Solvent Wind-down of Derivatives and Trading Portfolios

Discussion Paper for Public Consultation

3 June 2019
The Financial Stability Board (FSB) is established to coordinate at the international level the work of national financial authorities and international standard-setting bodies in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. Its mandate is set out in the FSB Charter, which governs the policymaking and related activities of the FSB. These activities, including any decisions reached in their context, shall not be binding or give rise to any legal rights or obligations under the FSB’s Articles of Association.

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The Financial Stability Board (FSB) is seeking comments on its discussion paper: *Solvent Wind-down of Derivatives and Trading Portfolios*.

Following the adoption of the *Key Attributes of Effective Resolution Regimes for Financial Institutions* in 2011, FSB jurisdictions have undertaken substantial reforms to help end “too-big-to-fail” through the introduction of legislative frameworks governing the resolution of global systemically important banks (G-SIBs), and through the development of resolution plans and actions to improve the resolvability of individual firms.

Many G-SIBs have large derivative and trading portfolios, including in some cases with illiquid or exotic positions. A disorderly close-out of these portfolios can potentially propagate substantial risks to financial stability. Given the global presence of some G-SIBs and the cross-border nature of many of these portfolios (including the intra-group transactions arising from firms’ booking models), such financial stability risks could spread across borders.

This discussion paper sets out considerations related to the solvent wind-down of the derivative and trading book activities of a G-SIB that may be relevant for authorities and firms for both recovery and resolution planning.

This discussion paper should not be viewed as proposed guidance; rather, the responses to the public consultation will be considered to determine whether the development of guidance would be useful.

**The FSB invites comments on the discussion paper and the following specific questions:**

1. What is your view on the rationale presented in the paper for solvent wind-down in recovery and resolution? Should the development of solvent wind-down plans be a component of both recovery and resolution planning?

2. Do you consider that the discussion paper adequately identifies relevant firm capabilities that may be needed to prepare for and execute a solvent wind-down? Are there other firm capabilities that could be considered?

3. What is your view on the identified evaluation/verification mechanisms for firm capabilities presented in the paper? Are there other mechanisms that could be considered?

4. Does the paper adequately identify the considerations for home and host authority cooperation? Are there other considerations?

5. Should authorities distinguish between different solvent wind-down scenarios (e.g. going vs. gone concern, different situations of banks, initiation of wind-down by a counterparty, or interaction with insolvency proceedings) when they develop solvent wind-down plans?
6. Are there any other actions that are not discussed in this paper that could be taken by authorities or firms to help facilitate successful solvent wind-down in the event of resolution?

Responses to this discussion paper should be sent to fsb@fsb.org by Friday 2 August 2019. Responses will be published on the FSB’s website unless respondents expressly request otherwise.
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Solvent Wind-down of Derivatives and Trading Portfolios

Introduction

The solvent wind-down of large derivatives and trading portfolios may be a recovery option for a G-SIB under stress or an element of a resolution strategy. The disorderly unwind of large derivatives and trading portfolios in recovery or resolution could pose risks to financial stability. In particular, given the global presence of some G-SIBs and the cross-border nature of many of these portfolios (including the intra-group transactions arising from firms’ booking models), such financial stability risks are likely to spread across borders.

G-SIBs with wholesale banking activities including derivatives trading typically have highly interconnected risk management and operations, and manage access to financial market intermediaries on a global basis. Their legal entity structures and financial and operational intra-group dependencies of G-SIBs may give rise to challenges in solvent wind-down. Operational dependencies may be created, for example, through the use of global operating models to provide operational support, including access to financial market infrastructures (FMIs). Financial dependencies may be created through the use of certain booking practices used to allow firms to transact with clients and manage risk on a global basis. For example, local legal and regulatory requirements (e.g. for a client to transact with a local entity), as well as capital and risk management considerations (e.g. to aggregate and manage risks of a similar nature on a group-wide basis within a particular geographic location or legal entity), have driven cross-border and intra-group booking practices, in particular for derivatives. This may include practices such as intra-group trades (including back-to-back trades to transfer market risk from one legal entity to another, and intra-group trades to facilitate access to FMIs where membership is held by particular legal entities within the group) and remote booking (e.g. trades directly booked into legal entities and/or jurisdictions that are different from those in which the trader is employed or based, respectively).

Even where financial stress does not originate from derivative and trading book activities, such activities depend on counterparty and client confidence. Their continuation may therefore not be viable for a firm subject to severe stress or resolution, particularly if there is substantial market uncertainty at the time of distress or resolution.

Solvent wind-down analysis explores options for how the exit from such positions could be managed as part of a recovery or a resolution. A coordination of certain aspects of a wind-down across group entities and jurisdictions is important if, as is likely, the trading and derivative positions to be wound-down span different group entities and jurisdictions.

This discussion paper draws on the practices that are emerging in some jurisdictions and describes, subject to eventual specific requests by supervisory and/or resolution authorities, capabilities and arrangements that may need to be put in place to ensure a solvent wind-down plan can be effectively executed. Solvent wind-down work in some jurisdictions is currently more advanced than in others (for example, in some jurisdictions some firms have been requested to develop solvent wind-down plans based on guidance prepared by authorities).

The focus of this discussion paper is on the wind-down of G-SIBs’ derivatives and trading book activities as opposed to other activities or assets (e.g. loan portfolios). This focus is important
because of the unique complexity and cross-border nature of derivatives and trading book activities as described above, and the potential financial stability risks that may stem from a disorderly wind-down of these activities. Hence, a clear strategy for winding down portfolios of financial instruments in an orderly and controlled manner may be needed as part of G-SIBs’ recovery and resolution plans, then assessed in the context of supervisory reviews and resolvability assessments. Furthermore, some trading activities may be necessary to ensure the continuity of critical functions (e.g. where those functions rely on trading in order to service clients, hedge risks, etc.).

Solvent wind-down planning might be less relevant for G-SIBs that do not undertake significant derivatives and trading book activities. Depending on the nature of a firm’s trading activities, and whether the plan is intended to support recovery planning, resolution planning, or both, and whether the plan relates to the wind-down of entire operations rather than a discrete business, some of the points described in the following sections may be of varying relevance.

The considerations set out in this discussion paper, which may be relevant for both recovery and resolution planning work, include consideration of firms’ general capabilities to conduct a wind-down of derivative and trading book activities, the capital and liquidity resources needed to manage the wind-down, and the implications of a wind-down on the viability of the rest of the group.

In light of the responses to the public consultation the FSB may develop this discussion paper into a paper that can serve as a reference to assist other jurisdictions in developing their approaches to managing the risks associated with large derivative and trading books. It is possible that some of the considerations of this paper may change if there is material progress in other jurisdictions.

Section 1 discusses the concept of ‘solvent wind-down’ and ‘wind-down planning’; Section 2 addresses firm capabilities; Section 3 addresses the evaluation/verification of firm capabilities; and Section 4 addresses coordination among home and host authorities.

1. **Solvent wind-down: concept and definition**

A solvent wind-down of derivatives and trading book portfolios could be achieved through several approaches that may be used singularly or in combination:

- the close-out or termination of positions prior to maturity (subject to stays that may be in effect in resolution in the relevant jurisdiction);
- contractual run-off (allowing contracts to run to maturity without being replaced or renewed);
- the auction or transfer of positions to a third party, or novation (the termination of a contract and its replacement with a new economically equivalent contract with a different party) of such positions; or
• compression or consensual tear-up (replacing a portfolio of derivative contracts with an economically equivalent portfolio with a lower exposure expressed in terms such as gross notional outstanding).¹

The term ‘solvent wind-down’ could be understood to include any of these approaches or a combination of them (or any other consensual mechanism to reducing the size of the business). ‘Solvent wind-down’ means that all claims are paid in full and all obligations are met in connection with the derivatives and trading book portfolio that is wound-down in a timely and measured manner.

Given the size and complexity of some G-SIBs’ derivatives and trading book portfolios, a solvent wind-down is likely to take place over a longer time horizon, as part of a restructuring phase in recovery or resolution. It could involve the wind-down of the firm’s entire operations (e.g. in the case of a broker-dealer firm where derivatives and trading activity represents a majority of its balance sheet), or a wind-down of a discrete part of the firm’s operations (e.g. in the case of a universal bank where derivatives and trading activity is concentrated in particular business units or legal entities).

Wind-down analysis may need to consider the effects of a solvent wind-down on the G-SIB’s other activities that are not subject to the solvent wind-down and vice versa. Where wind-down analysis is part of resolution planning, the interaction with certain resolution tools (e.g. transfer of positions to an asset management vehicle) would also need to be considered, if relevant according to the resolution strategy. In addition to planning a wind-down of its own derivatives and trading book activities, a G-SIB could be exposed to a similar process initiated by a counterparty, which may be another G-SIB.

Some authorities are expecting firms to develop solvent wind-down plans as part of recovery and resolution planning. In addition, some firms have adopted playbooks to help provide clarity on the necessary steps and actions of the solvent wind-down strategy, both in recovery and in resolution, including, for example, identification of key sign-off and escalation points, parties involved in the decision-making in a solvent wind-down, their responsibilities in the execution of a solvent wind-down and communication with relevant stakeholders.

2. Firm capabilities to support the preparation and execution of a solvent wind-down plan

The development and execution of a solvent wind-down plan requires adequate firm capabilities, including the ability to perform the analysis necessary to support (i) the preparation of a wind-down plan, and (ii) timely assessment and analysis to be undertaken to support decision-making by management and authorities as the firm prepares for execution and executes the plan. These capabilities are listed below.

Several capabilities reflect aspects of resolvability that have already been addressed by existing FSB guidance and will not be redefined in this context. For example, the FSB Principles on

¹ A simple example involves two parties where multiple contracts referencing the same underlier may be terminated or modified and replaced with a single net position.
Bail-in Execution\(^2\) cover firms’ capabilities in technological infrastructure to determine which instruments and liabilities fall within the scope of bail-in (Principle 3), as well as to support timely and robust valuations (Principle 6).

2.1. Operational capabilities

(1) **Ability to produce management information in a timely manner.** Firms will need to produce information and data to develop a solvent wind-down plan and to support decision-making by management with respect to the preparation and execution of the plan. Appropriate management information system (MIS) capabilities can support the timely provision of the necessary information and data (at a sufficient level of granularity and segmentation) to support the firm’s assessment and implementation of solvent wind-down strategies.

For example, this information may include:

- data on derivative and trading book assets at the individual contract, collateral or asset levels;
- information on key characteristics such as currency, maturity, collateral posted and received, netting arrangements; and
- the ability to segment derivative and trading book assets in multiple ways, including by: legal entity; trading desk and/or product; type of trade (e.g. centrally cleared vs. non-centrally cleared); market; and counterparty.

(2) **Ability to provide management information to authorities in a clear and timely manner.** Authorities will likely need information and data from the firm in order to take informed decisions in the lead-up to and during a solvent wind-down.

(3) **Ability to demonstrate a comprehensive understanding of how risk is managed and deployed across the group.** Intra-group financial and operational dependencies, in particular those arising from firms’ booking model practices, will need to be considered when developing a solvent wind-down plan so as to avoid the risk of creating material imbalances in risk, funding and liquidity positions across legal entities and jurisdictions when exiting positions. This includes impact on any part of the firm that is not subject to solvent wind-down. Good booking model practices are clearly documented, adequately supported by internal controls (e.g. procedures, systems and processes) and well understood by the firm’s management. A firm’s ability to articulate the underlying rationales for its booking model, and how its booking practices support (and do not materially impede) recovery and resolvability objectives, is important to demonstrating a full understanding of risk management.

(4) **Ability to access financial resources to ensure that the firm maintains solvency during a solvent wind-down**, particularly where losses have to be realised when exiting positions. Financial resources will need to be of sufficient quality and be in the appropriate location so that they can be flexibly deployed to facilitate execution of the solvent wind-down plan, including for a range of options across the entities subject to the solvent wind-down.

(5) **Ability to identify unencumbered collateral and mobilise unencumbered collateral.** Firms should have the capability to identify the quantum and location of unencumbered collateral. Consistent with the FSB’s Funding Strategy Elements of an Implementable Resolution Plan³, the capability of firms to mobilise unencumbered collateral is necessary to support the provision of liquidity and enable the firm to meet obligations associated with derivative and trading book assets as they fall due. The ability for firms to identify possible interactions with other plans to mobilise unencumbered collateral for other recovery or resolution objectives will be important in supporting a solvent wind-down.

(6) **Retention of operational staff and trading capabilities.** Retention of operational staff and trading capabilities is key to the effective implementation of a solvent wind-down plan. In particular, certain trading staff may be necessary to facilitate the unwinding of positions.

(7) **Arrangements to support operational continuity of critical shared services.**⁴ Continuity of the firm’s access to critical shared services in recovery and resolution, including operational support and MIS infrastructure, is critical to the execution of a successful solvent wind-down plan. Such services will be required to facilitate the continuity of the firm’s core business lines and critical functions, the exit of existing positions and the processing of any new trades (e.g. for hedging purposes).

(8) **Arrangements to support continued access to FMIs.** Continuity of access to clearing, payment, settlement, custody and other services provided by FMIs to a firm in recovery or resolution is an important component of a successful solvent wind-down plan, to facilitate both the exit of existing positions and the payment and settlement of any new trades (e.g. for hedging purposes). These critical FMI services may be directly provided by an FMI to a firm or indirectly provided by a firm (as an FMI intermediary) to its clients. It is important that firms have the necessary arrangements in place to manage the continued access to critical FMI services that are used by, or provided by the firm.⁵

(9) **Measures to mitigate the risk of financial contract close-out due to resolution.** Large-scale early termination of financial contracts upon entry into resolution could lead to the firm having an unbalanced book and undermine the objective of a resolution action that seeks to maintain the continuity of the firm’s core business lines and critical functions. The FSB **Key Attributes** include powers for authorities to impose a temporary stay on early termination rights that arise only by reason of entry into resolution or in connection with the exercise of any resolution powers.⁶ Temporary stay powers implemented under national regimes, however, may not be given effect in a foreign jurisdiction. This risk can be mitigated by statutory (i.e., administrative or judicial) approaches for giving effect to foreign resolution measures⁷ or through contractual recognition provisions (including for example the ISDA Resolution Stay Protocol⁸).

³ FSB (2018), Funding Strategy Elements of an Implementable Resolution Plan, June.
⁴ FSB (2016), Guidance on Arrangements to Support Operational Continuity in Resolution, August.
⁵ FSB (2017), Guidance on Continuity of Access to Financial Market Infrastructures (FMIs) for a Firm in Resolution, July.
⁶ FSB (2011), Key Attributes of Effective Resolution Regimes for Financial Institutions, November (updated in October 2014).
⁷ FSB (2015), Principles for Cross-border Effectiveness of Resolution Actions, November.
⁸ ISDA (2015), ISDA 2015 Universal Resolution Stay Protocol, November. The FSB has welcomed this initiative (see for example FSB welcomes extension of industry initiative to promote orderly cross-border resolution of G-SIBS, November 2015.
2.2. Analysis, valuation and modelling capabilities to support decision-making

(10) Methodologies and management information system capability to provide a basis for a robust and timely valuation. The valuation of a firm’s derivative and trading book assets is a necessary foundation for both the day-to-day management of derivatives and trading activities, as well as of a solvent wind-down plan and its implementation in a potential resolution. Section II of the FSB’s Principles on Bail-in Execution describes firm capabilities, including MIS and technological infrastructure, to support the timely provision of valuation data at a sufficient level of granularity and to enable valuations to be performed within a suitable timeframe.

(11) Ability to estimate financial resource impacts of a solvent wind-down on both liquidity and capital. A firm in resolution would need to have sufficient capital and access to sufficient sources of liquidity to facilitate the execution of a solvent wind-down plan. Losses may have to be recognised in the wind-down of certain positions and liquidity resources would be necessary to, for example, meet ordinary course payment and settlement flows, as well as any additional collateral requirements on derivative positions. Firms need to have the capability to estimate the capital and liquidity impacts of a solvent wind-down in a timely way, including the impact on any part of the firm that is not subject to solvent wind-down. Authorities would need this capability when considering: authorisation of entities; the potential dependencies of material host entities of the firm on central bank ordinary facilities; and the write-down or conversion of internal liabilities. This capability may also be relevant for the valuation of a firm in resolution, for example to estimate future losses that may be incurred during the execution of a solvent wind-down plan. Consistent with the FSB’s Funding Strategy Elements of an Implementable Resolution Plan, firms’ financial resource capabilities include, for example, the capability to estimate and model liquidity needs in resolution.

(12) Ability to model operational costs, including direct and indirect costs incurred by the firm during a solvent wind-down. Firms’ capability to identify operational dependencies in a solvent wind-down includes modelling associated timing impacts and operational costs that may be incurred in the event of a solvent wind-down. Operational dependencies and related costs include staff, technology, real estate, services from third parties such as legal, audit and accounting, FMI access (direct and indirect), and intercompany payments for provision of shared services.

(13) Ability to model hedging costs in a solvent wind-down. Firms’ capability to articulate a hedging strategy and model stressed hedging costs would take into account any reduced market access (e.g. basis risk if firms are only able to hedge using certain products) or effects resulting from any systemic stress on the wider market (such as market capacity), and the timing of any such reduced market access or wider effects. This includes changes in acceptable collateral and associated haircuts.

(14) Ability to model costs of exiting positions in a solvent wind-down. Firms’ capability to model the costs of exiting positions, including the expected gap between the exit value

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9 Examples of direct costs include compensation, technology, real estate, and services from third parties. Examples of indirect costs include FMI access and shared services arrangements.
and book value of those positions, comprises multiple factors. Factors that may affect the exit cost include (alone or in combination):

- loss of market maker flow (for example, by being subject to a solvent wind-down, a firm may cease being a market maker in derivatives and trading book activities and so lose pricing ability and pricing power);
- concentration (the firm undertaking a solvent wind-down may have large positions it needs to exit and so may need to absorb size discounts when exiting);
- the ability of the firm undertaking a solvent wind-down to construct novation packages (e.g., risk neutral portfolios) that fit the risk appetite of a potential step-in counterparty firm in a timely manner;
- differences between the operational costs of the firm undertaking a solvent wind-down and the counterparty firm;
- differences in the required return on capital between the firm in solvent wind-down and the counterparty firm; and
- the cost of executing replacement hedges.

(15) *Ability to perform sensitivity analysis.* During market stress, in recovery or resolution, there is likely to be substantial uncertainty as regards the impact of changing market conditions on the valuation of the firm’s derivative and trading book assets. The variation in the assumptions underpinning valuations, and other assumptions in the solvent wind-down plan, could be material to the successful execution of the solvent wind-down analysis. Firms therefore need the capability to perform timely sensitivity analysis on the assumptions and valuations provided in the solvent wind-down plan to address potential uncertainties that may arise in an actual event in a timely manner.10

(16) *Ability to model the extent and timeframe for access to markets in a solvent wind-down.* Firms’ capability to model potential changes to their access to different markets (e.g. for hedging products, securities, secured funding), includes the circumstances under which access might be affected and the potential timeframe for a return to normal access. For example, a firm under significant stress may have limited access to over-the-counter (OTC) derivative markets. This also includes effects resulting from any systemic stress on the wider market, such as falling equity prices, widened credit spreads and an extended period of heightened volatility.

(17) *Ability to model and analyse a range of exit strategies and options.* The exact circumstances that might lead to the activation of a solvent wind-down plan cannot be predicted in advance. Firms therefore need the capability to model and analyse a range of exit strategies and options to inform and support, on a timely basis, the execution of the solvent wind-down plan. Ideally, this would consider alternative outcomes that may arise in the event of recovery or resolution, including a broad set of exit strategies for derivatives and trading book positions, and identification of the most appropriate strategy for those positions (and the basis for this identification) and the related calibration of exit costs.

10 See also Principle 7 of the FSB Principles on Bail-in Execution.
Exit strategies can include:

- the close-out or termination of positions prior to maturity (subject to stays that may be in effect in resolution in the relevant jurisdiction);
- contractual run-off;
- the auction, transfer or novation of positions to a third party; and
- compression or tear-up.

Firms’ analysis can include a qualitative assessment as to why a particular exit strategy is appropriate for a position.

(18) Ability to consider and model the residual portfolio of derivative or trading book positions remaining after a solvent wind-down. Firms’ capability to identify the positions that would be retained under the solvent wind-down plan includes consideration of any risk management strategies relevant for these positions.

These positions could be considered under three categories:

- positions which the firm believes it would be unable to liquidate under certain scenarios despite all reasonable efforts (in some jurisdictions referred to as non-discretionary rump);
- positions which the firm holds to support non-discretionary rump positions but which in and of themselves could be exited; and
- positions the firm believes can be liquidated but where the cost to do so would be greater than the full cost of maintaining positions to maturity or to some future date where liquidation would be optional (i.e. discretionary rump).

3. Evaluation / verification of firm capabilities

Authorities may need to be able to obtain verification that G-SIBs have developed the appropriate capabilities, including through access to information on the firm’s capabilities that is sufficiently granular and clearly documented so that appropriate analysis can be undertaken (including by a skilled independent party).

The cross-border nature of G-SIBs’ derivatives and trading book activities means that financial stability risks of a disorderly wind-down could potentially arise in multiple jurisdictions. It is therefore important that both home and host authorities in those jurisdictions have confidence that the firm’s capabilities are sufficiently robust to support the execution of a solvent wind-down.

Home authorities may need to assume a leading role in obtaining verification, and G-SIBs would need to have appropriate arrangements in place to facilitate internal or third party challenge and verification.

Host authorities could play a role, for example by involvement in the analysis of potential effects on hosted subsidiaries and branches in the event of a solvent wind-down.

There are various ways to assess firm capabilities. These include:
(1) **Scenarios to test firm capabilities.** Firms could be asked to develop solvent wind-down plans on the basis of specific scenarios. Review or testing of these plans (e.g. fire drills, live tests and non-live tests) could also serve to provide insight for home and host authorities into whether a firm has the necessary capabilities to support and plan for a solvent wind-down.

(2) **Sensitivity analysis by firms.** Firms could be asked to undertake sensitivity analysis on estimates of costs and resources in a solvent wind-down. The results of this sensitivity analysis can serve to demonstrate the firm’s capabilities in handling changes to information, assumptions or market conditions. Such analysis can also provide home and host authorities with insight into firms’ ability to cope with situations that do not reflect the specific scenarios that have been used to test firm capabilities. This can help home and host authorities evaluate/verify that, in an actual solvent wind-down, firms would be able to process changing information quickly, analyse the consequences of these changes and reach appropriate conclusions on the necessary action(s).

(3) **Description of governance frameworks for a solvent wind-down.** Firms could be asked to provide a qualitative explanation of their solvent wind-down governance framework. This could help to provide home and host authorities comfort that the governance framework and the decision-making process is appropriate, timely and effective, and that the identified key sign-off points are appropriate and comprehensive.

(4) **Analysis of firms’ ability to ensure the continuation of its critical functions, core business lines and other operations necessary to support the solvent wind-down.** Firms could be asked to provide evidence that arrangements to ensure continuity of their operations in a solvent wind-down will be effective. Fire drills, live tests and review by skilled third parties (e.g. professional service firms) could help provide comfort to home and host authorities that firms have considered the full set of operations that are necessary to support a solvent wind-down and that appropriate arrangements are in place that ensure those operations continue.

(5) **Analysis of firms’ ability to mitigate the risk of close-out in resolution.** Firms could be asked to provide information on the extent of compliance with regulations on financial contract stays in resolution. This can help home and host authorities gauge the extent to which close-out has been addressed, and gain comfort that the unwinding of derivative and trading book positions can take place in an orderly fashion.

4. **Home-host cooperation**

The cross-border interconnected nature of G-SIBs’ trading book activities and the related financial and operational dependencies create the need for close cooperation and coordination among home and host authorities. A jurisdictional or legal entity approach to wind-down, absent cross-border coordination, could result in additional complexity, costs and risk exposure. For example, the splitting of intra-group transactions could unbalance risk profiles in individual legal entities, and increase the number of transactions to be wound-down.

A group-wide approach to solvent wind-down could be facilitated through existing cooperation and information sharing arrangements such as Crisis Management Groups and cooperation agreements, and may involve the following:
1) **Discussions between home authorities and relevant host authorities** of firms’ solvent wind-down plans and coordination to support their execution, including:

- the need for, and resources available to support the liquidity and capital needs of specifically identified material branches or subsidiaries at the G-SIB through a solvent wind-down. This includes coordination of valuations and an understanding of any barriers to the transfer of resources between branches and/or legal entities and the sharing of information on the decision by the relevant central bank on maintenance of access of a branch and/or subsidiaries to its ordinary facilities;

- the potential need for and timing of conversion or write-down of internal liabilities and instruments at a G-SIB through a solvent wind-down (e.g. as a recovery action); and

- action across the group to terminate intra-group transactions in an orderly fashion and replace them with third-party transactions where necessary.

2) **Additional considerations for home authorities** in the solvent wind-down of a firm include assessing the extent to which the solvent wind-down strategy is sufficient to avoid adverse implications for financial stability locally, for example by mitigating any potential procyclical effect on the financial system if the solvent wind-down is completed too quickly, while supporting the continued operation of core business lines in the home jurisdiction and assessing whether further action is required. Considerations also include implications for the supervisory approach of the home entities of a firm entering solvent wind-down, including the decision by the relevant supervisory authority to authorise, or continue to authorise, a home entity. This may include understanding of the adequacy of financial resources to deliver the wind-down and assessment of the viability of any residual business.

3) **Additional considerations for host authorities** in the solvent wind-down of a firm include assessing the extent to which the solvent wind-down strategy is sufficient to avoid adverse implications for financial stability locally, for example by mitigating any potential procyclical effect on the financial system if the solvent wind-down is completed too quickly, while supporting the continued operation of core business lines in the host jurisdiction and assessing whether further action is required. Considerations also include implications for the supervisory approach for the local entities of a firm entering solvent wind-down, including the decision by the relevant supervisory authority to authorise, or continue to authorise, a branch or subsidiary. This may require an understanding of the adequacy of financial resources to deliver the wind-down and assessment of the viability of any residual business.