BANK OF ENGLAND

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Dear CFO

Guidance on valuation capabilities to support resolvability

I am writing to you regarding the Bank's recently published Statement of Policy on Valuation Capabilities to Support Resolvability (the 'Valuations SoP'). The purpose of this letter is to provide you with information to support your implementation of the Valuations SoP. The Bank intends to publish a copy of this letter, including the appended guidance, on its website.

Please note that this letter has been addressed to your group's UK [resolution entity], although the Valuations SoP may apply to other entities within your group (see section 2 of the Valuations SoP for further information).

In June this year, the Bank published the Valuations SoP following industry consultation in 2017. In-scope firms, including yours, will have until January 2021 to comply with the policy.

Consultation respondents supported the adoption of a principles-based approach given it accounts for firm's different characteristics and would enable existing capabilities to be leveraged. A number of respondents requested further clarification on what specifically would be required. Taking this feedback into account, the Bank chose for the policy to remain principles-based and for supporting guidance to be provided at a later stage.

The Bank's guidance is contained in Annex 2 of this letter. It should be noted that this guidance is purely illustrative in nature. It does not set out any additional expectations beyond those set out in the Valuations SoP and related legal requirements. I encourage you to consider how the guidance can inform your implementation of this policy. However, your firm's compliance will ultimately be assessed against the principles in the Valuations SoP.

If you have any feedback on this guidance, please do provide this to us. We have endeavoured to ensure that our guidance is as comprehensive as possible. However, it is inevitable that the guidance is non-exhaustive. We may refine this guidance over time to reflect any developments in our thinking.

In addition, we invite your response to the survey contained in Annex 1. The purpose of this survey is for us to understand how you intend to implement the Valuations SoP. This will help support our engagement with your firm throughout implementation.

If you have any questions regarding the content of this letter, please get in touch with your usual resolution contact.

Yours sincerely,

Sasha Mills
Executive Director, Resolution Directorate

Annex 1: Valuations SoP implementation survey

The Bank is surveying relevant firms on the approach that they are taking to implementing the Bank's Statement of Policy on Valuation Capabilities to Support Resolvability (the Valuations SoP). The aim of this survey is to assist the Bank in understanding how firms plan to implement this policy, thereby supporting the Bank's engagements with firms going forward.

The Bank welcomes your response to the following questions on a reasonable-efforts basis by 28 February 2019. Please email your responses to RDValuationsPolicy@bankofengland.co.uk.

1. What is your plan to implement the Valuations SoP by 1 January 2021? Please provide a project plan setting out workstreams, responsibilities, and key milestones.

2. What subsidiaries in your group have you identified as 'significant subsidiaries', as defined in paragraph 2.7 of the Valuations SoP? How have you gone about identifying these significant subsidiaries?

3. For what asset and liability classes do you plan to maintain internal models for the purposes of the Valuations SoP? How have you gone about identifying these asset and liability classes?

4. For what asset or liability classes do you not consider it necessary to maintain valuation models? What is your rationale for this?

5. To what extent do your existing valuation capabilities comply with the principles of the Valuations SoP? How do you plan to address any gaps identified? Please respond in regards to capabilities to support:

    a. Valuation 1 (failing-or-likely-to-fail valuations)
    b. Valuation 2 (asset and liability valuation)
    c. Valuation 3 (equity valuation) – *for 'MREL firms' only*
    d. Valuation 4 (insolvency counterfactual) – *for 'MREL firms' only*

6. Overall, how many systems do you intend to amend or introduce in order to comply with the Valuations SoP (including in relation to both data and modelling)?

7. What governance arrangements have you established, or do you plan to establish, to:

    a. Oversee implementation of the Valuations SoP?
    b. Oversee the maintenance of resolution valuation capabilities in BAU?
    c. Oversee the engagement with a valuer in a resolution scenario?

8. How do you plan to meet the expectations for operational documentation in Principle 6 of the Valuations SoP?

9. What testing and review do you intend to carry out to ensure that suitable capabilities are in place by 1 January 2021?

Privacy statement

We collect personal information about the individuals submitting this survey and acting as our primary contact. To find out more about the Bank's approach to privacy and how we use personal data, please see https://www.bankofengland.co.uk/legal/privacy

Annex 2: Guidance on valuation capabilities to support resolvability

1 Introduction

1.1 This guidance has been prepared by the Bank of England (the Bank) to support implementation of its Statement of Policy on valuation capabilities to support resolvability (the Valuations SoP). This guidance is being provided to the following institutions:[1]

- _MREL firms:_ UK banks and building societies whose preferred resolution strategy involves the use of stabilisation tools (and therefore will be subject to MREL above regulatory capital requirements); and

- _Internal MREL firms:_ UK subsidiaries of overseas-based banking groups that are designated as material subsidiaries in the UK (and will therefore be subject to internal MREL above regulatory capital requirements).

Overview of the Valuations SoP

1.2 The Valuations SoP sets out seven principles for the capabilities these firms should maintain to support timely and robust resolution valuations. Carrying out timely and robust valuations in resolution is an inherently complex task. There is a substantial amount of analysis that will be required in a relatively short timeframe. A valuer would need to make a large number of complex assumptions and judgements around the valuations of the firm. This would likely be in the context of significant uncertainty around the future performance of the firm and its assets. It is therefore crucial that firms maintain valuation capabilities in business-as-usual that would enable a valuer to assess the value of the firm, and the impact of different underlying assumptions, on a timely basis.

1.3 The principles of the Valuations SoP relate to the needs of a valuer as follows:[2]

- _Principle 1: data and information._ A valuer would need firms to have substantial amounts of information about the firm's assets and liabilities, as well as historical information and forecasts to support this. Firms will therefore need to ensure the relevant data and information is sufficiently complete, accurate, and up-to-date. Firms will also need to ensure that this data and information is readily available to a valuer.

- _Principles 2-4: models, methodologies and assumptions._ A valuer would need models to assess valuations and the sensitivities around these. In many cases, it is unlikely that a valuer will be able to build, test, and use its own models to produce robust valuations in the timeframes required. Firms should therefore have their own models in place to produce valuations and forecasts wherever needed to ensure timely and robust valuations. For these models to be usable, they should use methodologies consistent with what a valuer would typically seek to apply. They should also be suitably flexible and dynamic to incorporate assumptions and overlays specified by the valuer, and to produce numerous iterations of the valuations. This flexibility will enable a valuer to evaluate uncertainty, apply judgments, and assess different resolution and restructuring options.

- _Principles 5-7: governance, documentation, and assurance_. For a valuer to effectively rely on a firm's capabilities, firms will need to have a robust and documented process in place for how their capabilities would be deployed in a resolution scenario. Firms will also need to have responsibilities and oversight arrangements to ensure that adequate capabilities are

[1] Refer to paragraph 2.1 of the Valuations SoP for the full definition of institutions within scope of the policy.
[2] The Valuations SoP should be referred to for the principles themselves. This guidance does not amend or extend these principles.

maintained and available. This should be supported by testing and review of capabilities and processes in business-as-usual. Finally, firms will need to document their capabilities, including the oversight and review arrangement they have been subject to. This is important to enable a valuer to rapidly familiarise themselves with the firm's capabilities and assess their reliability.

The purpose and nature of this guidance

1.4 The valuations needed in resolution will generally be carried out by a valuer independent from the firm in question. The purpose of this guidance is to inform firms of the factors we anticipate that such a valuer would consider when approaching this valuation task. In doing so, this guidance aims to assist firms in identifying the capabilities needed to comply with Principles 1-4 of the Valuations SoP.

1.5 This guidance is split into two parts covering valuations in the context of resolution, and firm capabilities in business-as-usual. The guidance does not cover in detail the governance, documentation, and assurance arrangements around these capabilities – though firms should consider what would be needed in this regard under Principles 5-7 of the Valuations SoP.

1.6 It is crucial to note that this guidance is illustrative only. It does not specify how a valuer must undertake resolution valuations beyond what is set out in the relevant legal frameworks. Within the applicable legal frameworks, it is the valuer's discretion as to how valuations will be undertaken and if and how a firm's capabilities would be relied upon. Furthermore, this guidance does not specify additional capability requirements beyond what is covered in the Valuations SoP. Ultimately, firms will need to implement and maintain capabilities in line with the Valuations SoP. This guidance does not itself impose requirements on firms to implement the capabilities set out therein.

1.7 It should also be noted that this guidance is not intended as exhaustive or definitive. The Bank has endeavoured to provide detail where possible to help inform implementation of the Valuation SoP. However, it is not possible to provide a "one size fits all" set of requirements for valuations given differences in firms' existing capabilities, business models, and home-jurisdiction valuation requirements. Instead, firms are expected to apply the SoP to their particular context in the spirit in which they were intended. To assist that process, this guidance is intended to further illuminate how the Bank expects the principles to be followed in practice.

Part 1: Valuations in the context of resolution.

1.8 The first part of this guidance sets out the Bank's interpretation of the valuations required in resolution. It also discusses how the Bank envisages the process for how these valuations would be carried out. The purpose of this part is to help firms understand the valuation task and how they would need to support a valuer in delivering timely and robust valuations. This in turn aims to inform the preparations that firms will need to undertake in business-as-usual.

1.9 Part 1 is comprised of two sections:

- *Valuations in the context of UK-led resolutions:* an overview of the resolution valuations needed for MREL firms and the Bank's expectations for the process around these valuations; and

- *Valuations in the context of overseas-led resolutions:* an overview of the expected approach to resolution valuations for Internal MREL firms.

Part 2: Firm capabilities in business-as-usual

1.10 The second part of this guidance sets out what capabilities the Bank anticipates a valuer may need in order to produce timely and robust resolution valuations. The purpose of this part is to inform firms' assessments of how existing (and potentially new) capabilities could be used or adapted to meet the needs of a valuer in line with the expectations in the Valuations SoP. What a valuer would need, and therefore what a firm should have in place, will ultimately depend on that firm's business, balance sheet, and home jurisdiction. This should be kept in mind when assessing what specific capabilities a given firm would require.

1.11 This part has been developed based on established industry practice, having regard to the specificities of the resolution context. The Bank has consulted valuation advisors on this guidance to help ensure that it reflects what a valuer may need in practice.

1.12 Part 2 is comprised of six sections:

- *Timeliness of valuation capabilities:* an explanation of how the timeliness objective should be interpreted in determining the capabilities required for a given firm;
- *Scope of valuations capabilities:* an explanation of what may constitute significant subsidiaries and classes of assets or liabilities, and what this means for the extent of capabilities that would be needed for a given firm;
- *Capabilities to support Valuation 1:* a description of what a valuer may need from firms to support the failing-or-likely-to-fail valuation;
- *Capabilities to support Valuation 2:* a description of what a valuer may need from firms to support the asset and liability valuation;
- *Capabilities to support Valuation 3:* a description of what a valuer may need from firms to support the valuation of a firm's equity post-resolution; and
- *Capabilities to support Valuation 4:* a description of what a valuer may need from firms to support the estimation of outcomes in an insolvency counterfactual.

Part 1 Valuations in the context of resolution

This part sets out (i) how the Bank envisages the valuations required in resolution; and (ii) how the Bank envisages the process of producing these valuations. It covers both resolutions where the Bank is using resolution tools itself, and where it is participating in a group-wide resolution without using resolution tools.

This Part relates to valuations in an actual resolution event, rather than the valuation capabilities firms will need in business-as-usual. However, it is intended to provide useful context for understanding what capabilities would be needed.

Note that the purpose of this section is not to specify how a valuer must undertake resolution valuations beyond what is set out it in the relevant legal requirements. Within the applicable legal frameworks, it is ultimately the valuer's discretion as to how valuations will be undertaken and if and how a firm's capabilities would be relied upon.

2 Valuations in the context of UK-led resolutions

2.1 This section covers how the Bank envisages the valuations required for the resolution of an MREL Firm, and the process for carrying these valuations out.

2.2 Figure 1 summarises the valuations that the Bank expects to require for the use of stabilisation tools. These valuations are based on the requirements set out in the Banking Act 2009 (the Banking Act) and the European Banking Authority's regulatory technical standards on pre-resolution valuations (the 'EBA RTS').[3]

Figure 1: Valuations required for the use of BRRD resolution tools

	Stage 1 *Pre resolution*	**Stage 2** *During resolution*	**Stage 3** *Post resolution*
1) Failing or likely to fail valuation *Updated regulatory balance sheet (on an accounting basis)*	Informs assessment of conditions for use of resolution tools		
2) Asset and Liability Valuation *Fair, prudent and realistic basis – hold or disposal basis*	Assesses the extent of losses that need to be addressed in resolution	Informs restructuring plan through scenario analysis	
3) Equity valuation *Estimated market value of equity reflecting resolution and restructuring*	Provides an indication of the post-resolution value of the firm	Informs the allocation of equity to bailed-in creditors	Determines NCWO compensation
4) Estimated insolvency *Estimated recoveries to creditors in a hypothetical insolvency counterfactual*	Provides a preliminary indication of potential NCWO risks	Provides an updated indication of potential NCWO risks	Determines NCWO compensation
	BRRD Article 36	*Additional steps for bail-in*	*BRRD Article 74*

Valuation 1: Failing or likely to fail valuation

2.3 The purpose of this valuation is to help inform the determination of whether the first condition for resolution is met, that being whether the firm is failing or likely to fail. In the UK, this determination would be made by the PRA after consultation with the Bank. A range of relevant information is likely to be considered when determining if a firm meets this condition for resolution. The EBA RTS contemplates this determination being made without reference to Valuation 1 if it is not yet available.

2.4 The EBA RTS requires that the valuation for the purposes of assessing whether the firm is failing or likely to fail must be made on the basis of fair and realistic assumptions. The valuation will be on the basis of the applicable accounting and regulatory framework, and therefore will be based on an updated balance sheet as submitted through regulatory submissions.

Valuation 2: Asset and liability valuation

The purpose of Valuation 2 is to estimate the extent of resolution action necessary (i.e. the extent of incurred and expected losses that need to be addressed) and inform the choice and use of resolution tools. This valuation involves a granular assessment of the balance sheet, valuing assets and liabilities based on the cash-flows the firm can expect on the basis of fair, prudent and realistic assumptions. The valuation will need to reflect the resolution actions being considered and the

[3] Commission Delegated Regulation 2018/345.

expected use and treatment of assets and liabilities. Accordingly, assets and liabilities will be measured on a **Hold Value** or a **Disposal Value** basis:

- *Hold Value:* Assets and liabilities should be valued at Hold Value where a firm is expected to continue operating a business, holding assets, or maintaining positions in financial instruments following entry into resolution. The EBA RTS defines hold value as *"the present value, discounted at an appropriate rate, of cash flows that the entity can reasonably expect under fair, prudent and realistic assumptions from retaining particular assets and liabilities, considering factors affecting customer or counterparty behaviour or other valuation parameters in the context of resolution"*. Hold value may, to the extent considered fair, prudent and realistic, anticipate a normalisation of market conditions, but must take into account all expected impairments to an asset over its lifetime, regardless of whether the asset is currently impaired.

- *Disposal Value:* Assets and liabilities should generally be valued at Disposal Value where a firm's assets and liabilities will be sold or transferred under a resolution action.[4] Disposal Value is defined by the EBA RTS as reflecting *"cash flows, net of disposal costs and net of the expected value of any guarantees given, that the entity can reasonably expect in the currently prevailing market conditions through an orderly sale or transfer of assets or liabilities*". Disposal Value should consider specific factors including advantages or disadvantages of a transaction to the parties involved. Disposal Value may also take into account estimated disposal costs and potential discounts for market illiquidity or accelerated sale taking account of market capacity. So while the concept of disposal value has some similarities to fair value,[5] different assumptions and overlays may need to be applied.

2.5 Both Hold Value and Disposal Value should be based on expected cash-flows, which could include expected cash flows from holding an asset or cash-flows from exiting a position in a transaction with the market. Key differentiating features between hold value and disposal value may include (but are not limited to):

- *Market conditions:* Disposal Value should be based on currently prevailing market conditions, whereas Hold Value may incorporate a normalisation of market conditions to the extent that this is consistent with the objectives of the valuation being fair, prudent, and realistic;

- *Cost of capital:* Disposal Value may be based on the cost of capital of an expected acquirer, whereas Hold Value should be based on the firm's anticipated cost of capital considering the impact of resolution and restructuring;

- *Operational costs:* When using Hold Value, valuations may incorporate expected operational costs of the firm associated with holding the asset over its lifetime (though it may be preferable to apply this adjustment at the level of the portfolio or business rather than the individual asset). When using Disposal Value, valuations may incorporate the expected operational costs of an acquirer;

- *Adjustments for market illiquidity:* where appropriate, Disposal Value should reflect discounts for market illiquidity or accelerated sale taking account of market capacity, to the extent not incorporated in the discount rate.

[4] Under the RTS, this may apply where a firm's situation prevents it from holding an asset or continuing a business, or where the sale is otherwise considered necessary by the resolution authority to achieve the resolution objectives.
[5] Throughout this guidance 'fair value' refers to fair value as defined under IFRS 13, that being *"the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."*

- *Disposal costs:* when using Disposal Value, valuations may incorporate the expected transactions costs associated with executing a disposal over the relevant disposal horizon. This would not be relevant when assessing Hold Value.

2.6 In a bail-in, Valuation 2 would need to assess the capital required to restore the firm to viability. It will therefore need to take into consideration the planned restructuring of the firm, which may include selling or transferring assets or liabilities following entry into resolution. While Hold Value may be the appropriate valuation basis in these cases, assets and liabilities may need to be valued on a 'hold-to-maturity' and/or 'hold-to-exit' basis reflecting the restructuring actions being considered. Assessing these valuations would in turn help inform the resolution and restructuring measures to be applied. A 'hold-to-exit'-type value may be based on cash-flows up to the point of exit, and the net cash-flow realised from exit. In this case, the cash flows realised may be treated as per Hold Value. The net cash flow realised from exit would be based on similar considerations to Disposal Value – though may reasonably reflect the intended timing of the disposal and the expected market conditions at that time (to the extent this was considered fair, prudent, and realistic).

2.7 Valuation 2 may also need to include relevant assets and liabilities that do not meet accounting recognition criteria. This could include contingent liabilities and off-balance-sheet items. It could also include provisions for restructuring costs, including for the continued operation of unprofitable business lines while restructuring is underway.

Valuation 3: Equity valuation

2.8 The purpose of the Valuation 3 is to estimate the market value of the equity of a firm post resolution. This valuation would take into account the potential (or actual) resolution action being considered (or undertaken).

2.9 In the context of a bail-in, the purpose of this analysis is to estimate the value of equity available to compensate bailed-in creditors.[6] The valuation should take account of the expected write-down or conversion of own funds or eligible liabilities, as well as the planned restructuring under the firm's business reorganisation plan. In a bail-in, this valuation serves two key purposes:

- *Informing decisions before and during resolution.* This valuation will be important to informing the calibration of the initial bail-in, and the subsequent allocation of equity to bailed-in creditors. This includes by illustrating potential NCWO risks. As such, this valuation should look to follow, as closely as possible, the expected approach to assessing actual treatment post resolution.

- *Determining NCWO compensation post resolution.* The market value of equity will likely underpin an estimate of the actual treatment received by creditors – as would be needed for the purposes of determining NCWO compensation. This assessment of actual treatment valuation will need to follow the approach set out in the separate EBS regulatory technical standards on valuations post resolution.[7] This includes by being based only on available information concerning facts and circumstances existing as of the date (or dates) at which equity is allocated to bailed-in creditors.

2.10 In the context of a share transfer resolution strategy, it may also be important to understand the market value of equity. For transfers to a private-sector purchaser, this includes assisting with the evaluation of bids in the interest of ensuring commercial terms are obtained.

[6] As per Article 10(5) of the EBA RTS.
[7] Commission Delegated Regulation 2018/344.

Valuation 4: Estimated insolvency outcome

2.11 The purpose of the Valuation 4 is to estimate outcomes for creditors had the firm had entered insolvency instead of resolution. Similarly to Valuation 3, this valuation serves two key purposes:

- *Informing decisions before and during resolution.* This analysis is also not explicitly considered in the EBA RTS, but is required under section 6E(7)(e) of the Banking Act. The analysis will help assess the potential NCWO risks around initial application of resolution tools, and (in a bail-in) the allocation of equity to bailed-in creditors. As with Valuation 3 above, this valuation should look to align as closely as possible with the separate EBS regulatory technical standards on valuations post resolution.

- *Determining NCWO compensation post resolution.* An assessment of outcomes for creditors in an insolvency counterfactual will be needed for the purposes of determining NCWO compensation. This assessment of actual treatment valuation will also need to follow the approach set out in the separate EBS regulatory technical standards on valuations post resolution. This includes by only being based on information about facts and circumstances which existed or could reasonably have been known at the resolution decision date.[8] This also includes by discounting expected cash-flows under normal insolvency proceedings, taking into account applicable insolvency law and practice in relevant jurisdictions.

2.12 In line with these regulatory technical standards, Valuation 4 would involve valuation of expected cash flows in insolvency, and the allocation of proceeds to creditors and shareholders in line with the hierarchy of claims under the relevant national insolvency law. The estimation cash flows from asset realisations in insolvency would have some similarities to Disposal Value. Potential differences may include, but are not limited to:

- The likelihood of assets generating cash flows, which may be different in insolvency compared to in going concern;

- The costs associated with the administrator or insolvency practitioner and other operating or funding costs that may differ in insolvency;

- The expected length of the disposal period, which would be based on the expected liquidation strategy, reflecting applicable national insolvency law;

- Market conditions during the disposal period, which may differ from the currently prevailing market conditions applicable to Disposal Value; and

- Any other discounts that may typically apply to transactions by entities in insolvency that may otherwise not apply when determining Disposal Value;

2.13 In carrying out Valuation 4 it may also be necessary to consider the application of statutory provisions regarding the determination of distributions under relevant national insolvency law (such as creditor hierarchies, or statutory interest rates applicable to claims in insolvency).

Expected process for valuations carried out before and during resolution

2.14 This section sets out the Bank's general expectation for the valuation process for an MREL firm. It intends to inform the capabilities that firms should put in place, and is not intended to prescribe a particular process that will apply in an actual resolution scenario. Note that this guidance does not

[8] Under the Bank's approach to bail-in, this is envisaged as the Friday of the resolution weekend.

provide any further discussion of the valuations carried out post resolution, given that these are not directly relevant to the capabilities required under the Valuations SoP.

Appointment of an independent valuer

2.15 For UK-led resolutions, the Bank would be required to appoint an independent valuer responsible for producing the valuations required for resolution.[9] The Bank would look to appoint a valuer within short notice following a decision that a firm is to enter heightened contingency planning for resolution in parallel to recovery. The Bank would seek to initiate heightened contingency planning with sufficient time to carry out the necessary preparatory work when there is potential for a material risk of resolution.

2.16 The Bank has a panel of valuation advisors that have been pre-selected for potential use as independent valuers in resolution. The selection of an independent valuer would depend on a number of factors, including whether or not a valuer had material conflicts of interest regarding the firm in question. The EBA RTS on independent valuers[10] establishes a framework for determining whether a potential valuer is suitably independent. An auditor who has completed an audit in the previous 12 months is restricted from being appointed as an independent valuer. However, other engagements with the firm would not necessarily restrict such an appointment where adequate safeguards could be put in place.

Roles and responsibilities

2.17 The **Bank** would be responsible for determining the resolution actions that would be taken as a result of the independent valuation. The Bank is expected to:

- Specify to the valuer the resolution actions that it is considering in respect of the firm and the information it requires to inform these actions (to the extent this is relevant to the valuations);
- Engage with other authorities (including relevant host authorities) around the valuations, including providing updates and seeking input where appropriate;
- Engage with the valuer and the firm throughout the valuation process to ensure an acceptable process is being followed; and
- Make decisions (in consultation with other relevant authorities) around the application of resolution tools based on the valuations provided.

2.18 The **independent valuer** would have ultimate responsibility for preparing the valuations. The independent valuer is expected to:

- Form judgements on valuation assumptions and methodologies to be used;
- Apply judgements to valuation analysis provided by the firms, including by performing a limited review of the firm's valuation capabilities; and
- Prepare firm-wide valuations and present these in a valuation report to the Bank.

2.19 The **firm** would have responsibility for supporting the preparation of the Valuations by the independent valuer. The firm is expected to:

[9] In certain circumstances the Bank may also carry out valuations itself if the Bank was carrying out a provisional valuation due to the urgency of the situation.
[10] See chapter IV of Commission Delegated Regulation 2016/1075.

- Provide the valuer with timely access to relevant data, information, and documentation;

- Facilitate the valuer's access to relevant personnel; and

- Run models and produce business forecasts based on the assumptions and level of granularity specified by the valuer.

2.20 Firms will need to make preparations in advance for how they will carry out these roles.

Timeframes and valuation dates

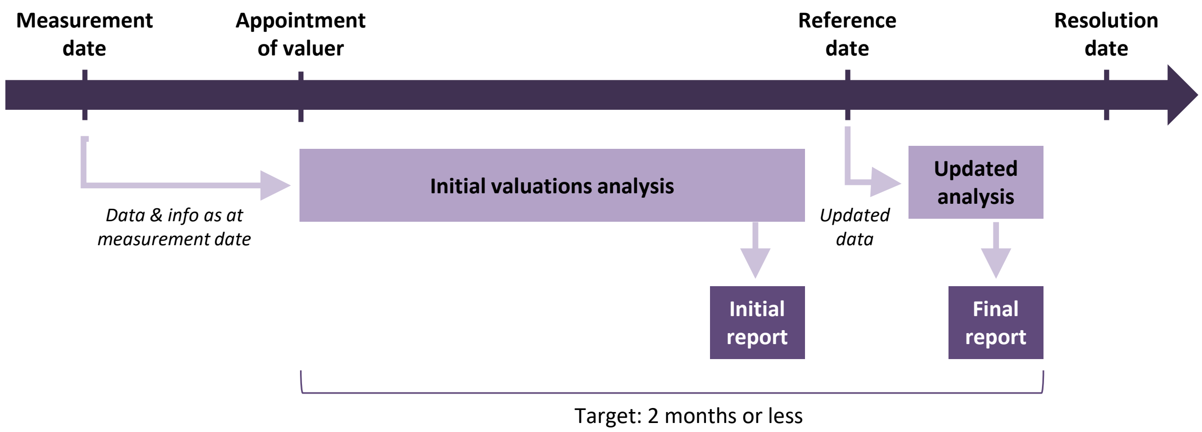
2.21 The Valuations SoP sets out an objective for timeliness whereby valuations needed to inform decisions around the initial application of resolution tools could be carried out within two months in the lead up to resolution.[11] This does not imply that two months will always be available.

2.22 The valuations prepared by the Bank-appointed independent valuer should ultimately be as at the **Reference Date**. The Reference Date is defined by the RTS as the date determined by the valuer on the basis of the date as close as possible before the expected date that a firm will be put into resolution. In practice, this date may not be determined at the point of appointing a valuer.

2.23 In practice, the Bank anticipates that a valuer will initially prepare valuations as at the **Measurement Date**. The Measurement Date is not a concept in the EBA RTS, but reflects that it will be necessary to choose a date at which valuations will be produced at the start of the valuation process. This date will be selected by the valuer or the Bank, and is likely to be a recent month-end or quarter-end prior to the valuer's appointment.

2.24 As the firm approaches the expected resolution date, the valuer will need to update the valuations from the Measurement Date to the Reference Date. This update may need to adjust valuations for known movements in valuations, reflecting factors such as liquidity flows, changes in loan balances, fluctuations in market prices, contractual maturities, and new transactions. This process is illustrated in Figure 2 below.

Figure 2: Expected timeline for valuations before resolution*



*NB: A further update to the resolution date may be needed following entry into resolution.

[11] Under paragraph 3.2(c) of the Valuations SoP, the Bank may consider it necessary for Valuations to be prepared under shorter timeframes to the extent that this was necessary and proportionate.

Expected steps in the pre-resolution valuation process

2.25 The valuation process in the lead-up to resolution will involve substantial interaction between the valuer and the firm in question. The process is expected to be highly iterative. For illustrative purposes, the process could involve the following steps that would commence once the Bank has initiated heightened contingency planning for resolution:

- The Bank would appoint a suitably independent valuer, and set out the scope of the valuations work, including the range of resolution and restructuring actions to be considered (which would be updated during the valuation process where relevant);

- The firm would begin initial preparation of relevant data, information and documentation, including by establishing and populating a data room[12] to facilitate a valuer's access to this;

- The valuer would submit an initial data and information request to the firm following appointment. This would likely cover information relating to the firm's assets and liabilities, as well as documentation of the firm's capabilities (e.g. model design, user guides) and the associated assurance procedures that have been undertaken;

- The valuer would review documentation of the firm's governance and assurance procedures to assess how much reliance it is willing to place on the firms' capabilities;

- The valuer will review the firm's data and supporting information, which may include identifying key sensitivities and historical trends, behavioural analysis, and other analysis. This will inform their assessment of input assumptions and overlays to be applied in carrying out the valuation;

- The valuer would meet with relevant personnel within the firm to help inform valuation assumptions and methodologies;

- Firms will then need to produce valuations for their assets and liabilities on an individual or portfolio basis using in-house models (alternatively, firms may provide the valuer direct access to these models, which the valuer would then run themselves);

- The valuer would carry out their own valuations, such as where the firm did not have suitable models, or as part of re-performance testing;[13]

- These steps may need to go through further iterations, including to obtain additional data and information, re-run valuation models using revised valuation assumptions, carry out sensitivity analysis, and reflect the intended action and information needs of the Bank;

- The valuer would collect, aggregate, and process these valuations taking into account other relevant information to produce the necessary valuations for the firm as a whole;

- The valuer will report to the Bank its initial valuations as at the Measurement Date;

- The Bank may update the valuer on the intended timing and nature of the resolution actions (including the post-resolution restructuring measures that are envisaged);

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[12] The Valuation SoP allows for firms to provide access to information through having robust and tested processes in place to ensure they could rapidly collate, and provide secure access to, relevant data and information as and when it was required for resolution. This may or may not include having a data room in place in business-as-usual or setting one up in the lead-up to resolution.

[13] Re-performance testing could involve the valuation of a limited sample of positions through separate models as part of assessing the reliability of a firm's own models.

- The valuer will update these valuations to the reference date based on data and analysis provided by the firm, reflecting the intended timing and nature of resolution actions specified by the Bank as appropriate; and

- The valuer would then present these valuations in an updated report to the Bank.

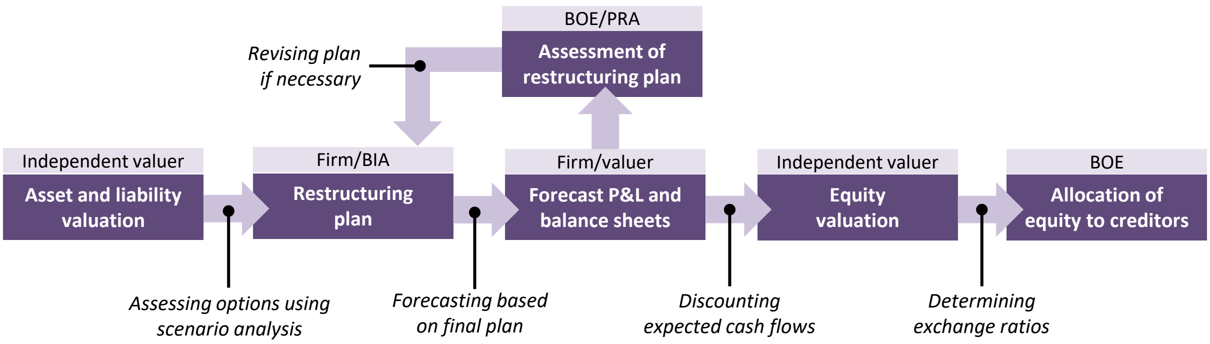
2.26 Under the timeliness objective of the Valuations SoP, these steps should be possible within a two-month timeframe. Some steps in the lead-up to resolution may fall outside of the two-month window, such as the selection of a valuer, and the final decision-making process around the application of resolution tools.

Additional steps during a bail-in resolution

2.27 The Bank's bail-in mechanic[14] provides additional time for final valuations to be carried out during a UK-led bail-in. On entry into resolution, bailed-in creditors will receive certificates of entitlement (CEs) to the equity in the firm in resolution. Before the firm exits resolution, valuations will be needed to inform the development of the firm's restructuring plan and the subsequent allocation of equity across CE holders. It is not intended that this analysis would represent a replacement valuation for the purposes of Section 48X of the Banking Act, unless the urgency of the situation meant that the Bank had needed to carry out a provisional valuation.

2.28 An overview of the expected valuation process during a bail-in resolution is set out in Figure 3 below. Note that further work may also be required during this period to provide a more robust assessment of Valuation 4 to help inform the Bank's setting of exchange ratios (i.e. the ratios by which a CE is exchanged for shares or other instruments). Valuations carried out during resolution may also incorporate an update from the Reference Date to the resolution date if these dates are meaningfully different.

Figure 3: Overview of valuations process during a bail-in resolution



2.29 For firms whose preferred resolution strategy is bail-in, it should be possible for valuations (notably Valuations 3 and 4) to be finalised in a timeframe to support exit from resolution within three to six months.[15] Firms would need to assist an independent valuer during this period by providing information, analysis, models, and access to personnel.

Consolidation of valuations

2.30 The Bank may ask a valuer to provide valuation analysis on both a consolidated and unconsolidated basis to help inform resolutions decisions. As a starting point, the Bank would expect

[14] For more detail on the Bank's bail-in mechanic see [The Bank of England's Approach to Resolution](), October 2017.
[15] As per paragraph 3.2(b) of the Valuations SoP.

to ask for consolidated valuations for the UK resolution entity. The following additional valuations may also be requested:

- Valuation 1 could also be requested for other regulated entities in the UK in order to evaluate whether these entities are failing or likely to fail. Any valuation analysis would likely be on the same consolidation bases as how the Group is supervised.

- Valuation 2 could also be requested for a firm's material subsidiaries in order to assess the write-down or conversion of internal MREL. This could be done on an unconsolidated basis, as well as a sub-consolidated basis if the subsidiary is supervised in that way.

- Valuation 3 could also be requested for equity holdings in subsidiaries or distinct businesses. This could be needed as part of Valuation 2, or as part of a Sum-of-the-Parts approach to Valuation 3 (discussed below). An analysis of interest and dividend flows throughout the Group may also be needed when preparing Valuation 3.

- Valuation 4 could also be requested for all entities that would be placed into insolvency in an insolvency counterfactual. This may be necessary in order to assess the recoveries that would eventually flow up to the UK resolution entity.

2.31 Additional valuations of overseas subsidiaries may also be requested to inform the assessments and decisions of the relevant overseas authorities in a UK-led resolution.

3 Valuations in the context of overseas-led resolutions

3.1 This section sets out how the Bank envisages the valuations required for the resolution of an internal MREL firm.

3.2 The home resolution authority of the group is expected to conduct group-wide resolution valuations in accordance with the Financial Stability Board's (FSB's) 'Principles on Bail-in Execution'[16] (where the home country is an FSB member jurisdiction). The home authority will likely be conducting valuations with similar objectives to those in the UK and will have access to a broader picture of losses and potential restructuring option throughout the group. This valuation analysis is likely to be conducted with the support of external advisors. It is likely that this will result in a substantially more robust analysis than could be conducted on a standalone basis in the UK. The valuation analysis may be conducted on a different valuation basis to that specified in the Banking Act.

3.3 To support the analysis conducted by the home resolution authority, and to assess the adequacy of recapitalisation, the Bank is likely to require one or more of the following analyses:

- Review and assessment of the robustness of valuations of the UK entities completed as part of the group-wide valuation (initiated by the home resolution authority);

- Solvent wind-down analysis (initiated by the PRA), or similar analysis to support an assessment of potential financial resource needs,[17] if trading book or business wind-down is viewed as a likely and credible restructuring option for the UK entities; and

- Where the above measures are not considered sufficient,[18] standalone valuation analysis in the UK (initiated by the Bank) to assess the extent of losses and the adequacy of recapitalisation of the UK entities. This is likely to be carried out with the support of a valuer appointed by the Bank. This analysis will be similar to Valuation 2, though may in practice differ from Hold Value or Disposal Value as defined in the EBA RTS.[19]

3.4 Firms should have capabilities in place to ensure these valuations could be carried out on a timely and robust basis, both prior to and following the resolution weekend.

3.5 For simplicity, the remainder of this guidance is structured around requirements and expected process for valuation in the context of UK-led resolutions. Internal MREL firms should consider how this may apply to them based on the resolution valuations framework applicable in their home jurisdiction. In particular:

- Emphasis should be given to the capabilities discussed for Valuations 1 and 2, which aims at estimating the accounting and economic value of a firm's assets and liabilities; and

- References to the independent valuer should be taken to mean the relevant party responsible for carrying out resolution valuations in the home jurisdiction.

[16] 'Principles on bail-in execution', June 2018: www.fsb.org/wp-content/uploads/P210618-1.pdf
[17] In an actual resolution this would not necessarily be in the form of the outcomes of the scenario defined under the SWD project. It may be analysis that draws on that capability to assess the potential range of losses that the UK entity might face.
[18] This includes where the Bank is legally required to obtain valuations itself, including if using the power to write-down or convert relevant capital instruments at the point of non-viability.
[19] The Bank would need to obtain valuations that complied with the EBA RTS where it used statutory resolution powers (such as the power to write down or convert relevant capital instruments at the point of non-viability).

Part 2 Firm capabilities in business-as-usual

This part provides guidance on the capabilities required to meet the expectations set out in the Valuations SoP, and therefore support the valuations set out in Part 1. The capabilities required will vary across firms, and firms should consider what would be required in their individual case. In particular firms should bear in mind:

- *Home jurisdiction: Under the Valuations SoP, MREL Firms should have capabilities in place to support valuation analysis discussed in Section 2, whereas Internal MREL firms should have capabilities in place to support the valuation analysis discussed in Section 3.*

- *Balance sheet/business model: Under the Valuations SoP, the degree of capabilities required is linked to the materiality of a given asset/liability class to the valuation of the firm as a whole.*

The first two sections of the Part provide guidance on the extent of capabilities required. Section 4 covers what the timeliness objective means for individual steps in the valuation process. Section 5 then looks at the identification of significant subsidiaries and material asset and liabilities classes.

The next four sections look at what the Bank envisages a valuer may need from the firms in terms of data and modelling capabilities. These sections look specifically at the capabilities to support Valuations 1- 4 respectively. Note that the capabilities to support Valuation 3 and 4 are less relevant to internal MREL Firms.

Note that the discussion of what a valuer may need is illustrative only. It does not specify an approach to implementing the Valuations SoP that firms must follow. Ultimately, firms will need capabilities in place that meet the principles set out in the Valuations SoP, and there may be ways to do this that differ from the measures set out below.

4 Timeliness of valuation capabilities

4.1 This section provides guidance on how the timeliness objective would apply to individual firms, and the implications of this for the capabilities that should be in place.

Timeframes for specific steps

4.2 The Valuations SoP sets out that a firm's capabilities should enable timely resolution valuations. It defines a timeliness objective for the end-to-end valuation processes before resolution, and in the case of a bail-in, during resolution. However, it does not specify the timeframes in which individual steps of the valuation process should be carried out. These timeframes may vary between firms. It is up to firms to consider what steps they would need to take in the valuation process, and what 'timely' would mean for each of these steps in their specific case .

4.3 Under Principle 6 of the Valuations SoP, firms should prepare operational documentation on how their valuation capabilities would be used in a resolution scenario. This includes detail on the timeframes and sequencing in which various steps in the valuation process would be taken (in addition to detail on the related roles and responsibilities, data sources, models, and procedures).

4.4 For a valuer to be able to carry out timely and robust valuations, it will be important that firms:

(a) Take into account all relevant steps in the valuation process, including steps that may need to be repeated as part of an iterative process;

(b) Provide sufficient time for each step, having regard to the likely resource demands on the valuer and the firm at the time (including those related to business-as-usual and recovery-related activities);

(c) Account for the dependencies between various steps in the valuation process

(d) Take into account the need for an update in valuation from the Measurement Date to the Reference Date (discussed further below); and

(e) Plan with appropriate prudence, which may mean including buffers where there is a reasonable degree of uncertainty around how long a step or set of steps would be expected to take.

Firm-specific timeliness objectives

4.5 The timeliness objective in the Valuations SoP specifies a two-month timeframe in which pre-resolution valuations should be possible. However, it also specifies that valuations should be possible in quicker timeframes where the nature of a firm's business is such that the firm was particularly exposed to rapid changes to solvency or liquidity.

4.6 The Bank considers it necessary and proportionate that firms that are primarily engaged in trading activities have capabilities to support robust valuations in the same timeframes as may be expected for a substantive refresh of a firm's solvent wind-down analysis. This reflects the fact that less time may be available to undertake contingency planning for trading firms given the potential volatility in the value of trading-book positions.

4.7 For other firms, similar considerations on timeframes may still apply depending upon the nature of the firm's business. In particular, this may apply where firms still have material trading books. It may also apply where the prudential soundness of the firm is otherwise particularly impacted by credit rating or market sentiment towards the firm.

Update of the valuations

4.8 As discussed in Section 2 above, valuations may need to be updated from the Measurement Date to the Reference date within a short timeframe. This would help ensure the robustness of valuations, especially given the potential for significant movements in the financial condition of the firm and the market more broadly in the lead up to resolution. These considerations would be relevant to all firms, including those that did not have a firm-specific timeliness objective

4.9 To carry out this update in a timely and robust manner, a valuer may need the firm to have capabilities to rapidly provide updated data, information, and analysis. This is consistent with Principles 1 and 2 of the Valuations SoP, which require that firms have data and models available to enable timely and robust valuations. Firms should therefore consider how they would support a valuer in this update process. The extent of capabilities that may be needed for a given position would depend on the extent to which there may be material movements in the underlying value of that position in the lead-up to resolution. In some cases, it may be sufficient to apply manual overlays to valuations as at the Measurement Date. In other cases, the underlying valuation model may need to be re-run in a short timeframe.

The extent of business-as-usual capabilities required

4.10 Understanding how quickly specific steps will need to be undertaken will help inform what capabilities would be needed to support timely and robust valuations. This includes determining whether it would be sufficient to rely on processes deployed in the lead up to resolution (e.g. to collate data, build models) rather than ongoing collection of information, development and maintenance of systems, and production of analysis in business-as-usual. The Bank expects that a firm would only rely on such processes where it can credibly demonstrate that these would be sufficient to achieve the objectives of the Valuations SoP. This may apply where, in meeting the principles of the Valuations SoP, a firm relies on:

(a) A robust and tested process for setting up a virtual data room at short notice as opposed to maintaining one in business-as-usual;

(b) A valuer developing and applying model(s) in the lead up to resolution as opposed to the firm maintaining the model(s) itself in business-as-usual; [20] and/or

(c) Other processes to rapidly prepare resolution-specific information or analysis, as opposed to maintaining and refreshing this in business-as-usual.

4.11 Where a firm does rely on processes to be deployed in the lead-up to resolution, the Bank may place additional emphasis on the documentation and assurance Principles of the Valuations SoP. In particular, firms will need to be able to demonstrate (in line with these Principles) that these processes are clearly and concisely documented, have been subject to testing by the firm, and have been revised to address any identified shortcomings. This will be crucial to ensuring the effectiveness of the processes in practice. Further detail on the Bank expectations on these matters is set out in the Valuations SoP.

[20] Further discussion on the need for firms to have their own models in place is discussed in the following section.

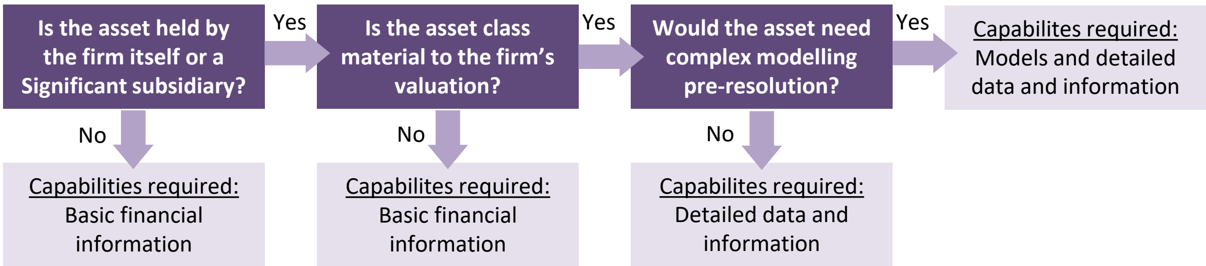
5 Scope of valuation capabilities

5.1 Under the Valuations SoP, the extent of capabilities a firm should have in place depends on the significance of a subsidiary, asset class, or liability class to that firm's valuation. This section provides guidance on identifying the scope of capabilities required.

5.2 At a minimum, Principle 1 stipulates that firms should have capabilities to provide basic financial information across all entities and asset classes within their Group.[21] This includes balance sheet information and information on creditor hierarchies, asset encumbrance, and intragroup exposures.

5.3 Additional capabilities should be in place for 'material' asset and liability classes held by 'significant' subsidiaries. The extent of capabilities required is illustrated in the diagram below.

Figure 4: decision tree for determining scope of capabilities required



Significant subsidiaries

5.4 Under the Valuations SoP, additional capabilities would be needed for the UK resolution entity (i.e. the firm) and all of its significant subsidiaries. This is defined as subsidiaries *"where timely and robust valuations of the subsidiary (or group of related subsidiaries) would be needed to adequately assess a firm's losses, recapitalisation needs, or post-resolution equity value"*. At a minimum, significant subsidiaries include all subsidiaries that meet the criteria for 'material subsidiaries' set out in the Bank's MREL Statement of Policy.

5.5 Firms would also need to identify any significant subsidiaries that do not meet the criteria for internal MREL, but could otherwise be significant to the firms' valuation. This could include subsidiaries that are sizable in terms of their total assets, or the percentage of the firms consolidated assets, revenues, or profits. There may also be groups of related subsidiaries which may be collectively significant to the firm's valuation, such as where a significant business books assets across multiple subsidiaries. Firms should also consider the overall percentage of the group that significant subsidiaries represent, and seek to ensure that the residual would not itself be material.

5.6 The identification of significant subsidiaries should not deter firms from having capabilities in place for non-significant subsidiaries, such as where capabilities are centralised.

Material asset and liability classes

5.7 For the purpose of this guidance, an asset or liability 'class' represents a group of assets and/or liabilities for which the same valuation methodology could be applied, given that positions are fundamentally similar in key financial characteristics. An asset or liability class may be comprised of multiple types of products, items, or instruments. It will generally be more granular than the line items used for financial reporting purposes, though may align with line items used in a firm's

[21] For the purposes of this guidance, 'group' should be taken to include the firm and subsidiaries that are directly or indirectly owned by the firm. It does not include the parent entities of the firm or subsidiaries thereof in which the firm does not have an ownership stake.

management accounting. A class would generally be defined at the level of granularity where a single valuation methodology (potentially with differing input assumptions) could be used without needing further granularity to produce a robust valuation of the firm.[22]

5.8 Under the Valuations SoP, the extent of valuations needed for a given asset or liability class would depend on two key factors:

(a) *Materiality*: At a minimum, additional data and information should be available on material asset and liability classes to enable a timely and robust assessment of value. Under Principle 2 of the Valuations SoP, an asset or liability class would be considered material *"where its misvaluation could plausibly impact the robustness of resolution valuations of the firm, taking in to account the associated level of valuation uncertainty, and its significance to the firm's balance sheet and business model"*. Firms should consider asset/liability classes not only based on the percentage of group assets, revenues, and/or profits that they represent, but also on their potential significance in resolution and the scope for misvaluation. Firms should consider the overall percentage of the group that material asset/liability classes represent, and seek to ensure that the residual would not itself be material.

(b) *Modelling complexity:* Under Principle 2, models would be required for material asset and liability classes where *"it is not reasonable to expect that a suitably robust valuation model could be developed and deployed on a timely basis in the lead up to resolution, taking into account the overall complexity of the valuation task"*. This may include (but is not limited to) loans held at amortised cost, financial instruments that fall within levels 2 or 3 of the fair-value heirarchy, and complex securitisation structures. However, modelling complexity will be firm specific. For example, valuing the residential mortgages of a smaller and simpler firm may be relatively straightforward for a valuer, yet in other cases it could be practically difficult given the sheer quantity of positions or the need for a valuer to focus its efforts on other more intricate aspects of the valuation task.

Modelling exemption for smaller and simpler firms

5.9 Under Principle 2, a firm may identify that they would not need to have any valuation models in place in business-as-usual to comply with the Valuations SoP. The Valuations SoP sets out the criteria for determining whether a firm would qualify for this exemption.

5.10 Indicatively, the Bank sees it as unlikely that a firm would qualify for this exemption where:

(a) Level 2 and 3 financial instruments held at fair-value (i.e. that did not had observable prices in liquid markets) collectively constituted a material asset and/or liability class for a firm;

(b) Loans to businesses (treated as a single asset class) represented a material asset class for a firm, and would reasonably need to be valued as a heterogeneous portfolio (for example due to differences in collateral arrangements, contractual terms, and borrower characteristics) [23];

[22] For example, it may be possible to value all performing residential mortgages using the same methodology, though this methodology may need to be adapted for non-performing loans, or SME loans to ensure the valuation of the firm is robust. In this case, performing residential mortgages would be considered an asset class. If non-performing and performing loans could reasonably be valued using the same methodology, residential mortgages would be considered a single asset class.

[23] As a point of reference, residential mortgages would typically be viewed as a homogenous portfolio. A valuer may reasonably calibrate assumptions across tranches of the portfolio rather than across individual exposures. This may be consistent producing robust valuations given that these loans tend to have similar contractual terms and are issued to households and secured on the same type of collateral. By contrast, business lending may not lend itself to such an approach where loans may be to very different types of businesses with different collateral arrangements and lending terms. Further discussion on the valuation of heterogeneous loan portfolios is contained in section 7.

(c) A firm has several or more distinct material asset/liability classes that would require complex modelling, such that a valuer would not reasonably be able to do this modelling themselves in the timeframes required; and/or

(d) The quantum of data points for one or more material asset class is so large that providing and using data could present significant practical challenges.

5.11 In addition, Principle 2 states that, to qualify for this exemption, a firm must have robust and tested capabilities in place to provide sufficiently rapid access to complete and accurate data and information. In line with Principles 5-7, it will be important that these capabilities involve:

(a) Clearly defined roles and responsibilities, including a single point of contact for dealing with the valuer;

(b) Clear and concise operational documentation for how data and information would be made available in practice; and

(c) Testing of these capabilties to assess whether processes would work as intended in practice and to identify areas for improvement.

6 Capabilities to support Valuation 1

6.1 This section sets out what the Bank envisages that a valuer may need to carry out a timely and robust assessment of Valuation 1. This aims to assist firms in identifying what capabilities they should have in place in order to comply with Principles 1-4 of the Valuations SoP.

Data and information supporting valuation

6.2 A valuer may need timely access to the latest available financial information (at the Measurement Date). This information could reasonably be in the form of those balance sheets submitted to the PRA under the EBA's financial reporting (FINREP) requirements, including the detailed annexes.

6.3 A valuer might also need timely access to:

(a) *Data and information to support the revision of provisions.* A valuer may need to review the book value of asset/liability classes that are impaired in resolution, or that contain significant accounting estimates. For these assets and liabilities, a valuer may need timely access to information supporting their book value, including impairment analysis, provisioning analysis, and third-party valuations (where available). This could also include information on the historical performance of the portfolio or assets, analysis of stress testing data, and the basis for deriving probability of default (PD) and loss-given-default (LGD) and other significant valuation assumptions (e.g. the key assumptions used to assess provisions and contingent liabilities).

(b) *Data to support the update of valuations to the Reference Date*. The book value[24] of a given asset or liability class may move between Measurement Date and Reference Date. For asset/liability classes that are subject to significant movements in book value over this period, a valuer may need the firm to rapidly update relevant data on an intra-month basis. In other cases, data from a more recent month or quarter end might be considered sufficiently up-to-date. The degree of timeliness needed will ultimately depend on the need to ensure robust valuations even if the firm experiences plausible but extensive movements in financial position in the lead up to resolution.

Models supporting valuation

6.4 In some cases, firms will use models to support the evaluation of book value of their assets and liabilities. For material asset and liability classes, these models may need to be re-run on a timely basis reflecting the views of the valuer around key input assumptions. These models could include:

- Valuation models used for the financial reporting of assets and liabilities held at fair value;
- Models used for producing impairment analysis for financial reporting purposes;
- Provisioning models used for financial reporting purposes; and
- Other internal models used for calculating significant accounting estimates.

6.5 For those asset/liabilities that are subject to significant movements in value in the lead-up to resolution, a valuer may need these models to be re-run closer to the reference date to support a robust update of Valuation 1. A valuer might also use this analysis to support an update of Valuations 2-4 where relevant (for example, by applying overlays and adjustments to the valuations initially carried out as at the Reference Date).

[24] For the purposes of this guidance, 'book value' is the value at which an asset or liability is held under the firm's financial statements in accordance with the applicable accounting rules.

7 Capabilities to support Valuation 2

7.1 This section sets out what the Bank envisages that a valuer may need to carry out a timely and robust assessment of Valuation 2 (the asset and liability valuation). It aims to assist firms in identifying what capabilities they should have in place in order to comply with Principles 1-4 of the Valuations SoP.

7.2 For simplicity, this guidance uses the term 'economic value' to represent Hold Value or Disposal Value for MREL firms, or a suitably equivalent valuation basis for internal MREL firms. A valuer may need to assess either or both of Hold Value and Disposal Value (or equivalents), and a firm's capabilities would need to support this (in line with Principle 3 of the Valuations SoP). This may be achieved through ensuring sufficient flexibility around the choice of valuation assumptions by the valuer (in line with Principle 4 of the Valuations SoP).

Assets

Cash and balances at central banks (and cash equivalents)

7.3 In addition to the financial reporting capabilities discussed for Valuation 1, a valuer may need information on encumbrance of these assets where relevant.

Financial instruments held at fair value

7.4 This category covers trading portfolio assets, derivative assets, financial assets designated at fair value and financial investments. For these assets, a valuer may need to rely on the firm's assessments fair value, and to apply adjustments or overlays where necessary to reflect their views on economic value. A valuer may also need to carry out sample testing of certain portfolios to gain comfort around relying on the firm's own valuation models.

Data and information supporting valuation

7.5 A valuer may need the following data and information to support the adjustment of fair values to economic values:

(a) Portfolio-level fair values;

(b) Position-level fair values and the data underlying these, in order for a valuer to carry out more granular analyses (e.g. on a sample basis) if needed;

(c) Information to support the calculation of the bid/offer adjustments;[25]

(d) Detail on identified concentrated positions (if any), including position-level information and external market data to support the estimation of an appropriate valuation adjustment;

(e) Data and information to support the estimate of operational costs associated with holding the portfolios of financial instruments for the expected holding period or the period up to disposal; and

(f) For derivatives, data and information to support the re-calculation by an independent valuer of specific portfolio-level adjustments, which may include: Credit valuation adjustment (CVA), debit valuation adjustment (DVA), funding valuation adjustment (FVA), capital valuation adjustment (KVA), and other relevant valuation adjustments applied by the firm.

[25] For derivative financial instruments this should include counterparty netting sets and net risk metrics.

7.6 A valuer may also need data to be clearly cross-referenced, so that they are able to rapidly identify where data across various sources relates to a single counterparty. This is consistent with the expectations under Principle 1 of the Valuations SoP.

Firm models supporting valuation

7.7 A valuer may need valuation models to be in place to estimate economic value for individual positions, unless there is a reasonable degree of certainty that a position would have an observable price in a liquid market in a resolution scenario. Firms should consider how they would estimate fair values where there is a reasonable likelihood that positions currently 'marked to market' would have to be 'marked to model' in a resolution scenario

7.8 A valuer may need to apply adjustments and overlays to the firm's fair values in order to assess economic value. To do so, a value may need a firm to have models that support the estimation and application of these adjustments. These adjustments could include, but are not limited to:

(a) Mid-market to bid/offer price adjustments;

(b) Adjustments to reflect the illiquidity of concentrated positions;

(c) Adjustments to reflect operational costs associated with holding the portfolio;

(d) Adjustments to reflect losses arising from expected counterparty behaviour following entry into resolution; and

(e) For derivatives, CVA, DVA, KVA and FVA portfolio-level adjustments.

7.9 In line with capabilities for Valuation 1, a valuer may need valuation models for these assets to be re-run to support a robust estimate of economic value as at the Reference Date. The Bank expects that consideration would be given to the expected materiality and potential volatility of a given input or adjustment when determining how quickly it may need to be refreshed in the lead-up to resolution.

Box 1: Potential links to Prudent Valuation capabilities

Firms are required to calculate Prudential Valuation (PruVal) adjustments for capital adequacy purposes. PruVal adjustments pertain to Additional Valuation Adjustments (AVAs) made to assets held at fair value. These adjustments reflect both valuation uncertainty and factors affecting the valuation itself that may not be reflected in fair value. A firm's capabilities to estimate and apply these adjustments may support the evaluation of economic value for the purposes of Valuation 2. Relevant adjustments may include

(a) *Concentrated positions AVA*, which reflects the costs of disposing a concentrated position in an accelerated timeframe that are not captured in fair values;

(b) *Future administrative costs AVA*, which reflects all incremental staffing and fixed costs that will be incurred in managing the portfolio (to the extent that positions cannot be fully exited);

(c) *Early termination AVA*, which reflects all potential losses arising from non-contractual early terminations; and

(d) *Operational risk AVA* which reflects potential losses arising from operational risk relating to the valuation process.

Other AVAs related to uncertainty may also be useful in applying “prudent”overlays to the extent this is relevant to economic value.

For a valuer to leverage a firm’s PruVal capabilities, it will be important that capabilities are sufficiently flexible to reflect the valuer’s judgements, sufficently granular to be considered robust, and sufficiently supported by relevant information that a valuer could review.

Box 2: Potential links to Solvent Wind-Down capabilities

The PRA requires certain firms to prepare Solvent Wind-Down (SWD) plans for their trading portfolios. These plans primarily aim to assess a firm’s capital and liquidity position through a hypothetical wind-down scenario, rather than to produce a valuation of a firm’s trading book as a whole. However, the capabilities that firms have in place, or may put in place, to operationalise the production of these plans may assist with the production of resolution valuations. This could include the assessment of economic value for Valuation 2, as well as the forecasting of net recoveries as part of Valuation 4 (discussed further in section 9 below).

Potential similarities and differences between previous SWD exercises and resolution valuations may relate to:

(a) *Wind-down scenario*: Previous SWD exercises have been based on hypothetical stress scenarios specified by the PRA. Resolution valuations would need to refelect the actual scenario at hand, reflect the views of a valuer around future market conditions, and include sensitivity analysis.

(b) *Wind-down strategy:* Under SWD, firms are responsible for determining the wind-down strategy that achieves the objective of reducing risk as quickly as is prudent and rational while seeking the economically optimal outcome. In a UK-led resolution, the wind-down strategy would form part of the firm’s restructuring plan, which would be developed with input from the Bank, other relevant authorites, and the Bank’s advisors. The desired outcome is likely to be similar, though the restructuring plan would need to have due regard to regulatory objectives.

(c) *Estimation of realisable value:* SWD plans should involve adjustments to fair values where needed to reflect the amount that could actually be realised through exiting a position. This is similar to what is required for assessing Disposal Value, though Disposal Value may differ to the extent it is required to be “prudent” and based on the views of an external valuer.

(d) *Extent of wind-down:* Under SWD, certain positions may not be exited over the wind-down period and left in the so-called ‘rump’. This may include where it is not possible or economically sensible to exit a position during the wind-down period. Resolution valuations would also need to incorporate positions that would not be exited. However, they may need to reflect a broader range of restructuring options, potentially including options that did not involve the wind-down of the firm’s trading book or key parts thereof.

(e) *Franchise value:* SWD plans may incorporate a degree of franchise value for portfolios or business sold as a whole. However, they assume no new business would be generated by the firm in wind down. Resolution valuations may need to incoporate new business generated by the firm in resolution where relevant.

(f) *Operating costs:* SWD plans account for the operational costs of winding down a book, and of holding certain positions to maturity. This analysis could also be relevant to resolution valuations. However, resolution valuations may need to reflect the operating costs of a firm continuing a business indefinitely post-resolution (though a portion of these costs may be attributable to new business).

One motivation behind SWD exercises to date has been to support policy development on a steady state framework for SWD planning. This steady state is still under consideration. However, it is likely to place greater emphasis on the operationalisation of SWD planning, including capabilities to refresh scenarios, wind-down strategy and market values at short notice based on the facts and circumstances at hand. These capabilities are expected to deliver much of what would be needed for resolution valuation purposes.

Loans and advances to banks

7.10 A valuer may need the firm to provide a detailed breakdown of the firm's loans and advances to banks, including any impairment analysis undertaken for exposures to distressed counterparties. For impaired positions, a valuer may need to revise the firm's impairment analysis through adjusting input assumptions or applying overlays.

Loans and advances to customers

7.11 This subsection focusses on loans and advances held at amortised cost. Loans and advances held at fair value may reasonably be considered as falling under this section, or under the section above. In general, the estimation of economic value for loans and advances is expected to involve projecting expected future cash flows of a loan or group of loans, and discounting these cash flows at an appropriate discount rate.

7.12 This subsection contains guidance on what capabilities a valuer may need for loans and advances to customers in general, as opposed to covering different product types individually. In practice, loans and advances to customers may consist of multiple asset classes with different financial characteristics. These could cover a range of lending products as well as performing and non-performing loans. A valuer may need to adapt their valuation approach to reflect differences in financial characteristics. To do so, they may need product-specific data and information, flexible valuation models, and/or multiple valuation models for each of the material loan classes of the firm in question.

7.13 This subsection does however distinguish between the capabilities that a valuer may need for homogeneous portfolios and those they may need for heterogeneous portfolios.[26] For simplicity, this subsection focuses primarily on homogeneous portfolios. Additional considerations for heterogeneous portfolios are then covered at the end of the subsection.

Loan-level data supporting valuation

7.14 The loan-level data needed by a valuer may differ based on whether a firm maintains its own models for estimating economic value of a given loan portfolio. Specifically:

(a) *Where in-house models are maintained*, models may use data directly from source systems and databases. A valuer may need to familiarise themselves with this data on a timely basis to inform their use of the firm's models. They may need the firm to support their review of loan data by providing, for example, direct access to the data source, sample data-tapes, and/or detailed summary statistics on the portfolio. However, they may not consider it necessary or practical to see loan-level data on the entire book.

[26] Heterogeneous portfolios are those which contain exposures of distinctive characteristics which are necessarily evaluated at the exposure level. In contrast, homogeneous portfolios are those which contain exposures of similar characteristics which can be evaluated at a segmental level. Generally speaking, consumer lending portfolios are considered to be homogeneous or partly homogeneous and corporate lending portfolios are considered to be relatively less homogeneous and more heterogeneous.

(b) *Where in-house models are not maintained*, a valuer would need timely access to loan-level data tapes containing all relevant data fields to carry out a robust estimate of economic value. Data tapes would need to be in a format that would enable a valuer to use this data in their own models without undue delay. By way of example, these data tapes could include:

- The mandatory fields of the data tape templates used for submitting data to the Bank for eligible collateral under the Stirling Monetary Framework (SMF);

- The mandatory fields of European Central Bank's loan-level data templates could be considered for portfolios without a relevant SMF data tape; or

- The fields contained in other industry-recognised templates that are commonly used in estimating economic value for loan portfolios.

In addition, a valuer may need data tapes to include fields for the legal entity in which the loan is recognised[27] and the line item under which the loan is recorded for financial reporting purposes.

7.15 Under either approach, a valuer may need to see documentation containing definitions of the data fields used by the firm (i.e. a 'data dictionary'). This data dictionary would need to be in a format that is readily understandable by a valuer, including by using or referring to definitions from industry-recognised data templates where relevant. If certain data fields are calculated separately, the associated field definitions would include reference to the model, system or process used to determine them. This is consistent with the expectation in Principle 6 that valuation capabilities be documented.

7.16 A valuer may need data to be clearly cross-referenced, so that they are able to rapidly identify where data across various sources relates to a single borrower or exposure. A valuer may also need the firm to provide a reconciliation analysis between the loan-level data source and the relevant balances in the financial reporting information provided for Valuation 1. This is consistent with the expectations under Principle 1 of the Valuations SoP.

Additional data and information supporting valuations

7.17 Under Principle 1 of the Valuations SoP, additional data and information should be available to support the valuation of loans and advances, regardless of whether or not models are maintained. For homogenous portfolios, a valuer may accept this information at the level of loan 'segments' rather than at the level of the individual loan.

7.18 A valuer may need firms to have carried out segmentation analysis in business-as-usual to identify segments of loans across which homogenous valuation assumptions could be applied. This segmentation analysis would enable a valuer to form a high-level view of the portfolio and determine the basis for application of valuation assumptions. A valuer would ultimately determine the appropriate segmentation, and may need the firm's segmentation analysis to either be dynamic (i.e. an alternative analysis could be produced at short notice), or suitably granular to enable alternate segmentations. In general, this segmentation of the portfolio could be based on a number of factors which could include contractual terms, performance status, collateral characteristics (such as geographic location and loan-to-value ratio), and borrower characteristics (such as age, employment status and income).

7.19 For each of these segments, a valuer may need the firm to have the following information:

[27] Where the legal title of the loan and the beneficial owner are not the same entity further detail would also be included.

(a) *Monthly historical payments data* covering the full term since issuance for recently issues loans, or, for mature portfolios, a recent period of suitable duration in order to reliably analyse the data and support the determination of valuation assumptions. For each period, this could include the following information:

- Balance outstanding at period-end;
- Contractual payments due in that period;
- Actual payments made in that period;
- Non-contractual drawdowns/advances in period;
- Months in arrears multiple at period-end;
- Balance outstanding of loans in default; and
- Recoveries and losses realised in that period.

(b) *Historical performance metrics* relating to the key valuation assumptions that would be used in estimating economic value. This could include, but is not limited to:

- Actual default rates (or roll-rate analysis);
- Actual 'cure rates' (i.e. of loans that were non-performing but become performing again);
- Actual arrear rates (e.g. one month, two months, and three months past due);
- Actual prepayment rates (overpayment rate and early repayment rate); and
- Actual loss given default rates.

(c) *Operating costs information* supporting the estimation of the marginal operating costs attributable to a given loan segment.

(d) *Weighted average portfolio metrics* providing additional summary information for each of the segments identified in cases where a firm had its own models and did not intend to provide a valuer with a data tape. These metrics would cover the key loan characteristics relevant to the projection of net cash flows.

7.20 A valuer may need access to loan documentation to assess (on a sample basis) the accuracy of the firm's data. Access to this documentation may also be needed to enable an assessment of the enforceability of the loans and any associated collateral.

7.21 A valuer may need information on the firm's approach to forbearance and on the work-out strategies the firm applies to defaulted loans.

7.22 A valuer may also want the following information:

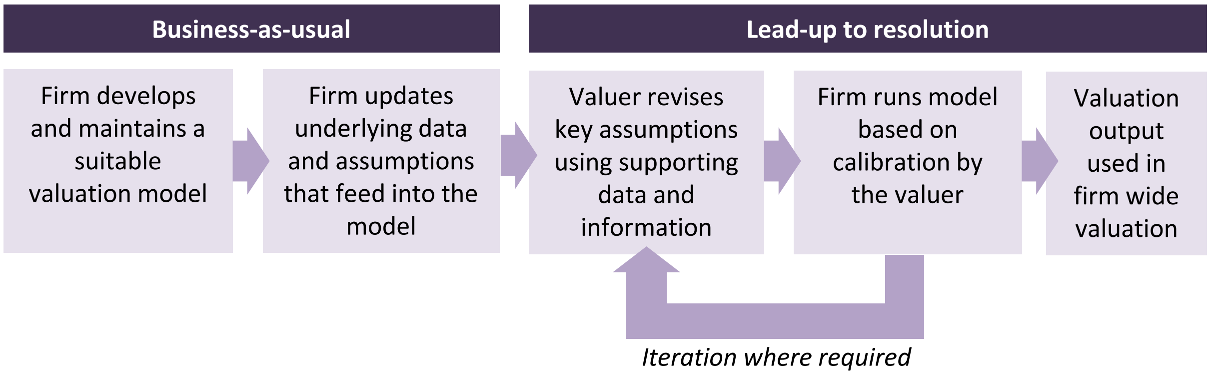
(a) Analysis to support a valuer's assessment of the appropriate discount rate for estimating economic value; and

(b) Data and information with regards to the traded prices observed in secondary markets for syndicated and other traded loans, or price information from recent loan portfolio transactions, would be maintained and available if needed to cross-check portfolio valuations.

Firm models supporting valuation

7.23 The diagram below sets out how models may be used in carrying out resolution valuations. This subsection describes what a valuer may need in terms of the models that would be used as part of the process in relation to loans and advances.

Figure 5: Expected process for using a firm's models in resolution valuations



7.24 Firstly, a valuer may need the methodologies used by these models to have the following characteristics:

(a) The model projects the components of the net expected cash flows for each loan or segment, including:

- *Gross contractual cash flows,* which are projected based on the terms of the loan (or weighted average terms of a segment) and expected future interest rates for variable rate loans;
- *Non-contractual cash flows,* which may include overpayment, early repayment and non-contractual draw-downs (e.g. additional spending on credit cards, draw-down on revolving facilities) projected based on expected customer behaviour;
- *Adjustment for defaults*, which would reflect the likelihood of default and the cash flows pertaining to the subsequent net recoveries following default.[28]

(b) The model discounts the loan-level or segment-level net expected cash flows at a discount rate that could be specified by the valuer.

(c) The model incorporates the impact of operating costs, either through the expected cash-flows or the discount rate.

7.25 Secondly, a valuer may need the firm to provide existing analysis on the key assumptions of the valuation model. The analysis would be formatted such that it could be inputted directly into the relevant valuation model. Specific models could be used to produce this analysis based on historical data and information, relevant macroeconomic indicators, intended work-out strategies, and other relevant variables.

7.26 Thirdly, a valuer may need the models to have the following functionality to enable them to apply their own assumptions in a resolution scenario:

[28] Net recovery assumptions for secured lending may include current collateral value, expected collateral growth, foreclosure costs and time to recovery. Alternatively this may be expressed in terms of loss given default.

(a) The key valuation assumptions used to project the net expected cash flows could be revised at short notice to reflect the views of a valuer. These assumptions could include:

- Expected non-contractual advances/drawdown rates;
- Overpayment rates/early repayment rates;
- Probability of default (or 'roll-rates');
- Net recovery assumptions following default; and
- Marginal operational costs.

(b) Where these valuation assumptions were produced by the model itself (rather than an exogenous model input), it would be possible to apply overlays to these at an appropriate degree of granularity.

(c) Where these valuation assumptions were produced by a separate model, the calibration of these models could also be revised at short notice to reflect the views of a valuer.

(d) The model could apply valuation assumptions at the loan-level or at the segment-level (based on the same segments as under the segmentation analysis).

(e) The model would enable relevant valuation assumptions (including discount rates) to be held constant or have a term-structure as specified by the valuer.

(f) Where a data source contained valuation assumptions that are subject to review and revision by a valuer, it would be possible to update the data source accordingly during the valuation process. This would not interfere with other business-as-usual processes that may rely on that data source.

7.27 Fourthly, a valuer may need the model to provide outputs on an aggregated basis as required. These outputs could include:

- Valuations of loans and advances at a suitable level of granularity for Valuation 2;
- Cash flow projections at a suitable level of granularity for Valuation 4;
- Future expected valuations at a suitable level of granularity for Valuation 4; and
- Sensitivity analysis for key valuation assumptions.

Additional considerations for heterogeneous portfolios

7.28 For heterogeneous loan portfolios, a valuer may need firms to have the following capabilities in place in addition to those covered above:

(a) *Significant exposure analysis:* An analysis of significant exposures that identifies the exposures for which a valuer may reasonably look to apply a loan-level or connection-level[29] valuation approach. This analysis would identify the largest connections with a view to ensuring that substantially all of the portfolio *by value* could be valued this way.[30] The analysis would also identify other exposures that may need to be valued individually, such as those that are non-performing and/or impaired.

(b) *Additional connection-level data and information:* Supporting data and information for significant exposures identified as part of the analysis above. This data and additional

[29] In this context, a 'connection' refers to a group of affiliated entities to which a firm has lending or other exposures. This includes direct exposures and exposures arising as a result of cross-collateralisation and inter-affiliate guarantees.

[30] This would not necessarily cover substantially all, or even a majority, of connections *by number*. In practice, a disproportionate amount of the portfolio's value will correspond to the largest connections.

information would provide sufficient detail on the structure and risk of an exposure to facilitate a loan-level or connection-level valuations. Data and information would be presented in a readily understandable format and would cover:

- An overview of the connection (i.e. the facilities in place, the legal entities these are provided to, and the relationship between these entities);
- Summary descriptive and financial information on the borrower;
- Credit quality metrics and past performance against debt covenants;
- Information on the collateral held against the facilities (and any cross-collateralisation);
- Information on any guarantees applicable to the facilities; and
- Information on the netting and set-off arrangements related to the facilities.

(c) *Models:* Valuation models where valuation assumptions could be applied at the loan-level or connection-level for selected exposures. It would also be possible to calibrate valuation assumptions across multiple other exposures without needing to carry out detailed exposure-by-exposure analysis (such as by using a dynamic function that relates the specific characterics of the loan to these valuation assumptions).[31] These capabilities would be suitably flexible and dynamic to reflect the views of a valuer and support numerous iterations of the valuations.

Box 3: Potential links to IFRS 9 capabilities

7.29 The approach to provisioning for Expected Credit Loss (ECL) under IFRS 9 may have some similarities to the estimation of Economic Value for loans and advances to customers. Estimates of ECL are not valuations themselves, but may rely on similar methodological approaches to Economic Value. Potential similarities and differences between these two frameworks may relate to:

(a) *Assessing lifetime credit losses:* IFRS 9 requires lifetime ECLs to be fully recognised for 'Stage 2' and 'Stage 3' loans.[32] When estimating Economic Value it may be necessary to account for lifetime ECLs for all loans, regardless of how they are classified for accounting purposes.

(b) *Projecting expected cash flows*: IFRS 9 may involve the projection of future expected contractual cash flows, pre-payments and draw-dows, defaults, and cash-flows arising from the realisation of security to estimate exposure at default (EAD) over the lifetime of a loan. This may be similar to the projections of expected cash-flows that may be needed to estimate Economic Value.

(c) *Discount rate:* Under IFRS 9, the rate used to discount the ECLs is the Effective Interest Rate (EIR) of the loan. When estimating Economic Value it may be necessary to apply a discount rate that reflects the market rates for that particular risk, reflecting current market and asset conditions.

(d) *The simulation of a range of economic scenarios*: IFRS 9 requires the estimation of ECLs under a range of economic scenarios to account for non-linearities in losses across scenarios. IFRS 9 also requires firms to consider a range of possible work-out strategies and to reflect the weighted

[31] By way of example, this could take the form of a 'score-card' approach. This could involve allocating a score to each exposure based on multiple loan characteristics (which may be weighted to reflect relative importance) and then using this score to specify a valuation assumption using a dynamic formula.

[32] The stages of credit impairment under IFRS 9 are: **Stage 1** – as soon as a financial instrument is originated or purchased, 12-month expected credit losses are recognised in profit or loss and a loss allowance is established. This serves as a proxy for the initial expectations of credit losses. For financial assets, interest revenue is calculated on the gross carrying amount (i.e. without deduction for expected credit losses); **Stage 2** – if the credit risk increases significantly and is not considered low, full lifetime expected credit losses are recognised in profit or loss. The calculation of interest revenue is the same as for Stage 1; and **Stage 3** – if the credit risk of a financial asset increases to the point that it is considered credit-impaired, interest revenue is calculated based on the amortised cost (i.e. the gross carrying amount less the loss allowance). Financial assets in this stage will generally be assessed individually. Lifetime expected credit losses are recognised on these financial assets.

probability of those in the assessment of ECL. When estimating Economic Value it may also be necessary to consider multiple or alternate economic scenarios. In addition, to the extent that resolution valuations need be 'prudent', the approach taken may differ from that taken for accounting purposes.

(e) *Operating costs*: IFRS 9 does not explicitly account for the marginal operation costs associated with servicing the loan (though these would likely be reflected in the contractual interest rate an therefore the loan's EIR). When estimating Economic Value, it may be necessary to explicitly account for operating costs in the discount rate or elsewhere.

Reverse repurchase agreements and other similar secured lending

7.30 If these positions are not accounted for at fair value, a valuer may need data on the contractual terms of the agreements, including maturity, coupon rate and collateral/encumbrance arrangements. In addition, a valuer may need encumbrance analysis to identify and quantify excess collateral and collateral shortfall for assets pledged or received in respect of these positions.

Investments in other group undertakings and separable businesses

7.31 In carrying out Valuation 2, a valuer may need to estimate the Economic Value of a firm's equity investments in business. This could include investments in subsidiaries, associates, and joint ventures (i.e. other group undertakings), including special purpose vehicles. It could also include 'separable' businesses that may not be legal entities, but may be divested as part of post-resolution restructuring (e.g. the wealth management business within an operating bank). The Bank considers that a business would be considered separable for this purpose if the business could be disposed of without material disruption to a firm's remaining operations. At a minimum, this would include subsidiaries or businesses that may be divested under a firm's recovery plan.

7.32 A valuer may need a firm to have capabilities in place to support the valuation of those investments that may reasonably be disposed of in resolution or post-resolution restructuring. In general, a valuer may choose to apply one or more different valuation approaches to assessing the economic value of a firm's equity investments.

Data and information supporting valuation

7.33 A valuer may need the firm to provide the following data and information:

(a) *Other group undertakings*: the latest audited financial statements, latest financial information (including management accounts), and management forecasts of expected future financial performance;

(b) *Separable businesses*: the identification of the assets and liabilities attributed to the busiess, and the corrsponding financial information and management forecasts of expected future finanical performance (on a similar basis to other group undertakings); and

(c) *Special purpose vehicles (SPVs):* financial and legal records with regards to interests held in SPVs, as well as observable market prices for interests where there are recent trades for identical or similar securities.

Firm models supporting valuation

7.34 Under Principle 2 of the Valuations SoP, firms will need to maintain financial forecast capabilities to prepare the management forecasts outlined above. Further detail on these forecasting capabilities a valuer may require is discussed further below as part of capabilities to support Valuation 3.

7.35 The valuation of SPVs where a relevant market price is not available may be particularly challenging. A valuer may therefore need a firm to have models in place to value the firm's interest(s) in these SPVs. These models would involve projecting the cash flows generated by the assets of an SPV, and allocating these cash flows across the holders of interests in the SPV in order to assess the Economic Value of these interests.

Other balance sheet assets

7.36 These assets include property, plant and equipment, as well as intangible assets and other on-balance-sheet assets not discussed above. For these assets, a valuer may need, where available, any third-party appraisals, information on observable prices in secondary markets, or other information used to determine book value in order support their assessment of the economic value of these assets.

7.37 Where these assets are held for sale or held for investment purposes, a valuer may also need access to information and analysis supporting the firm's assessment of fair value. Any models used to assess fair value may also need to be re-run reflecting the views of a valuer.

Off-balance sheet assets

7.38 Off-balance sheet assets could include assets that are not recognised for financial reporting purposes but may be realised through the sale or retention of businesses or portfolios. It would be at the valuer's discretion as to whether these assets would be included in Valuation 2. By way of example, these assets could include intangible assets, such as internally generated goodwill and franchise value.[33] They could also include contingent assets, such those resulting from guarantees received by the firm.

7.39 A valuer may need a firm to have capabilities to support the identification of assets not recognised for financial reporting purposes, and the estimation of Economic Value for these assets. This could include capabilities to forecast potential net income streams and assess the probabilities associated these income streams. Relevant supporting information would be available to the valuer to inform their assessment of Economic Value for these assets.

Liabilities

7.40 This subsection covers the valuation of different types of liabilities on an Economic Value basis. A valuer may also need data and analysis from the firm to support an assessment of the firm's forward looking funding costs, including the composition and pricing of funding available. This may be needed to inform the discount rates used when valuing assets as well as liabilities.

Customer accounts and deposits from banks

7.41 A valuer may need a detailed breakdown of deposits to provide an up-to-date overview of the firm's deposit book in order to support the estimation of economic value. This breakdown would reflect the financial reporting categories that deposits fall under.

7.42 A valuer may also need the following information to be available upon request:

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[33] Under the RTS, franchise value is the *"net present value of cash flows that can reasonably be expected to result from the maintenance and renewal of assets and liabilities or businesses and includes the impact of any business opportunities, as relevant, including those stemming from the different resolution actions that are assessed by the valuer. Franchise value may be higher or lower than the value arising from the contractual terms and conditions of assets and liabilities existing at the valuation date."*

(a) A reconciliation analysis between this breakdown and the relevant balances in the financial reporting information provided for Valuation 1;

(b) Summary information on deposit characteristics to support a high-level estimate of economic value (such as the weighted average maturity and contractual interest rate of fixed term deposits);

(c) If there are significant levels of fixed term deposits, deposit-level data on the contractual terms of individuals deposits; and

(d) Information to support an analysis of depositor behaviour following entry into resolution.

Financial liabilities held at fair value

7.43 This category includes trading portfolio liabilities, liabilities related to derivatives, and other financial liabilities designated at fair value. Relevant considerations for these liabilities are equivalent to those discussed above for financial assets designated at fair value. In particular, a valuer may need to apply adjustments and overlays to the firm's estimates of fair value where they disagreed with the assumptions used, or considered that certain aspects of fair value would not be realisable by the firm under fair, prudent, and realistic assumptions. A valuer may also need to carry out sample testing of certain portfolios to gain comfort around relying on the firm's own valuation models.

7.44 For funding liabilities, a valuer may need information to support an analysis of counterparty behaviour in resolution, in order to assess the access and pricing of funding that the firm might face.

Debt securities in issue and subordinated liabilities

7.45 A valuer may need data on the contractual terms of the debt securities and subordinated liabilities that the firm had in issuance, including: maturity, coupon rate, amortisation schedules and collateral/encumbrance arrangements. For instruments that qualify for MREL or internal MREL, additional data may be needed as per the applicable regulatory reporting arrangements around these instruments.[34]

Repurchase agreements and other similar secured borrowing

7.46 Relevant considerations for this liability class are equivalent to that discussed above for reverse repurchase agreements and similar secured lending.

Provisions

7.47 A valuer may need to re-evaluate a firm's provisions for the purposes of Valuation 2 (as well as for Valuation 1, as discussed above). This could include (but is not limited to) provisions related to known restructuring costs, conduct charges, onerous contracts, and regulatory charges and fines. A valuer may need to review the information supporting a firm's existing provisions, discuss with relevant personnel, and revise these provisions accordingly (potentially using the firms' own models or tools). Note that a valuer may also need to consider provisions for potential liabilities that are not recognised for accounting purposes (see below).

Other balance-sheet liabilities

7.48 A valuer may only need accounting information for other liabilities that appear on the firm's balance sheet, as per Valuation 1. Firms should consider what additional capabilities may be needed in cases where other on-balance-sheet liabilities were material to their valuation.

[34] Policy Statement PS11/18, 'Resolution Planning: MREL Reporting', June 2018: https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/policy-statement/2018/ps1118.pdf.

Off-balance-sheet liabilities

7.49 Off-balance-sheet liabilities include liabilities that are not recognised for financial reporting purposes but may crystallise through the continuation or restructuring of the business. Ultimately it would be at the valuer's discretion as to whether these liabilities would be included in Valuation 2. By way of example, these liabilities could include (to the extent they do not meet accounting recognition criteria):

(a) *Contingent liabilities*, such those relating to financial guarantees provided, or to pending or ongoing litigation and regulatory investigations;

(b) *Restructuring costs*, such as administrative costs, redundancy costs, contractual break costs, and other net operating costs that may arise throughout the restructuring period; and

(c) *Pension liabilities*, as may arise from shortfalls in defined-benefit pension schemes provided or supported by the firm.

7.50 A valuer may need firms to support them in the identification of liabilities not recognised for financial reporting purposes, and the estimation of economic value for these liabilities. A valuer may need access to information, analysis, and personnel to support forecasts of potential costs and estimates of the probabilities associated with these costs. This could include third-party appraisals, management information, and other analysis carried out by the firm itself.

8 Capabilities to support Valuation 3

8.1 This section sets out what the Bank envisages that a valuer may need to carry out a timely and robust assessment of Valuation 3 (post-resolution equity value). This aims to assist MREL Firms in identifying what capabilities they should have in place in order to comply with Principles 1-4 of the Valuations SoP. This section is less relevant to internal MREL Firms.

8.2 A valuer may use a range of methodologies to value a firm's shares. The Valuations SoP focuses on the capabilities needed to support an income-based approach[35] in estimating the value of a firm's shares. Specifically, Principle 2 sets out that firms should have capabilities to produce dynamic and robust business forecasts reflecting the firm's restructuring plan as it is developed. In practice, the valuer would have discretion as to what valuation approaches are applied, and this might reasonably include other approaches such as market-based approaches.[36] Firms should consider what additional capabilities they may need to support this analysis.

Forecasting capabilities

8.3 A valuer may need a firm to produce timely and robust forecasts of financial information, as well as key regulatory ratios for UK regulated entities. This could include, where relevant:

- Income statements;
- Statements of financial position;
- Cash flow statements;
- Regulatory capital ratios;
- Regulatory leverage ratios;
- Liquidity coverage ratios; and
- Net stable funding ratios.

8.4 A valuer may need these forecasts to have the following characteristics:

(a) Forecasts are available at the level of individual entities and/or business where:

- An entity or businesses may reasonably be divested as part of resolution or (in line with capabilities for Valuation 2); and/or
- An entity or businesses has fundamentally different financial characteristics to the rest of the firm, such that it may reasonably need to be valued separately as a part of a sum-of-the-parts approach.[37]

(b) Forecasts are available for a sufficient period such that a terminal value[38] at the end of the forecast period could reasonably be used in estimating equity value. The length of the forecast period would also enable a robust assessment of medium-term viability for UK regulated entities.

(c) Forecasts are carried out at a sufficient level of granularity to ensure they are robust. Forecasts may be aggregated for provision to a valuer but would also be available on a disggregated basis upon request.

[35] An income-based approach involves valuing equity based on the forecasting and discounting of expected cash flows to equity holder.
[36] A market-based approach involves valuing equity based on the comparison of the value of the investment with observable market prices, such as through the use of multiples.
[37] A sum-of-the-parts approach involves valuing the equity of a firm by summing across the equity value of distinct entities or businesses and adjusting for any synergies.
[38] Terminal value refers to expected value at a future point in time beyond which value is modelled by applying a constant growth rate and discount rate to future expected cash flows at that time.

(d) Forecasts can be adjusted where relevant to incorporate consistent assumptions to cash-flows forecasted on a position level or portfolio level for the purposes of Valuation 2.

(e) Forecasts can incorporate, on a timely basis, adjustments or overlays to key assumptions to reflect the views of a valuer and support sensitivity analysis. These assumptions may include, but are not limited to:

- Growth rates (including assumptions related to the generation of new business);
- Revenues (including interest and non-interest revenue);
- Funding (including pricing and composition);
- Cost of risk (including credit impairments or similar adjustments); and
- Operational cost assumptions (including costs associated with post-resolution restructuring)

(f) Forecasts can reflect, on a timely basis, the development and evolution of the firm's restructuring plan prior to and during resolution.

Supporting information

8.5 A valuer may also need timely access to information and analysis underpinning the firm's choice of key forecast assumptions. This could include information and analysis used in the development of the firm's strategic plan, as well as additional information on costs that may arise as a result of post-resolution restructuring (in line with those discussed for Valuation 2). This information would need to be available at a level of detail to enable a valuer to review and revise a firm's forecasting assumption. It would also support the valuer's assessment[39] of how to account for the degree of execution risk under the forecasts.

[39] In practice, this assessment may be made in co-ordination with the firm's management, authorities, any resolution administrator, and possibly other advisors supporting the development of the restructuring plan.

9 Capabilities to support Valuation 4

9.1 This section sets out what the Bank envisages that a valuer may need to carry out a timely and robust assessment of Valuation 4 (estimated insolvency outcome). This aims to assist MREL Firms in identifying what capabilities they should have in place in order to comply with Principles 1-4 of the Valuations SoP. This section is less relevant to internal MREL firms.

9.2 The approach adopted for carrying out Valuation 4 would ultimately be at the discretion of the valuer. This section considers the following steps that a valuer may take:

- Preparing adjusted legal-entity balance sheets;
- Forecasting net recoveries in legal entities;
- Forecasting distribution to creditors in each legal entity; and
- Accounting for intra-group balances.

Capabilities to support adjusted legal-entity balance sheets

9.3 A valuer may need the following information to support the application of netting and set-off arrangements to legal-entity-level balances:

(a) Unconsolidated balance sheets for each of entity within the Group;

(b) Information on netting arrangements for derivative financial instruments, as well as the collateral balances related to netting sets by legal entity;

(c) Information on the contractual and statutory set-off arrangements applicable to the assets and liabilities (including net derivative balances) or each entity, including in respect of external counterparties and affiliates; and

(d) Information on assets pledged and received with regards to repurchase agreements, reverse repurchase agreements, and other instances of encumbrance.

Capabilities to forecast net recoveries in legal entities

9.4 To assess gross realisations, a valuer may draw on the valuation analysis carried out as part of Valuation 2. However, a valuer may need to revise assumptions or apply overlays in order to reflect the hypothetical insolvency strategy (or strategies) and other factors that may be specific to insolvency. Section 2 above discusses some of the potential differences that may need to be considered between Valuation 2 and the analysis of recoveries for Valuation 4.

9.5 To assess net recoveries, a valuer may need additional data and information from the firm on known contractual costs that may arise in insolvency. This could include information on staff costs, lease costs, contractual break costs, and other relevant costs.

9.6 To assess recoveries from interests in SPVs, a valuer may need firms to have pre-existing legal analysis on the expected treatment of the SPV in insolvency. This analysis would be documented in a form that could be readily understood by a valuer. A valuer may also need a firm to have models in place for valuing the firm's interest in SPVs, unless the quantity and complexity of a firm's SPVs was such that a valuer could reasonably be expected to value these in the lead-up to resolution. A valuer may need these models to involve projecting the cash flows generated by the assets of an SPV, and allocating these cash flows across the holders of interests in the SPV in order to estimate the firm's realisations in insolvency (noting that the SPV itself may or may not be insolvency-remote).

Capabilities to support forecasting distributions to creditors

9.7 A valuer may need data and information on the insolvency creditor hierarchies for each legal entity within the firm's group. This data and information would consist of a detailed breakdown of creditor balances across each creditor class of the insolvency creditor hierarchy in the jurisdiction in which the entity is incorporated. Where relevant this could include a breakdown of customer balances under Financial Services Compensation Scheme (FSCS) reporting categories.

9.8 In particularly complex cases, a valuer may need firms to have models in place to analyse the distribution of recoveries to creditors and shareholders of legal entities throughout the group.

Capabilities relating to intra-group balances

9.9 A valuer may also need data and information on intra-group balances. This could include balances relating to liabilities, equity holdings, and guarantees. A suitable format for this data could be a series of intra-group matrices that demonstrate the gross balances between affiliates for each relevant position in the insolvency creditor hierarchy.

9.10 In particularly complex cases, a valuer may need firms to have models in place to analyse the flow of recoveries throughout the group, taking into account these intra-group balances.