier OMV has also acquired additional pipeline capacity of 40 TWh for twelve months from October to transport gas from its own production in Norway and additional quantities of liquified natural gas (LNG) to Austria. Significant disruption to gas supplies to trading partners in the eurozone could also cause considerable problems for Austria’s domestic economy. Nevertheless, S&P believes its external position is strong, although forecasts have been revised downwards: the rating agency assumes that real growth in gross domestic product will reach 3.6% in 2022 (previous forecast: 4.1%), having been boosted by the recovery in tourism in the first half of the year. For example, overnight stays reached 96% of the record level achieved in 2019. The process of budget consolidation is also continuing – albeit at a moderate pace in 2022 due to the one-off measures to curb inflation, which are expected to support the government’s economic growth and limit the consequences of geopolitical circumstances. However, S&P sees an increasing risk of recession over the rest of 2022 due to higher energy prices and slower growth among key trading partners.

Half-year figures NRW.BANK: increased demand for energy efficiency programmes

The next round of commenting on half-yearly results is starting, with the focus on NRW.BANK this time. In the first six months of 2022, the regional promotional bank from North Rhine-Westphalia provided a total of EUR 7.2bn of development funds – this equates to an increase of 37% compared with the previous year (EUR 5.3bn). NRW.BANK attributes this to a stabilisation in the economic situation following the years of the pandemic, as investment projects made up for lost time. The promotional bank reported a particular increase in development funds for programmes that have a positive impact on energy and resource efficiency. These can be combined in the issue of energy transition/environment-tal protection. Here, an increase of 32% from EUR 1.8bn in the prior year to EUR 2.3bn was reported. In particular, demand for the NRW.BANK.Effizienzkredit (efficiency loan) increased significantly with new commitments of EUR 408m (previous year: EUR 24m). This was due to an expansion in the areas for which it can be used, as the programme can now be used to make buildings more energy efficient as well as for the construction of new commercial properties. The bank also reported a surge in demand for the NRW.BANK. Elektromobilität (e-mobility) programme, where new commitments rose from EUR 5m in the previous year to EUR 44m. The promotional area "Business" also reported a significant rise in development funds. At the end of the first half, new commitments of EUR 3.0bn had been provided, which equates to an increase of 87% (H1 2021: EUR 1.6bn). The substantial amount of development loans can be explained by the expiry of coronavirus aid programmes among other factors. Demand for the NRW.BANK.Universalkredit (universal credit) picked up subsequently, which was attributable to a wide range of covered entrepreneurial investments. The amount lent under this programme came to EUR 1.0bn, while a figure of EUR 0.4bn was committed in the same period in the previous year. Demand also rose for the newly initiated NRW.BANK.Gründung und Wachstum (creation and growth) programme (EUR 238m), which was combined from two previous programmes and given additional financing options. The development loans provided under the two previous programmes came to EUR 99m in the same period in the previous year. At EUR 179m, demand under the NRW.BANK.Digitalisierung und Innovation (digitalisation and innovation) programme also rose significantly, an increase on the previous year of more than 100%. In contrast, new commitments in the promotional area "Housing" fell year on year by 14% to EUR 1.4bn (previous year: EUR 1.7bn). NRW.BANK attributes this to capacity and supply bottlenecks, rising prices and the shortage of land for residential construction. However, NRW.BANK reported an increase in new commitments to improve energy efficiency. In the NRW.BANK.Gebäudesanierung (building refurbishment) programme, new commitments increased from EUR 9m to EUR 17m and the newly established NRW.BANK.Nachhaltig Wohnen (sustainable living) development programme reported demand of EUR 64m. In contrast, new commitments in the promotional area "Infrastructure/Local Authorities" increased to EUR 2.8bn (previous year: EUR 2.0bn). Subsidies for infrastructure projects, which increased by 43% to EUR 1.3bn (H1 2021: EUR 918m), are included here. The NRW.BANK. Infrastruktur (infrastructure) programme (EUR 307m; previous year: EUR 150m) and the NRW.BANK.Baudenkmäler (historical buildings) programme (EUR 36m; previous year: EUR 10m) reported a rise in demand of over 100%. NRW.BANK last ventured onto the capital market in the previous week: the promotional bank of North Rhine-Westphalia issued a 15-year social bond in the amount of EUR 1.0bn (WNG). The order book totalled EUR 2.8bn, meaning that the spread tightened by two basis points to ms +6bp compared with guidance (ms +8bp area).

Federal Republic of Germany issues inaugural 5y green federal bond

Occasionally, we also comment on issues outside our defined SSA coverage. For example, this week, the Federal Republic of Germany issued its inaugural five-year green federal bond using the syndicate process. The amount of the bond is EUR 5.0bn and the corresponding order book totalled EUR 14bn. A "greenium" of 1.25 basis points (guidance: OBL -1bp area) was set in line with the green bond curve.

Primary market

Having been running at full speed last week, the primary market in the SSA segment showed signs of a certain slowdown in response to the latest news regarding Nord Stream 1 and the upcoming ECB meeting. In the previous issue, we announced deals from the Korea Development Bank (ticker: KDB) and NRW.BANK (comments on the deal on the previous page), and marketing started on the same day. The Koreans opted for a bond with a five-year maturity and an amount of EUR 600m. Following guidance of ms +45bp area, the bond was subsequently priced seven basis points lower at ms +38bp. Here, the order book came to EUR 620m. Issuers that we rarely see on screen also utilised this opportunity: starting with SAGESS – also its ticker – which is responsible for France's strategic oil reserves. A total of EUR 1bn changed hands at OAT +85 bp (guidance: OAT +90bp area). The bond has a ten-year maturity. The interpolation of FRTR 0% 05/25/32 and FRTR 2% 11/25/32 served as a benchmark. According to our calculation, the spread corresponds to the mid-swap circa ms +38bp at the issuance date. Finnvera (ticker: FINNVE), Finland's official export credit agency, was also active. A bond with a five-and-a-half-year maturity in the amount of EUR 1.0bn was printed at ms -8bp. Initially, the guidance amounted to ms -5bp area, but was revised to ms -7bp area during the marketing phase in view of the interest in the bond. The order book ultimately totalled EUR 4.4bn. Poland's promotional bank Bank Gospodarstwa Krajowego (ticker: BGOSK) appeared on the primary market – EUR 600m changed hands at ms +180bp (guidance: ms +190bp area; order book: EUR 1bn). Another very infrequent guest: Japan Finance Organization for Municipalities (ticker: JFM). The Japanese raised an elegant EUR 1.25bn by means of a five-year bond at ms +21bp (guidance: ms +24bp area; order book: EUR 3.3bn). This week, ASFiNAG (ticker: ASFING) reported from Austria: EUR 600m (WNG) changed hands at ms -12bp (guidance: ms -8bp area) with a bulging order book of EUR 6.0bn. In addition, the European Union (ticker: EU) plans to raise further funding for the NGEU programme. An RfP has been sent to selected banks. Mandates have also been issued: the Wallonia region (ticker: WALLOO) – more on the issuer in our Public Issuer Profile – has mandated for a bond with a 15-year maturity and the African Development Bank for a social bond.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
ASFING	AT	05.09.	XS2532310682	6.0y	0.60bn	ms -12bp	- / Aa1 / AA+	-
JFM	Other	31.08.	XS2527914779	5.0y	1.25bn	ms +21bp	- / A1 / A+	-
BGOSK	Other	31.08.	XS2530208490	5.0y	0.60bn	ms +180bp	A- / - / -	-
FINNVE	Nordics	31.08.	XS2529521283	5.5y	1.00bn	ms -8bp	AA+ / Aa1 / -	-
SAGESS	FR	31.08.	FR001400CKB2	10.0y	1.00bn	ms +38bp	- / - / AA	-
KDB	Other	31.08.	XS2529713435	5.0y	0.50bn	ms +38bp	AA- / Aa2 / AA	-
NRWBK	DE	30.08.	DE000NWB0AS6	15.0y	1.00bn	ms +6bp	AAA / - / AA	X

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)

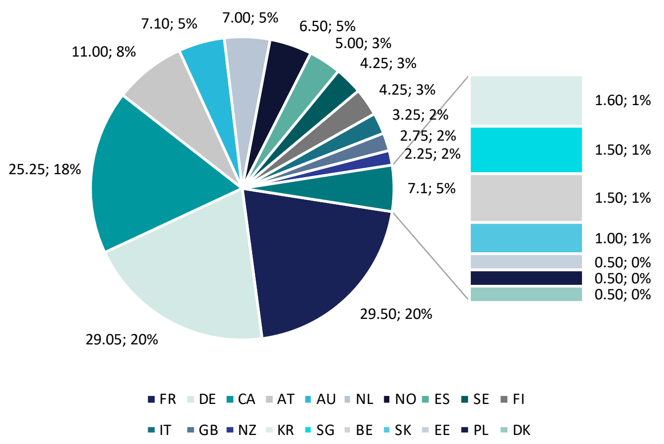
Covered Bonds
Primary market: A little more to come!

Author: Dr Frederik Kunze

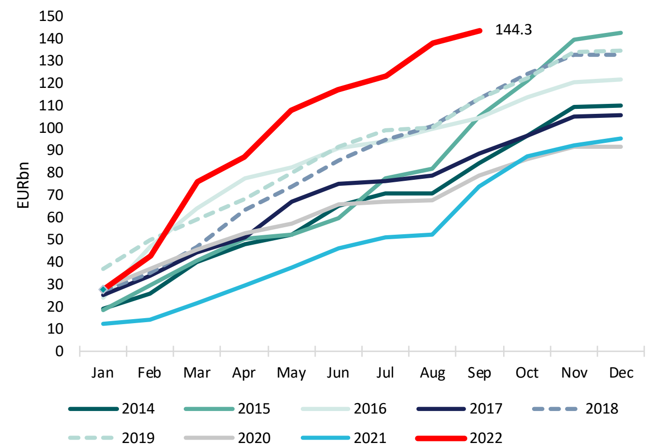
Adjustment of our supply forecast for the EUR benchmark segment

In a market environment that is evidently being shaped more and more by geopolitical rather than monetary policy events, the question as to what role the asset class of covered bonds will play is being raised increasingly frequently. In fact, the issuance volume for the current year alone and in particular the momentum of recent trading weeks underlines the character of the “crisis product”. For 2022, we have already registered a new issue volume of EUR 144.3bn in EUR benchmarks, up significantly on the previous year’s level. This is nothing new in the current covered bond year. Nevertheless, we assume that issuers will provide even more fresh supply, which is why we are once again adjusting our supply forecast upwards. In the course of this article, we intend to briefly summarise the latest developments in the EUR benchmark segment and present our outlook for the remaining months of 2022, in addition to venturing a guess as to future spread developments as well.

EUR benchmarks: Issues 2022 ytd (EURbn)



EUR benchmarks: Issuance history (EURbn)



Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

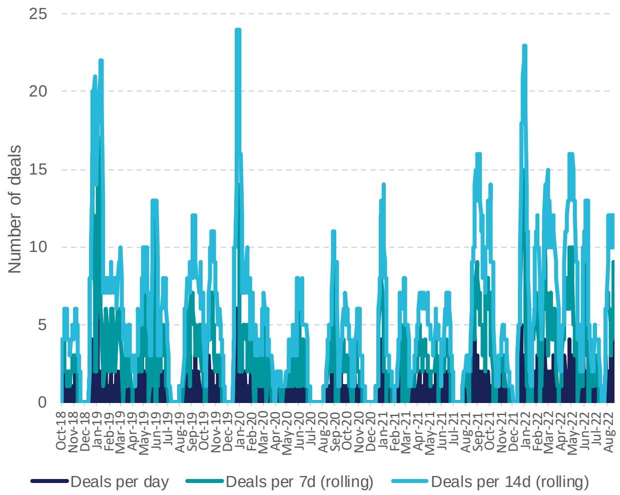
Issuers from the DACH region have consistently delivered so far this year

In terms of the breakdown of issuance volume by jurisdiction, France (2022 ytd: EUR 29.50bn) and Germany (EUR 29.05bn) lead the field. Canadian issuers (EUR 25.25bn) particularly stood out in the first few months of the year due to their strong primary market activity, but also approached investors during July, August and September. Also as a result of the dynamic issuance activity of Austrian issuers (EUR 11bn), the German-speaking DACH (Germany, Austria and Switzerland) region was responsible for an impressive figure of EUR 40.05bn as measured by volume. As we have already noted elsewhere, the Austrians certainly surprised us, as we had expected a bottleneck effect due to the country's new covered bond legislation.

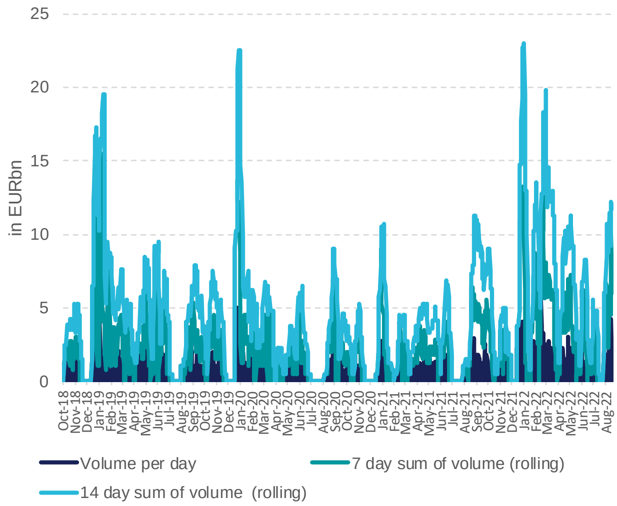
The whole is also always a sum of many smaller parts

Although we are generally reluctant to talk about large or small benchmark jurisdictions, this differentiation is nevertheless apt given the outstanding volume. In fact, this analysis becomes even more challenging if we refer to issuance activity in recent years as the relevant classification, as in this case Spain is a noteworthy candidate. As one of the top five jurisdictions in terms of outstanding volume, just two Spanish issuers had appeared on the market by the end of August (volume: EUR 1.5bn). In this respect alone, we can talk about a sensation when we take a look at the dual tranche of Banco Santander (cf. Covered Bonds market overview section of this present edition). In addition, the recent primary market appearances from Denmark, Norway, South Korea and New Zealand also contribute to the more bountiful primary market supply and represent the diverse and broadly based dynamics of the EUR benchmark segment.

Seasonal pattern (EUR BMK, number of issues)



Seasonal pattern (EUR BMK, EURbn)



Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

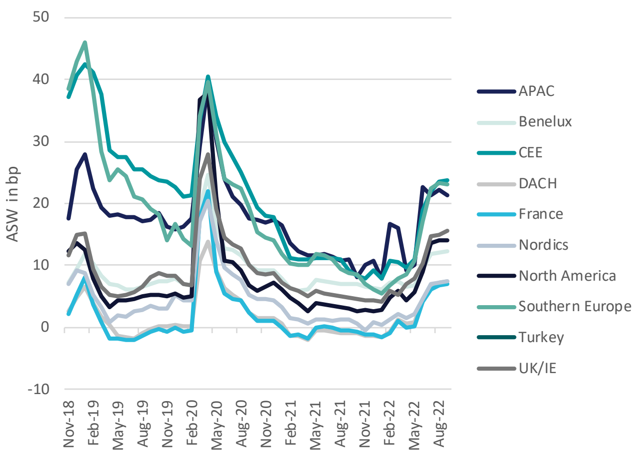
Farewell to seasonal patterns?

What also concerns us is the observation that the seasonal issuance pattern for the covered bond market cannot be confined to the comparatively narrow range that we are familiar with from the average of the years prior to the outbreak of the pandemic. If it still seemed like this at the beginning of 2022, we were soon put right in the course of the first quarter. It is also important to stress that the summer recess was very short this year. There are certainly reasons for this. For example, geopolitics but also monetary policy factors are putting issuers in a bit of a tight spot and forcing them to act. In our opinion, noticeable concessions have been made on spreads here or there. For the time being, we continue to see the recent escalation of the multi-dimensional crisis situation fuelled by inflation, energy shortages and geopolitical tensions/global uncertainty as catalysts for the covered bond market. The comparatively short summer recess, during which the primary market closed between the end of July and mid-August, can also be explained in this context.

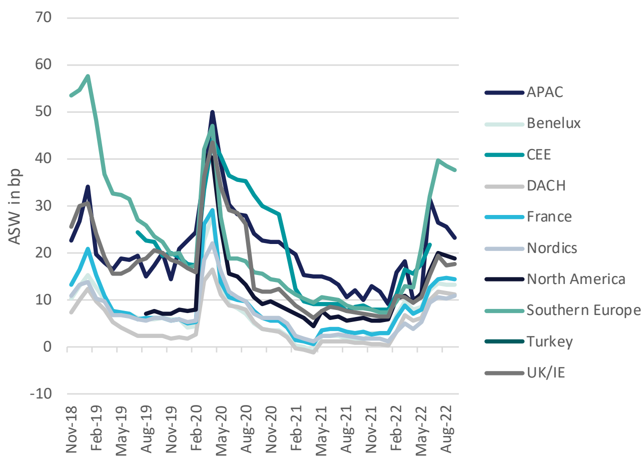
Previous issuance waves also influenced spreads?

However, a strong dynamic could also be observed with regard to spread development in the EUR benchmark segment in the current year. For example, phases of widening or re-pricing episodes repeatedly alternated with narrowing. Overall, the generic ASW spreads have widened quite noticeably. In particular, higher new issue premiums were seen in phases of increased issuance activity, which at times also triggered a certain exodus in the secondary market. Nevertheless, the widening movements (but also the required new issue premiums) remained comparatively restrained in direct comparison with more risky asset classes. Overall, we see the current spread levels as the result of a revaluation due to technical market data, although market sentiment was and still is a determining factor in some places. Especially given the reflections on net supply in the EUR benchmark segment outlined below, we see renewed, albeit rather subtle, widening tendencies, as we explain in further detail below. The previous waves of new issues are ultimately already having an impact on the market in terms of technical market aspects.

Spread development (EUR BMK, 5y generic)



Spread development (EUR BMK, 10y generic)



Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Adjusted supply forecast 2022: We are now expecting EUR 184.3bn

In our supply forecast, we follow a bottom-up approach in that we derive the expected primary market deals at jurisdiction level and combine them in an overall forecast. Based on our adjusted considerations, this results in a primary market issuance forecast of EUR 184.3bn, which with existing maturities (EUR 138.0bn in 2022), leads to a net supply of EUR 43.6bn. Based on our adjusted expectations, there are still active primary markets in France (EUR +4.50bn), Germany (EUR +3.50bn) and Canada (EUR +2.50bn). However, in the case of the United Kingdom (EUR +3.25bn) as well as Australia and Finland (EUR +3bn in each case), there are also still some issues to come in 2022 according to our projection. In the case of the UK, we see issuers in a regulatory-induced wait-and-see position. It is in line with our baseline expectation for the LCR eligibility of UK covered bonds in the context of the EU/EEA regulation that UK covered bonds will continue to be eligible as Level 2A assets in the context of LCR management (see also NORD/LB Covered Bond Special on the [LCR eligibility of covered bonds](#)).

Updated NORD/LB forecast: supply and maturities 2022 (EURbn)

Jurisdiction	Outstanding volume	Issues 2022 ytd	Maturities 2022	Issues 2022e	Net supply 2022e	Issues up until end of 2022e
AT	41.5	11.0	3.0	12.5	9.5	1.5
AU	29.5	7.1	7.5	10.1	2.6	3.0
BE	16.0	1.5	2.8	2.5	-0.3	1.0
CA	80.2	25.5	8.0	28.0	20.0	2.5
CH	0.0	-	1.3	0.0	-1.3	-
CZ	0.5	-	0.0	0.5	0.5	-
DE	170.0	29.3	21.1	32.8	11.6	3.5
DK	5.5	0.5	2.5	1.5	-1.0	1.0
EE	1.0	0.5	0.0	0.5	0.5	0.0
ES	72.8	5.0	13.7	6.0	-7.7	1.0
FI	30.3	4.3	4.8	7.3	2.5	3.0
FR	231.1	29.5	30.8	34.0	3.2	4.5
GB	28.4	2.8	8.3	6.0	-2.3	3.3
GR	0.5	-	0.0	0.0	0.0	-
HU	0.0	-	0.0	0.5	0.5	-
IE	1.8	-	1.8	0.0	-1.8	-
IT	49.8	3.5	7.8	5.8	-2.0	2.3
JP	4.9	-	0.0	1.5	1.5	-
KR	7.2	1.6	0.0	2.0	2.0	0.4
LU	1.5	-	0.0	0.0	0.0	-
NL	67.4	7.0	5.3	9.5	4.3	2.5
NO	50.6	6.5	8.0	8.0	0.0	1.5
NZ	10.0	2.3	1.8	4.0	2.3	1.8
PL	2.0	0.5	0.6	0.5	-0.1	0.0
PT	3.8	-	2.8	0.0	-2.8	-
SE	28.8	4.3	5.0	6.0	1.0	1.8
SG	7.8	1.5	1.5	3.0	1.5	1.5
SK	4.5	1.0	0.0	2.0	2.0	1.0
Total	**946.9**	**144.9**	**138.0**	**184.3**	**46.3**	**36.9**

Source: Market data, NORD/LB Markets Strategy & Floor Research

Forecast risks…

Any forecast or prediction about the future is subject to uncertainty. A further reduction in primary market activities, for example in the senior unsecured segment, could provide an additional influx of covered refinancing. However, we would like to point out that there are also limits to the issuing potential in the covered segment. On the other hand, a collapse in funding requirements could lead issuers to undertake less capital market refinancing overall. One reason for this could be a dramatically worsening outlook for new business activity. We would also describe as a "black swan" the possibility that the central bankers of the ECB will intervene in market activity in the covered bond segment this year with new or adjusted monetary policy instruments. It is conceivable that if the crisis were to worsen, the ECB Governing Council might consider renewed liquidity support for the banking sector as well. However, in our view, there will be no attractive conditions. In the short term, the ECB meeting next Thursday is therefore not seen as being a long-term stimulus for our supply forecast in our baseline scenario.

NORD/LB

…and implications for further spread development

In terms of the spread development over the rest of the year, we see technical market data as the primary driver. The higher issuance volume will therefore tend to result in widening. In fact, the adjustment of our forecast results in a change of sign to the extent that there will now not be a reduction in the positive net supply accumulated by August even with the high maturities in the months of September to December 2022 (in total: EUR 37bn). Instead, this market variable will increase by the end of the year to the above-mentioned figure of EUR 46.3bn. This means a certain amount of support for spreads will be lost, although we are at a new level after the recent market movements. There should also be additional differentiation by maturity and jurisdiction due to general sentiment or, in the case of Italy, specific sentiment factors. We see a little more widening for longer maturities but also for Italy and to a lesser extent for Spain.

NORD/LB forecast: Spreads at year-end 2022

Current levels					as of 31/12/2022(e)					Expected spread change				
in bp	3y	5y	7y	10y	*in bp*	3y	5y	7y	10y	*in bp*	3y	5y	7y	10y
AT	9.4	11.9	12.9	15.8	AT	10.0	14.0	16.0	20.5	AT	0.6	2.1	3.1	4.7
AU	16.0	19.1	19.7	21.7	AU	16.0	21.0	23.0	26.5	AU	0.0	1.9	3.3	4.8
BE	3.8	5.4	9.5	14.9	BE	4.0	8.0	13.0	19.5	BE	0.2	2.6	3.5	4.6
CA	10.4	14.2	17.8	18.9	CA	11.0	16.0	21.0	23.5	CA	0.6	1.8	3.2	4.6
CZ	21.5	21.5			CZ	22.0	24.0			CZ	0.5	2.5		
DE	2.6	2.9	3.8	6.8	DE	3.0	5.0	7.0	11.5	DE	0.4	2.1	3.2	4.7
DK	5.4	10.6	14.8	13.5	DK	6.0	13.0	18.0	18.5	DK	0.6	2.4	3.2	5.0
EE	23.4	29.9			EE	24.0	32.0			EE	0.6	2.1		
ES_Multi	30.8	32.6	31.9	31.9	ES_Multi	31.0	35.0	35.0	36.5	ES_Multi	0.2	2.4	3.1	4.6
ES_Single	16.2	22.3	29.1	37.2	ES_Single	17.0	24.0	34.5	43.5	ES_Single	0.8	1.7	5.4	6.3
FI	1.4	2.7	4.3	5.9	FI	2.0	5.0	8.0	10.5	FI	0.6	2.3	3.7	4.6
FR	4.1	6.9	9.4	14.4	FR	5.0	9.0	13.0	19.5	FR	0.9	2.1	3.6	5.1
GB	12.4	15.6	15.2	17.7	GB	13.0	18.0	18.0	22.5	GB	0.6	2.4	2.8	4.8
IE	2.5				IE	3.0				IE	0.5			
IT	21.5	27.4	32.0	43.9	IT	23.0	32.0	39.5	52.5	IT	1.5	4.6	7.5	8.6
JP	23.8	26.5	30.7	30.8	JP	24.0	29.0	34.0	35.5	JP	0.2	2.5	3.3	4.7
KR	27.8	26.2	22.4		KR	28.0	28.0	26.0		KR	0.2	1.8	3.6	
LU	16.8	23.2			LU	17.0	25.0			LU	0.2	1.8		
NL	6.3	8.4	8.7	11.6	NL	7.0	11.0	12.0	16.5	NL	0.7	2.6	3.3	4.9
NO	6.0	8.8	11.7	12.8	NO	6.0	11.0	15.0	17.5	NO	0.0	2.2	3.3	4.7
NZ	18.0	22.4	20.3	17.0	NZ	18.0	25.0	24.0	21.5	NZ	0.0	2.6	3.7	4.5
PL	34.5				PL	35.0				PL	0.5			
PT	7.7	10.4	10.4		PT	8.0	13.0	14.0		PT	0.3	2.6	3.6	
SE	5.3	7.4	9.7	12.1	SE	6.0	10.0	13.0	16.5	SE	0.7	2.6	3.3	4.4
SG	8.6	12.7	16.2		SG	9.0	15.0	19.0		SG	0.4	2.3	2.8	
SK	17.1	20.1	21.6		SK	18.0	22.0	25.0		SK	0.9	1.9	3.4	

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Conclusion

The covered bond market will stay intact for the remaining trading weeks and months. This especially applies to the EUR benchmark segment. The current volume on the primary market as well as a continuing preference by issuers for covered funding combined with continuing strong investor demand lead to our updated supply forecast of EUR 184.3bn, which is once again significantly higher than the previous expectation of EUR 156bn. In a way, the covered bond segment can definitely be seen as a beneficiary of the current market environment. Nevertheless, it should not be ignored in this context that these developments can also pose challenges for the sub-market of covered refinancing. However, within our forecast for the development of spreads, we see a sustained fundamental deterioration in the condition of the issuers or the cover pools as unlikely. The gentle widening movements that we expect by the end of 2022 are, in our view, more due to technical market data and sentiment.

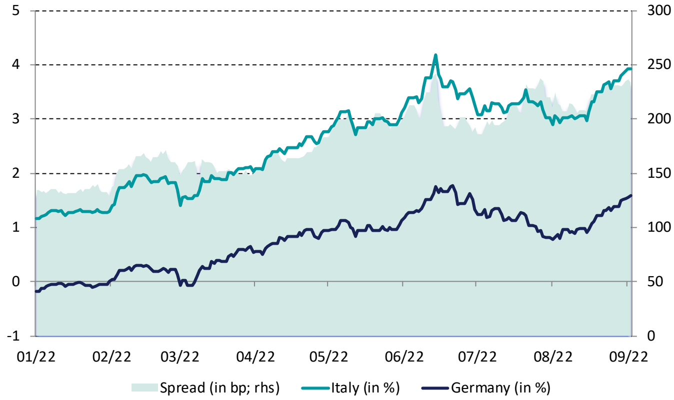
SSA/Public Issuers
ECB: PEPP visibly active as first line of defence

Authors: Dr Norman Rudschuck, CIIA // Jan-Phillipp Hensing

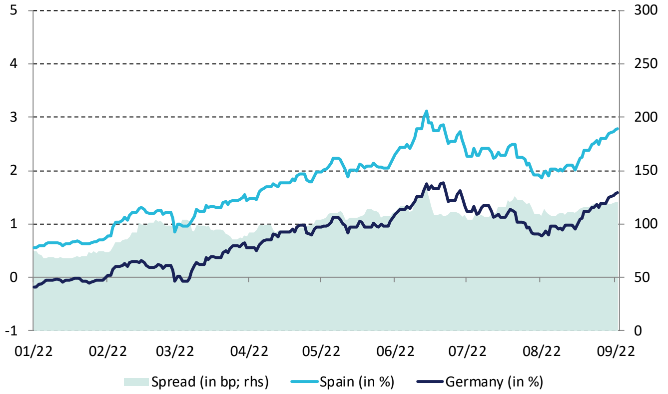
Despite new TPI: PEPP reinvestment as first line of defence

With the July meeting plus an unscheduled special meeting beforehand, the ECB Governing Council launched its anti-fragmentation tool that had been the subject of great speculation in advance and directly renamed it the Transmission Protection Instrument (TPI). The aim of the TPI is to support the effective transmission of monetary policy. It can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the Eurozone. The purchases will not be limited ex ante in terms of volume. In any case, according to President Lagarde, flexibility in reinvesting redemptions falling due in its PEPP (Pandemic Emergency Purchase Programme) portfolio will remain the first line of defence. We would like to devote special attention to these PEPP reinvestments in this article. To recap, the PEPP was initiated in March 2020 to counter the risks to the monetary policy transmission mechanism and the outlook for the Eurozone brought about by the outbreak of the COVID pandemic. The original volume of EUR 750bn was increased as early as 4 June 2020 by EUR 600bn and on 10 December 2020 by a further EUR 500bn to a total of EUR 1,850bn. In principle, all securities that are also eligible for purchase under the APP, plus Greek government securities, are eligible for purchase under the PEPP. The net purchases were carried out until the end of March 2022, but the full envelope of EUR 1,850bn was not utilised. As at 26 August, the cumulative portfolio amounts to EUR 1,690bn. The ECB's statements regarding reinvestment are exciting and relatively transparent compared to the APP. Redemptions of maturing bonds are to be reinvested flexibly at least until the end of 2024 in order to avoid impairments to monetary policy transmission. However, the volumes of the impending maturities remain unclear. This is particularly relevant for the SSA segment. In total, public sector issuers account for 97% (or EUR 1,640bn) of the volume of securities. The ECB will therefore continue to be one of the most important investors in the secondary market through reinvestment over the next two years.

Spread movement – Bunds vs. BTPs (yields, 10Y)



Spread movement – Bunds vs. SPGs (yields, 10Y)



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Reinvestments mainly in the periphery

The data published by the ECB every two months provides a certain amount of information on how the PEPP portfolio is reallocated on the basis of reinvestments. In the past, we have already emphasised several times that the portfolios "breathe" and therefore strict observation of the (historical) purchases according to the ECB capital key does not seem to make much sense. Moreover, ECB President Lagarde repeatedly emphasises the flexibility of PEPP purchases. Nevertheless, the data from June and July has led to some debate as to whether the first line of defence is working. Particularly striking are the high maturities of Germany and the Netherlands – a total of EUR 17.7bn – which were reinvested to almost the same extent (EUR 17.3bn) in Spain, Italy, Greece and Portugal. Moreover, there is little or no change with regard to the supranationals – ultimately, the focus here is on no spread differences. As regards the frequently discussed yield spreads of German government bonds compared to Italian or Spanish papers, a certain volatility has been observed since July 2022, and most recently this trend is on the up again. In Italy, the current political uncertainty, including new elections, are certainly contributing to this. We are therefore eagerly awaiting the publication of the new reinvestment data at the beginning of October. Only then will it become clear whether the line of defence has already been fully activated or whether the latest figures can be chalked up as "breathing" in the portfolio.

Public sector net purchases under the PEPP in selected countries (EURm)

Country	Net purchases Apr 22 – May 22	Net purchases June 22 – July 22	Cumulative net purchases at end-July 22
Germany	3,551	-14,279	398,212
Netherlands	953	-3,383	82,741
Spain	799	5,914	196,377
Italy	-1,724	9,762	289,065
Greece	173	1,089	39,765
Portugal	60	514	35,315
Supranationals	3	0	145,953

Source: ECB, NORD/LB Markets Strategy & Floor Research

Conclusion

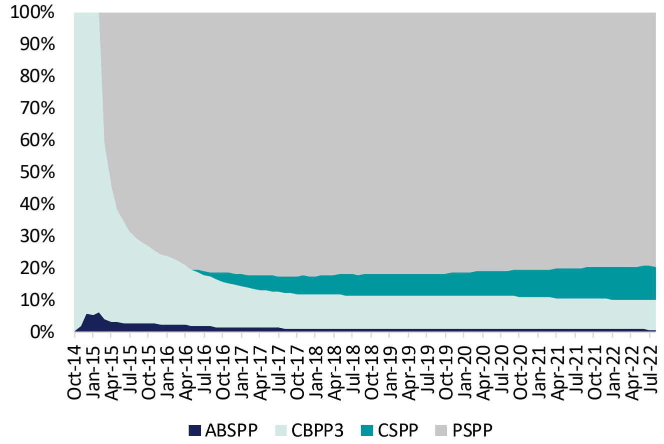
The ECB has already demonstrated flexibility on several occasions and, unfortunately, a lack of transparency with regard to reinvestment and maturing volumes. At this point, it would (still) appear to be up for debate as to whether the first line of defence is already fully effective. An indication will only come from new data at the beginning of October. Tomorrow's interest rate decision could also provide new impetus for a possible fragmentation on the capital market. In our view, there would nevertheless have been no need for a new tool in the ECB's toolbox if all the reinvestment leeway had been utilised. In addition to the PEPP, the maturing papers from the APP will also be reinvested – although it remains questionable for what period. In contrast to the PEPP, however, the volumes are known. For 2023, it is already clear that the average reinvestment requirement in the first six months is EUR 30.5bn per month. So there is enough ammunition for the first (PEPP) and second (APP) line of defence.

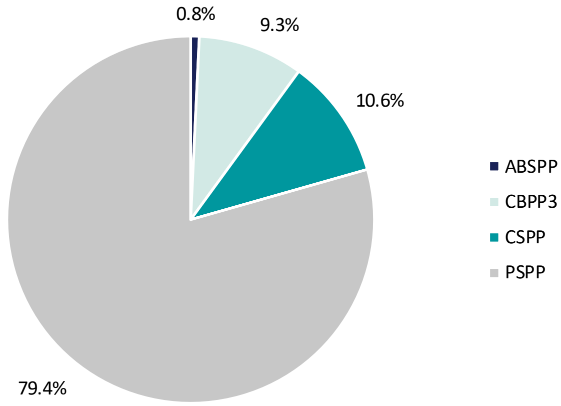
ECB tracker

Asset Purchase Programme (APP)

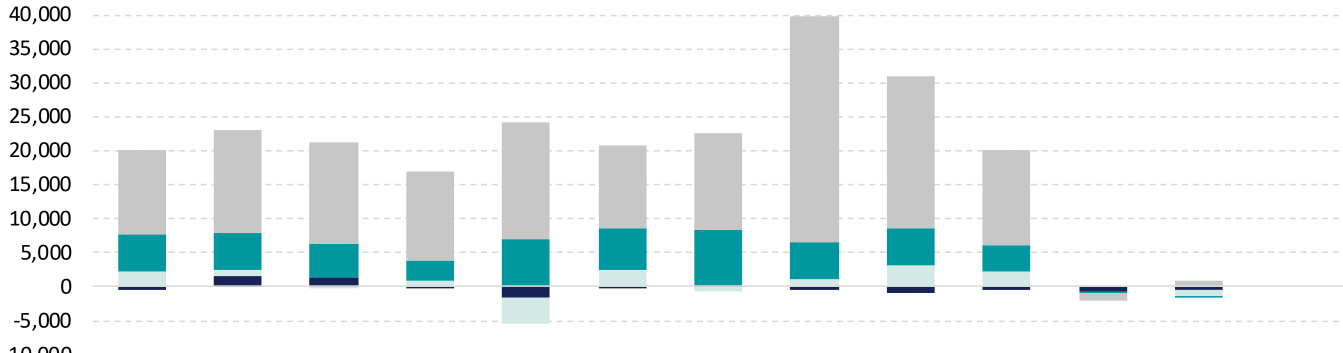
	ABSPP	CBPP3	CSPP	PSPP	APP
Jun-22	25,337	302,210	344,952	2,592,645	3,265,144
Jul-22	24,638	302,427	344,811	2,591,531	3,263,407
Δ	-699	+217	-141	-1,114	-1,737

Portfolio structure





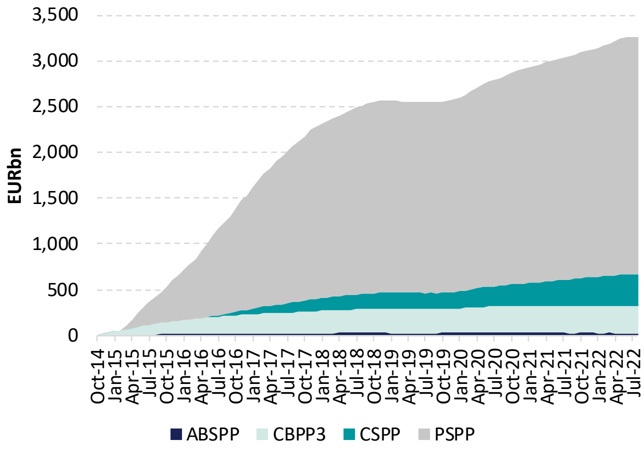
Monthly net purchases (in EURm)



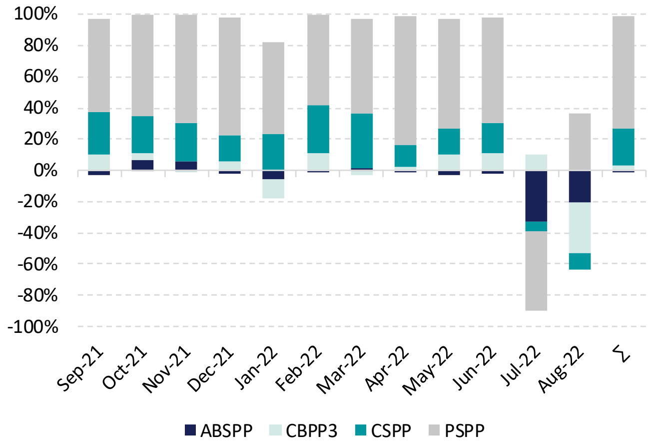
	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	∑
APP	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-655	228,874
PSPP	12,423	15,038	14,815	12,989	17,292	12,095	14,172	33,238	22,443	13,924	-1,114	869	168,184
CSPP	5,590	5,481	5,142	3,007	6,970	6,272	8,042	5,461	5,366	3,858	-141	-253	54,795
CBPP3	2,184	1,008	-12	942	-3,761	2,376	-606	1,074	3,247	2,339	217	-787	8,221
ABSPP	-538	1,490	1,255	-342	-1,663	-45	321	-376	-824	-399	-721	-484	-2,326

Source: ECB, NORD/LB Markets Strategy & Floor Research

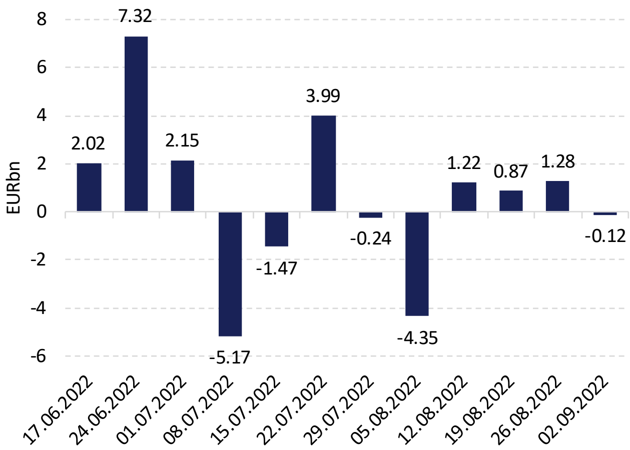
Portfolio development



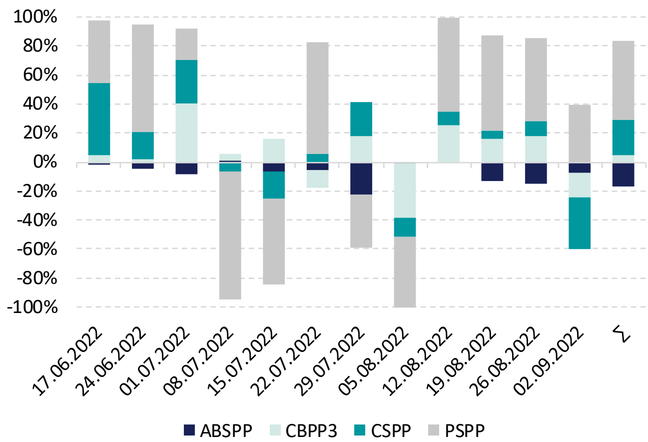
Distribution of monthly purchases



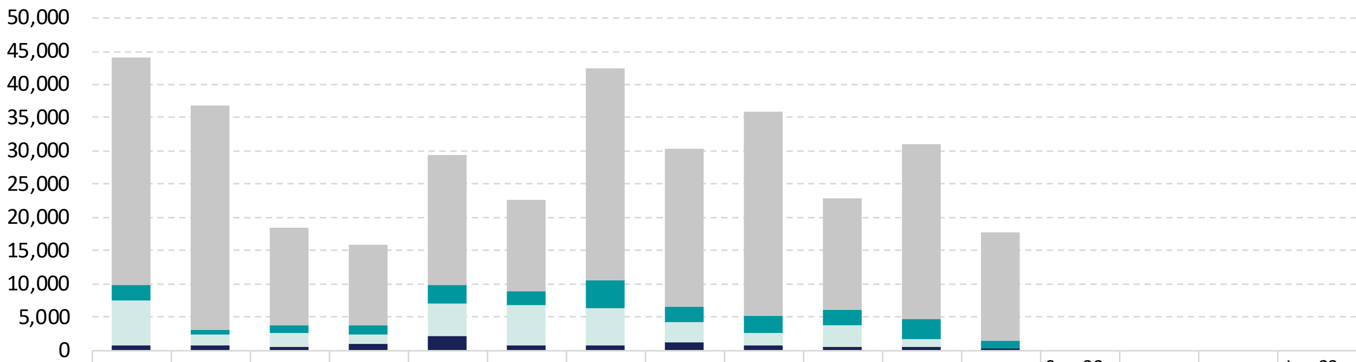
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

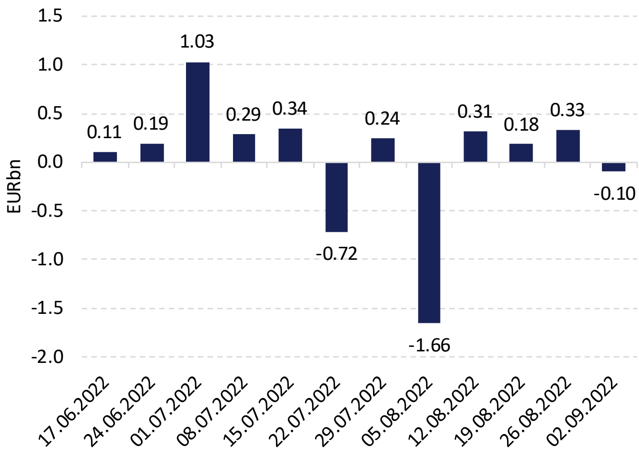


	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-22 - Aug-23	2021	2022	Jan-23 - Aug-23
APP	44,114	36,965	18,361	15,844	29,368	22,586	42,567	30,235	35,827	22,809	31,094	17,816	347,586	247,069	298,879	232,302
PSPP	34,354	33,927	14,669	12,016	19,469	13,657	32,033	23,663	30,552	16,619	26,378	16,445	273,782	188,494	228,585	178,816
CSPP	2,221	674	1,031	1,416	2,947	2,182	4,219	2,388	2,579	2,521	3,023	979	26,180	17,134	17,428	20,838
CBPP3	6,873	1,651	2,167	1,487	4,786	6,013	5,631	2,937	1,874	3,108	1,170	0	37,697	30,143	41,244	25,519
ABSPP	666	713	494	925	2,166	734	684	1,247	822	561	523	392	9,927	11,298	11,622	7,129

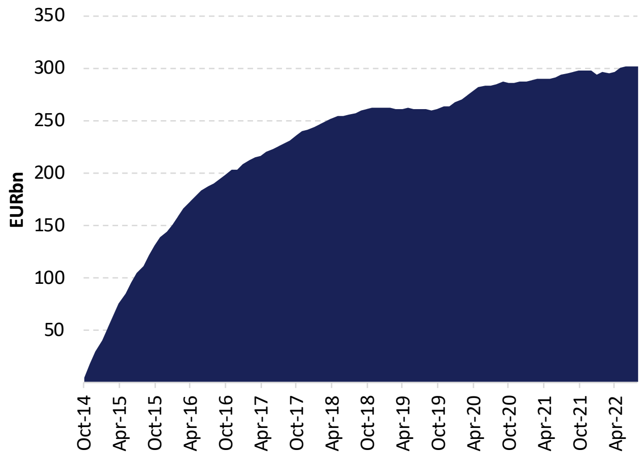
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

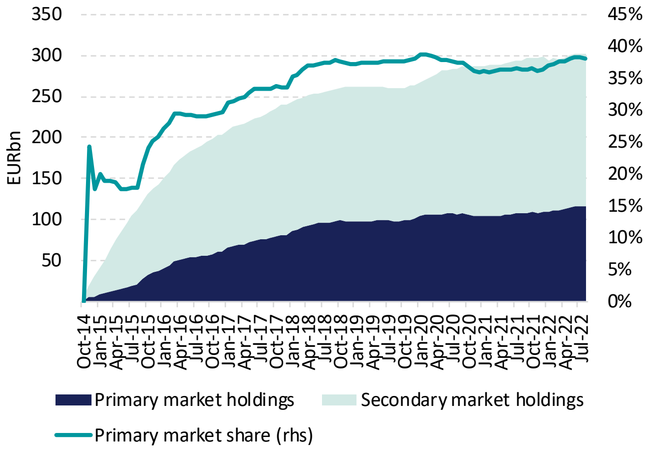
Weekly purchases



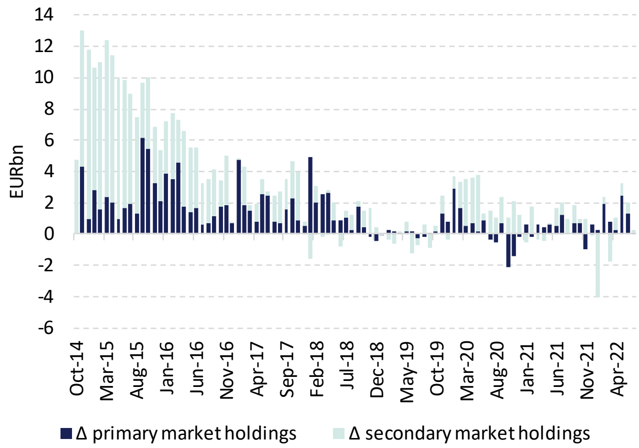
Development of CBPP3 volume



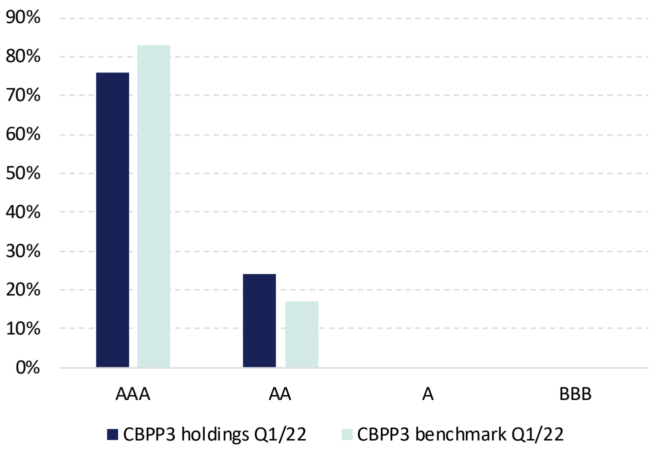
Primary and secondary market holdings



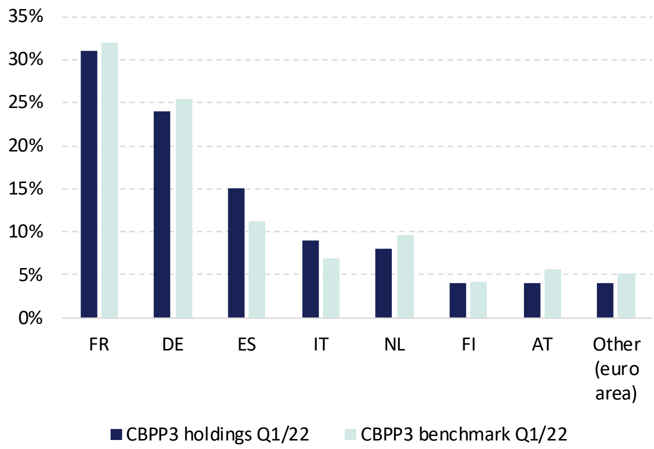
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



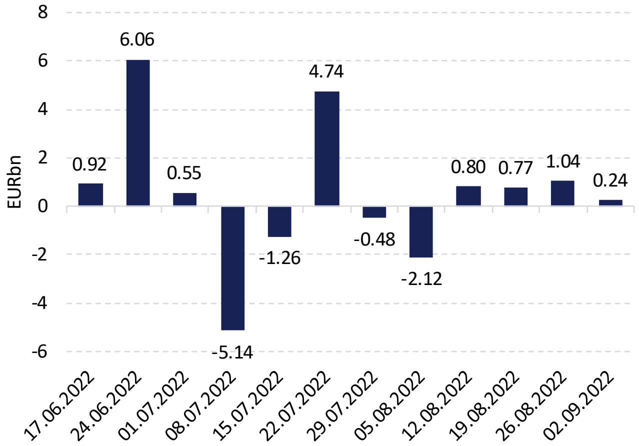
Distribution of CBPP3 by country of risk



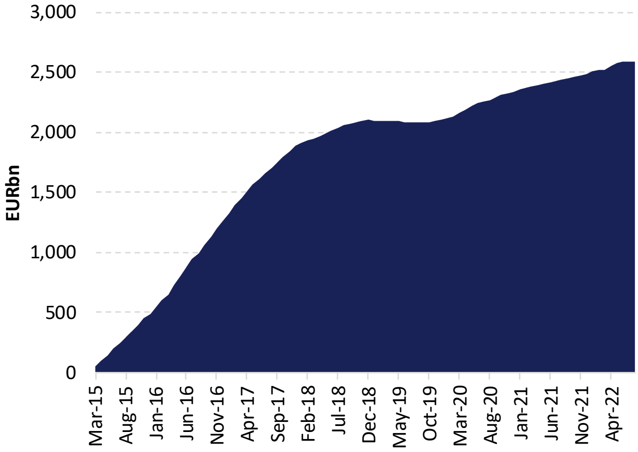
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



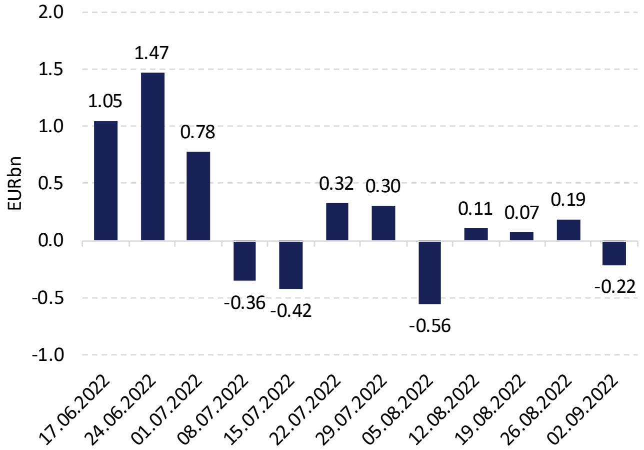
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Holdings (EURm)	Expected holdings (EURm)[2]	Difference (EURm)	Current WAM of portfolio[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	2.7%	78,139	74,117	4,022	7.2	8.4	-1.2
BE	3.4%	95,598	92,256	3,342	7.2	10.3	-3.1
CY	0.2%	4,328	5,449	-1,121	8.8	9.2	-0.4
DE	24.3%	664,195	667,541	-3,346	6.6	8.0	-1.4
EE	0.3%	444	7,133	-6,689	7.8	7.8	0.0
ES	11.0%	316,826	301,962	14,864	7.8	8.2	-0.5
FI	1.7%	44,340	46,514	-2,174	8.0	9.4	-1.5
FR	18.8%	531,745	517,196	14,549	6.8	8.8	-2.0
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	42,964	42,881	83	8.2	8.6	-0.4
IT	15.7%	447,491	430,193	17,298	7.1	10.5	-3.4
LT	0.5%	5,967	14,656	-8,689	10.3	7.9	2.4
LU	0.3%	3,864	8,341	-4,477	5.7	10.3	-4.6
LV	0.4%	3,812	9,867	-6,055	9.1	7.8	1.2
MT	0.1%	1,411	2,656	-1,245	11.3	9.1	2.2
NL	5.4%	129,560	148,401	-18,841	7.8	9.7	-1.9
PT	2.2%	55,468	59,268	-3,800	7.3	9.7	-2.4
SI	0.4%	10,944	12,193	-1,249	9.5	7.6	1.9
SK	1.1%	18,332	29,000	-10,668	7.9	9.6	-1.7
SNAT	10.0%	288,595	274,403	14,192	7.9	8.5	-0.6
Total / Avg.	**100.0%**	**2,744,026**	**2,744,026**	**0**	**7.2**	**8.5**	**-1.3**

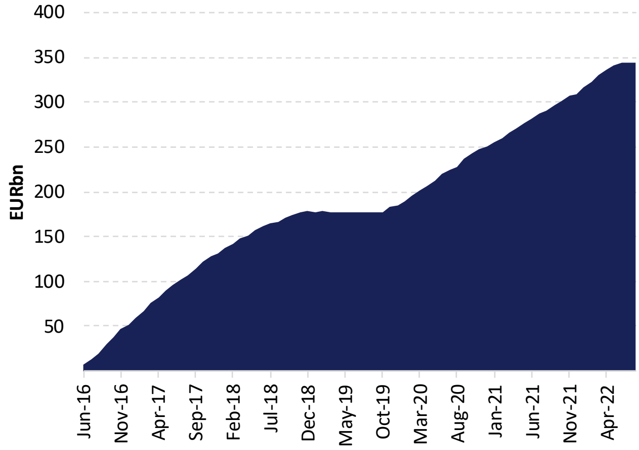
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

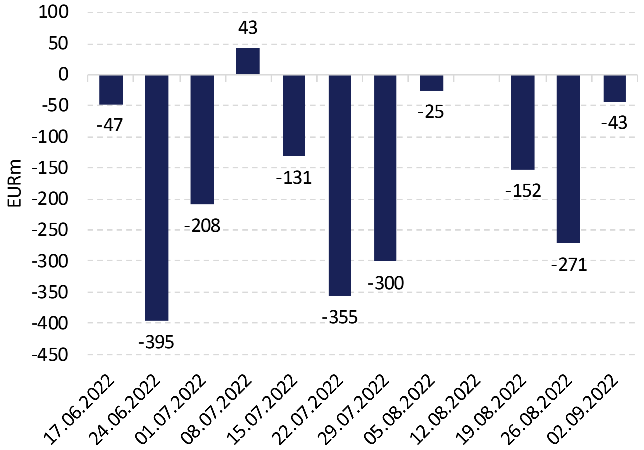


Development of CSPP volume

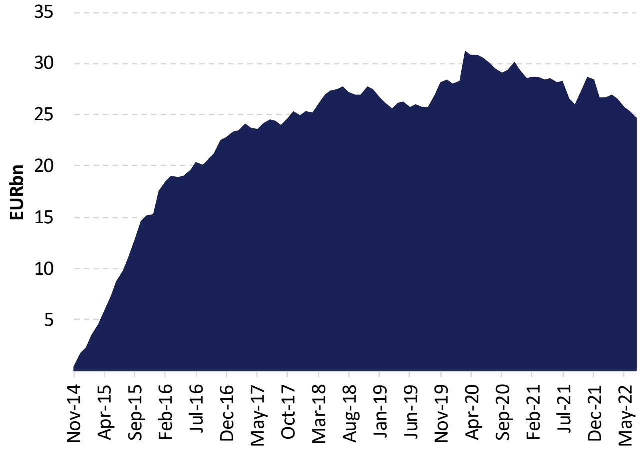


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



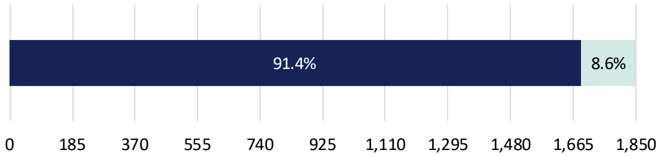
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

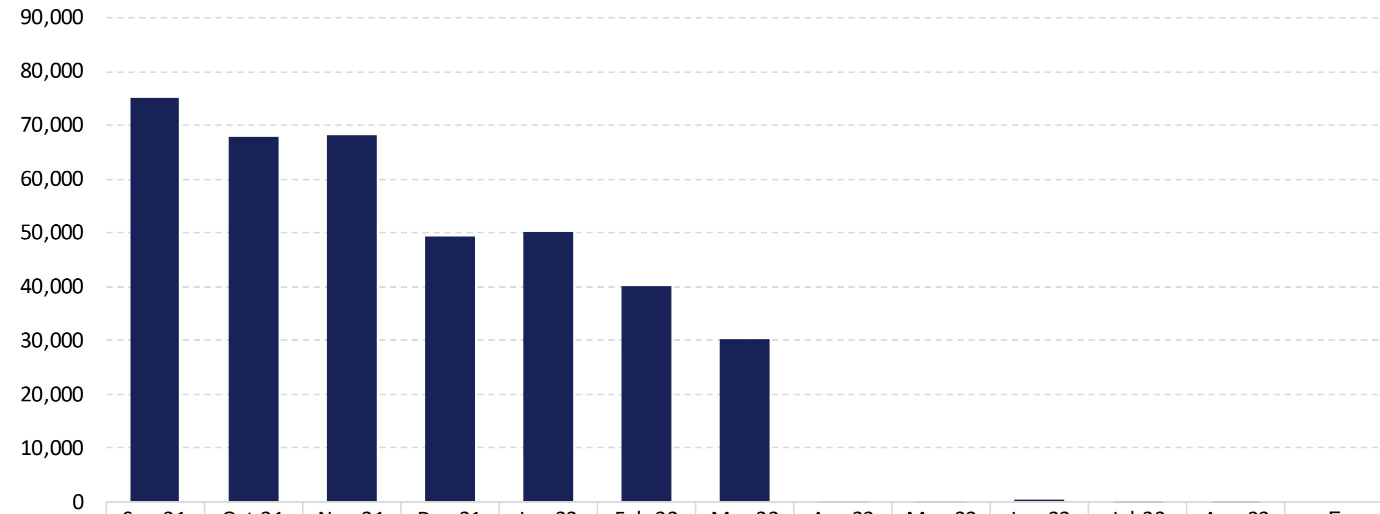
Holdings (in EURm)

	PEPP
Jul-22	1,717,352
Aug-22	1,714,539
Δ (net purchases)	-2,813

Invested share of PEPP envelope (in EURbn)

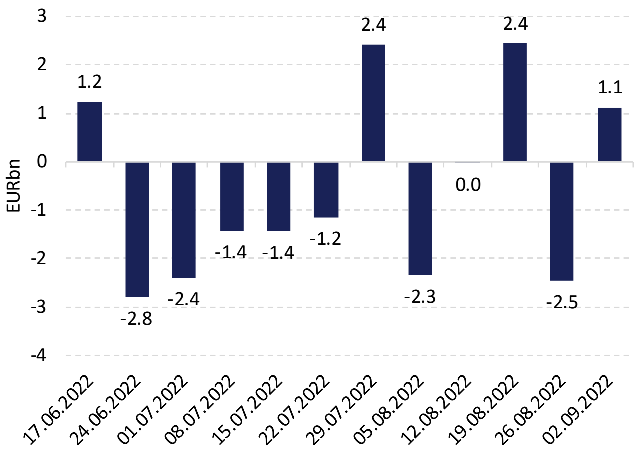


Monthly net purchases (in EURm)

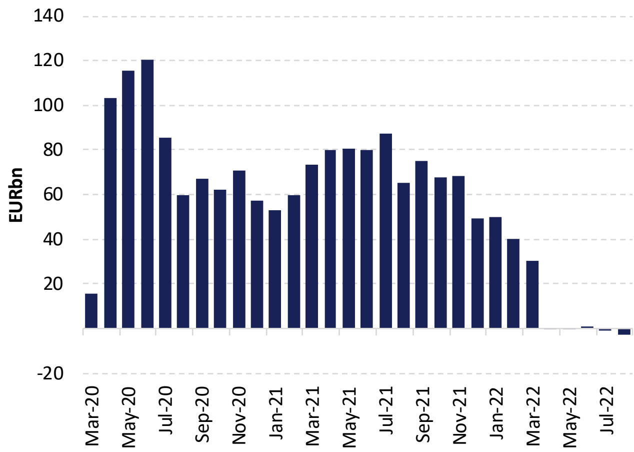


	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	∑
PEPP	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	377,300

Weekly purchases



Development of PEPP volume

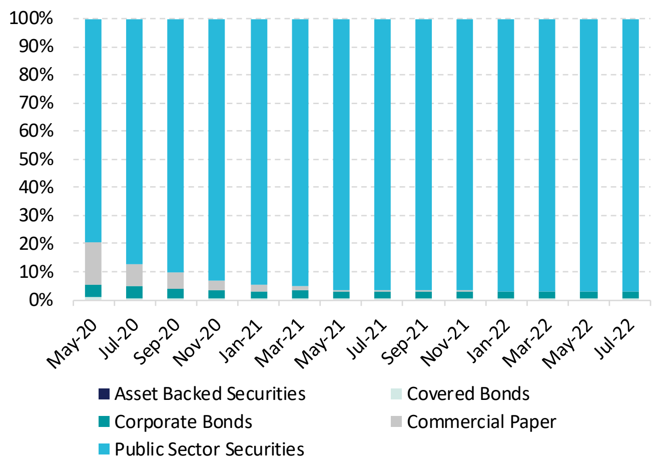


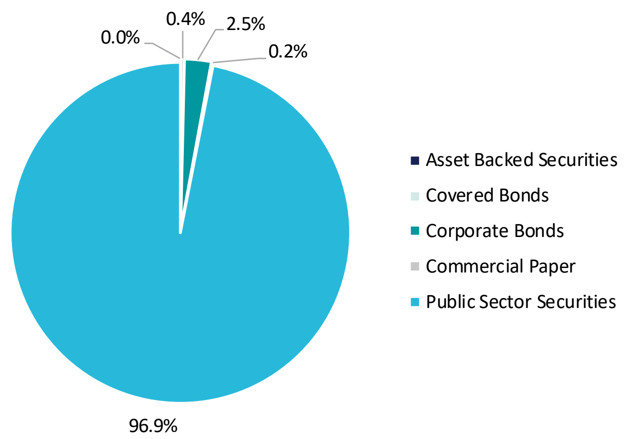
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

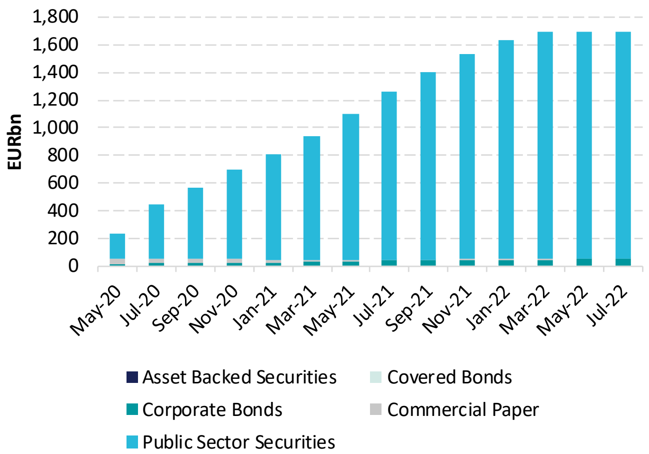
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
May-22	0	6,067	41,825	4,352	1,644,230	1,696,474
Jul-22	0	6,062	42,814	3,322	1,639,774	1,691,971
Δ (net purchases)	0	0	+1,025	-1,029	-705	-709

Portfolio structure

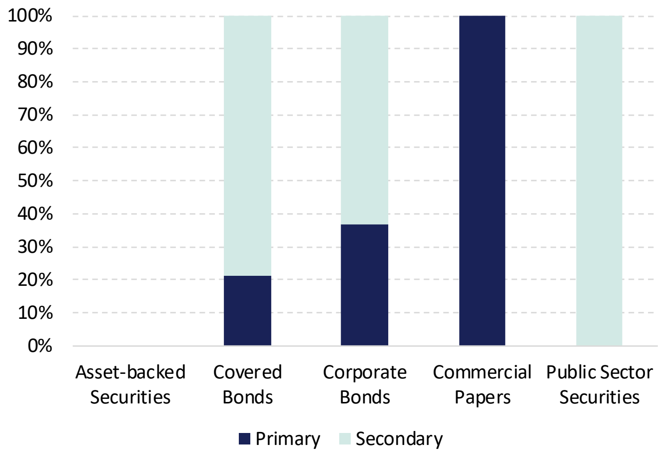




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

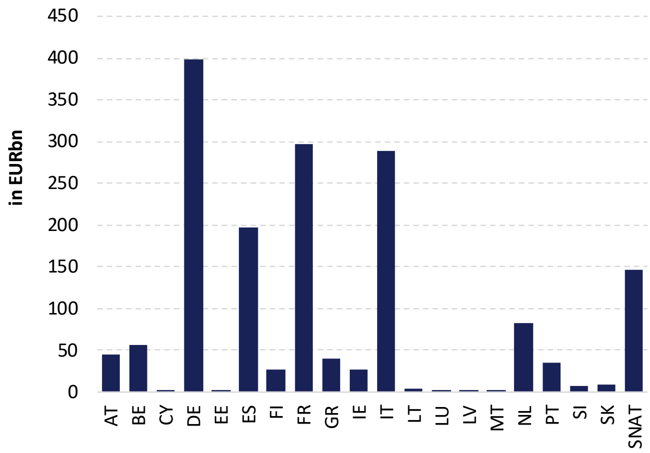
Jul-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,764	15,262	27,552	3,322	0
Share	0.0%	0.0%	21.4%	78.6%	35.7%	64.4%	100.0%	0.0%

Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

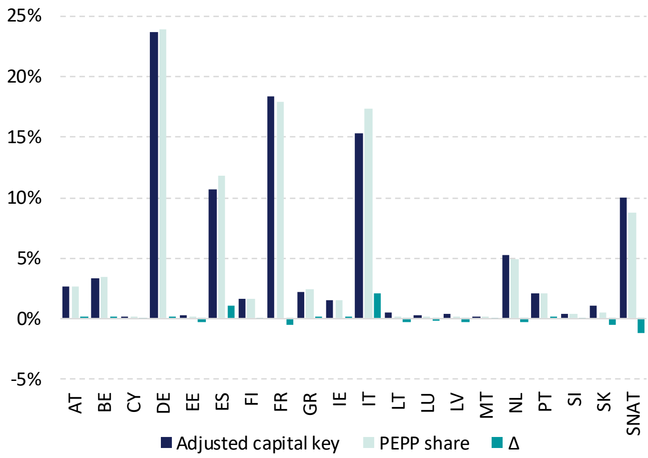
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	Current WAM[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	44,424	2.6%	2.7%	0.0%	7.7	7.3	0.3
BE	57,057	3.3%	3.4%	0.1%	6.4	9.6	-3.2
CY	2,464	0.2%	0.1%	0.0%	8.9	8.2	0.7
DE	398,212	23.7%	23.9%	0.2%	6.6	7.0	-0.3
EE	256	0.3%	0.0%	-0.2%	7.9	6.5	1.4
ES	196,377	10.7%	11.8%	1.1%	7.5	7.4	0.1
FI	27,454	1.7%	1.6%	0.0%	7.1	8.2	-1.2
FR	297,766	18.4%	17.9%	-0.5%	8.0	7.8	0.2
GR	39,765	2.2%	2.4%	0.2%	8.4	9.4	-1.0
IE	26,004	1.5%	1.6%	0.0%	8.8	9.7	-0.8
IT	289,065	15.3%	17.4%	2.1%	7.1	7.0	0.1
LT	3,235	0.5%	0.2%	-0.3%	9.9	9.6	0.4
LU	1,865	0.3%	0.1%	-0.2%	6.2	7.0	-0.8
LV	1,890	0.4%	0.1%	-0.2%	8.4	8.3	0.1
MT	603	0.1%	0.0%	-0.1%	10.9	9.0	2.0
NL	82,741	5.3%	5.0%	-0.3%	7.9	8.7	-0.7
PT	35,315	2.1%	2.1%	0.0%	6.6	7.0	-0.4
SI	6,542	0.4%	0.4%	0.0%	9.0	9.2	-0.2
SK	7,966	1.0%	0.5%	-0.6%	8.6	8.1	0.5
SNAT	145,953	10.0%	8.8%	-1.2%	10.5	8.7	1.8
Total / Avg.	**1,664,955**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.6**	**0.0**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

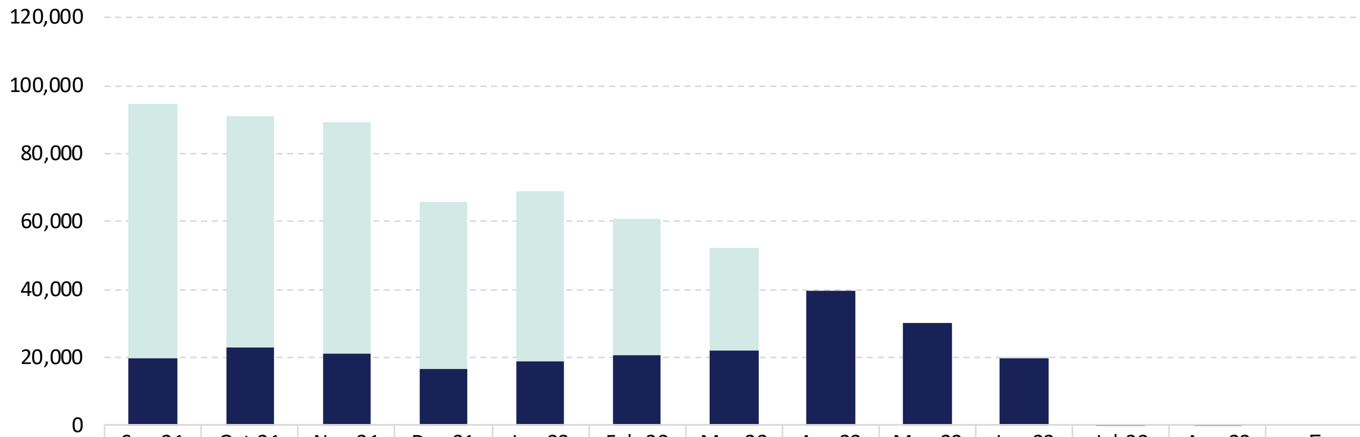
NORD/LB

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

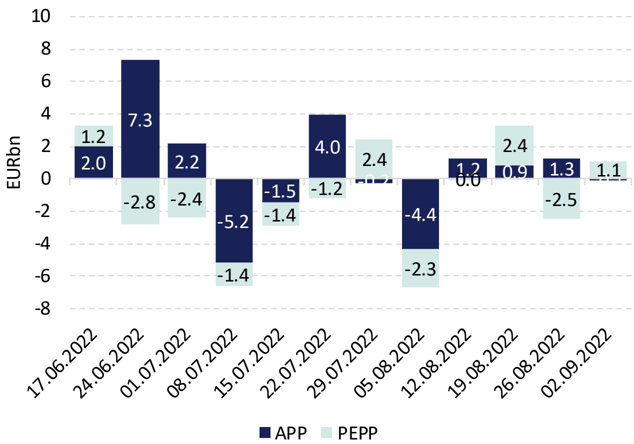
	APP	PEPP	APP & PEPP
Jul-22	3,263,385	1,717,352	4,980,737
Aug-22	3,262,730	1,714,539	4,977,269
Δ	-655	-2,813	-3,468

Monthly net purchases (in EURm)

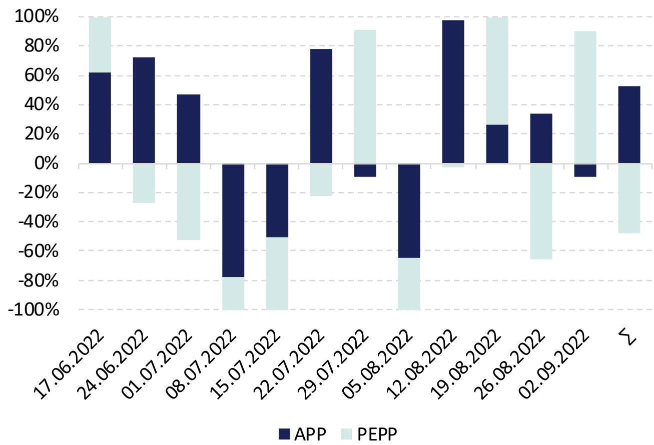


	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	∑
∑	94,710	90,872	89,245	65,971	68,951	60,882	52,143	39,393	30,222	19,734	-2,481	-3,468	606,174
PEPP	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	377,300
APP	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-655	228,874

Weekly purchases



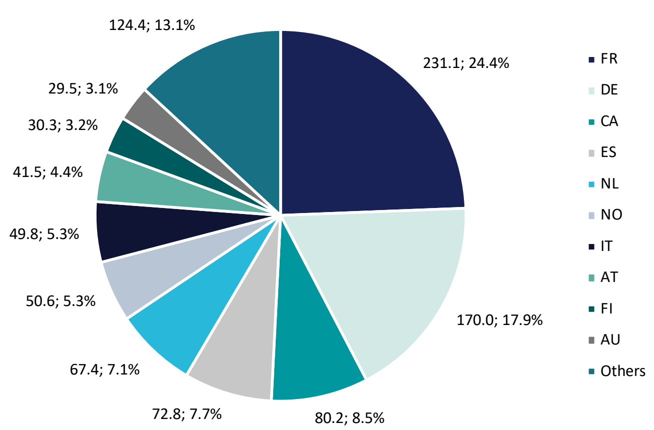
Distribution of weekly purchases



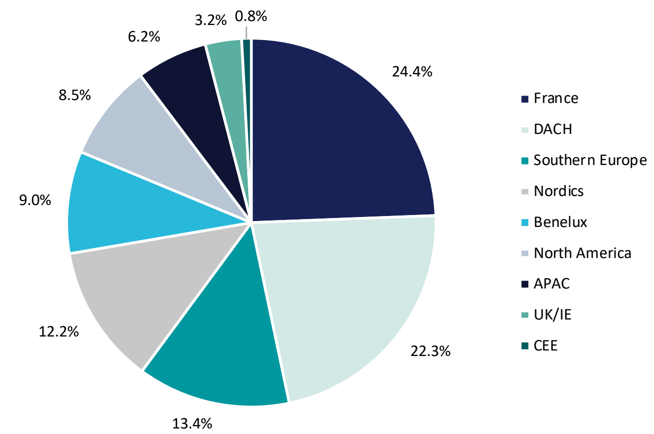
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



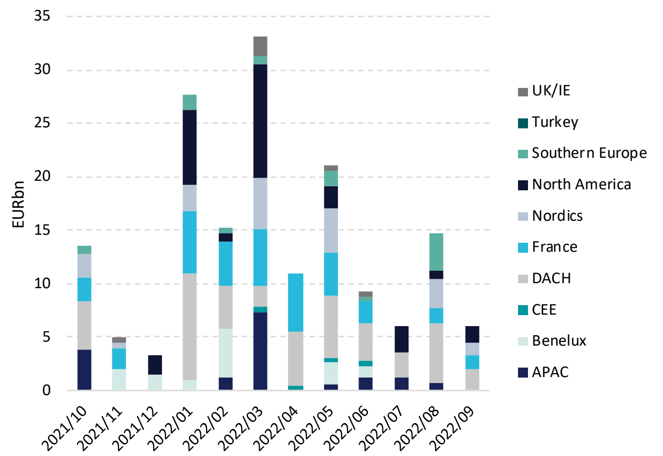
EUR benchmark volume by region (in EURbn)



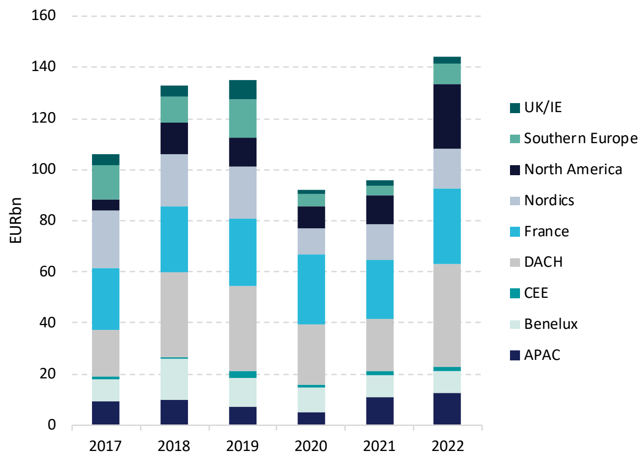
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	231.1	222	14	0.94	10.0	5.4	0.85
2	DE	170.0	245	23	0.64	8.4	4.5	0.52
3	CA	80.2	62	0	1.25	5.8	3.0	0.37
4	ES	72.8	58	5	1.14	11.7	3.8	1.73
5	NL	67.4	69	1	0.91	11.5	7.3	0.79
6	NO	50.6	59	9	0.86	7.4	3.9	0.44
7	IT	49.8	60	2	0.80	9.2	3.9	1.27
8	AT	41.5	74	3	0.56	9.3	5.8	0.71
9	FI	30.3	32	2	0.95	7.5	3.7	0.45
10	AU	29.5	30	0	0.98	8.2	4.0	0.85

EUR benchmark issue volume by month

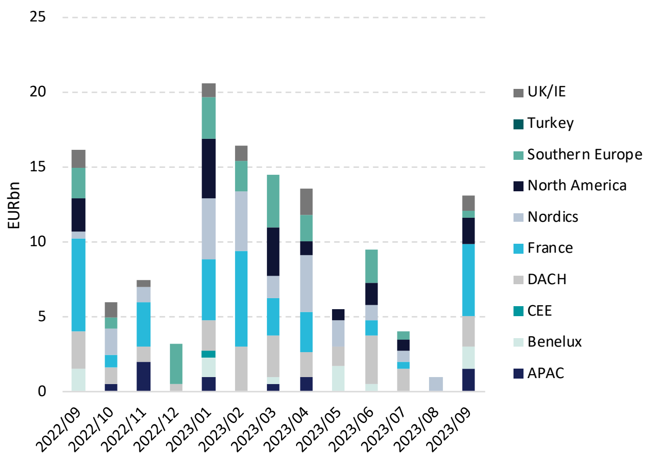


EUR benchmark issue volume by year

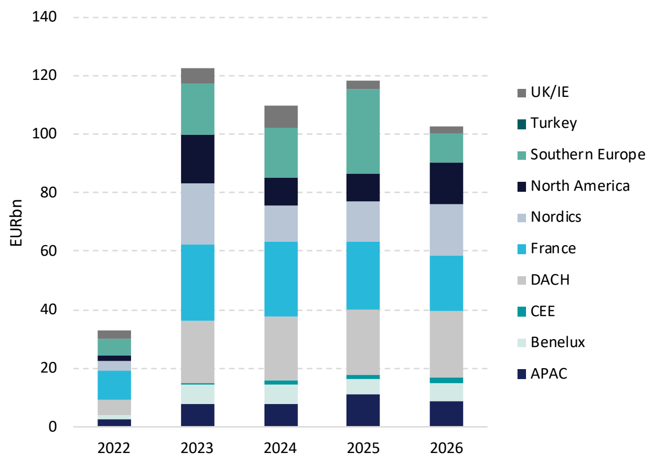


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

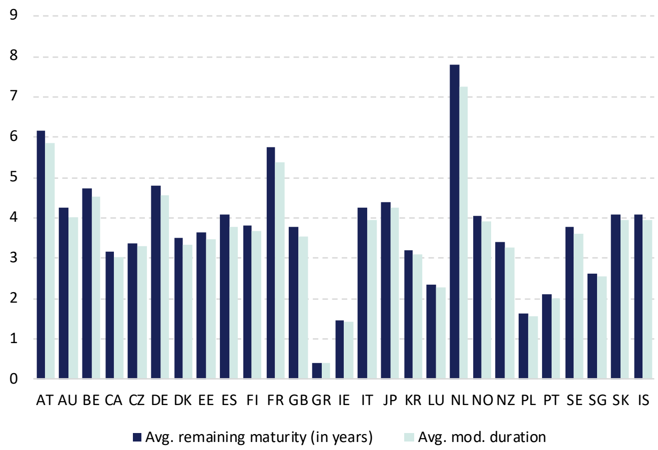
EUR benchmark maturities by month



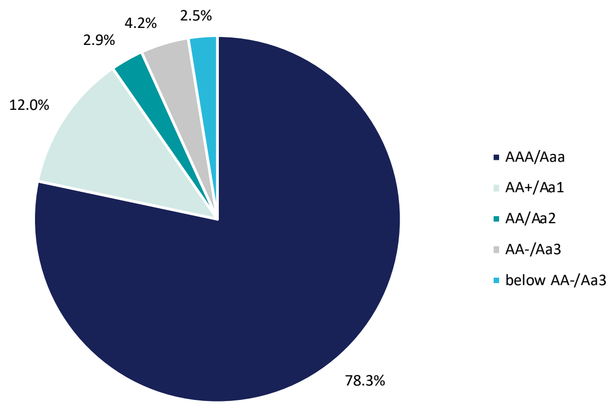
EUR benchmark maturities by year



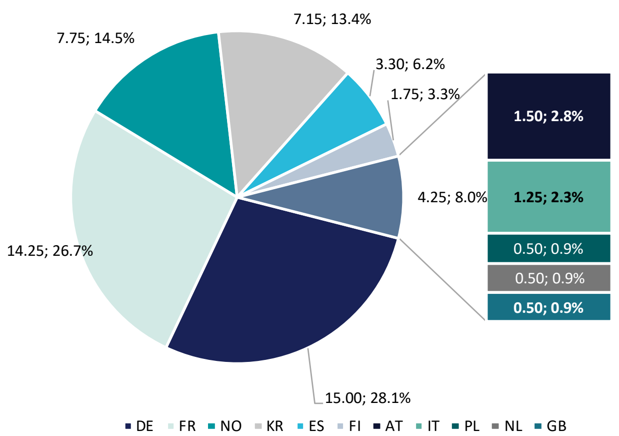
Modified duration and time to maturity by country



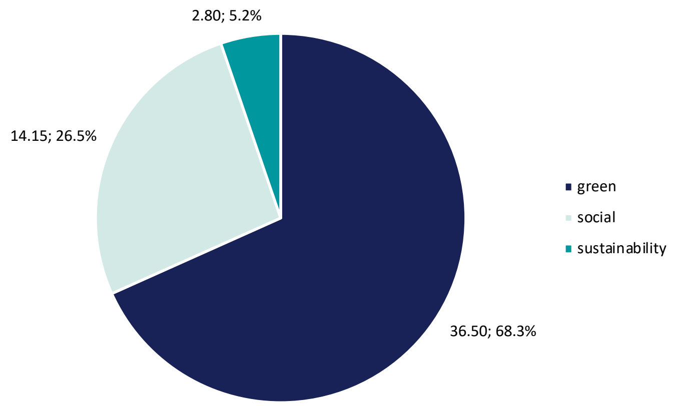
Rating distribution (volume weighted)



EUR benchmark volume (ESG) by country (in EURbn)

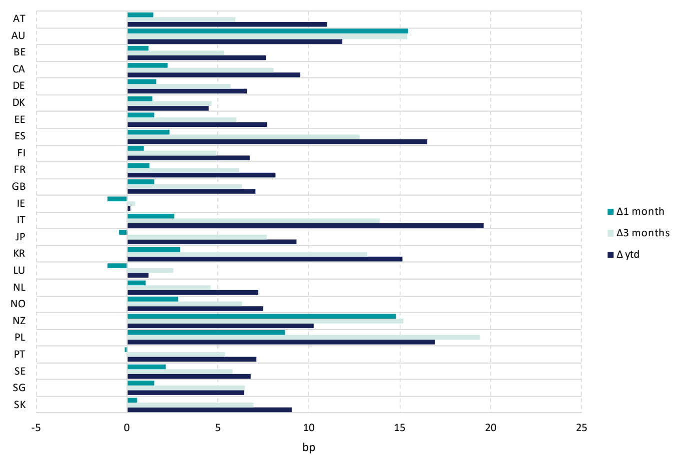


EUR benchmark volume (ESG) by type (in EURbn)

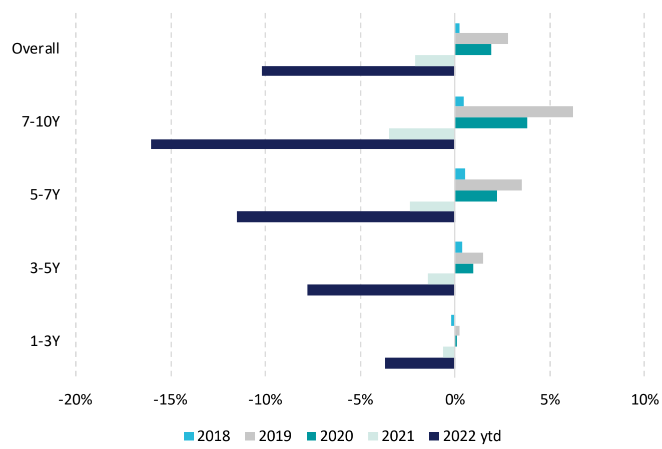


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

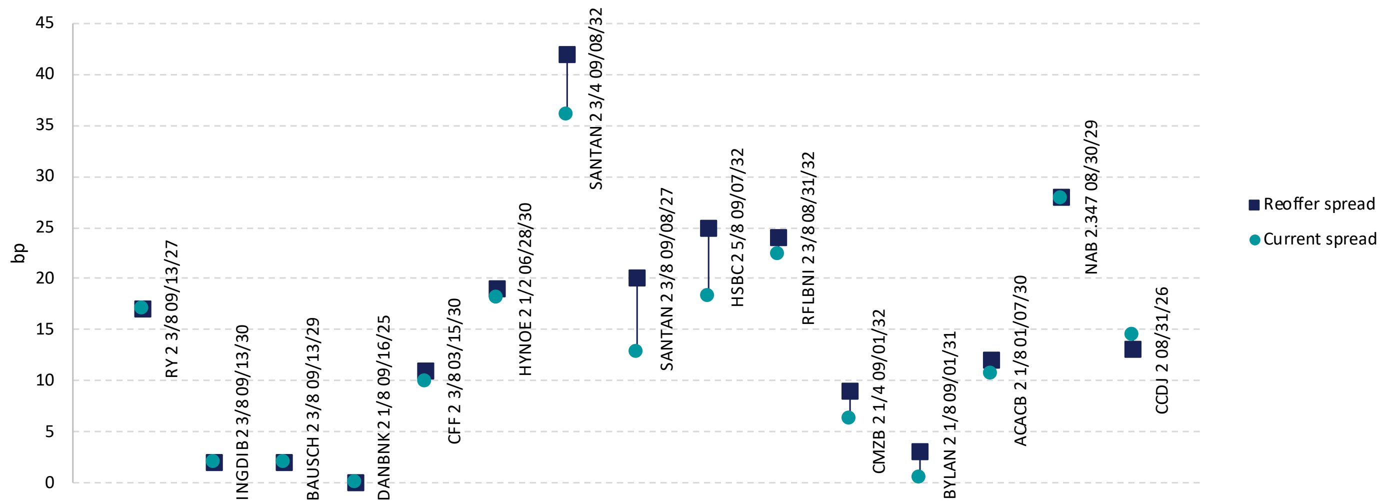
Spread development by country



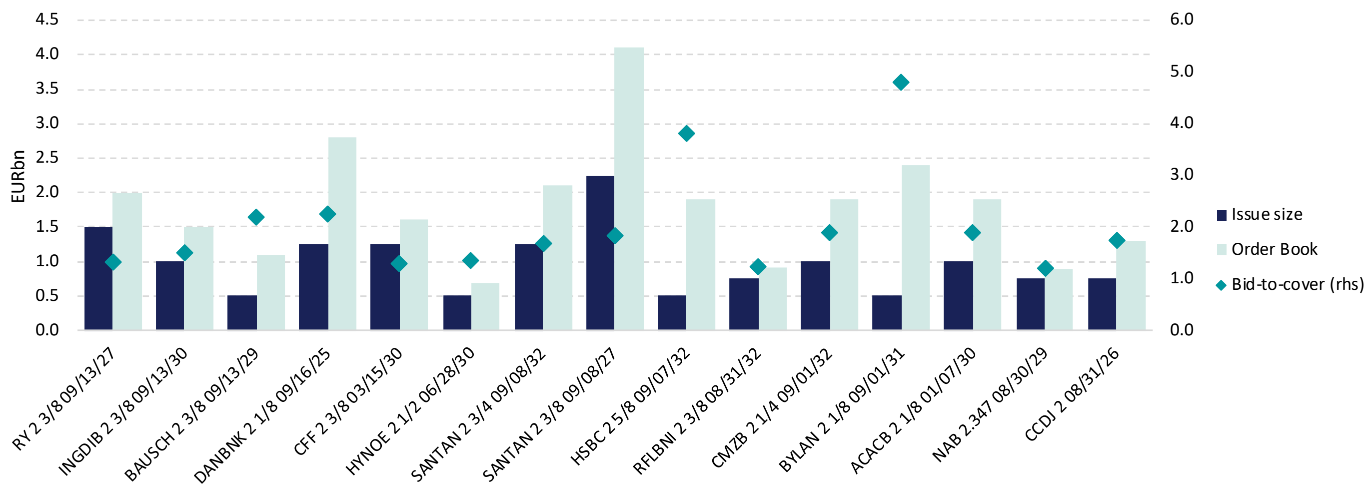
Covered bond performance (Total return)



Spread development (last 15 issues)



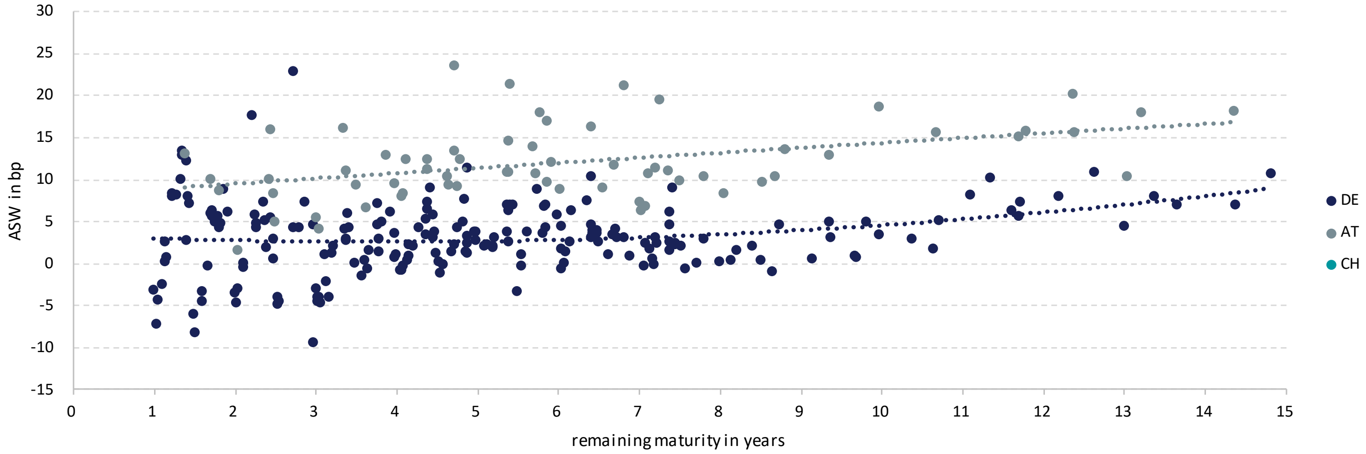
Order books (last 15 issues)



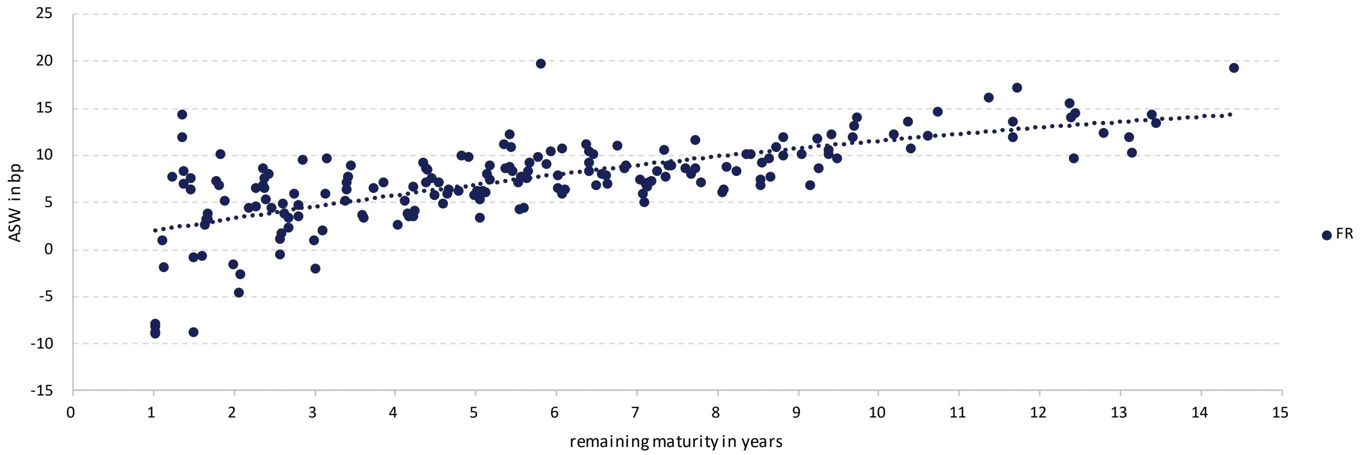
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

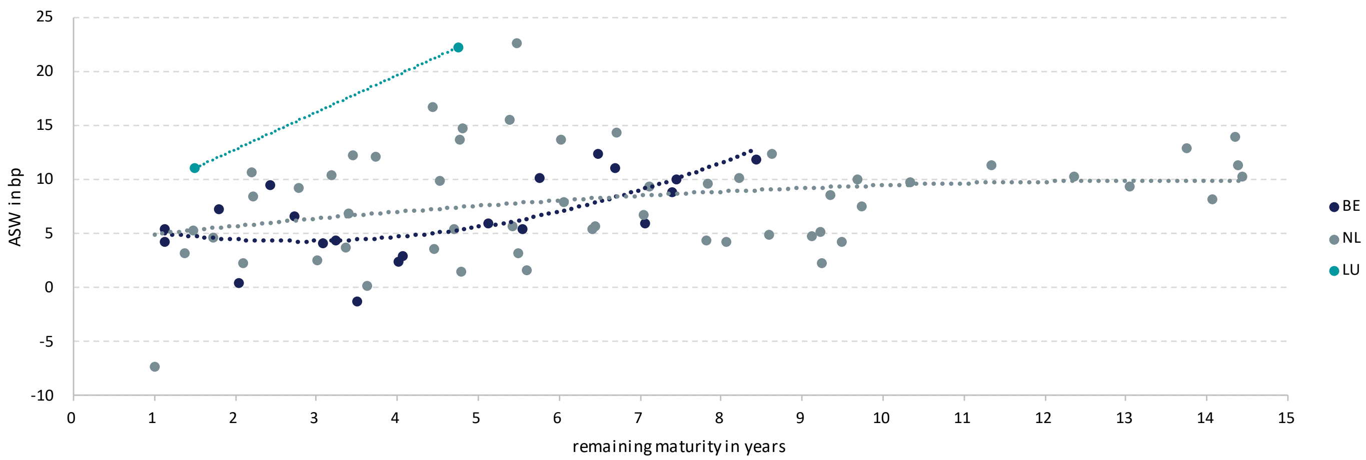
DACH



France

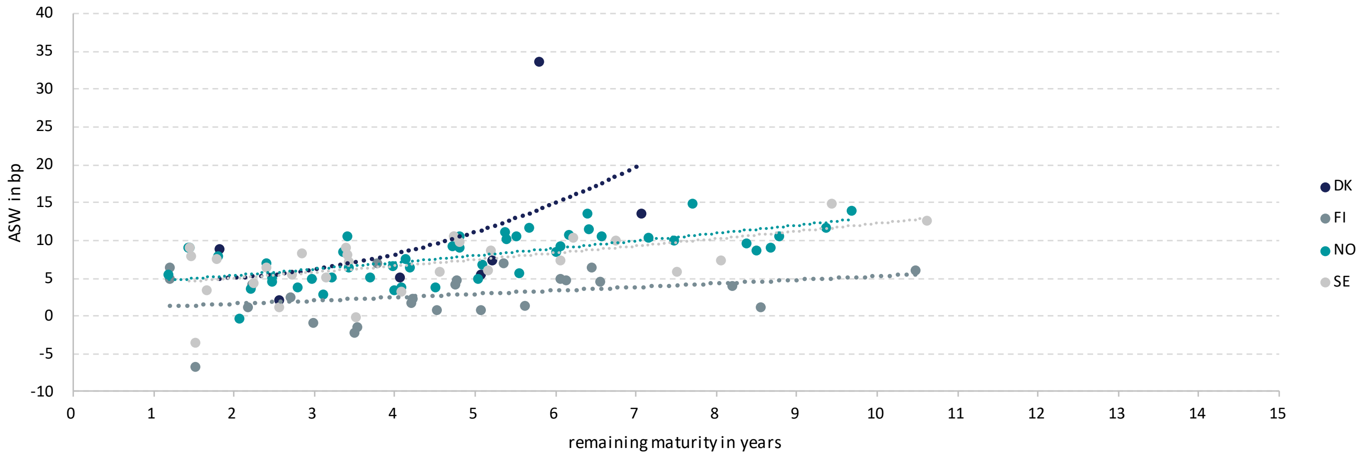


Benelux

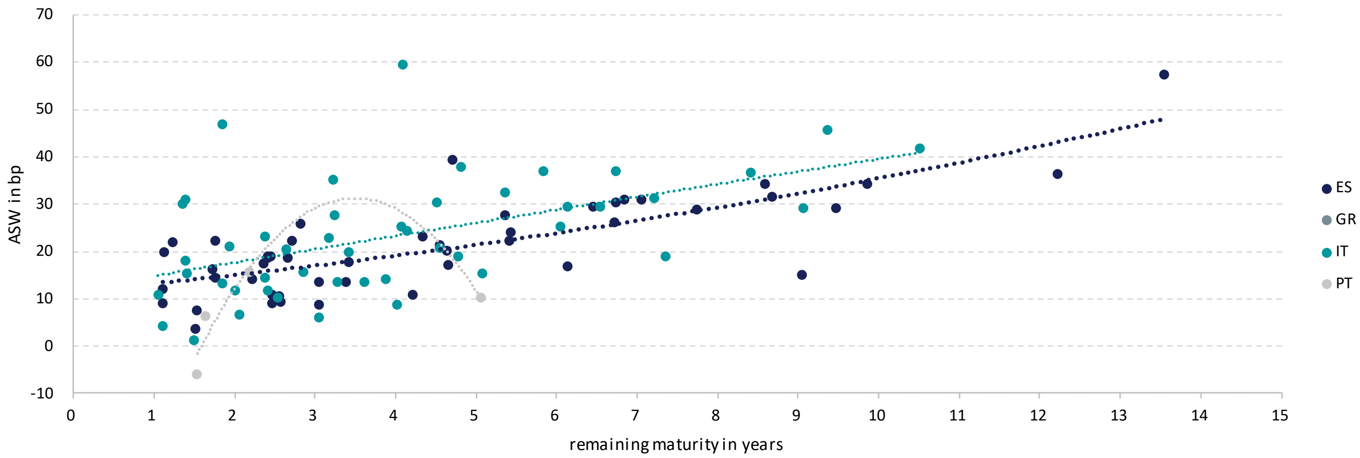


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

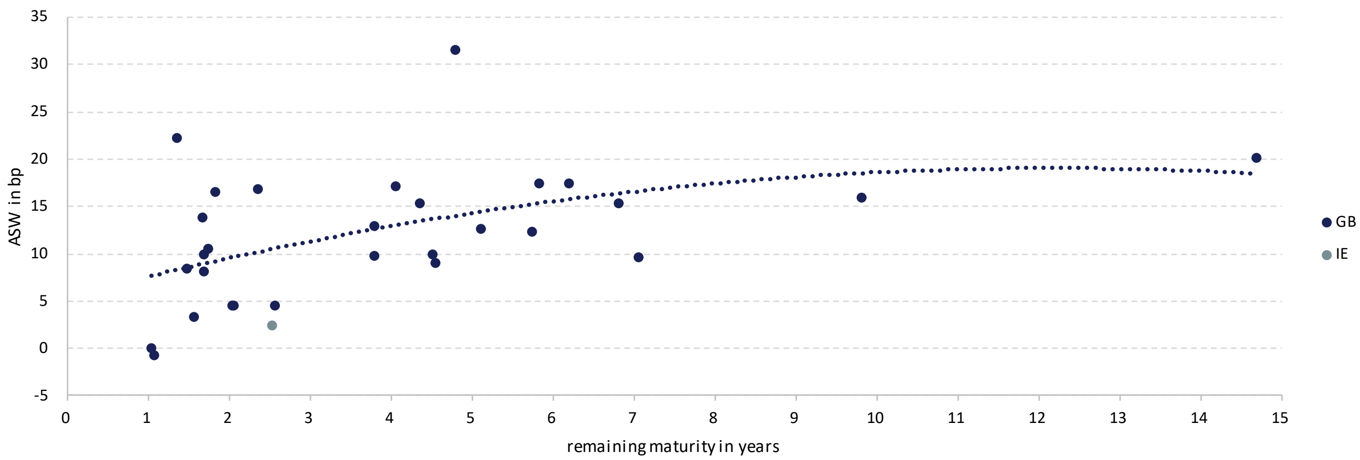
Nordics



Southern Europe

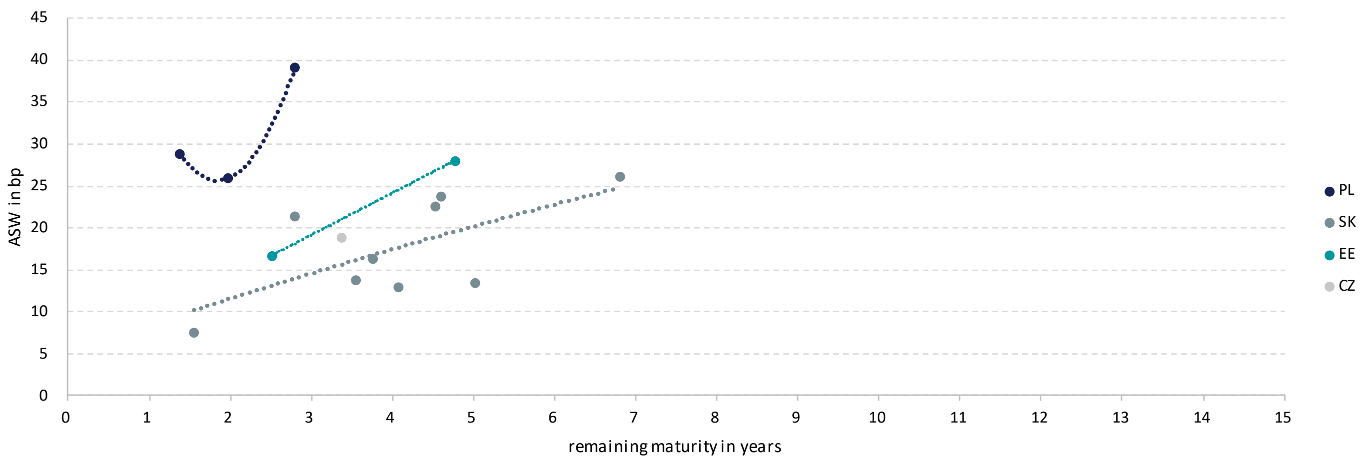


UK/IE

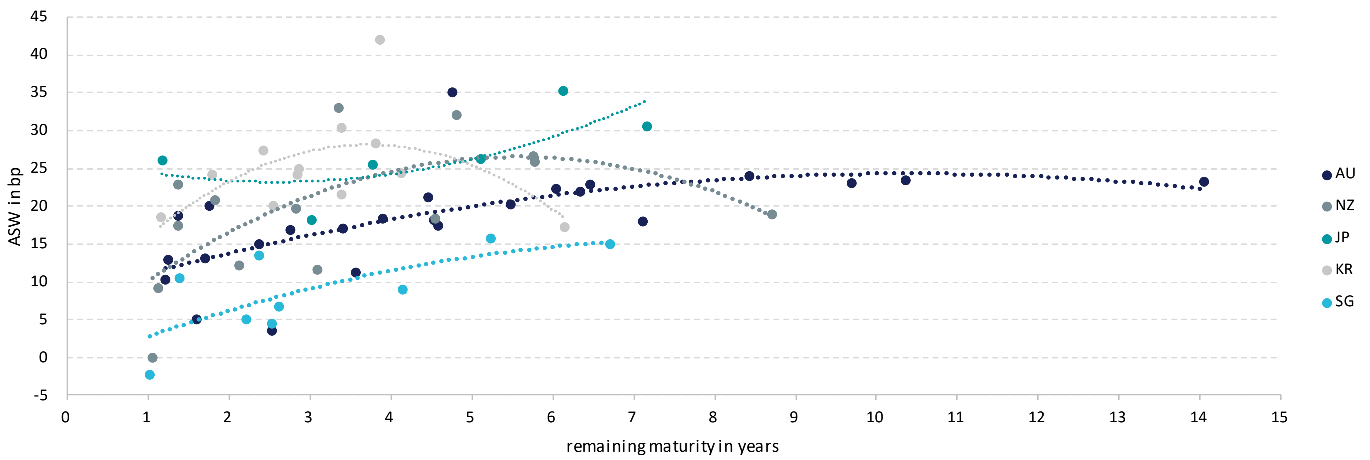


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

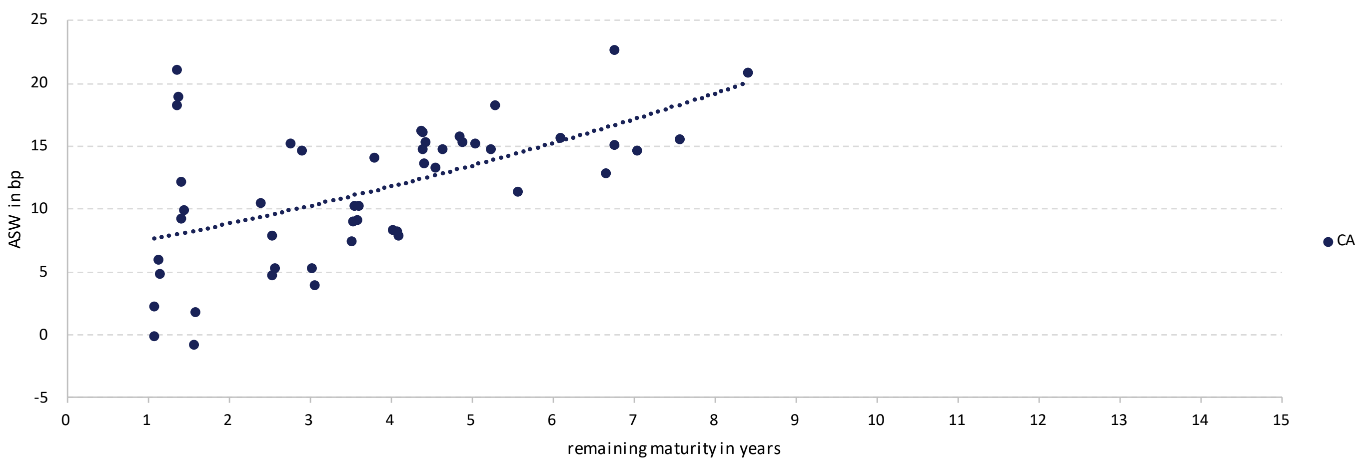
CEE



APAC



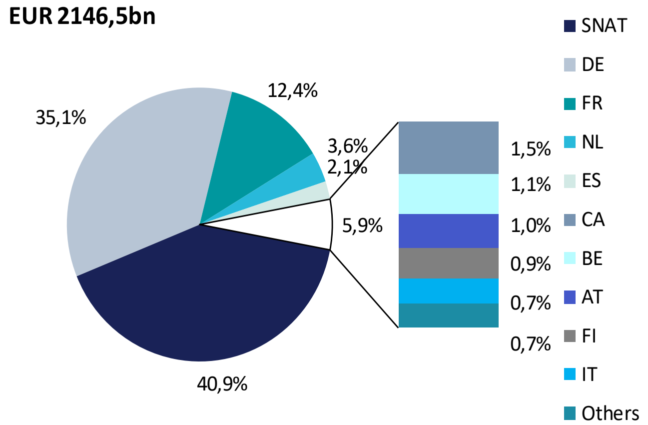
North America



Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
SSA/Public Issuers

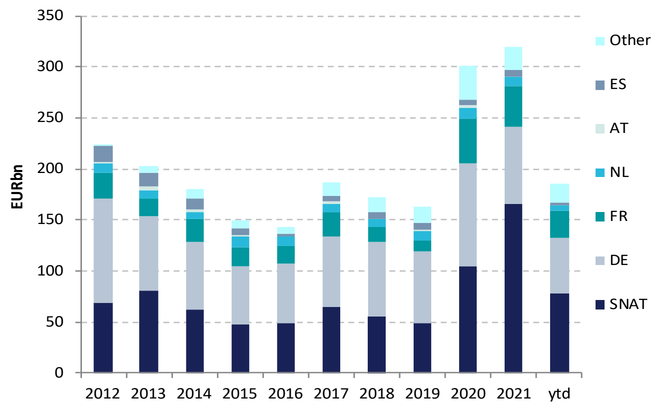
Outstanding volume (bmk)



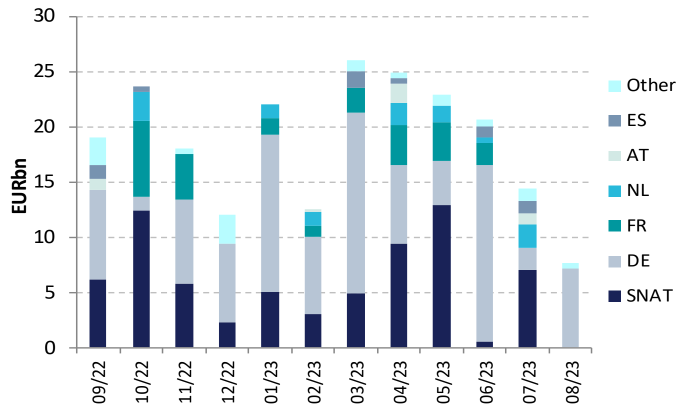
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	877,3	216	4,1	8,2
DE	753,4	565	1,3	6,5
FR	265,6	180	1,5	6,3
NL	76,9	67	1,1	6,6
ES	45,8	59	0,8	4,8
CA	32,6	23	1,4	4,9
BE	24,5	28	0,9	12,3
AT	20,8	24	0,9	4,4
FI	19,2	23	0,8	5,5
IT	16,0	19	0,8	5,1

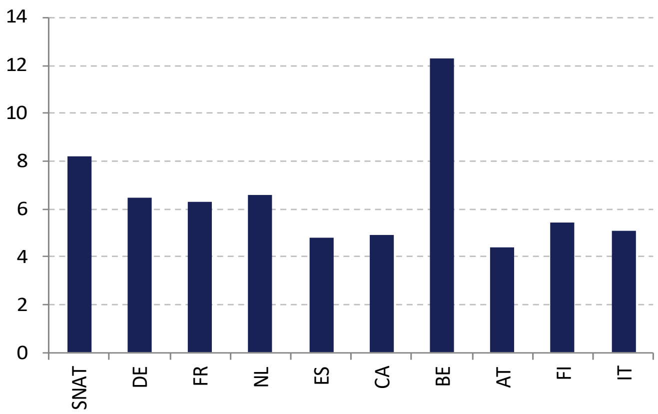
Issue volume by year (bmk)



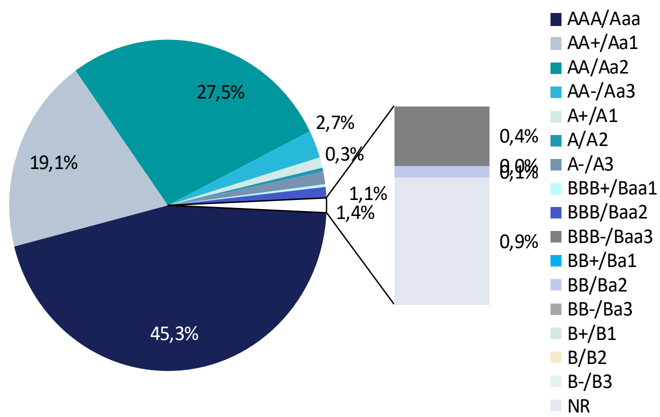
Maturities next 12 months (bmk)



Avg. mod. duration by country (vol. weighted)

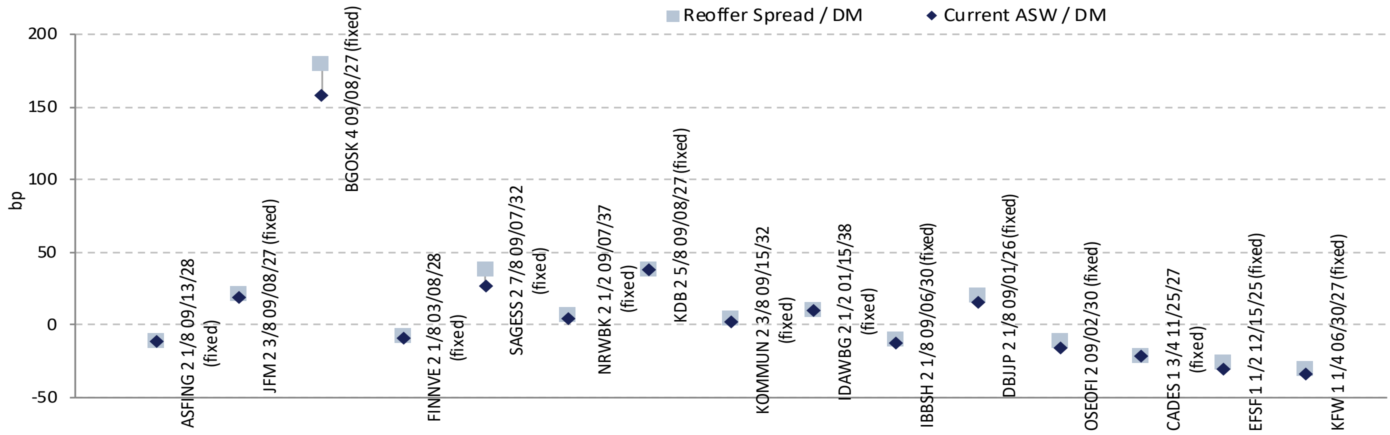


Rating distribution (vol. weighted)

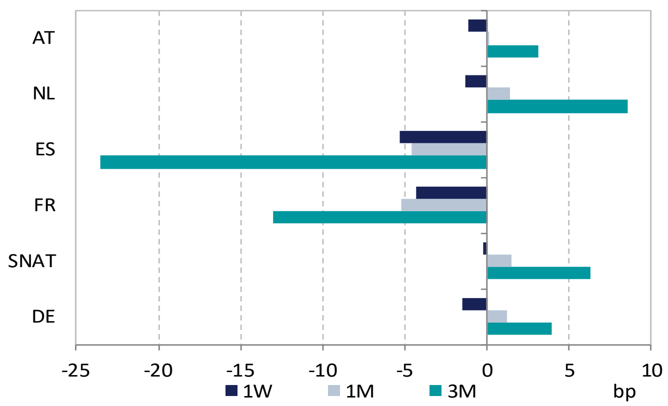


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

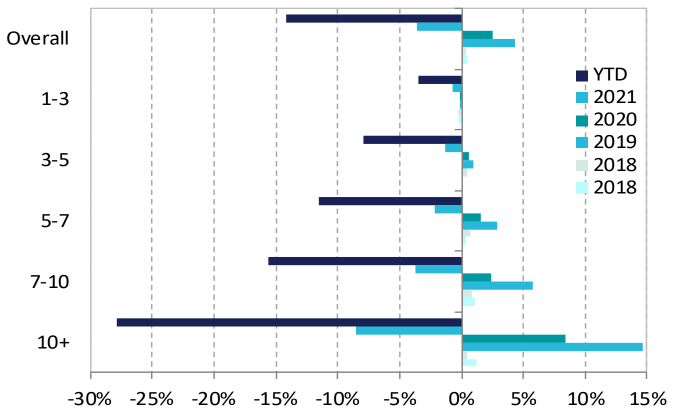
Spread development (last 15 issues)



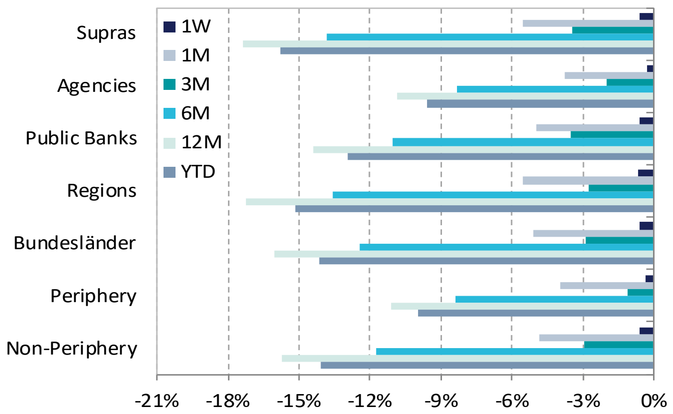
Spread development by country



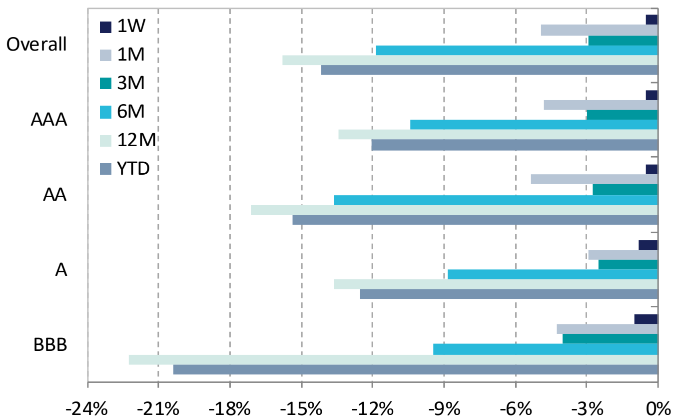
Performance (total return)



Performance (total return) by segments

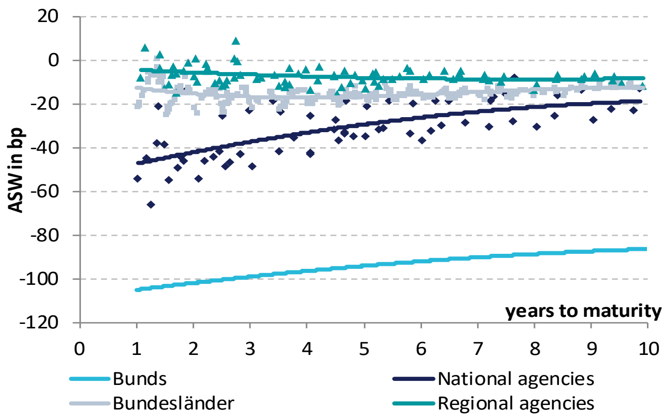


Performance (total return) by rating

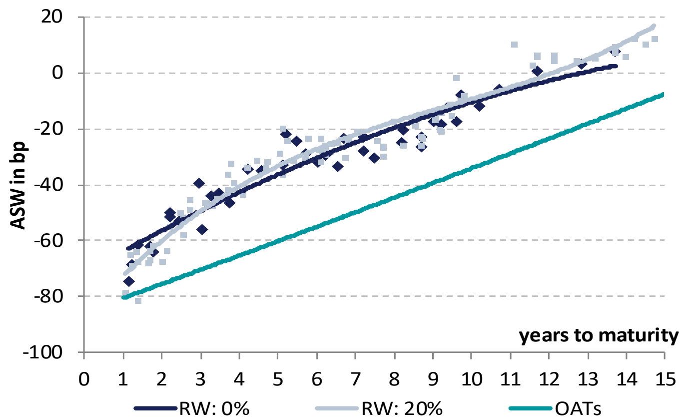


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

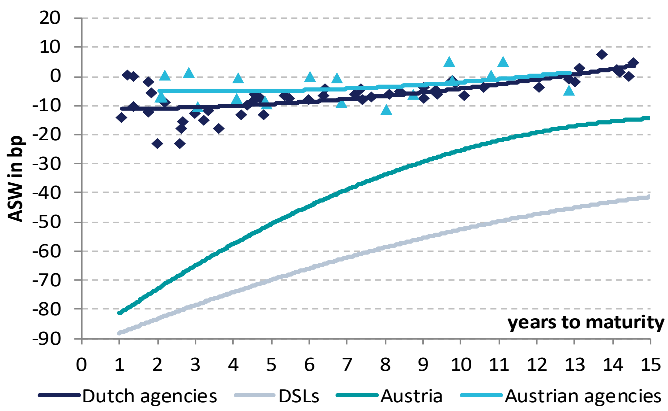
Germany (by segments)



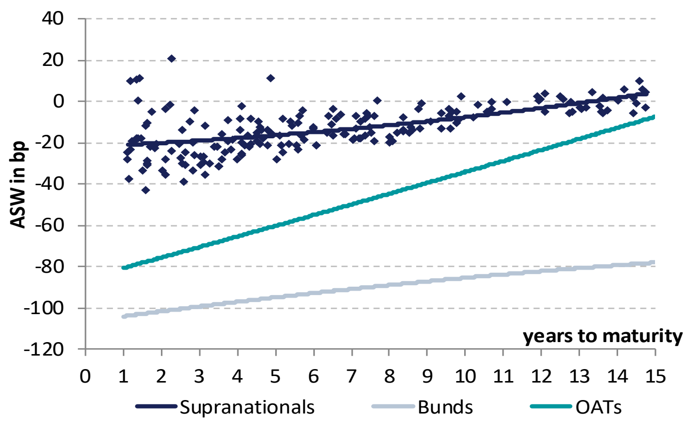
France (by risk weight)



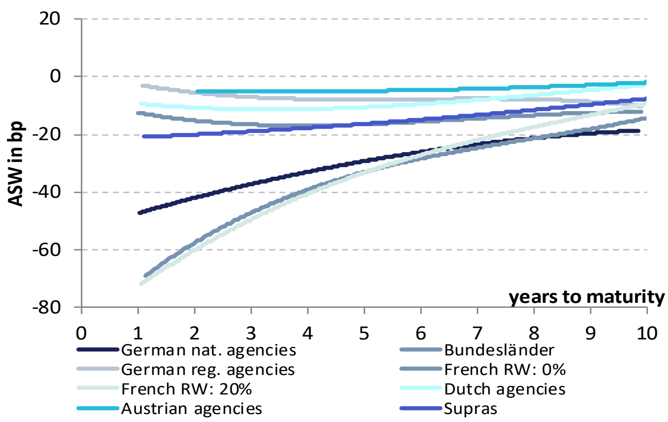
Netherlands & Austria



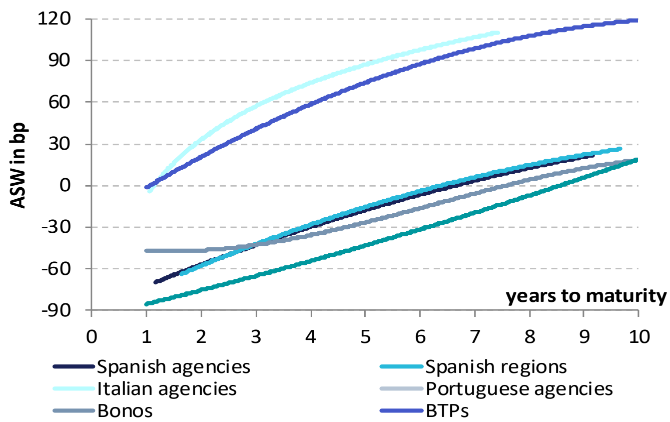
Supranationals



Core



Periphery



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
27/2022 ♦ 31 August	▪ ECB rate hikes: minimum of +100bp still to come by year-end ▪ Australia: Macquarie returns to the EUR benchmark segment
26/2022 ♦ 24 August	▪ Development of the German property market ▪ Transparency requirements §28 PfandBG Q2/2022
25/2022 ♦ 27 July	▪ ECB likes abbreviations: After OMT and SMP, we now have TPI ▪ Covereds vs. Senior Unsecured Bonds
24/2022 ♦ 20 July	▪ A brief spotlight on the EUR sub-benchmark segment ▪ Deutsche Hypo real estate climate: index falls again
23/2022 ♦ 13 July	▪ ECB preview: might the ECB go slightly further? ▪ EBA Report on Asset Encumbrance: levels increasing
22/2022 ♦ 06 July	▪ H1 review and outlook for H2 2022 ▪ Half time in the 2022 SSA year – taking stock
21/2022 ♦ 22 June	▪ Focus on ESG covered bonds: BayernLB's "green rail" public sector Pfandbrief ▪ Stability Council convenes for 25th meeting
20/2022 ♦ 15 June	▪ Covered bond jurisdictions in focus: a look at Australia and New Zealand ▪ NGEU: Green Bond Dashboard
19/2022 ♦ 01 June	▪ ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead ▪ The covered bond universe of Moody's: an overview ▪ ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered bonds
18/2022 ♦ 25 May	▪ Transparency requirements §28 PfandBG Q1 2022 ▪ ESG: EUR-benchmarks 2022 in the SSA segment (ytd)
17/2022 ♦ 18 May	▪ Development of the German property market ▪ The SSA market in 2022 a review of the first four months
16/2022 ♦ 11 May	▪ Focus on covered bond jurisdictions: a look at Austria ▪ Update on DEUSTD – Joint German cities (bond No. 1)
15/2022 ♦ 04 May	▪ Focus on covered bond jurisdictions: Spotlight on Sweden ▪ ESG covered bonds from Germany: DKB issues social Pfandbrief in the form of a "Berlin Social Housing Bond" ▪ Issuer Guide SSA 2022: The Spanish agency market
14/2022 ♦ 13 April	▪ First ECB meeting after the end of the PEPP: (Not) a non-event!? ▪ PEPP reporting: (Not) an obituary
13/2022 ♦ 06 April	▪ ECB adjusts order behaviour in time for the new quarter ▪ United Kingdom: spotlight on the EUR benchmark segment ▪ Issuer Guide SSA 2022: the Nordic agency market
12/2022 ♦ 30 March	▪ An overview of the market for ESG covered bonds ▪ Issuer Guide SSA 2022: the Austrian agency market

Appendix
Publication overview

Covered Bonds:

Covered Bond Directive: Impact on risk weights and LCR levels

Issuer Guide Covered Bonds 2021

Risk weights and LCR levels of covered bonds **(updated semi-annually)**

Transparency requirements §28 PfandBG **(quarterly update)**

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2021 **(updated annually)**

Issuer Guide – German Agencies 2022

Issuer Guide – Dutch Agencies 2022

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Spotlight on Belgian regions

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB frontloads rate hike by +50bp and breaches pre-commitment

ECB ready for lift-off: Every journey starts with a first step

Face-saving ECB decision: Hawks have won – for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

Appendix
Contacts at NORD/LB

Markets Strategy & Floor Research

Jan-Phillipp Hensing
SSA/Public Issuers

+49 172 425 2877
jan-phillipp.hensing@nordlb.de

Dr Frederik Kunze
Covered Bonds/Banks

+49 172 354 8977
frederik.kunze@nordlb.de

Melanie Kiene, CIIA
Covered Bonds/Banks

+49 172 169 2633
melanie.kiene@nordlb.de

Dr Norman Rudschuck, CIIA
SSA/Public Issuers

+49 152 090 24094
norman.rudschuck@nordlb.de

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

Disclaimer

The present report (hereinafter referred to as "information") was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as "Relevant Persons" or "Recipients"). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information **within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014**.**

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient's personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.
The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.
By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic:
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in the Republic of China (Taiwan):
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: Wednesday, 07 September 2022 (08:46h)