

GERMAN COLLATERAL SCARCITY AND ITS IMPACTS

16 March 2022

Eugene McGrory
Patrick Chauvet

ECB Money Market Contact Group

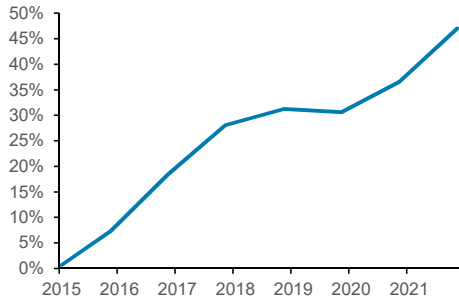


BNP PARIBAS

The bank for a changing world

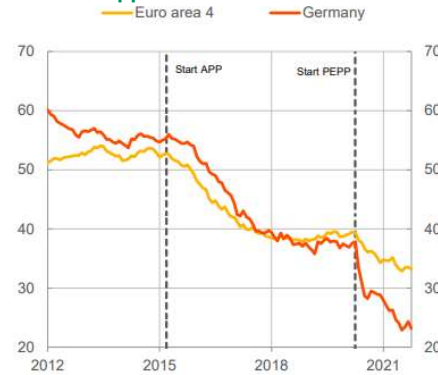
The bund Free Floating issue

Eurosystem holds 47% of outstanding public sector German collateral*



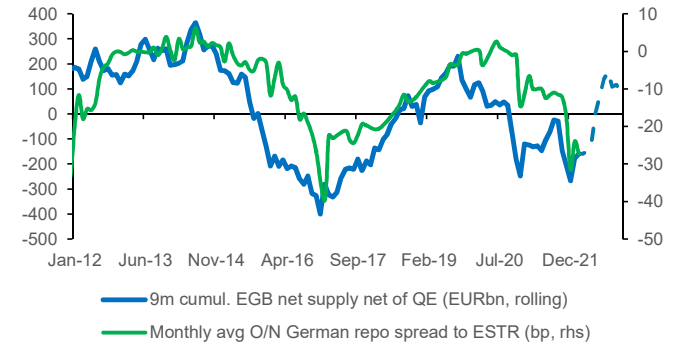
Sources: ECB, BNP Paribas

Free float approaches 20% with PEPP



Sources: ECB (The DE free float measure is defined as holdings by investors other than the foreign official sector, insurance companies, pension funds and the Eurosystem.)

Scarcity of supply behind the collateral squeeze as ECB lending facility has not increased



Sources: ECB, BNP Paribas (*sovereign, regions, eligible agencies)

ECB holdings end-January 2022 vs end-2021

	End-Jan 2022			Dec-21		
	APP	PEPP	APP+PEPP	APP	PEPP	APP+PEPP
Germany	30%	16%	47%	30%	17%	47%
France	23%	12%	35%	23%	12%	35%
Italy	21%	12%	33%	21%	12%	34%
Spain	27%	14%	41%	27%	14%	41%
Netherlands	29%	17%	46%	29%	17%	46%
Belgium	21%	12%	33%	21%	12%	33%
Austria	29%	15%	43%	29%	15%	44%
Portugal	30%	18%	48%	30%	19%	49%
Finland	33%	19%	52%	33%	20%	53%
Ireland	28%	16%	44%	28%	18%	45%
Greece		41%	41%		41%	41%
Total	26%	14%	40%	26%	14%	40%
Supras	37%	17%	53%	32%	15%	47%

Sources: ECB, BNP Paribas

Forecasted negative net supply at beginning of year

2022 Net supply minus QE (excl. reinvestments)	2022 monthly net EGB issuance net of QE breakdown (EURbn)												2022
	Act.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	
Austria	6	-1	2	0	3	2	3	2	0	2	-10	-1	7
Belgium	3	7	-11	-1	5	4	3	1	-10	1	4	0	5
Finland	3	2	0	-5	2	1	0	3	-4	1	1	0	3
France	19	-5	19	-27	-9	20	11	16	19	-18	18	4	69
Germany	-12	8	-3	-8	21	-4	-7	17	-15	1	19	-9	9
Greece	2	-1	2	0	2	2	0	-3	2	-1	0	0	4
Ireland	3	-1	-7	2	1	0	1	0	1	-4	1	0	-4
Italy	21	21	3	3	-7	17	8	-7	-34	22	-19	-10	20
Netherlands	-11	4	1	5	2	2	-14	1	7	3	3	0	2
Portugal	2	2	0	3	1	1	1	-1	0	-9	1	-1	-1
Spain	15	-15	6	13	-12	16	10	5	14	-9	10	3	56
Total in 2022	51	20	13	-13	8	62	15	33	-19	-13	27	-15	170
Total in 2021	70	24	11	-43	4	14	-28	-19	-62	-49	-35	-49	-162

Sources: ECB, BNP Paribas



BNP PARIBAS

The bank for a changing world

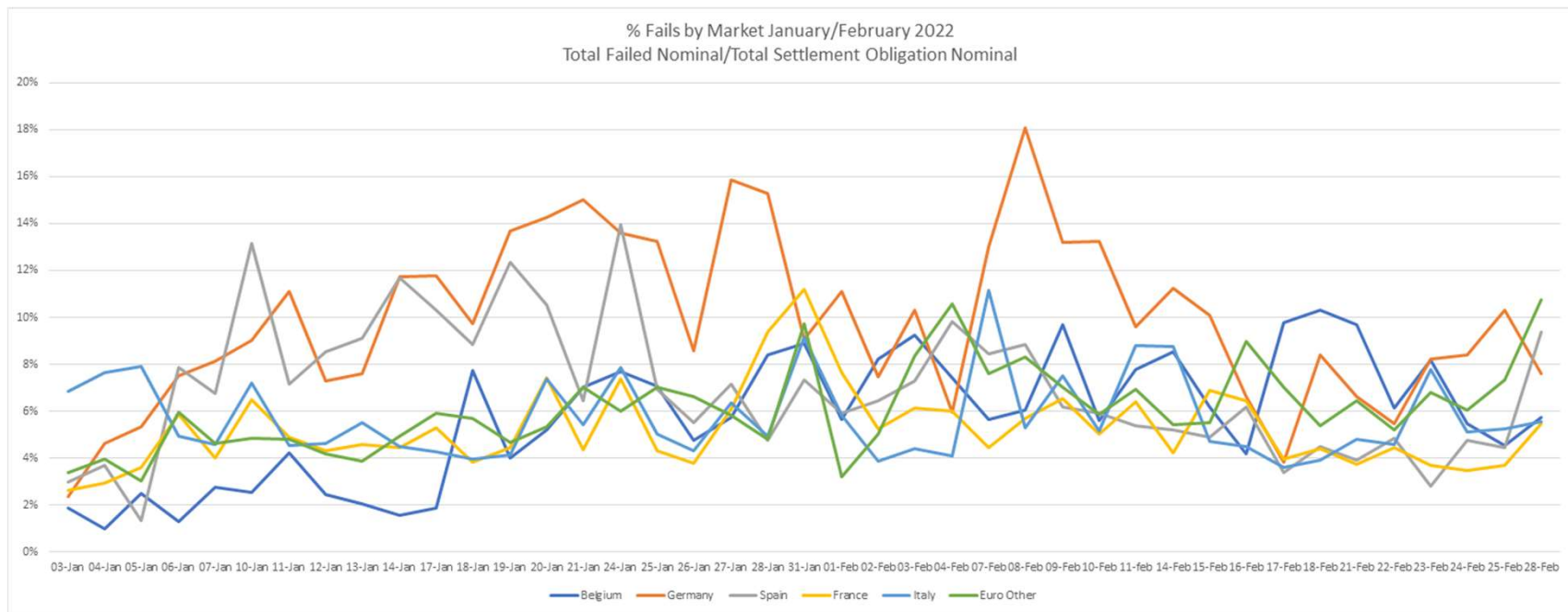
| 16 Mar 2022 |

German Finance Agency/ECB/BUBA – Catalysts for Involvement

- General scarcity of collateral
 - Due to specific pandemic-related conditions like PEPP and TLTRO
- Crowded trades
 - Excess leverage in the system
 - Short basis (short bonds vs futures) – QE intermediation
 - Rich asset swap
 - Fast money short positioning into end of PEPP and APP
- Potential cross currency reserve management by foreign central banks, more predominantly in Germany

LCH CCP Fails

- BNP has canvassed heavily for mandatory membership of auto-borrow programme, shaping and auto-partialling
- BNP also recommended a pass-through mechanism that is more reflective of actual costs of fails than CSDR charges



Source: LCH SA



BNP PARIBAS

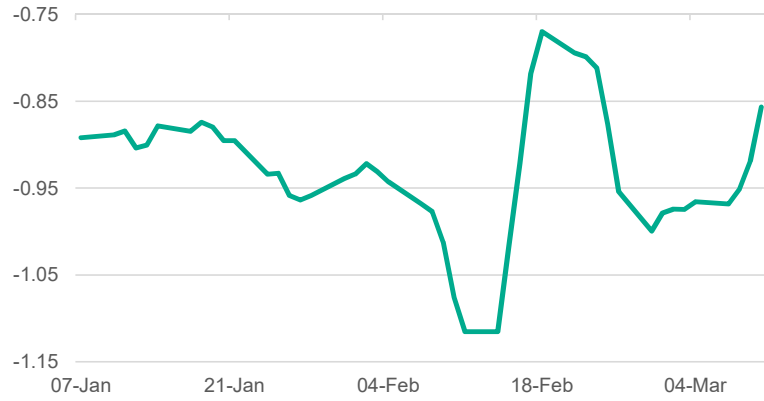
The bank for a changing world

| 16 Mar 2022 |

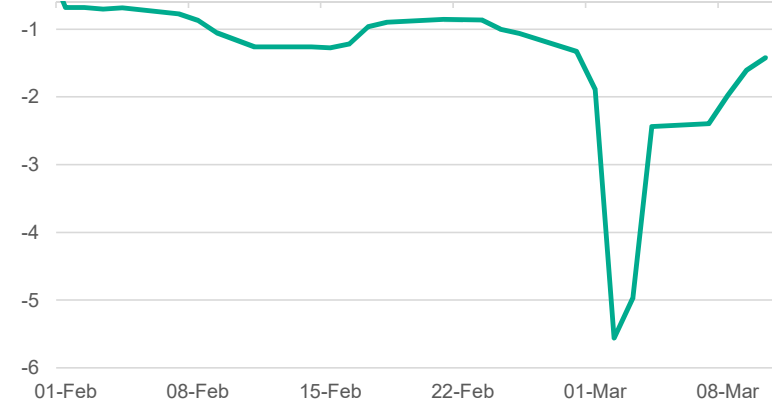
4

German Specials

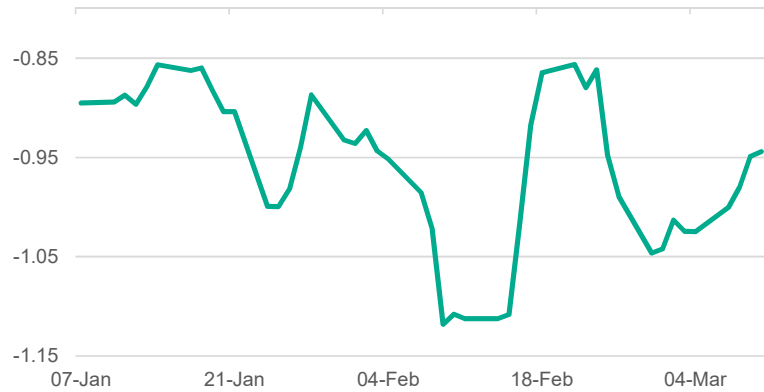
DBR 0.25 15/02/27



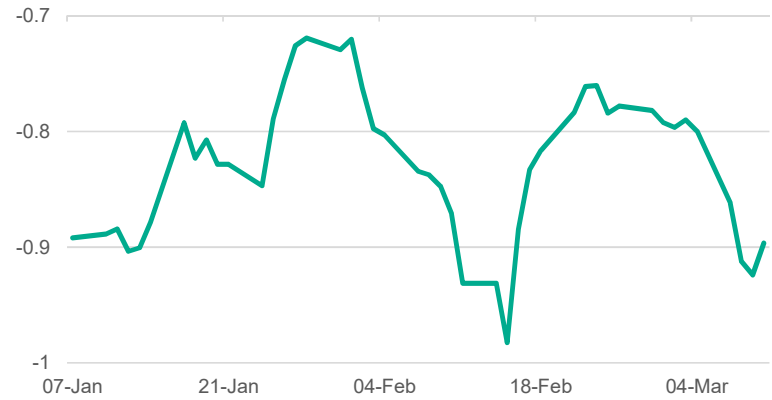
BKO 0 03/15/24



DBR 0 15/08/30



DBR 0.5 15/02/26



Source: BNPP

German Finance Agency – Mitigations

- German finance agency announced that it would step in to ease any potential collateral squeeze and support smooth functioning of repo markets
- Buba has discussed increasing counterparty limits to alleviate the degree of specialness
- Reduction of leverage in huge flight to quality in aftermath of Ukraine-Russia crisis
- ECB has actioned the following
 - ECB increasing amount borrowed vs cash from €75bn to €150bn
 - ECB (via Deutsche security lending) also increasing counterparty limits
- Specific mitigation for Mar 24 Schatz announced 3 Feb
 - German finance agency to increase holdings of Mar 24 Schatz by €2.5 billion to €8.5 billion, with volume to be used **exclusively** for short-term repo and securities lending transactions



Central Securities Depositories Regulation (CSDR)

- CSDR was implemented on 1st February, mandating all market participants as liable to pay daily penalties and/or charges against each failed transaction
- Instruments include all transferable securities and money market instruments, across CSDs in all EEA countries
- Mandatory buy-ins were discussed during the decision process to be standard practice. We were not supportive of it, and finally a fail penalty was decided upon.
- Government bonds now incur a penalty rate of 0.10bps per failed settlement
- However the actual costs of failed settlements largely exceed the penalties, and the CSDR penalties are not significant to deter poor settlement discipline in the market

Impact of German bonds scarcity on derivatives and other Euro Government bonds hedging costs

- **German bond futures are, in normal times, the first hedging tool for first-order delta risk of market makers in EUR swaps and bonds (govies, credit...)**
 - Because they are supposed to be extremely liquid
 - Because their relative value versus other rates products is understandable
- **The German asset swap value becomes extremely difficult to read as it embeds:**
 - Collateral scarcity price
 - German sovereign credit price
- **Recent volatility creates the need for an alternative to German debt when hedging this risk**
 - But other markets available may not have either the necessary liquidity
 - Hence there is a need for market makers to reduce this hedging risk
 - by avoiding proxy hedges as much as possible
- **This leads to wider bid-offer spreads and reduced liquidity offered by market makers**

DISCLAIMER

Legal Notice: This document/communication may contain "Research" as defined under MiFID II unbundling rules; any such Research is intended either (i) for those firms who are in scope of the MiFID II unbundling rules and have signed up to a BNP Paribas Global Markets Research package, or (ii) for firms that are out of scope of the MiFID II unbundling rules and therefore are not required to pay for Research under MiFID II. Please note that it is your firm's responsibility to ensure that you do not view or use any Research in this document if your firm has not signed up to a BNP Paribas Global Markets Research package, unless your firm is out of scope of the MiFID II unbundling rules. This document may also be regarded as a minor non-monetary benefit (MNMB) and it is your firm's responsibility to consider its own regulatory obligations in relation to inducements and accepting MNMBs.

This document is CONFIDENTIAL AND FOR DISCUSSION PURPOSES ONLY; it constitutes a marketing communication and has been prepared by a Sales and Marketing function within BNP Paribas and/or its subsidiaries or affiliates (collectively "we" or "BNP Paribas"). As a confidential document it is submitted to selected recipients only and it may not be made available (in whole or in part) to any other person without BNP Paribas' written consent.

This document is not a recommendation to engage in any action, does not constitute or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision. To the extent that any transaction is subsequently entered into between the recipient and BNP Paribas, such transaction will be entered into upon such terms as may be agreed by the parties in the relevant documentation.

All materials contained in this presentation are the property of BNP Paribas and are copyright protected and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior written consent of BNP Paribas.

The information contained in this document has been obtained from sources believed to be reliable, but there is no guarantee of the accuracy, completeness or suitability for any particular purpose of such information or that such information has been independently verified by BNP Paribas or by any person. None of BNP Paribas, its members, directors, officers, agents or employees accepts any responsibility or liability whatsoever or makes any representation or warranty, express or implied, as to the accuracy or completeness of the information, or any opinions based thereon, contained in this document and it should not be used in place of professional advice. Additional information may be provided on request, at our discretion. Any scenarios, assumptions, historical or simulated performances, indicative prices or examples of potential transactions or returns are included for illustrative purposes only. Past performance is not indicative of future results. Investors may get back less than they invested. BNP Paribas gives no assurance that any favourable scenarios described are likely to happen, that it is possible to trade on the terms described herein or that any potential returns illustrated can be achieved. This document is current as at the date of its production and BNP Paribas is under no obligation to update or keep current the information herein. In providing this document, BNP Paribas offers no investment, financial, legal, tax or any other type of advice to, and has no fiduciary duty towards, recipients. Certain strategies and/or potential transactions discussed in this document may involve the use of derivatives which may be complex in nature and may give rise to substantial risks, including the risk of total or partial loss of any investment or losses without limitation and which should only be undertaken by those with the requisite knowledge and experience. BNP Paribas makes no representation and gives no warranty as to the results to be obtained from any investment, strategy or transaction, or as to whether any strategy, security or transaction described herein may be suitable for recipients' financial needs, circumstances or requirements. Recipients must make their own assessment of strategies, securities and/or potential transactions detailed herein, using such professional advisors as they deem appropriate. BNP Paribas accepts no liability for any direct or consequential losses arising from any action taken in connection with or reliance on the information contained in this document even where advised of the possibility of such losses.

As an investment bank with a wide range of activities BNP Paribas may face conflicts of interest and you should be aware that BNP Paribas and/or any of its affiliates may be long or short, for their own account or as agent, in investments, transactions or strategies referred to in this document or related products before the material is published to clients and that it may engage in transactions in a manner inconsistent with the views expressed in this document, either for their own account or for the account of their clients. Additionally, BNP Paribas may have acted as an investment banker or may have provided significant advice or investment services to companies or in relation to investments mentioned in this document. The information in this document is not intended for distribution to, or use by, any person or entity in any jurisdiction where (a) the distribution or use of such information would be contrary to law or regulations, or (b) BNP Paribas or a BNP Paribas affiliate would become subject to new or additional legal or regulatory requirements. Persons in possession of this document should inform themselves about possible legal restrictions and observe them accordingly.

This document is intended for, and is directed at, (a) Professional Clients and Eligible Counterparties as defined by the European Union Markets in Financial Instruments Directive ("MiFID"), and (b) where relevant, persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, and at other persons to whom it may lawfully be communicated (together "Relevant Persons"). Any investment or investment activity to which this document relates is available only to and will be engaged in only with Relevant Persons. Any person who is not a Relevant Person should not act or rely on this document or its content.

This document is being communicated by BNP Paribas London Branch, 10 Harewood Avenue, London NW1 6AA; tel: +44 (0)20 7595 2000; fax: +44 (0)20 7595 2555 (www.bnpparibas.com). Incorporated in France with Limited Liability. Registered Office: 16 boulevard des Italiens, 75009 Paris, France. 662 042 449 RCS Paris. BNP Paribas London Branch is lead supervised by the European Central Bank (ECB) and the Autorité de Contrôle Prudentiel et de Résolution (ACPR). BNP Paribas London Branch is authorised by the ECB, the ACPR and the Prudential Regulation Authority and subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct Authority are available from us on request. BNP Paribas London Branch is registered in England and Wales under no. FC13447. © BNP Paribas 2019. All rights reserved.

