

Andrea ENRIA Chair of the Supervisory Board

To the CEO of the significant institution

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Leveraged transactions - supervisory expectations regarding the design and functioning of risk appetite frameworks and high levels of risk taking

Dear CEO,

This letter further specifies the ECB's expectations regarding the leveraged transactions (LTs) of significant institutions (SIs), particularly as regards the establishment of risk appetite frameworks for leveraged transactions (LT RAFs) in accordance with the good risk management practices set out in the ECB Guidance on leveraged transactions (hereinafter, "the ECB Guidance")¹. The latter defines supervisory expectations regarding the scope, RAFs and organisation of risk management activities for LTs undertaken by SIs supervised by the ECB. Such transactions have a higher than average risk profile and exhibit some unique features in terms of their structure and origination. Consequently, comprehensive and well-designed LT RAFs are necessary to ensure that SIs capture all key risks, and that those risks are managed effectively.

The coronavirus (COVID-19) pandemic has confirmed the ECB's concerns regarding the high risks entailed by leveraged transactions. The market sell-off at the onset of the pandemic, which centred around non-financial corporates, particularly affected the most vulnerable firms (i.e. those with high levels of debt and strong dependence on economic growth). While that sell-off and the immediate consequences were ultimately curtailed by decisive public sector support, that episode highlighted the vulnerabilities of highly leveraged corporates and their dependence on the market and continued economic and revenue growth for their survival.

By early 2021, risk taking in global leveraged loan markets already had returned to pre-COVID levels. By mid-2021, most risk indicators (i.e. leverage ratios, primary market issuance volumes, credit spreads, etc.) showed risk appetite standing close to - or at - the highest levels seen since the 2008-09 global financial crisis (GFC). In the second half of 2021, leverage ratios for corporates seeking financing in the US and European primary leveraged loan markets increased further, reaching the highest and second highest

Address European Central Bank Sonnemannstrasse 20 60314 Frankfurt am Main Germany Postal address European Central Bank 60640 Frankfurt am Main Germany www.bankingsupervision.europa.eu

Tel.: +49 69 1344 0 E-mail: info@ecb.europa.eu

¹ ECB, "Guidance on leveraged transactions", May 2017. Available at www.bankingsupervision.europa.eu.

levels on record respectively, while leveraged loan issuance in global primary markets reached all-time highs and credit spreads for the riskiest leveraged loans fell to the lowest levels seen since the GFC. More worryingly, a number of indicators suggest that risks are now higher than they were before the GFC. For example, loan agreement documentation is very weak (as captured by, but not limited to, covenant-lite loans), which is eroding lenders' protection and can be expected to lead to significantly lower recovery rates, and a very high percentage of outstanding leveraged loans are at the lower end of the credit quality spectrum. These market developments in 2020 and 2021 were very different from previous episodes. Unlike the period after the GFC, there was no cooling-off in leveraged loan markets, with transactions continuing to involve very high levels of leverage and covenant-lite formats. Such developments were observed in both the European and the US markets.

In particular, SIs have, on aggregate, significantly increased their exposure to leveraged transactions over the past few years and accelerated their leveraged lending activities in 2021. Between the first quarter of 2018 and the third quarter of 2021, aggregate leveraged loan exposures in the hold books of the 28 SIs reporting via the quarterly ECB Leveraged Finance Dashboard² rose from less than €300 billion to around €500 billion - an increase of around 80%. While that is not necessarily reflective of developments at each of the SIs for which the ECB collects supervisory data, the aggregate increase is in line with the 70% rise in the notional of the main European leveraged loan indices over the same period and is material in both absolute and relative terms. In less than four years, reporting SIs have, on aggregate, increased leveraged loan exposures in their hold books from around 40% of CET1 capital to close to 60%.

The increase in risk taking accelerated further in 2021. In line with the record levels of primary market issuance, origination volumes in the first three quarters of 2021 were at the highest levels seen since data collection began, significantly exceeding the volumes seen in equivalent periods of previous years. Over the last few years, and particularly in 2021, highly leveraged transactions (HLTs)³ - have accounted for a very significant percentage of these increases. On aggregate, HLTs accounted for around half of all new leveraged transaction volumes originated in 2019 and 2020, with that figure rising to more than 60% in the first and second guarters of 2021. Other risk indicators corroborate the generalised increase in risk taking evidenced by the rise in HLT origination. Leveraged buy-out (LBO) and merger and acquisition (M&A) transactions accounted for more than half of total origination volumes in the first half of 2021 - an increase of around 10 percentage points relative to the levels seen in 2019 and 2020. In the first half of 2021, covenant-lite and uncovenanted loans accounted, on aggregate, for more than 60% of the total volume of leveraged loans originated by SIs, compared with around 50% in previous years. The sustained pace of origination in 2021 contributed to an increase of more than 8% in aggregate leveraged loan exposure in the hold books of SIs over just two guarters - between the fourth guarter of 2020 and the second quarter of 2021. A deterioration in the credit quality of the transactions underwritten, as reflected in various risk indicators, ultimately translates into a deterioration in the quality of the credit in banks' banking books.

Excessive risk taking is of particular concern to the ECB when it is coupled with inadequate risk management. High levels of LT exposure on banks' balance sheets leave them vulnerable to renewed shocks, which could arise from unexpected and sharp economic slowdowns or higher than expected

² The ECB Leveraged Finance Dashboard is a supervisory tool used by the ECB, through which a sample of significant institutions report leveraged finance-related data on a quarterly basis.

³ High-risk transactions where total debt is more than 6.0 times EBITDA at the time of the deal's origination.

interest payments on outstanding loans. Banks with significant underwriting inventories are also exposed to the mark-to-market losses that could arise from a sharp repricing of credit spreads. The ECB Guidance already sets out the main LT RAF elements that the ECB regards as good practice. While SIs have generally made progress with the implementation of the ECB Guidance, key deficiencies remain. In the context of its supervisory engagement with SIs, the ECB has identified a number of significant deficiencies in banks' risk management practices. In many cases, risk management is inadequate and not well-developed enough given the high-risk strategies pursued. In general, the ECB has observed that LT RAFs are still insufficiently developed and do not adequately capture and limit the multiple risks posed by LTs.

Origination of HLTs remains at very high levels, while the strength of the HLT risk management is often not commensurate with the considerable risks incurred. As a result of issuers' very high leverage, HLTs are the riskiest sub-segment within the high-risk LT asset class, which, in turn, makes them highly vulnerable to economic downturns and default risks. Moreover, HLTs are typically structured with little or no protective subordinated debt cushions, which exposes them to the risk of materially lower recoveries upon default relative to historical levels. High levels of HLTs on SIs' hold books represent a concentration risk and a significant risk to institutions that needs to be managed appropriately. The ECB has already warned about the high risks posed by HLTs, and this is reflected in the ECB Guidance, which indicates that such transactions should be originated on an exceptional basis and need to be well justified. Despite the significant risks entailed by these transactions, the ECB has found that risk management for HLTs remains highly deficient. HLT origination is often unrestricted, with no limits on origination activities or HLT levels in the hold book, and where restrictions are imposed, they are overly permissive. Those deficiencies regarding the monitoring and management of the risks entailed by HLTs apply to numerous different aspects of banks' LT RAFs and include insufficient capture of the various risk drivers and insufficient risk-sensitive metrics.

The ECB has also identified severe deficiencies regarding the management of risks arising from underwriting and syndication activities. A horizontal exercise that was undertaken in the first half of 2021 to assess how banks with sizeable syndication activities identified and managed risks arising from their underwriting activities during the COVID-19 pandemic pointed to a number of significant shortcomings. Those shortcomings related, in particular, to a failure to accurately capture, in a timely manner, the market value of inventory subject to syndication and inadequate capture of market risk via stress testing and appropriate risk appetite metrics. Furthermore, in some cases, the deficiencies also related to transactions in the underwriting pipeline whose syndication was either delayed or failed owing to the closure of primary markets.

Against that background, ECB Banking Supervision has identified leveraged finance as a key vulnerability of SIs that requires increased scrutiny and remedial actions going forward. The ECB has made leveraged finance a key supervisory priority for 2022-24 in order to ensure that banks manage the associated risks in an appropriate manner.⁴ Consequently, the ECB expects SIs to pay particular attention to what it regards as sound credit risk management policies and procedures. These include an LT RAF that identifies, guantifies and limits risks in an appropriate manner, a reduction in risk taking

⁴ ECB, "ECB Banking Supervision - Supervisory priorities for 2022-2024", 7 December 2021. Available at: www.bankingsupervision.europa.eu.

and robust stress testing for the LT portfolio. In particular, HLTs represent a key risk driver, both for underwriting activities and for the portfolios in banks' hold books. As such, the ECB expects SIs to reduce HLT origination as a share of total origination to low levels consistent with the prudent risk management described in the ECB Guidance, and it expects that lower level of HLT origination to be reflected in a decline in HLTs' share of the LT hold book, thereby substantially reducing HLT concentration risk over time. Annex 1 provides more details regarding the sound risk identification and management practices that the ECB expects to see in banks' LT RAFs, while Annex 2 sets out the ECB's expectations as regards the recognition and management of market risk arising from underwriting and syndication activities.

The ECB expects all SIs that engage in leveraged transactions to take note of this letter and take steps to comply with the expectations set out herein, as also expressed in the ECB Guidance. The ECB will follow up with those SIs, bearing in mind the principle of proportionality. At the same time, the ECB recognises that these expectations are of particular importance for a subset of SIs which have significant leveraged transaction activities. Joint Supervisory Teams will engage with those particular SIs as a matter of priority regarding the concrete follow-up to this letter, which will, among other things, involve banks conducting a stocktake of their current procedures and indicating the action that they intend to take in order to close gaps relative to the expectations set out in Annexes 1 and 2.

The ECB intends to actively follow up on all aspects of this letter using a wide range of supervisory tools. Failure to remedy these deficiencies will be addressed using all available supervisory tools - including, where relevant, increases in Pillar 2 requirements in the context of the annual SREP process.

Your institution's management body should, in its supervisory function, discuss the contents of this letter.

Yours sincerely,

Andre Eng

Encl. Annex 1 Annex 2

Annex 1 - Overall LT Risk Appetite Framework design and functioning

This annex provides SIs with more details about the ECB's observations on the LT RAF design and functioning, as well as the ECB's minimum expectations in this regard.

Banks' leveraged transactions are considered well managed from a supervisory perspective when all leveraged transactions are captured at the group wide (GW) level and where there is a comprehensive and effective risk management framework in place. The RAF represents the backbone of an effective risk management. An effective LT RAF takes a GW perspective to leveraged transactions, i.e. captures all transactions across the bank that fall under the scope of leveraged transactions as defined by the ECB Guidance. Moreover, an effective LT RAF recognises that, due to their common risk drivers, LTs represent an Asset Class (AC) that requires a centralised risk management. Such a group wide asset class risk appetite framework (GW AC LT RAF) should adequately address concentration risks stemming from LTs and HLTs. Finally, an effective LT RAF captures all relevant risk dimensions and quantifies risks under both business as usual and stress conditions. The risks stemming from LTs should feed into the GW level risk assessment and the limits put in place to frame LT activities should be directly derived from the GW levels applied to the respective metrics. As such, any change in the risk appetite at GW level should be directly cascaded down to LT activities via a common set of relevant metrics. The limit system put in place to ensure that risks from LTs are well controlled should be subject to high standards of governance, which means that the limits should be effective in restraining risk and, when breached, they should trigger timely corrective actions.

The ECB has in many cases evidenced a lack of a GW and appropriate LT identification and risk management. In many cases, SIs have not yet implemented the GW AC capture of the LTs expected by the ECB Guidance. This raises risks arising from the misidentification of high-risk exposures that should be recognised and managed as LT exposures. The ECB expects that SIs implement a GW AC LT RAF that fully captures LT activities originated both by the investment and commercial bank units.

The metrics applied to LT activities are overly simplistic, insufficient, and delinked from the GW metrics. Generally, only a small subset of the metrics existing at the GW level are cascaded down to the LT activities and those cascaded are only covering a fraction of the risks incurred by LT activities undertaken by various Business Units (BUs). In most cases, notional limits represent the key metric used even though notional metrics are not risk sensitive and do not capture the multitude of risks raised by LT activities. This can lead to a significant underestimation of risks. The metrics at GW level are typically more developed, measuring credit, market, liquidity and operational risk as well as capital and leverage ratio consumption. From a supervisory perspective, an adequate LT RAF should at the minimum incorporate credit risk metrics that capture the impact on capital ratios both via the expected loss and the consumption or increase in the risk-weighted assets (RWA) components, both under business as usual - i.e normal conditions - and under stress conditions - i.e "stress risk metrics". Similar considerations apply to market risk (MR), where stress scenarios need to be sufficiently developed to cover both less and more severe market sell-off situations. COVID-19 has furthermore showed the

importance of capturing and monitoring the liquidity risk associated with leveraged lending, given the high drawdowns on the revolving credit facilities (RCFs). The ECB expects that all relevant GW metrics, including but not limited to credit and liquidity risks and covering both business as usual and stress metrics, are cascaded to the AC level and below.

The calibration of risk metrics is generally inconsistent and delinked from the calibration of the same metrics at GW levels. Typically, the calibration of the main metrics used - usually notional based - is ad-hoc and reflects legacy practices. As such, the calibration is delinked from the risk identification and the risk appetite allocation at GW levels, which is generally based on risk sensitive metrics. Where implemented to LT activities, risk sensitive metrics are typically directly derived from the notional limits, instead of being calibrated top-down from the risk level budgeted for the same metrics at GW level. As such, local limits - whether notional or risk sensitive - remain unjustified and cannot be assessed in terms of GW level equivalents. The lack of transparency and consistency can lead to overly high limits allotted to LT activities. Moreover, risk sensitive metrics that are directly correlated to notional metrics add limited value in terms of risk limitation. The ECB expects that SIs implement robust and consistent procedures for the calibration of risk metrics. Such procedures should require metrics to be calibrated in a top-down manner from the risk capacity levels allotted at GW levels and that notional limits are the end-result, not the start, of the metric calibration process.

HLT origination remains at very high levels and HLTs are insufficiently framed by risk metrics. The risk management of HLTs typically fails to consider the high risk posed by these exposures. Generally, SIs have not introduced limits on the maximum share of HLT volumes in their origination activities. While some SIs have introduced notional HLT limits for the hold book portfolios in their LT RAFs, limits are typically set to fully accommodate the existing exposure. Furthermore, metrics applied to HLTs typically do not include GW risk sensitive metrics and metrics capturing LT specific risks.

The capture of risks specific to LT activities remains insufficiently granular. LT activities raise specific risks which require identification and monitoring, such as leverage levels and the amount of subordinated debt available to protect the LT facilities held. Such metrics are complementary to the more general metrics part of the group wide RAF. The ECB has evidenced that, overall, SIs have not introduced metrics that are specific to the key risks entailed by LTs. SIs are expected to introduce metrics that track and, where appropriate, monitor or restrict hold book portfolio leverage levels, debt subordination levels, lower rated exposures, maximum single name and industry concentration exposures, as well as forward-looking indicators to avoid unexpected increases in the LT and HLT portfolios.

The governance provisions regarding metric setup and enforcement require significant improvements. The ECB has evidenced a wide range of governance related issues. Generally, the differentiation of the risk levels applied to metrics is insufficient. Typically, there is no traffic light escalation system with "green", "amber" and "red" levels applied to the key metrics to ensure that corrective actions are taken once the utilisation levels of these metrics are high, to avoid breaches. Moreover, the escalation of level breaches is not robust. In many cases limits or levels are frequently

modified to accommodate business demand rather than restrict risk taking. Furthermore, in many cases, key metrics are cascaded in soft forms that do not limit risk taking, such as thresholds, indicators or guidelines. In some cases, the more binding risk appetite metrics serve as capital and resource allocation, i.e. they are often modified to transfer, or borrow, metric capacity between other areas of the bank even when they can act as an effective limit to the build-up of concentration risks. Generally, the LT RAF policies are insufficiently detailed and do not offer a comprehensive overview of the various metrics, limits and hedging policies applied to LT activities. The ECB expects that at least the key metrics are implemented as hard limits instead of via softer forms; that risk metrics function as binding risk control tools instead of resource allocation; that the key metrics have an associated "traffic light" escalation procedure implemented, and that limit breaches or near breaches have consequences in terms of clear remedial actions.

The capture and risk management of delayed and failed syndicated transactions remains in many cases inadequate. While in many cases, the internal definition of failed deals has been aligned with the expectations set out in the ECB Guidance, in some cases the definitions of delayed and failed deals remain overly permissive and they are not captured in a timely manner. COVID-19 has highlighted the risks of inadequate risk capture. The ECB has evidenced cases where SIs did not properly flag as either delayed or failed transactions in their syndication pipelines given that primary leveraged loan markets were closed for several months starting in March 2020. Moreover, typically, LT activities are commingled with other underwriting activities undertaken, and no LT specific limits are defined to control the volume of delayed and/or failed LT transactions.

Issue and risks	Sound policies and practices
 Implementation of a group wide asset class RAF for LT activities consistent with expectations in the ECB Guidance. Issue 	SIs are expected to implement a GW AC approach to the origination, identification, and risk management of leveraged transactions in various BUs.
 LTs are not identified and managed under a GW AC perspective. Some institutions have not yet implemented a GW AC approach to their LT identification and risk management. In some cases, the identification of LTs, including of HLTs, and the measurement of the leverage, is not undertaken according to the expectations in the ECB Guidance. 	 a. LTs including HLTs should be identified under a GW approach taking into account the prudent scope and definition expected by the ECB Guidance. b. Both direct and indirect LT exposures should be identified and included in the LT RAF. The LT RAF should detail how the risks raised by the indirect LT exposures are managed, also relative to direct LT exposures.
Indirect LT exposures are not identified and/or not included in the LT RAF, even if the nature of the	 c. The risk management of LTs should take a GW AC perspective and apply consistent procedures to the management of exposures originated by

exposure is directly linked to the nature of a direct LT exposure.

Risks

- There is a **risk that high-risk exposures are not identified as such**, ie as LT exposures.
- The lack of a GW AC LT RAF leads to an inconsistent and fragmented LT identification and risk management across BUs, with LT exposures being managed at BU levels only instead of also at the AC level.
- Lack of, or the partial, HLT identification raises considerable risks, given the very high HLT risk profile.
- Indirect LT exposures can significantly increase the exposure to leveraged loan markets via a number of channels which include credit and liquidity risks.
- 2. Consistency between risk metrics applied to LT activities and metrics applied at group wide level. Issue

Metrics applied to LT activities are overly simplistic, insufficient, and delinked from GW metrics. Only a small subset of the GW risk metrics has been cascaded down to the LT activities of the single BUs. Overall, LT activities are insufficiently framed by metrics capturing incurred risks.

- Many institutions apply notional limits only, both for the hold book and for the underwriting pipeline.
 These are risk insensitive and as such do not capture the various risks raised by LTs.
- Many institutions have underdeveloped CR and MR risk sensitive metrics that do not distinguish between losses expected to be incurred under business as usual conditions and under stress periods. In some cases metrics that measure CR and MR under business as usual conditions, such as CR Expected Losses and MR losses under severe but short-lived stress scenarios, are missing.
- Risks in the LT portfolio are measured and restricted by insufficient existing GW risk

various BUs. The risk capacity allocation and management should be evidenced in detail via the GW AC LT RAF. The risk management should consider the definition of LTs and of HLTs in the ECB Guidance.

- d. For LTs under the scope of the ECB Guidance leverage should be consistently measured taking into account the expectations in the Guidance.
- e. Leverage levels should be measured for all originated LT transactions, i.e both for newly underwritten transactions and for transactions originated in the hold book. See also issue 5 on the measurement of the ongoing leverage.

Metrics applied to LT activities should include risk sensitive metrics and capture all relevant risks, both under business as usual and stress conditions. Metrics available at GW levels should be cascaded to AC level and below in an appropriate form and included in the GW AC LT RAF. Metrics should capture risks in the hold book and in the underwriting portfolio.

- a. SIs should cascade to their leveraged transactions, both at AC and BU levels, those metrics available at GW level that measure risks relevant to LT activities. These should include both metrics that control potential losses both under business as usual and severe stress conditions (such as under the periodical GW stress tests).
- b. SIs are expected to apply metrics that capture the multi-dimensional risks raised by LT activities. SIs are expected to apply/cascade at the minimum the following metrics or other appropriate metrics capturing the same risk in LT RAF as limits at the indicated level:
 - 1. Business as usual metrics: for the hold book, CR Expected Loss (CR EL) and CR risk

sensitive metrics. Many risk sensitive metrics that exist at GW level and are relevant to the risks raised by LT activities are not implemented. These include liquidity, capital, leverage ratio exposure and, in some cases, even stress CR and MR metrics.

- Liquidity risks associated with LT activities are typically restricted to the investment bank units. As such, a GW perspective of liquidity outflows under stress is lacking.
- The funding risks associated with corporates drawing before the syndication date on the syndication facilities committed by the syndicating banks are not captured and measured. These liquidity risks for underwriting activities combine with the liquidity risks stemming from the drawdown on the RCFs in the LT hold book portfolio, which in some cases are in foreign currencies.
- Key metrics highly relevant to monitor and restrict LT specific risks are missing (see also issue 5).

Risks

- Underdeveloped LT RAFs do not allow SIs to capture and monitor key risks and do not allow for a holistic understanding of LT risks.
- Overly simplistic metrics such as notional metrics do not capture the key risks.
- Metrics that are applied to only some BUs but not to others undertaking significant LTs do not offer a holistic assessment of risks raised by LT activities at GW AC level.
- Lack of a GW identification and management of liquidity risks for LTs raises the risk of severe underestimation of liquidity outflows under stress conditions. COVID-19 has evidenced the very high liquidity risks associated with committed facilities granted to leveraged borrowers.
- Calibration of notional and risk sensitive metrics, and links to the calibration of metrics applied at the group wide level.

weighted asset consumption (CR RWA); and for the underwriting pipeline: MR Expected Loss (MR EL); at AC level and BUs with significant LT exposure or activity;

- Stress metrics: for the hold book, increase in CR expected losses and in CR RWAs under severe stress (stress CR EL and stress CR RWAs, respectively), and for the underwriting pipeline: the expected MR losses under stress (stress MR losses); at AC level and for BUs with significant LT exposure/activity;
- Capital consumption (Total Capital Demand - TCD or equivalent); liquidity outflow metrics under stress; leverage ratio exposure metrics; at least at AC level.
- c. SIs are expected to have a GW AC capture of the risk of liquidity outflows under stress conditions arising from LT activities. The liquidity risks captured should cover both liquidity risks in the hold book such as drawdowns of RCFs and liquidity risks in the underwriting activities such as drawdowns on (funding of) the committed facilities before these are syndicated.

Calibration of metrics should be robust, consistent and transparent. Risk capacity allotted to metrics cascaded from GW levels should be top-down. Calibration of metrics at LT AC, BU and below

Issue

The calibration of risk metrics is based on an inconsistent methodology and, as such, is both adhoc and delinked from the calibration of the same metrics at GW levels.

- Typically, the calibration of the main, notional based, metrics used is ad-hoc, reflects legacy practices and therefore is inconsistent with the risk identification and allocation at GW levels. Notional metrics typically provide significant headroom.
- Where implemented, risk sensitive metrics are typically directly derived from the notional limits, instead of being calibrated top-down from the risk level budgeted for the same metrics at GW level. As such, local limits remain unjustified and cannot be assessed in terms of GW level equivalents.
- Typically, it is unclear what the impact on CET1 and other ratios would be if limits or metric levels were fully utilised and stress scenarios materialised. As such, it remains unclear how the calibration of metrics at LT AC, BU and below levels is related to the calibration of the same metrics at GW levels.
- Calibration is too permissive, the headroom is significant and metrics do not restrict risk.
- Where an AC approach is implemented, there is significant headroom between risk capacity allotted at AC and BU levels.

Risks

- In the absence of a top down and robust limit calibration methodology limits and utilisation levels can be arbitrarily set and increased.
- The lack of consistency can lead to overly high risk appetite levels allotted to metrics applied to LT activities.
- The inconsistent calibration methodology leads to a lack of transparency as to the level of GW equivalent risk implied by limits or levels allotted to LT

levels should be transparent, allowing to assess risk taken by LT activities in terms of GW risk levels. Notional metrics should be the end-result of the calibration process of the risk sensitive metrics.

- a. GW metrics should be calibrated top-down. Metrics that have a GW equivalent level should be calibrated in a top-down manner, based on a consistent methodology that determines how the GW risk capacity is allotted to LT activities at AC level and below.
- b. Risk capacity for metrics at AC and BU levels should be transparently derived from, and linked to, the capacity for the same metrics allotted at the GW level. For example, the CR and MR maximum acceptable losses under business as usual and stress conditions should be derived from the maximum acceptable losses allotted to these metrics at GW level.
- c. Risk sensitive metrics should not be calibrated taking notional metrics as reference. Notional metrics are risk insensitive and reflect different risks depending on instrument type.
- d. The calibration of the notional metrics should reflect the most conservative of the risk sensitive GW metrics (i.e. the lowest common denominator from the calibration of the more risk sensitive GW metrics). This reflects that risk sensitive metrics cascaded from GW to LT activities are/should be calibrated in a consistent, top-down, manner. This ensures that the breach of the more operational LT notional limits does not occur without breaching the maximum risk capacity allotted to the risk sensitive LT metrics under the LT RAF.

	activities. As such, assuming the maximum utilisation	
	of levels allotted to metrics cascaded to LT activities,	
	and the materialisation of the risk scenarios, the	
	impact on the GW capital ratios and other key GW	
	metrics is unclear and not assessed ex-ante.	
•	Risk sensitive metrics that are directly correlated	
	to notional metrics provide little value in terms of	
	risk limitation.	
•	Significant headroom between LT AC metric	
	calibration and BU calibration leaves leeway for	
	BU level increases. The headroom moreover leads	
	to a lack of transparency as to the GW equivalent of	
	limits or levels allotted at BU and sub-BU levels.	
4.	HLT origination and management	SIs are expected to implement HLT limits that
lss		reflect the principles of sound risk management
		and restrict HLT origination to the low levels
	T origination remains at very high levels and HLT	envisaged by the ECB Guidance.
ris	k management is inadequate.	a. HLT exposure in the hold book and at the point
		of origination should be identified at GW level
•	In some cases, HLT exposure in the hold book is	and known at all times.
	not identified or is not identified at a GW level.	
	Typically, the HLT identification is limited to BUs	b. HLTs should be managed as very high-risk
	engaged in origination-focused capital markets	exposures at a GW AC level.
	$\ensuremath{\textbf{BUs.}}$ As such, the GW HLT exposure is not known,	1. Origination : limits should be set at levels that
	both for the hold book and new originations.	restrict HLT origination, as a share of the LT
•	Many SIs have not internalised HLTs in terms of	origination volumes, to low levels only.
	risk management according to expectations in the	2. Hold book: the lower HLT share in the
	ECB Guidance, i.e as a very high-risk segment of	origination volumes should be reflected over
	their LT activities. Typically, HLTs are not risk	time in a lower HLT share in the hold book LT
	managed at a GW AC level.	portfolio.
•	HLT origination relative to LT origination is	c. Metrics applied to the HLT sub-portfolio should
	undertaken at very high levels and significantly	include both notional and the main GW CR
	above the exceptional levels expected by the ECB	metrics. The risk-sensitive metrics applied to the
	Guidance.	HLT hold book sub-portfolio should include the
•	In some cases, HLTs are not framed by any limits.	following metrics implemented as limits in the BUs
	Consequently, many SIs originate very high HLT	with significant HLT exposure or activity:
	levels. Where HLT limits are implemented, either	1. Business as usual CR and MR metrics: CR
	for origination activities or in the hold book, they are	EL and CR RWAs;

• SIs do not manage high HLT exposure as a concentration risk and do not differentiate between

highly permissive.

2. Stress conditions: stress CR EL and stress CR RWA;

HLTs and non-HLTs in their RAFs and their internal d. The SIs' risk management should internalise risk management framework. HLTs, including leverage as a key driver, as a HLTs are not subject to stress tests, to assess high-risk sub-portfolio. SIs may use their own behaviour and higher than average losses under definition of high-risk transactions in their risk stress. management while being aware of the ECB's expectations regarding the identification and risk Risks management of the HLTs, as laid out in the ECB Due to the issuers' high leverage levels, HLTs are Guidance. the riskiest sub-segment within the high risk The liquidity risk characteristics of HLTs e. leveraged loan AC. The leverage, in turn, makes should be monitored and compared to those of HLT issuers highly vulnerable to economic other LTs. SIs should assess the stress liquidity downturns and default risks. High levels of HLTs outflows for the HLT sub-portfolio during COVIDrepresent a concentration risk. 19, to determine whether HLTs were subject to The HLTs' high-risk profile has been recognised higher liquidity outflows and whether a HLT by the ECB in the ECB Guidance, which expects specific stress liquidity metric and limits are the origination of such transactions to be on an warranted. exceptional basis and deviations well justified. High HLT origination volumes translate directly into high HLT concentration levels in the LT hold book. Lack of HLT GW identification, and of HLT AC level • risk management, raises the risk of inappropriate capture of high risk transactions. 5. Capture and limitation of risks specific to LTs SIs are expected to introduce metrics to monitor and, where appropriate, restrict the key risks in Issue their LT portfolios. The key risks should be The granularity and risk capture of LT activities restricted via metrics implemented as limits that remains insufficient. trigger clearly defined remedial actions. Measures to control concentration risk should be introduced, Many SIs have not yet introduced metrics that are calibrated and enforced in a binding manner. specific to the key risks entailed by the LT AC. a. Sls are expected to introduce at least the Missing metrics include those monitoring developing following metrics in their LT hold book, at least risks in the current portfolio, and forward-looking at AC level: metrics that capture growth risks in the LT portfolio. 1. Initial and ongoing leverage. Leverage is Many SIs do not monitor the evolution of key the primary PD risk driver for leveraged loans drivers directly affecting the PD and LGD of their and furthermore a key driver for HLT portfolios, such as leverage, the debt cushion reclassification. SIs are expected to available to first withstand losses in case of default implement a metric tracking current leverage and the share of their portfolio that is cov-lite. levels at least in the form of a threshold and to Leverage is not tracked on an ongoing basis for understand the share of their hold portfolio the hold portfolio, even as it constitutes the primary that may be designated as HLTs upon an LT risk driver.

- Concentration risk is poorly monitored and addressed:
 - While most SIs break down exposure by granular ratings, they do not apply rating-based limits, in particular to the lower rated exposures. The risk raised by the lowest rated transactions in the portfolio is neither monitored nor restricted.
 - Single name/connected debtor as well as maximum industry exposure metrics are missing.
 - The level of covenant protection in general, and of cov-lite status in particular, is not tracked and assessed.
 - Metrics and risk limits are missing to limit the share and volume of subordinated facilities which have very high LGD risk.
- Forward looking risks such as potential LT portfolio increase arising from fallen angels, or potential increase in the HLT sub-portfolio due to increase in leverage, are not monitored.
- Where introduced, LT specific metrics are calibrated too permissively and/or implemented in a soft form (indicator, guideline, thresholds, etc) that does not restrict risk taking. In most cases, breach consequences are unspecified and remedial actions are not provided for in RAFs (see also item 6).

Risks

Lack of identification, monitoring and risk-taking limitation of the key LT risk drivers leads to **underestimation of the riskiness of the LT portfolio and to overly high risk taking**.

 Current levels of leverage provide key information on developing risks in the hold book portfolio. Rising current leverage levels relative to leverage measured when an origination event occurs⁵ may signal an increase in the credit risk of the borrower and provides a leading indicator to potential origination event. The monitoring should allow to break down the hold portfolio by leveraged levels and distinguish and track separately the breakdown of the leverage levels between the funded debt leverage, leverage computed if RCFs are drawn and leverage computed considering the additional debt allowed to be raised under the loan agreements.

- 2. Initial and ongoing debt cushion levels. SIs are expected to understand the LGD risks in their LT portfolios arising from poorly protected facilities. SIs should introduce metrics as limits to restrict the maximum share of the hold book portfolio having minimal debt cushion protection and actively monitor debt cushion levels.
- Geography, industry and single name concentration metrics, to be implemented as limits.
- 4. Maximum share of B- and lower rated facilities, to be implemented as limits.
- 5. The share of cov-lite loans in the hold book portfolio at least as a threshold.
- b. SIs should have in place systems to allow the granular assessment of the above metrics at BU and sub-BU levels.
- c. The management of the LT transactions should be undertaken in a forward-looking manner, which includes setting up and monitoring metrics that can lead to an increase in the LT hold book portfolio, such as from fallen angels which can eventually qualify as LT transactions, or LT transactions that can qualify as HLTs.

⁵ The ECB Guidance provides that the designation of a financing as a "leveraged transaction" is made at loan origination, modification or refinancing.

reclassification of some LT transactions to the HLT sub-segment.

- Debt cushion defined as the share of debt subordinated to LT facilities as percentage of the total debt - is a key LGD driver. Credit Rating Agencies have documented a structural erosion in the size of the debt cushion under leveraged loan facilities structured after the GFC, which is expected to lead to lower recovery rates for facilities that are minimally protected (such as those with no or a very low debt cushion).
- Excessive industry concentration exposes the bank to idiosyncratic shocks. COVID-19 has furthermore illustrated that correlation between industries can increase due to the unexpected nature of the shock.
- The build-up of risk in the B- and lower rated LTs exposes the institution to very significant defaults and losses under downturn conditions. At the time of default or near default losses are already realised or priced in and corrective actions limiting losses are no longer feasible.
- While RCFs are typically better protected than term loans via covenants, the share of poorly protected facilities has risen considerably due to a significant erosion of protective covenants and a higher retention of term loans by some SIs. Available data evidences higher than average LGD ratios for cov-lite loans.
- The lack of forward-looking monitoring can result in unexpected and unbudgeted-for risks. This has been the case for several SIs which have seen significant and unexpected increases in the LT hold book exposure arising from the reclassification of fallen-angels due to the COVID-19 impact.

6. Metric and LT RAF governanceThe SIs are expected to ensure that the RAFs in
place serve as effective risk management
frameworks. This should entail, at the minimum, that
SIs:

- No traffic light system (with green/amber/red levels) are in place and as such metric risk levels are insufficiently differentiated (e.g. amber levels missing) even for the key metrics.
- Metrics are cascaded in forms that are nonbinding, such as thresholds or guidelines, which do not limit risk taking. Key metrics are implemented in overly soft formats which are less effective or ineffective at restricting risk taking and ensuring high levels of governance.
- Some existing metrics serve only as capital and resource allocation, instead of limiting risk taking.
- The escalation procedure for limits and other forms of metric implementation is not defined and not effective in limiting risk.
- There is a proliferation of soft metrics (limits, thresholds, indicators, guidelines) which do not trigger clearly defined remedial actions and which do not limit risks effectively in practice.
- The LT RAF does not offer an adequate overview of the scope of LT activities, various metrics, limits, escalation and remedial procedures applied to LT activities, reports used to monitor and discuss risks.

Risks

- LT RAFs that have inadequate governance, escalation and consequence management do not effectively restrict risk taking.
- Lack of a traffic light approach for the key metrics does not allow for the application of timely remediation measures to ensure "red" level thresholds are not overrun.
- Soft metrics do not restrict risks effectively. Unclear governance procedures or the non-binding nature of some softer metric implementation can lead to level breaches or amendments to accommodate increased utilisation levels.
- The lack of a structured approach to risk management of LT transactions via comprehensive and well-structured RAFs leads to inconsistences in risk management across various BUs undertaking

- a. SIs should introduce and enforce a "traffic light" escalation procedure for all the key metrics cascaded. "Amber" levels should require remedial actions, to ensure increased metric monitoring in case of high utilisation and that corrective actions are taken in a timely manner.
- b. SIs should define and reflect in RAFs the consequences of the breach, or near breach, of the above metrics and the necessary remedial actions. In all cases, including when metrics are implemented in forms other than limits, RAFs should specify the governance implications and the consequences in terms of risk management when metric levels are breached.
- c. Key metrics should be implemented as limits to improve metric governance and the metric implementation should be simplified to avoid the proliferation of soft measures.
- d. Capital, leverage and other risk metrics part of the GW RAF should be used for risk appetite, instead of for resource allocation, purposes.
- e. The LT RAF granularity should provide a comprehensive view of risks taken, metrics applied at AC and BU levels, and of other risk management tools and procedures.

LT activities, lack of transparency and lack of understanding of risks and risk management tools.

7. Capture and risk management of delayed and failed transactions in the underwriting and syndication pipeline.

Issue

The risks of delayed and failed underwritten transactions are insufficiently captured.

- Some SIs have not implemented definitions that adequately identify delayed and failed transactions in the underwriting pipelines (see also expectations in the ECB Guidance regarding the capture of such transactions).
- Many SIs do not have specific limits for the maximum amount of delayed and/or failed LTs in the underwriting pipeline. In some cases, the delayed and failed LT transactions have limits commingled with other asset classes.
- In most cases, the consequences in terms of an overly high stock of delayed and failed deals are unclear in terms of risk management and do not restrict the ongoing underwriting of new transactions.

Risks

- Improper capture of delayed and/or failed transactions in the underwriting pipeline may lead to SIs continuing to underwrite transactions and accumulate inventory even as a large share of their pipeline will not be syndicated as expected.
- The COVID-19 episode has revealed that in the first half of 2020 some SIs did not label as delayed or failed the transactions in their underwriting pipeline even as the market was closed for several months and there was no visibility on the reopening timeline.
- The lack of limits for delayed and/or failed transactions, as well as comingling the risk of LT transactions with that of other transactions types that the SIs underwrite, raises the risk that limits are de facto overly high.

The SIs are expected to recognise delayed and failed transactions in a timely manner and manage the risks pro-actively by limiting the build-up of overly high volumes of delayed and/or failed transactions in their inventories.

- a. SIs are expected to tighten the definition of delayed and failed transactions to capture the true nature of transactions in the underwriting and syndication pipeline. The definition of delayed and/or failed transactions should be able to identify most of the underwriting pipeline during the COVID-19 sell-off as delayed and/or failed.
- b. SIs are expected to introduce LT specific limits for delayed and failed transactions in the underwriting and syndication pipeline and to link remedial actions to new underwriting activities. Remedial actions should include a limitation on new underwriting activities as long as the level of unsold inventory remains high.

•	The lack of consequences for breaches of limits in	
	terms of restrictions places on new underwriting limits	
	the effectiveness of the metric governance.	

Annex 2 - Capture of market risk arising from underwriting and syndication activities

This annex provides SIs with more details about the ECB's observations regarding the recognition and management of risks arising from LT underwriting and syndication activities, as well as the ECB's expectations in this regard.

Banks active in primary syndication markets are exposed to market risk (MR) when they underwrite positions to be sold to third party investors through the syndication process. Given the lag between the commitment and the syndication stages, in the case of underwritten transactions banks are exposed to mark to market losses if market prices decline significantly relative to the levels where syndication banks commit to provide funding. The ECB Guidance sets out expectations that credit institutions develop a stress-testing framework aimed at capturing the impact of market-wide disruptions on the underwriting and syndication pipeline.

The ECB has evidenced several severe shortcomings related to the management of market risk arising from SIs' syndication and underwriting activities. A number of SIs fail to timely mark to market their pipeline inventory, and therefore severely underestimate mark to market losses in case of severe market sell-offs. This typically reflects insufficiently robust mark to market pricing mechanisms. This is a severe deficiency given that the inventory of loans committed but not yet syndicated is subject to market price changes that need to be adequately and timely captured until the syndication closes. Where such risk is recognised, important deficiencies remain in particular regarding the adequate and timely capture and measurement of MR under stress scenarios, and the management of such potential losses via the LT RAFs. Generally, stress scenarios are insufficiently developed and, in many cases, the potential MR losses under stress are not measured and limited through metrics; often such metrics are not included in the LT RAFs.

The ECB expects that banks have an adequate recognition and risk management of the market risk arising from LT underwriting and syndication activities. MR under various stress conditions and after the application of hedges, if any, needs to be captured via appropriate metrics and such metrics should be included in the LT RAF. This allows SIs to assess which MR losses they are likely to incur under various stress scenarios and to control such losses via dedicated and appropriately calibrated metrics.

Issue and risks	Sound policies and practices
Issue	Market risk is a highly significant risk associated
The ECB has documented severe deficiencies in the capture and management of the market risk related to underwriting and syndication activities. This leads to severe underestimation of the risk associated with LT	with LT underwriting and syndication activities and SIs are expected to adequately manage it. SIs should have methodologies to mark to market the pipeline inventory subject to syndication, measure
activities.	the risk under stress conditions via appropriate
 In some cases, the market risk of underwriting activities is not recognised, measured and managed. In the case of underwritten transactions, 	 metrics and reflect residual risks in the LT RAF. a. The marking to market of inventories should be undertaken timely and accurately; procedures

the inventory SIs hold in form of commitments to syndicate is subject to market risk given that market prices can move from the levels the underwriting banks have committed to provide financing at.

- In many cases the underwriting pipeline is not marked to market in a timely manner. The ECB has documented several instances where SIs have only marked to market their inventories a few months after the heights of the COVID-19 sell-off, leading to underestimated loss and risk recognition.
- In some cases, the stress testing methodologies are either missing or are insufficiently developed, resulting in an inappropriate capture of the potential losses under stress scenarios.
 - In some cases, the lack of MR metrics and underlying stress test methodologies results from the lack of marking to market of positions.
 - In other cases, the stress testing methodology is overly simplistic both in terms of scenarios used and how the scenarios are translated into markdowns of positions in the inventory.
 - In many cases, the stress tests are not undertaken sufficiently often even as inventory volumes change.
- In many cases, the stress testing process is not incorporated in the LT RAFs via appropriate metrics and is furthermore delinked from the risk allocation under the GW RAF.
 - In some cases, where present, stress tests do not have associated MR metrics that are part of the LT RAFs.
 - Typically, metrics for stress MR losses are local to LT activities and delinked from GW stress MR metrics.
- In those cases where MR is recognised, important deficiencies remain in terms of its adequate risk measurement and reflection in the LT RAF. In some of the cases where hedges are implemented to partially offset adverse price developments, the residual risk is underestimated due to the use of

should be in place to determine market prices under business as usual and stress conditions.

- The marking to market of the inventory to be syndicated in the case of underwritten LTs should at all times reflect realistic syndication prices that reflect market conditions at all times and in particular under stress episodes such as during COVID-19 market sell-off.
- As such, if modelled prices are used, they should incorporate liquidity, model and other premia, and reflect the nature of the transactions underwritten by the institution, which may differ from those in the leveraged loan market indices.
- Any pricing models should be back tested to determine accuracy under COVID-19 stress conditions.
- b. SIs should implement robust and realistic stress tests that estimate the mark to market losses under stress conditions.
 - The stress tests should assess losses under a variety of scenarios. These scenarios should include short-dated but severe business as usual stress scenarios, as well as a number of more severe scenarios that range from very severe to extremely severe.
 - 2. Stress test scenarios should include scenarios under the quarterly/periodic GW stress test.
 - 3. The more severe stress tests should assume that the market will be closed for an extended period and that no transaction in the pipeline will be able to be syndicated.
 - 4. Where hedges are used, the stress tests should incorporate the hedge behaviour and basis, FX, model and other risks arising from a divergent price performance of the transactions in the syndication pipeline relative to the hedging instruments. If shorter dated hedges

overly short dated hedges. Such hedges raise rollover risks that are not adequately captured and managed via the structuring of longer dated or replacement hedges, and/or the capture of potential losses under the LT RAF.

Risks

- The lack and the delays of marking to market inventories in the underwriting pipeline, as well as the improper capture of residual risks, leads to the severe underestimation of the risks entailed by LT activities. MR for entities with sizeable syndication pipelines can be very material, in particular if the inventory is left unhedged.
- Lack of MR metrics applied to underwriting and syndication activities does not allow for active monitoring and ex-ante assessment of potential losses in case of severe market sell-off developments.
- The lack of incorporation of stress tests in the LT RAFs via appropriate metrics does not allow for the assessment, control and budgeting of potential losses entailed by LT activities due to the MR component.
- Stress tests and metrics local to LT activities which are delinked from stress loss metrics applied at GW level do not allow the assessment of the share of stress MR losses LT activities contribute to the overall GW stress losses. Furthermore, such local stress tests and metrics de facto entail an ad-hoc calibration of MR LT stress metrics that is delinked from the GW metric calibration.
- Overly simplistic stress tests methodologies may not capture actual developments and may underestimate risks during severe sell-offs.
- Hedge roll-over risks that are not recognised in the LT RAFs may lead to underestimation of MR associated with LT underwriting and syndication activities.

are used, the stress tests should also capture the hedge roll-over risks. Any risks arising from the impossibility of rolling over existing hedges should be captured under the LT RAF.

- c. Potential MR losses evidenced by stress testing should include stress loss metrics already used at GW level and should be accounted for by metrics in the LT RAF.
 - The stress tests applied should be linked to stress loss metrics and included in the LT RAF, ie potential losses evidenced by the tests should be monitored and budgeted for via clearly defined metrics.
 - Stress loss metrics should include potential losses under both business as usual and severe stress scenarios.
 - 3. Stress loss metrics applied to LT activities should include stress loss metrics available at GW level.
 - 4. SIs should develop additional LT specific stress tests if the MR metrics available at GW level are insufficiently developed to capture stress under a variety of scenarios, or the specificities of the leveraged loan markets.
- d. The stress tests should be applied on a sufficiently frequent basis to ensure that the risks associated with evolving volume and composition of the underwriting pipeline are appropriately captured.
- e. The maximum levels that can be incurred from mark to market losses arising from the underwriting activities should be managed via clearly defined stress loss metrics implemented as hard limits.
- f. Stress loss metrics should be applied at AC level and for BUs with significant MR arising from LT origination activities.
- g. The calibration of stress loss metrics for LT activities should be top down from the stress loss capacity allotted to the same metrics at GW

level and be based on a consistent and transparent
methodology.