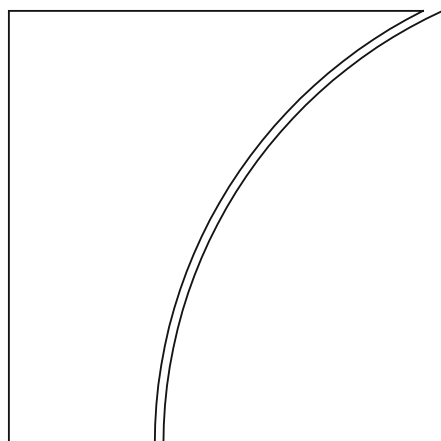


Basel Committee on Banking Supervision

Consultative document



Supervisory guidelines for identifying and dealing with weak banks

Issued for comment by 19 September 2014

June 2014



BANK FOR INTERNATIONAL SETTLEMENTS

This publication is available on the BIS website (www.bis.org).

© *Bank for International Settlements 2014. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISBN 978-92-9131-547-5 (print)

ISBN 978-92-9131-548-2 (online)

Contents

Executive summary	1
Part I: Identifying weak banks	3
1. Introduction and background.....	3
1.1 The 2002 guidance.....	3
1.2 Mandate	3
1.3 Related work in other forums	4
1.4 Structure of this report	4
2. General issues and concepts.....	6
2.1 Definition of a “weak bank”	6
2.2 Principles for dealing with weak banks.....	6
2.3 Symptoms and causes of bank problems.....	8
3. Preconditions.....	10
4. Identification of weak banks.....	12
4.1 Characteristics of the supervisory review process	12
4.2 Key elements of the supervisory review process.....	13
4.2.1 On-site examination, off-site reviews and forward-looking supervision	13
On-site examinations	13
Regulatory reporting and early warning indicators	14
Business model assessment	15
Governance, risk management and controls.....	15
MIS, data aggregation and reporting.....	16
Stress testing	17
Review of recovery plans	18
Resolvability assessment.....	19
4.2.2 Macroprudential surveillance and responses.....	19
Macroprudential surveillance.....	19
Macroprudential responses.....	20
4.2.3 Other sources of information	21
Bank governance and management	21
External auditors	21
Internal control and internal auditors.....	22
Cooperation with other supervisory and related authorities	22
Market signals.....	23

4.2.4	Supervisory evaluation systems	23
Part II: Dealing with weak banks.....		25
5.	Contingency and recovery planning	25
5.1	Supervisory planning for dealing with weak banks.....	25
5.2	Bank contingency plans, recovery plans and resolvability assessment	26
6.	Corrective action	27
6.1	General principles for corrective action	27
6.2	Implementation of corrective action.....	28
6.2.1	Determining the nature and seriousness of the weakness	28
6.2.2	Range of corrective actions	29
	Impact on governance	29
	Impact on cash availability	29
	Impact on shareholders' rights.....	29
	Impact on bank operations and expansion.....	29
6.2.3	Incentives for timely corrective action and preventing forbearance	30
6.2.4	Escalation of corrective action and supervisory resources.....	31
6.2.5	Formulating a plan of corrective action.....	31
6.2.6	Monitoring and enforcing compliance with corrective actions	32
6.2.7	Cooperation and collaboration with other agencies.....	33
6.3	Dealing with different types of weakness	33
6.3.1	Business strategy	34
6.3.2	Capital adequacy.....	34
6.3.3	Asset quality.....	35
6.3.4	Governance and management.....	37
6.3.5	Earnings	38
6.3.6	Liquidity.....	38
6.3.7	Risk management processes.....	40
7.	Resolution issues and exit	41
7.1	Guiding principles for bank resolution policy.....	41
7.2	Resolution techniques.....	42
7.2.1	Restructuring plans	43
7.2.2	Bail-in within resolution	44
7.2.3	Mergers and acquisitions	44
7.2.4	Purchase and assumption transactions	45
7.2.5	Use of a bridge bank	46

7.3	Use of public funds in resolution.....	47
7.4	Closure of the bank: depositor payoff.....	47
7.5	Management of impaired assets	48
7.6	Public disclosure of problems.....	49
7.6.1	When should communication start?.....	49
7.6.2	Contents of disclosure.....	49
7.6.3	Communication strategy.....	50
7.6.4	Other general considerations.....	50
8.	Selected institutional issues.....	50
8.1	Conglomerates.....	50
8.2	Global systemically important banks	52
8.3	Cross-border issues.....	52
8.4	Public sector banks	54
9.	Conclusions	55
Annex 1	Bibliography.....	57
Annex 2	Flow chart to assist in the resolution of weak banks.....	61
Annex 3	Glossary.....	62

Executive summary

- (i) Weak banks are a worldwide phenomenon. Supervisors should be ready to deal with them. This report provides a toolkit offering practical guidelines in the areas of problem identification, corrective action, resolution techniques and exit strategies. The target audience of this report is the supervisory community and international financial institutions advising supervisors.
- (ii) A weak bank can be defined in various ways. In this report, it is “one whose liquidity or solvency is impaired or will soon be impaired unless there is a major improvement in its financial resources, risk profile, business model, risk management systems and controls, and/or quality of governance and management”. In such cases, a supervisor should try to preserve the value of the bank’s assets with minimal disruption to its operations, subject to minimising resolution costs. It may well be that the bank as a legal entity ceases to exist, but it should do so in a way that ensures continuity of access to the critical financial services necessary to maintain financial stability and confidence in the financial system.
- (iii) For supervision to operate effectively, the proper regulatory, accounting and legal framework, as set out in the *Basel core principles for effective banking supervision*, must be in place. A supervisor must distinguish clearly between symptoms and causes of bank problems. A supervisor must also identify and tackle problems at an early stage, before they become acute. These guidelines consider the relevant sources of information and the avenues available for supervisors. They highlight in particular the developing tools of business model analysis, macroprudential assessment and stress testing.
- (iv) A bank’s board and management bear the primary responsibility for addressing the bank’s weaknesses and problems. If supervisors are required to act, they have a range of tools at their disposal; but the use of them must be proportionate, fitting the scale of the problem and set within a clear time frame. The framework for supervisory action must strike a balance between rigid regimes for prompt corrective action and general, less binding approaches. One effective combination would include rules for pre-agreed supervisory actions – which protect the supervisor from undue interference in the decision process – plus room for flexibility in particular circumstances. A balance also has to be struck between informal methods – to be used if the bank’s problems are less serious and bank management is cooperative – and more formal actions that are binding on the bank, with penalties for non-compliance. Closing the bank or revoking its licence remains the ultimate sanction.
- (v) A corrective action plan must be detailed and specific, showing how the bank’s financial position will be restored. A supervisor must be able to discern whether progress is satisfactory or additional actions are necessary. A supervisor should also have mechanisms in place for consulting with, or informing, the government, central bank, resolution authorities and other domestic and foreign regulatory agencies. Coordination with the relevant authorities should increase as the bank weakens. On the critical question of disclosure, the overriding consideration must be whether it contributes to the authorities’ objective of resolving the weak bank.
- (vi) If insolvency is imminent, several means of resolution may be available. They include a merger or acquisition involving a healthy bank; a purchase and assumption transaction; open bank assistance; and bail-in and bridge bank techniques. If no investor is willing to step in, or if the reimbursement of depositors is less costly than other options, repayment of depositors (in full or in part) and liquidation are unavoidable.
- (vii) Public authorities may provide temporary liquidity support or, in exceptional circumstances, solvency support. On a case by case basis, the central bank may decide to supplement a bank’s access to normal central banking facilities with emergency liquidity assistance if the bank is

presumed to be solvent. Where a jurisdiction decides to provide solvency support, that decision should be taken and funded by the government and not by the central bank. In such circumstances close cooperation and sharing of information between the central bank and the government is necessary. Liquidity and solvency support should always be linked to other, more permanent corrective measures.

- (viii) Additional supervisory issues will arise if the bank is a foreign institution or part of a conglomerate, or if it is systemically important. The guidelines examine the relevant issues and possible options, such as ring-fencing. Special considerations, both political and financial, can also apply to public sector banks, for which the timescale for resolving problems may need to be longer.
- (ix) Finally, when dealing with weak banks, early intervention is critical to prevent an escalation of the problem. In many cases, the bank's board of directors, management and shareholders, as well as supervisors, have tended to postpone taking timely and adequate corrective action. The basic reason for inaction is the hope on the part of these parties that the problems will rectify themselves. In addition, politicians or lobby groups may impose explicit or implicit pressures on the supervisor to postpone action. But international experience has shown that bank problems can worsen rapidly if not promptly addressed. It is therefore important to establish incentives that encourage supervisory authorities to take early and decisive action in response to problems.

Part I: Identifying weak banks

1. Introduction and background

1.1 The 2002 guidance

1. Weak banks are a worldwide phenomenon. They pose a continuing challenge for bank supervisors in all countries, regardless of the political structure, financial system and level of economic and technical development. All bank supervisors have to be prepared to minimise the incidence of weak banks and deal with them when they occur.

2. Weak banks have common problems. Lessons can be drawn by pooling the experience of supervisors, especially the specific actions that have or have not worked in given circumstances. In the past, the lack of contingency arrangements and understanding of the tools available for dealing with weak banks have sometimes resulted in unnecessary delays in supervisory actions, and have been key factors in the high cost of resolving banking problems. The Basel Committee on Banking Supervision (BCBS) agreed that appropriate guidance could reduce the costs and spillover effects of these problems.

3. To this end, in 2002 the Basel Committee released international supervisory guidance for dealing with weak banks, based on the experiences and circumstances of various countries. Intended as a toolkit for supervisors, the 2002 guidance examined a wide variety of bank problems and their background and causes, and assessed the pros and cons of the methods used to address them. The methods included preventive measures, early identification, corrective actions, resolution issues and exit strategies. The guidance was not intended to be prescriptive; rather, it identified practices that had already been tried to good effect. The intention was to offer practical advice that could be adapted to the specific circumstances of each case.

1.2 Mandate

4. Global financial markets and the global regulatory landscape are now significantly different than they were in 2002 as a consequence of, and in response to, the 2007-2009 financial crisis (the crisis). Developments include changes to regulatory expectations and practices regarding early intervention, resolution frameworks, recovery and resolution planning (RRP), stress testing and macroprudential oversight. The Basel Committee therefore set up a Task Force in July 2013 to update the 2002 guidance by taking into account these important developments and lessons learned from the financial crisis.¹

5. The mandate of the Task Force was to (i) review existing supervisory guidance, as well as relevant publications issued since 2002 by the BCBS and other standard-setting bodies, and (ii) share supervisory lessons learned during the crisis. One such lesson was that poor governance or risk management can weaken a bank even if its financial ratios remain healthy. The Task Force was not aiming to provide a supervisory handbook on all types of preventive action, since many actions should take place in the course of supervising institutions. Rather, the goal was to show how to identify weak banks and how to deal with them.

¹ Twelve national jurisdictions were represented on the Task Force along with the European Banking Authority and the Financial Stability Institute.

6. The target audience of these guidelines is the supervisory community, including the international financial institutions (IFIs) that advise supervisors. For this reason, the Task Force has not focused on any specific category of countries or banking systems. The toolkit described here should be relevant whether the institution is a small local bank or a large international banking group; whether it is a public or a privately owned bank; and whether it is a universal bank, a financial group or a financial conglomerate. Supervisors can use the toolkit as a reference in a particular problem case; IFIs should find it useful for preparing the authorities in a particular country to manage their weak banks. It should be recognised that some tools may be more suitable for larger or smaller banks. For example, the requirements for stress testing and the development of formal resolution plans have generally been applied to larger and more systemically important banks.

1.3 Related work in other forums

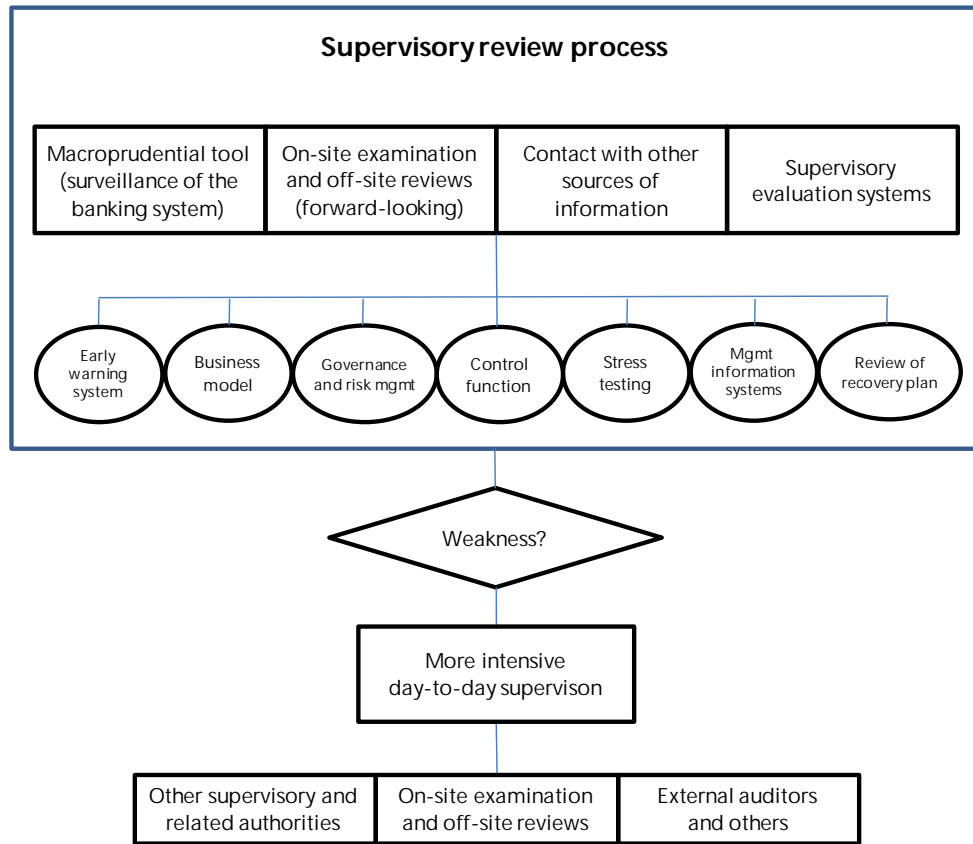
7. The Task Force has tried to minimise overlaps with work being undertaken in other forums on related issues. Where relevant, the guidelines refer to published reports and to existing international standards and guidelines, and cross-reference these where appropriate. A reference list is in Annex 1.

1.4 Structure of this report

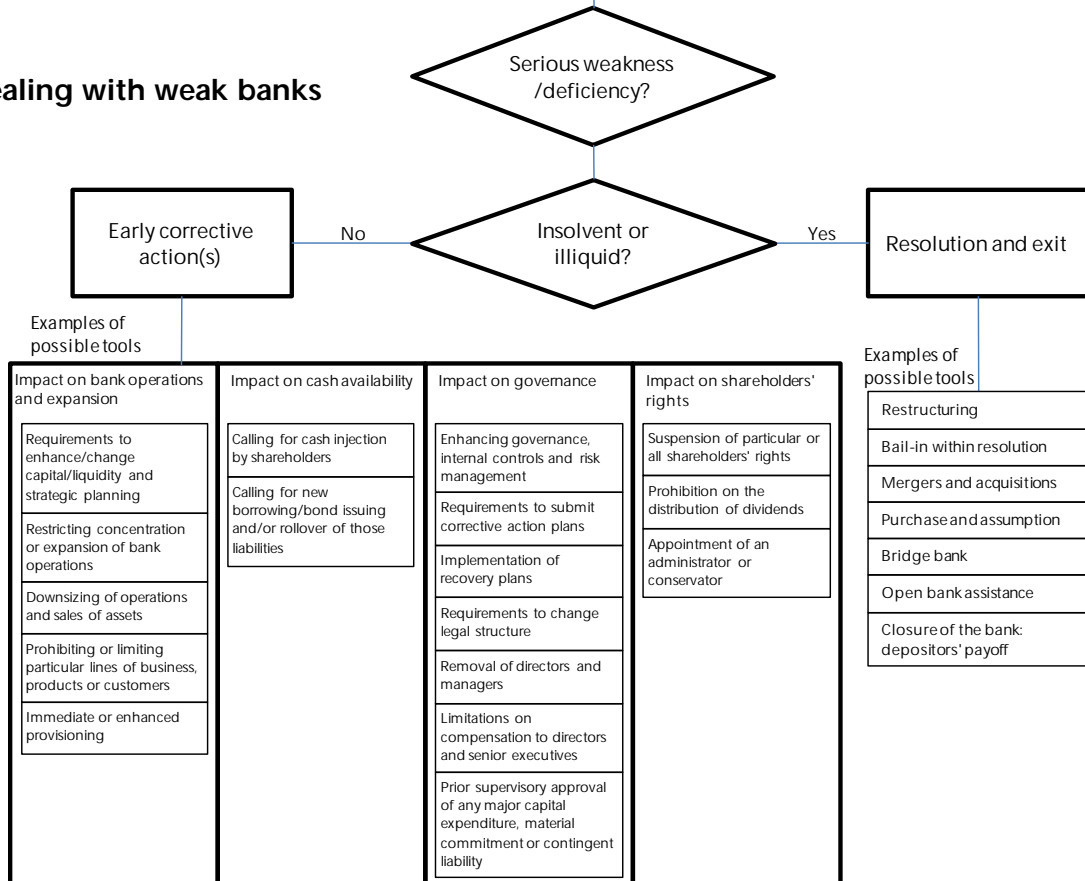
8. Weaknesses in a bank may occur at various times. The bank, together with the supervisor, must work continuously on steps to prevent problems and, if weaknesses develop, identify and remedy them promptly. The structure of these guidelines reflects these different stages (Figure 1). Part I discusses the underlying supervisory preconditions for dealing with weak banks and techniques that will allow the supervisor to identify problems. These phases include preparatory work on recovery and resolution issues. Part II concerns the corrective measures available to turn around a weak bank, and resolution and exit strategies for failing or failed banks.

Figure 1: Overview of the structure of the report

I. Identifying weak banks



II. Dealing with weak banks



2. General issues and concepts

2.1 Definition of a “weak bank”

9. This report uses the following definition:

A weak bank is one whose liquidity or solvency is impaired or will soon be impaired unless there is a major improvement in its financial resources, risk profile, business model, risk management systems and controls, and/or quality of governance and management.

10. The definition focuses on a bank which is facing potential or immediate threats to its liquidity and solvency, rather than one with observable weaknesses that are isolated or temporary and do not threaten its viability. While all weaknesses, whatever their magnitude and character, must be addressed by the bank, the problems of a weak bank, as defined above, are more fundamental. They include, but are not limited to: poor governance or management; inadequate financial resources (capital and liquidity); a non-viable business model or strategy; weak asset quality; and poor systems and controls. As banks do not become weak overnight, problems that seem to emerge rapidly are often a sign of financial or governance/managerial weaknesses that have been allowed to persist for some time. These problems can rapidly become a major concern for a supervisor if minimum prudential requirements are not met and the bank’s viability is threatened. The supervisor’s task is to identify these problems early, ensure that preventive or corrective measures are adopted, and have an agreed recovery and resolution strategy in place should preventive action fail. The resolution strategy will need to take account of the bank’s systemic significance.

2.2 Principles for dealing with weak banks

11. As part of the background to the work, the Task Force considered why it is necessary to deal with weak banks. The answer is related to the fundamental objectives of banking supervision. These, of course, vary somewhat from country to country and in some cases are expressly stated in law. As a general proposition, however, a central objective of supervision is to maintain stability and confidence in the financial system, thereby reducing the risk of loss to depositors and other creditors. In dealing with weak banks, this objective translates into supervisory actions aimed at preserving the value of the bank’s assets with minimal disruption to its operations (ie maintaining the economic entity), subject to minimising any resolution costs. In certain cases, it may well be that the bank as a legal entity should cease to exist.

12. The guiding principles for a supervisor when dealing with weak banks include:

- **Early identification of risk.** Supervisors should incorporate forward-looking tools (eg early warning systems (EWS), reviews of governance and management, macroeconomic surveillance and stress testing) to identify weak banks at an early stage.
- **Early intervention.** Supervisors should act promptly and intervene at an early stage. Experience from many countries shows that regulatory and supervisory forbearance exacerbates the problems of a weak bank, allowing them to grow rapidly and become more widespread and systemic. It thus makes eventual resolution efforts more difficult and costly.
- **Cost-effectiveness.** A least-cost criterion should guide the supervisor in making choices among alternative actions consistent with achieving supervisory objectives. The supervisor must consider all costs, including exogenous costs such as instability of the financial system, in deciding on a course of action.
- **Flexibility.** Legislation frequently adopts a rules-based approach. However, it is also helpful if the legislation permits the supervisor to exercise discretion in the deployment and timing of

supervisory tools. It is outside the Task Force's mandate to prescribe the nature of any country's legislative framework. Suffice it to say that supervisors should be prepared to act flexibly by considering the full range of powers available to them when faced with a weak bank.

- **Clear internal governance processes.** Supervisors should design their own governance processes to ensure that their discretionary decisions are taken at a level within the organisational hierarchy that is appropriate to the significance of the issue at hand and with a clear indication of the underlying reasons for the decision. Governance processes may include early warning thresholds. Where these are breached, the supervisory process should also track the reasons behind a decision to defer an action or to lessen the intensity of ordinary supervisory measures.
- **Consistency.** Consistent and well-understood supervisory actions are necessary so as not to distort the competitive environment and to minimise confusion and uncertainty in times of crisis. Actions must be supported by a well-functioning supervisory rating system: the ratings should be the basis for subsequent supervisory actions so that similar problems in different banks, large or small, private or state-owned, will receive similar treatment.²
- **Avoiding moral hazard.** Supervisory action should not create incentives for banks to act in such a way as to incur costs that they do not have to bear entirely. Shareholders should not be compensated for losses when a bank gets into difficulty; otherwise, this may encourage other banks to behave less prudently in the expectation that they, too, will receive a bailout if problems occur. Equally, supervisory action should not protect the interests of the bank's corporate officers. As Bagehot wrote, "any aid to a present bad Bank is the surest mode of preventing the establishment of a future good Bank".³
- **Transparency and cooperation.** Inadequate or incorrect information from the bank increases uncertainty for everyone involved. It can lead to misplaced supervisory action and add to the costs of solving the problems. The bank and the relevant authorities should aim for a high degree of information-sharing and transparency about their intended actions. Decisions on the extent of disclosures, if any, to the wider financial community and the general public are more difficult. These decisions depend on the specific situation and will need to be carefully assessed in each case. A major consideration must be whether the disclosure contributes to the supervisor's objective in resolving the weak bank and maintaining broader systemic stability.
- **Avoiding potential systemic problems.** To avoid distorting competition in the financial sector, all banks should, in general, be subject to the same supervisory and regulatory framework. This applies in normal times as well as in times of distress. However, a more intensive framework may be applied to systemic banks, for good reasons. Systemic banks have bigger interbank linkages and carry out a wider range of activities, often including cross-border operations. They also tend to be large, so a failure will create greater spillover effects. But systemic problems do not arise only with large banks. They may arise when a number of small banks fail simultaneously or where a small bank has a critical position in a particular market segment. Equally, a large bank's failure may not have systemic consequences.
- **Early preparation.** Deterioration in the perceived position of a bank can occur rapidly. For this reason, it is important that supervisors take early preparatory steps to ensure they are well equipped to respond to a crisis situation in a supervised bank. For banks that are systemic,

² The treatment of public sector banks is discussed in more detail in Section 8.4.

³ See Bagehot (1873).

additional preparation for crisis situations, both by supervisors and by banks themselves, is particularly important. Systemic banks should be obliged to draw up recovery plans demonstrating how they would tackle crisis situations and which measures they would take to avoid failure. Supervisors should be required to identify systemic banks, benchmark and challenge banks' recovery plans, and prepare for the failure of a systemic bank by having resolution plans ready. Recovery and resolution plans should not assume that taxpayers' money or a lender of last resort facility from the central bank can be relied on to resolve the bank. In addition to consideration of depositors, resolution plans should endorse the general principle that no creditors should be worse off in a resolution (including cross-border resolution, where applicable) than they would be in a liquidation process.

2.3 Symptoms and causes of bank problems

13. It is important to distinguish between the symptoms and causes of bank problems. The symptoms of weak banks are usually poor asset quality, lack of profitability, loss of capital, excessive leverage (eg in excess of the leverage ratio), excessive risk exposure (eg in terms of concentration of risk), reputation problems and liquidity concerns. The different symptoms often emerge together. The causes of weak banks can usually be traced to one or more of the following conditions: an inappropriate business model⁴ given the business environment, poor or inappropriate governance, poor decision-making by senior management and/or a misalignment of internal incentive structures with external shareholder/stakeholder interests.

14. While banking difficulties usually result from a combination of factors, they can be traced to credit problems in the majority of cases. This should not be surprising given that lending has been and still is the mainstay of banking. Thus, strong capital requirements are a necessary but not sufficient condition for banking sector stability: a strong liquidity base reinforced through robust supervisory standards is of equal importance. For example, during the early "liquidity phase" of the financial crisis that began in 2007, many banks – despite having adequate capital levels – experienced difficulties because they did not manage their liquidity in a prudent manner. The crisis drove home the importance of liquidity to the proper functioning of financial markets and the banking sector. Prior to the crisis, asset markets were buoyant and funding was readily available at low cost. The rapid reversal in market conditions illustrated that liquidity can evaporate quickly and that illiquidity can last for a long time.

15. Apart from credit and liquidity risk, a bank's weaknesses may stem from market risk, operational risk, interest rate risk or strategic risk. These risks are not new, although historically they have been less important than credit risk in accounting for bank failures. But some of these risks are gaining importance. For example, operational risk is coming into sharper focus as banks make use of more sophisticated systems, new delivery channels and outsourcing arrangements that increase the bank's reliance on, and exposure to, third parties. At the same time, banks should also benefit from improved techniques and instruments for risk reduction. The balance between risk and reward has to be carefully managed in all banks.

16. More often than not, excessive risk exposures, credit losses, liquidity problems and capital shortfalls stem from weaknesses in corporate governance (eg weak oversight by the board of directors, absence of an effective risk appetite framework), compensation policies (eg those focused on short-term earnings, without risk adjustments) and internal control systems. In particular, it is often true that these processes have not been sufficiently robust to prevent:

⁴ The crisis showed that bank failures are often the result of non-viable business models. The common characteristics of such business models are described in Section 4.2.1.

- *Poor lending practices*, such as poor underwriting skills or an overly aggressive loan expansion programme, coupled with an absence of incentives to identify problem loans at an early stage and to take corrective action.
- *Excessive concentrations* across the business model, including funding, lending, sources of income and risk. Concentrations can accumulate across products, business lines, countries and legal entities, and can be destabilising. Large exposure regimes implemented by many countries aim to limit some concentrations.
 - Concentration of lending to one geographical area or industrial sector has been the cause of problems for many banks. Unless a bank maintains a diversified loan portfolio, it is exposed to the risk that loans to any particular area, or group of related companies, could become impaired at the same time.
 - Products containing the same types of risk under different labels and in different booking units, such as structured products and off-balance sheet funding structures, can mask exposures and risks.
 - Concentrations in the investment portfolio coupled with undue reliance on credit rating agencies can result in increased risks.
 - Concentrations in funding, particularly when coupled with concentrations in lending, can also be destabilising.
- *Structural imbalances in a bank's liquidity position*, determined by, for example, an unsustainable maturity structure, a high loan-to-deposit ratio, or a low share of stable sources of funding on total liabilities. An excessive concentration of funding is typical of business models that are overly reliant on ample market liquidity and that ignore the liquidity risk.
- *Excessive risk-taking*, such as through speculative trading. This may come about when a bank's compensation scheme ties compensation or bonuses to short-term performance (eg short term increases in the bank's profits, earnings or share price).⁵ When compensation is linked to performance targets that do not take the related risks into consideration, bank managers have an incentive to assume a higher risk profile. They also have an incentive to under-invest in risk control staff and other critical risk management activities, such as investment in the information technology (IT) tools needed to accurately aggregate and monitor risk positions to ensure they are up to date. Excessive risk-taking may also come about when a bank's culture is oriented towards year-on-year profit increases. Other reasons may include weaknesses in risk culture and governance, lack of risk experience and skills among senior executive and non-executive management, a lack of influence of the risk function, and weaknesses in the way risk is measured and reported. Finally, risk management may not evolve at the same pace as financial innovation.
- *Overrides of constraints in existing policies and procedures*, such as limits on concentration, connected lending, value-at-risk exposure of the trading book, and liquidity risk tolerance. Strong individuals within the bank may override policies and procedures by force of personality, dominant ownership or executive position. In public sector banks, this can also come about through political interference.
- *Excessive balance sheet growth*. In the run-up to the crisis, some banks had only limited understanding of, and control over, their potential balance sheet growth and liquidity needs,

⁵ See Financial Stability Forum (2009).

including cross-border funding needs. They failed to properly price the risk that exposures to certain off-balance sheet vehicles might need to be funded on the balance sheet precisely when it became difficult or expensive to raise such funds externally. Some boards had not put in place mechanisms to monitor the implementation of strategic decisions, such as balance sheet growth.

- *Fraud or criminal activities and self-dealing* by one or more individuals.

17. Weak banks have, in the past, contributed to or exacerbated financial crises. Equally, external factors such as negative macroeconomic shocks (including a currency crisis, a weak real economy, inadequate preparation for financial sector liberalisation, a massive market liquidity squeeze etc) may also lead to problems for banks. External factors may not overwhelm a well managed and financially sound bank, but will certainly expose deficiencies in management and control in weaker banks.

3. Preconditions

18. The Basel Committee's *Core principles for effective banking supervision*⁶ set out the necessary foundations of a sound supervisory system. Some of these principles are crucial in preventing and dealing with weak banks; if not met, supervisors' ability to deal with a weak bank effectively may be hampered. In particular, laws must provide for, or supervisors must be given the power to set and/or require, the following standards:

- Comprehensive rules for the licensing of banks, for permitting new major activities, acquisitions or investments by banks, and for ownership changes in banks (Core Principles 4–7).
- Prudential rules or guidelines for banks, such as norms and limits on capital, liquidity, connected lending and loan concentrations (Core Principles 16–25).
- Requirements for effective corporate governance, including compensation policies, and internal controls and risk management systems in banks consistent with the strategy, complexity and scale of the business (Core Principles 14, 15 and 26).
- A forward-looking supervisory assessment of the risk profile of individual banks and banking groups at a level proportionate to their systemic importance (Core Principles 8 and 12).
- Supervisory reporting – the supervisor should collect, review and analyse prudential reports and statistical returns from banks on both a solo and a consolidated basis (Core Principle 10).
- A supervisory framework and culture that encourage early intervention. Risks emanating from banks and the banking system should be identified and addressed promptly. Supervisors must act at an early stage to address unsafe and unsound practices or activities that could pose risks to banks or to the banking system. The supervisor should have a range of tools permitting a graduated and flexible response to different problems, as well as timely corrective action and powers to enforce a range of penalties when prudential requirements are not met. And supervisors should have plans in place, in partnership with other relevant authorities – including through home-host relationships – to take action to resolve non-viable banks in an orderly manner (Core Principles 8, 9, 11 and 13).

⁶ See Basel Committee on Banking Supervision (September 2012).

- Accounting standards for preparing financial statements that are widely accepted internationally and rules that are relevant for banks. In particular, there must be rules or guidance that require asset impairment to be recognised on a timely basis. Other areas that require significant judgements, eg fair value measurement and going-concern assessments, must also be covered (Core Principle 27).
- The scope and standards to be achieved in audits of banks. These require the use of a risk-based approach in planning and performing the audit. The supervisor should also have the power to reject or rescind the appointment of auditors that do not adhere to established professional standards. A supervisor should be able to require auditors to report matters that are likely to be of material significance directly to the supervisor (unless this is not permitted, in which case reporting should be made indirectly through the bank (Core Principles 10 and 27)).⁷
- A legal and judicial framework, including an adequate insolvency regime,⁸ to provide each responsible authority with the legal powers necessary for an efficient resolution of banks, expeditious liquidation of assets and fair and equal treatment of creditors, along with tools that enable authorities to ensure the continuation of critical economic functions (Core Principle 1, FSB Key Attributes⁹ 2 and 3).
- A framework of cooperation and information-sharing among domestic and foreign official agencies (eg central banks and finance ministries) responsible for the safety and soundness of the financial system. This framework reflects the need to protect confidential information (Core Principles 3 and 13).

19. The other main institutional preconditions for dealing effectively with weak banks and providing a safety net (systemic protection) are:

- Laws providing the bank supervisory authority with operational independence and access to adequate resources for conducting effective supervision, including the ability to take early action (Core Principle 2).
- Laws affording appropriate legal protection to supervisory authorities and individual supervisors for actions taken in good faith in the performance of their duties (Core Principle 2).
- Neutral tax rules that allow asset transfers and other transactions in a bank resolution without distorting or offsetting the corrective nature of such measures.
- A well functioning safety net (systemic protection) that enhances the public's trust in the banking system. Important features of a safety net are a lender of last resort facility with the central bank and deposit protection arrangements. During the crisis, the banking system came under severe stress, which necessitated central bank action to support both the functioning of money markets and, in some cases, individual institutions.

⁷ The banking supervisory approach could differ from one country to another. In some countries, supervisors require external auditors to (i) confirm the adequacy of provisions or allowances made by banks for bad and impaired debts and diminution in the value of assets; (ii) verify compliance with regulatory requirements on prudential norms (eg liquidity requirements and concentration limits) and the bank's assessment of its capital adequacy ratio; (iii) give a report on the quality of the internal control and risk management procedures; or (iv) report to the supervisor immediately any serious violations of banking or other regulations, criminal offences involving fraud or dishonesty, issues that prejudice the interest of depositors, or any fact that may result in material weaknesses in a bank.

⁸ In addition, an efficient insolvency regime is needed for corporations and individuals.

⁹ See Financial Stability Board (November 2011).

4. Identification of weak banks

20. If not corrected, weaknesses in banks tend to grow over time. The supervisor's challenge is to identify weaknesses before they become irreparable by relying on forward-looking risk analysis and on early intervention powers. To address this challenge, supervisory authorities should set up a structured approach to the supervisory review of banks, based on the principle of risk-based supervision and grounded in the use of various investigative methodologies and sources of information (which should be timely, relevant and of good quality and should include both qualitative and quantitative material). But appropriate methodologies and good sources of information will rarely be sufficient; supervisory judgement will almost always be needed to interpret the information and assess the financial health of a bank.

21. Developments in the aftermath of the crisis have highlighted the particular risks that large and interconnected banks can pose to financial stability. In response, supervisors have focused much effort on developing tools and techniques to mitigate these risks, including enhanced capital standards, heightened microprudential supervision of these institutions, and the development of recovery and resolution regimes specifically tailored to these large institutions. Stress testing has become a key component of the supervisory review process for systemically important banks, as well as a tool for contingency planning and communication.

4.1 Characteristics of the supervisory review process

22. The Basel Committee has set out four key principles of supervisory review in the second pillar of the compilation entitled International convergence of capital measurement and capital standards (Basel II),¹⁰ which discusses specific issues to be addressed in the supervisory review process. In this context, the process includes an ongoing dialogue between supervisors and banks to help ensure that banks have adequate capital to cover all their risks, and also to encourage banks to develop and use better risk management techniques. Banks are responsible for developing an internal capital assessment process and setting the appropriate capital targets. Supervisors are expected to evaluate how well banks are assessing their capital needs.

23. An effective supervisory review process also requires supervisors to implement a risk-based supervisory approach with forward-looking aspects. Supervisory activities (eg supervisory planning and resource allocation) should be prioritised in accordance with the risk profile and systemic importance of individual banks and banking groups. In this forward-looking approach, the supervisor identifies the areas of greatest concern by assessing the bank's various business lines and risks; its associated strategies; and the quality of its governance, management and internal controls. The supervisory focus is directed to these areas to allow the supervisor to identify and address weaknesses at an early stage. Many banks have seen the advantages of a risk-based approach and adopted a similar methodology for their own internal control system (eg for internal audit and risk management work).

¹⁰ See Basel Committee on Banking Supervision (2006). Principle 1: Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels. Principle 2: Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process. Principle 3: Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum. Principle 4: Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

24. In practice, this means identifying the significant business units and areas of inherently high risk, such as a division of the bank that is consciously targeting riskier borrowers. The supervisor's efforts may be concentrated on examining risk exposures and the robustness of the controls in these areas, if necessary through regular on-site examination. This approach may also identify and focus on relatively weak controls, such as an internal audit function that is understaffed relative to the bank's peers. The supervisor's resources will be targeted on discovering more about the areas of weakness with a view to implementing a remedial action plan, where needed.

25. The adoption of a risk-based supervisory framework is premised on the ability and willingness of supervisors to exercise sound judgement, for example, in determining which areas of a bank pose the greatest supervisory concern. These assessments are difficult because the supervisor must consider the quality of risk management and internal controls in determining what constitutes a high risk area. The consequences of making the wrong judgement are significant: areas considered to be of low to moderate risk will not be given heightened supervisory focus, which in turn may allow excessive risk-taking to build up at individual banks. For this reason, supervisors should have in place robust internal governance processes to ensure that well supported judgements are being made within and across supervisory teams. They will also regularly review other areas to ensure that their risk-based approach is correctly focused, as noted below.

4.2 Key elements of the supervisory review process

26. The supervisory review comprises the gathering of quantitative and qualitative information on the risks facing the bank and the assessment of the bank's ability to control or mitigate these risks through internal governance and control structures and capital and liquidity resources. Supervisors should use a range of approaches for gathering the information, and they should establish systems for substantiating judgements on the bank's capability to mitigate the identified risks. Peer group reviews may be an effective way of identifying outliers. Adopting these processes should allow supervisory authorities to identify those banks whose deficiencies or inadequate financial resources relative to risks are likely to make them weak. This section presents the key elements of the supervisory review process: (i) on-site examination, off-site reviews and forward-looking supervision; (ii) surveillance of the banking system and macroprudential instruments; (iii) contact with sources of information; and (iv) supervisory evaluation systems.

4.2.1 On-site examination, off-site reviews and forward-looking supervision

27. Effective banking supervision should consist of some form of both on-site and off-site supervision with forward-looking aspects. If deterioration or potential deterioration in the bank's condition is detected in the off-site reviews, which typically involve analysis of information submitted by the bank, on-site examination can be used to assess more precisely the nature, breadth and depth of the problem. On-site and off-site supervision should consider a number of sources of information and assessment processes to identify risks and weaknesses.

28. In addition, supervisors are increasingly using a number of forward-looking tools to facilitate the early identification of a weak bank. These include the supervisory review of a bank's business models, the quality of its governance, risk management and control functions and, when appropriate, stress testing practices. Collectively, these assessments provide valuable insights into a bank's future risk profile. They may also be used as the basis for pre-emptive corrective measures against weak banks, even if their reported capital and liquidity positions or earnings performance may otherwise appear strong.

On-site examinations

29. The breadth, depth and frequency of on-site examinations will be driven by the bank's overall risk profile. This can be determined by assessing the level and trend of risks in the bank, the adequacy of

its risk management systems (including the reporting structure) and its financial strength in terms of earnings and capital and liquidity resources. There can be general, full-scope examinations, or specific ones focusing on segments of operations or types of risk. On-site examinations can cover most of the subsequent key elements of the supervisory review process, and they also provide a more qualitative analysis. The purpose of such qualitative assessments is for the supervisor to determine whether management has the ability to identify, measure, monitor and control the risks faced by the bank.

30. In many countries, examinations are typically conducted every 12 months. Exceptions to the examination cycle will depend on the risk profile of the institution. The cycle may be extended for small banks with low risk and a stable financial position, while those with weak or deteriorating financial ratios should be examined more frequently. In some countries, for larger banks, a risk-based approach (ie concentrating on areas of known or suspected deficiencies in a bank) is complemented by a rolling programme of reviews centred on areas of impact rather than a single, full-scope review. A rolling programme within large banks is useful for ensuring that, from time to time, an assessment equivalent to a full-scope examination is undertaken without the excessive commitment of resources that would be required for a comprehensive review. This will help to identify areas of potential weakness and prevent overreliance upon reactive tools.

31. Examination reports should be prepared in a timely fashion. For example, it is the practice of many supervisors to finalise the report within one month of the conclusion of the examination. When there are significant weaknesses calling for immediate attention, supervisory action should be initiated without waiting for the report to be finalised. All or parts of an examination (eg where special skills are needed) may be commissioned by supervisors but undertaken by external auditors or other “skilled persons” other than the supervisor. Supervisory agencies should possess the legal power to order special examinations of individual banks or groups of banks at any time to follow up on suspected weaknesses.

Regulatory reporting¹¹ and early warning indicators

32. Banks are typically required to submit timely financial statements to the supervisor in the form of regulatory returns and other ad hoc financial reports. The frequency of reporting depends on the nature of the data. Market-based and other data that become obsolete fairly quickly require a shorter reporting interval. A quarterly frequency would be the maximum appropriate interval for many types of prudential data, such as loan classification and provisioning, risk concentration, insider lending and capital adequacy. Supervisors should have the legal power to require banks to report all data that are relevant for supervision, with sanctions available to punish banks submitting deficient, incorrect or late returns.

33. Some supervisors have developed or are developing statistically based early warning systems based in large part on the regulatory reports submitted by banks. These models typically estimate the likelihood of failure or financial distress over a fixed time horizon. Alternatively, some EWS aim at predicting future insolvency by estimating potential future losses.

34. One drawback¹¹ of EWS is that the information used as an input to the statistical models consists mainly of quantitative financial indicators, which are objective measures. The use of qualitative factors as inputs to the models – including the quality of management and internal controls and overall risk management practices – is difficult because they must be represented, albeit imperfectly, by some quantitative indicator. It is also not easy to incorporate competitive and environmental factors.

35. EWS will not normally provide firm evidence of weaknesses, but they can give indications that suggest the need for a deeper investigation by the bank and its supervisor. EWS are particularly

¹¹ See Basel Committee on Banking Supervision (September 2012), in particular, Core Principle 10.

important for helping supervisors to direct limited resources towards banks or activities where weaknesses are most likely to be found.

Business model assessment

36. The assessment of business models is becoming a structured component of supervisory review frameworks in many countries. Understanding a bank's business model can be an effective tool for early detection of the risks and vulnerabilities that could turn strong banks into weak ones.

37. The financial crisis showed that banks' failures are often the result of non-viable business models. The common characteristics of such business models include:

- Excessive reliance on an *inappropriate funding structure*, given the business model.
- *Excessive concentrations* across the business model – funding customer base, sources of income, and/or risk. Even with sound risk management tools, such concentrations can be destabilising and leave the bank vulnerable to sudden changes in the business environment.
- *Earnings asymmetry/volatility*, identified by significant changes in the earnings mix over a short time frame, particularly when driven by non-core business lines. Such changes also suggest vulnerability to sudden changes in the business environment.
- *Unrealistic strategic assumptions*, particularly excessive optimism about capabilities, growth opportunities, economic indicators and market trends, which leads to poor strategic decisions that imperil business model viability.
- *Production of and investment in complex products*, leading to significant increases in risk exposure, often without appropriate controls, oversight or understanding of the nature of the risk.

38. The assessment of business models requires the supervisor to both develop an understanding of the viability of the bank's current business model and form a view of its sustainability, given the strategic choices that the bank is making and/or the impact of changes to the business environment in which it operates.

39. The outcome of the assessment can provide supervisors with a valuable supervisory tool by allowing for the early detection of potentially risky exposures incurred or actions taken by the bank to generate current or future profits that may ultimately lead to its failure.

40. Whenever the outcome of the assessment suggests that the business model is non-viable or unsustainable, supervisors should consider timely corrective action, even if the bank has not yet breached any operational limits.

41. A feature of business model analysis is the review of a bank's financial information and forecasts and proposed business strategy and plans. Such a review can produce a wide array of financial ratios with which to assess the performance and financial condition of the bank and to gauge the sensitivity of its condition to projected changes in the wider economic and business environment. The results can be used to support the analysis of whether potential weaknesses in the business model are likely to materialise as a result of the projected changes.

Governance, risk management and controls

42. The quality of governance and management is probably the single most important element in the successful operation of a financial institution. Therefore, a critical element of the supervisory review process is to regularly evaluate a bank's corporate governance practices, including the quality of board and senior management oversight and the effectiveness of the bank's risk management and control functions (including internal audit, credit review and compliance).

43. Under a risk-based supervisory regime, these reviews serve two important purposes. First, they help supervisors determine the reliability of a bank's own risk management and control processes, which in turn helps to inform the scope, resource needs and areas of focus during the off-site reviews and on-site examination process. Second, they are used to take early corrective action against banks that have inadequate governance and risk management practices, even if their financial condition and performance indicators still appear robust. The choice of tool and time frame for any remedial actions taken should be proportionate to the level of risk the deficiency poses to the safety and soundness of the bank or the relevant financial system.

44. Basel Core Principles 14 and 15 outline supervisory expectations for corporate governance and risk management at each banking organisation. In general, the board is responsible for establishing a bank's overall strategic direction and risk appetite and for developing an appropriate organisational structure, risk management framework and control environment. Senior management is accountable for putting the board's strategic objectives and high-level policies into practice.

45. As part of their evaluation of the overall corporate governance of a bank, supervisors should assess the appropriateness of criteria used by banks in the selection of board members and senior management, including whether their skill sets are commensurate with the nature and complexity of the bank. In particular, an assessment of the overall risk culture of a bank provides valuable insights into the effectiveness of its board and senior management. Such a review entails an evaluation of the extent to which the board and senior management set the right tone and how that has been put into practice in the business lines, as well as in the risk management and control functions.

46. Supervisors should also assess the depth and breadth of interaction between the board and the risk management and control functions; how information flows to and from the board and senior management; and how potential problems are escalated and addressed throughout the organisation. Ultimately, supervisors should hold the board and senior management accountable for material shortcomings in a bank's business model, stress testing practices, or other weaknesses in policy, practice or condition.

*MIS, data aggregation and reporting*¹²

47. Banks are expected to have management information systems (MIS) that enable them to collect, sort, aggregate and report data and other information efficiently and reliably within business lines and across the bank. The reports are for use in risk management, including risk aggregation and, where appropriate, stress tests. Data should be reliable and generally consistent across time. Information should be available at the group level and the legal entity level and reported to the relevant parties, including senior management and the board. With access to MIS data, supervisors can more closely monitor a bank's financial indicators and identify unfavourable developments or weaknesses earlier.

48. Supervisors should require banks to maintain MIS that produce information on a timely basis, both in normal times, for recognising weakness and during resolution.¹³ MIS provide key information such as risk exposures, liquidity positions, interbank deposit and short-term exposures to, and of, major counterparties. The adequacy of MIS should be assessed by timely analysis of information on both a qualitative and a quantitative basis.

¹² In January 2013, the Basel Committee published its *Principles for effective risk data aggregation and risk reporting*. The principles aim to strengthen practices at banks to improve their risk management and decision-making and thereby enhance their ability to cope with stress and crisis situations. Firms designated as global systemically important banks (G-SIBs) are required to implement the principles in full by 2016.

¹³ See Financial Stability Board (November 2011, paragraph 12.2).

Stress testing¹⁴

49. Stress testing is an ongoing risk management practice that supports banks' forward-looking assessment of risks and better equips them to address a range of adverse outcomes. Stress testing can, for instance, assist in highlighting unidentified or under-assessed risk concentrations and interrelationships and their potential impact on the banking organisation during times of stress.

50. Supervisors should expect banks of all types and sizes to have the capacity to analyse the potential impact of adverse outcomes on their financial condition. Large, systemically important banks and banks that have a significant concentration in a particular type of loan or investment are generally expected to have more developed means for evaluating such outcomes, including, where appropriate, formalised stress testing programmes. Where relevant, supervisors should use any negative results from stress tests to enhance risk management practices. In addition, supervisors should expect that a bank would use its stress testing framework to determine whether exposures, activities and risks under normal and stressed conditions are aligned with the bank's risk appetite or the level and type of risk a bank is able and willing to assume.

51. Stress tests are multifaceted and multipurpose instruments that may differ in terms of objectives (depending on whether they are applied to a bank or to the overall financial system), methodology (eg single- or multifactor stress tests, type of shocks, type of scenarios) and scope. As with other aspects of its risk management, a bank's stress testing framework will be effective only if it is subject to strong governance and effective internal controls to ensure that the framework is functioning as intended. Thus, it is important that a stress testing framework be well documented within the group-wide risk appetite and governance framework. Supervisors should request information on a banking organisation's stress testing framework and results to assess liquidity and solvency vulnerabilities, enhance capital planning and liquidity contingency planning, identify appropriate actions and assist with recovery and resolution planning.

52. Stress tests can be a key instrument for the early detection of a weak bank. Stress testing is not only a useful process, but also a means to engage in a dialogue directly with the bank in order to identify potential weaknesses of banks in a forward-looking manner, and to alert bank managers to take the necessary corrective actions. Stress test results are one of the instruments used by supervisors to inform the overall decision about corrective action, given that the formality of stress testing processes will differ depending on the size and complexity of the banks.

(a) System-wide stress testing

53. Stress testing tools and methodologies have evolved significantly in recent years.¹⁵ In addition to being applied at the micro level (portfolios of individual banks), stress testing techniques have assumed a pivotal role in financial stability analysis (macroeconomic or system-wide stress tests). The latter stress tests are used by supervisors and macroprudential authorities to assess the robustness of the financial system more broadly (see Section 4.2.2), rather than focusing on specific banks, and may

¹⁴ In May 2009, the Basel Committee published its *Principles for sound stress testing practices and supervision*, which are aimed at improving banks' stress testing programmes in response to weaknesses observed during the financial crisis. The principles – 15 for banks and six for supervisors – cover the overall objectives, governance, design and implementation of stress testing programmes. The paper also notes issues related to stress testing of individual risks and products.

¹⁵ In April 2012, the Basel Committee published its *Peer review of supervisory authorities' implementation of stress testing principles*. Countries are, however, at various stages of maturity in the implementation of supervisory stress testing programmes and guidance; hence, more work remains to be done to fully implement supervisory stress testing in many countries.

assist in the identification of systemic vulnerabilities. The system-wide stress testing also helps supervisors identify individual banks' weaknesses.

(b) Supervisory firm-specific stress testing

54. Supervisors in some countries complement banks' forward-looking stress testing with supervisory stress tests based on common scenarios. Prominent among these supervisory tests are those designed to assess the adequacy of capital and liquidity. That prominence is appropriate, given the importance of capital and liquidity to a bank's viability. Supervisory stress testing in these two areas should include an evaluation of the interaction between capital and liquidity and the potential for both to become impaired at the same time. Depletions and shortages of capital or liquidity can prevent the bank from performing effectively as a financial intermediary, destroy the trust and confidence of counterparties, and diminish its capacity to meet legal and financial obligations or become insolvent.

55. Supervisory capital and liquidity stress testing should consider how losses, earnings, cash flows, capital and liquidity would be affected in an environment in which multiple risks manifest themselves at the same time – for example, an increase in credit losses during an adverse interest rate environment. Additionally, supervisors (and banks) should recognise that at the end of the time horizon considered by a given stress test, there may still be substantial residual risks or problem exposures that may continue to put pressure on capital and liquidity resources.

56. Reviewing the stress test outcomes and assessing a bank's stress testing programme can prompt supervisors to take action. Such action might require a bank to raise the level of capital above the minimum to ensure that the bank continues to meet its minimum capital requirements over the capital planning horizon during a stress period. Supervisors may also identify liquidity deficiencies and may ensure that management takes appropriate action, such as increasing the liquidity buffer of the bank, decreasing its liquidity risk, and strengthening its contingency funding plans. Stress testing results may also be used to inform the appropriate supervisory response should a bank face financial or other difficulties.

(c) Reverse stress testing

57. Reverse stress testing is complementary to other stress tests. Unlike general stress and scenario testing, which test for outcomes arising from changes in circumstances, reverse stress testing starts with business failure. It then identifies circumstances in which such failure might occur, that is, circumstances that would render its business model unviable, and thereby identifies potential business vulnerabilities.

58. Based on the analysis of its reverse stress tests, senior management should determine whether it should put in place either mitigating actions at the current time or triggers for future action should the scenario develop. The results of reverse stress tests should also inform contingency planning and enable senior management to make decisions that are consistent with business and capital planning.

Review of recovery plans

59. International and national regulatory frameworks require a significant number of global and national systemic banks to draw up recovery plans that prepare them for future crises and to implement recovery processes in their organisational structures. In some countries, this requirement has been extended to all banks. In that context, recovery indicators need to be designed and implemented as an extension of banks' risk management.

60. The breach of such recovery indicators should be reported to supervisors on a timely basis, allowing for potential preventive supervisory action. Recovery indicators may be integrated into the overall supervisory process.

61. Authorities should assess the recovery plan as part of the overall supervisory process, assessing its credibility and likelihood of being effective.

Resolvability assessment

62. In many countries, resolution authorities and/or supervisors carry out resolvability assessments on large systemic banks or all banks, depending on the country. Such information can be useful for supervisors in identifying weak banks.

4.2.2 Macprudential surveillance and responses

Macprudential surveillance

63. The surveillance of banks for supervisory purposes focuses mainly on identifying individual banks at risk of failure. This firm-specific supervision is reinforced by peer group reviews and cross-system reviews. Increasingly, however, supervisors are supplementing their microprudential supervision with efforts to identify risks in the financial system as a whole. This macroprudential approach allows supervisors to take actions to head-off systemic financial instability or improve the resilience of systemically important banks and the financial system.¹⁶ Surveillance of the banking system entails the identification of potential external shocks to the domestic and international environment and an assessment of how the banking system will be affected by these shocks. Pertinent issues involve the ability of the banking sector to absorb such shocks. Also important are considerations about whether losses can be spread through credit interlinkages and the liquidity of financial markets. The answers to these questions will help determine the choice of particular macroprudential instruments.

64. Many central banks and supervisory authorities publish surveillance analyses of the banking system in their annual reports and, on a more frequent basis, in standalone financial stability reports. Some countries have established authorities dedicated to macroeconomic surveillance and to monitoring market developments. These authorities are also likely to play an important role in deciding which macroprudential instruments should be activated and when. Where there are separate authorities, all relevant authorities should be closely involved in determining the macroprudential factors to be taken into account by microprudential supervisors.

65. Surveillance of the banking system and the financial system as a whole can provide early warning indicators of problems that may affect individual banks. Analysis of the state of the economy and credit conditions can help inform the supervisory approach to individual banks. For example, if economic surveillance suggests that there is a significant risk of a sharp decline in real estate values, the supervisor would be wise to monitor more closely those banks with particular exposure to the sector. One of the recently evolving ways to identify systemic risks is through macroeconomic or system-wide stress testing, as mentioned in the previous section.

66. Evidence from past episodes of bank weakness or failures may also be indicative of the macroeconomic factors that could provide an early indication of bank risk. A plethora of empirical studies have been conducted on leading indicators of banking crises. Macroeconomic factors frequently cited in these studies include a marked slowdown in real output, asset price bubbles (eg in financial assets or real estate), increases in real interest rates and currency depreciation, particularly when these negative shocks follow a period of rapid credit growth and/or financial deregulation.¹⁷ When a country is overbanked, such macroeconomic factors may affect a number of small banks, which poses the risk of their simultaneous failure.

¹⁶ See eg International Monetary Fund (2013).

¹⁷ For a review of the literature on leading indicators of banking crises, see Bell and Pain (2000, pp 113–29).

67. Contingency planning and/or recovery planning may give supervisors a deeper insight into banks' potential behaviour in crisis situations. In many countries, only a limited number of banks in the financial system are obliged to produce formal recovery plans. However, many more banks may have developed generic recovery plans or contingency plans. A horizontal analysis of all available plans may provide a valuable contribution to the supervisor's assessment of the banking system as a whole. Such analysis may give an insight into risks identified by the banks themselves, the chosen indicators for such risks and the proposed mitigation tools. This benchmark approach may also provide the supervisor with the opportunity to identify and spread best practices for relevant banks regarding objectives, content and the level of operational detail available in recovery plans.

68. Supervisors and macroprudential authorities frequently share analyses of macroprudential developments with bank management to encourage prudent responses. For example, if a build-up in a particular type of investment or reliance on a common funding source appears to be creating a concentration risk, supervisors will want banks to be aware of the risk and to evaluate its potential effect on their business. History shows that when many banks and investors in an economy fund a high level of commercial real estate assets and valuations rise rapidly, the risks of a large drop in values can be pronounced. The effect of such a loss in values may be particularly severe for banks with business models that focus on funding real estate markets, and supervisors may focus particular attention on banks with such models when a build-up in commercial real estate loans is observed.

69. One approach to measuring credit risk is to trace the effects of an exogenous adverse event, such as an increase in interest rates or a marked slowdown in aggregate demand, and thus output growth,¹⁸ using a quantitative macroeconomic model or more qualitative analysis. The impact on banks' household and corporate customers would depend on their own vulnerability at the time. This, in turn, is likely to depend on factors such as the level of, and recent trend in, household and corporate income and on capital gearing of the corporate sector on average and across the distribution. The position of firms and households at the top end of the distribution of fragility indicators would be particularly important since these would be the ones most likely to default on their loan repayments. In turn, the impact on banks of deterioration in the corporate and household (and overseas) position would depend on the composition of banks' exposures and the capital cushion available to withstand losses.

Macroprudential responses

70. Various tools and macroprudential instruments are available to counter risks identified during system surveillance. The Basel III capital regime introduced tools for containing systemic risk. These include countercyclical capital buffers, capital buffers for systemically important banks and – to the extent these are used for macroprudential purposes – the introduction of internationally harmonised leverage and liquidity requirements. These tools are designed to constrain excessive risk-taking during economic upswings while enhancing the financial system's resilience to shocks during cyclical downturns.

71. Similarly, if supervisors are observing a rapid build-up in exposures to real estate when market conditions suggest the possibility of unsustainable valuations, one macroprudential approach to addressing related risks could be to raise risk-based capital requirements for real estate loans held by banks or to impose maximum loan-to-value ratios. Similarly, if macroeconomic monitoring suggests that

¹⁸ Similarly, some guidance on the vulnerability of the banking system to market risk could be assessed by simulating the impact of a given amount of currency depreciation or increase in interest rates on a bank's balance sheet position. However, how accurate a guide it would be to a bank's underlying risk would depend on the size and quality of any compensating off-balance sheet hedging positions.

banks are relying heavily on potentially volatile funding sources, supervisors may require individual banks to further diversify their funding sources or hold more liquid assets.

72. Macroprudential approaches and tools are being further developed internationally. The areas of focus include agreeing on a common definition of systemic risk, identifying and collecting the data needed to monitor and respond to systemic work, and implementing and evaluating the effectiveness of macroprudential tools.¹⁹

4.2.3 Other sources of information

73. The following sources of information can also potentially support the supervisor in identifying weak banks.

Bank governance and management

74. Frequent contact and dialogue with bank managers and the board of directors²⁰ are important components of effective supervision.²¹ To the extent practicable, supervisors should have regular contact with the management of all banks, and not only those in poor financial condition. Discussing strategies, plans, and deviations from existing business plans or changes in management with banks' top executives will allow supervisors to update and review the existing supervisory framework as necessary. Supervisors should also review with management their efforts to correct identified weaknesses in the previous on-site examination.

75. An official meeting with the bank's management and board of directors should be held at the conclusion of each on-site examination. Depending on the type of supervisory system, as well as the circumstances and condition of the bank, it can be useful to hold another meeting at least once before the next on-site examination. Frequent meetings can be useful for riskier or problem banks.

76. There may or may not be a statutory duty for the board of directors to report material weakness in the bank to the supervisor. In some countries, an audit committee of the board of directors is required to report to the supervisor, without delay, any irregularity in the management of the bank or any violation of banking regulations. Regardless of whether there is a statutory obligation, supervisors should cultivate an understanding with the management of banks that it is better to inform the supervisor of a problem earlier rather than later.

77. In addition to formal contact between the supervisor and bank management, there should be regular dialogue at different staff levels. A good practice is to meet with the banks on issues not related to the situation of the individual bank, for instance, on future regulations or macroeconomic developments. If such a dialogue is created, bank managers and directors can be more willing to inform the supervisor of emerging questions or problems.

External auditors

78. The supervisor and the external auditor should have an effective relationship that includes appropriate communication channels for the exchange of information relevant to carrying out their respective statutory responsibilities.²² External auditors may identify weaknesses in a bank sooner than the supervisor, such as during the statutory financial audit or in the course of executing an on-site

¹⁹ See Financial Stability Board, International Monetary Fund and Bank for International Settlements (2011, p 3).

²⁰ See Basel Committee on Banking Supervision (October 2010).

²¹ See Basel Committee on Banking Supervision (September 2012), especially Core Principles 9 and 14.

²² See Basel Committee on Banking Supervision (March 2014).

examination on behalf of the supervisors. A bank's external auditor should identify and assess the risks of material misstatement in the bank's financial statements, taking into consideration the complexities of banking activities and the need for banks to have a strong control environment. Where significant risks of that nature are identified, the auditor should respond appropriately. Hence, by regularly following the auditor's reports and letters, the supervisor can gain an early indication of control weaknesses or areas of high risk in the bank.

79. For small banks in which equity capital is narrowly or privately held, external audits can be especially helpful to supervisors in the early identification of needed improvements in financial management. External auditors' reports and letters may contain information on deficiencies – eg weaknesses in internal controls related to financial reporting – that may have a significant impact on the safety and soundness of the institution. For larger banks, such findings may also contribute to a safe and sound banking system.

80. The auditor's reports and letters to the bank and its board of directors should be available for the supervisor at the bank. The supervisor may wish to arrange to directly receive a copy of all such reports and letters. Moreover, where this is allowed, supervisors should review auditors' work papers to better focus their resources and avoid unnecessary duplication. Supervisors should also carefully consider that independence issues, such as providing consulting services to the bank that they audit, may impair the effectiveness of a bank's external auditor in identifying weaknesses.

81. There should be regular and effective dialogue between the banking supervisory authority and the relevant audit oversight body.²³ In many jurisdictions, audit oversight bodies are responsible for independently monitoring the quality of statutory audits as well as audit firms' policies and procedures supporting such quality. Therefore, banking supervisory authorities and audit oversight bodies have a strong mutual interest in ensuring high-quality audits by audit firms. Effective dialogue can be established through both formal (eg regularly scheduled meetings) and informal channels (eg ad hoc discussions, telephone conversations).

*Internal control and internal auditors*²⁴

82. As with external audits, supervisors should have unfettered access to reports and all other documents issued by the internal control and audit functions of a bank. Supervisors should examine these on a regular basis, at a minimum during each on-site examination but preferably more frequently.

83. Internal auditors generally report to the board of directors or a committee of the board. The supervisor should make it clear that directors and management of the bank are expected to immediately relay to the supervisor any information from the internal auditors regarding material weaknesses.

Cooperation with other supervisory and related authorities

84. Banking supervisors should maintain close communication with other domestic agencies that have an interest in the bank's financial condition. Interested parties normally include the central bank, the deposit insurer, the government/ministry of finance, conduct authorities, supervisors of the securities and insurance industries and the overseer of the payment systems. Even if the central bank has no banking supervisory role, the supervisor should communicate with its relevant officers, such as those

²³ See footnote 22.

²⁴ See Basel Committee on Banking Supervision (June 2012), Principle 7 and its related paragraphs, which elaborate on adequate coverage by the internal audit function on matters of regulatory interest, such as capital adequacy and liquidity and regulatory and internal reporting; and Part B, "Relationship of the supervisory authority with the internal audit function", especially paragraph 77.

responsible for monetary and exchange rate policy, payment systems and financial stability. Supervisors should communicate with foreign supervisors regarding banks with cross-border operations through colleges of supervisors²⁵ or bilateral contacts.

85. In some countries, it would be normal practice for supervisors and these agencies to sign memoranda of understanding (MoUs) covering the types of information to be exchanged and the protection of information that is shared. This agreement is especially important when sharing involves agencies outside the usual supervisory circle, such as a private deposit insurance agency, where confidentiality of information may be an issue. The execution of an MoU should not be regarded as the only solution, however, if there are practicable ways of exchanging information expediently.

86. For cross-border exchanges of information between banking supervisors, there are differing views within the supervisory community as to whether an MoU is the best channel if it is not statutorily required. MoUs take time to negotiate and may end up being overly legalistic, impeding rather than facilitating the exchange of information. Many countries have still found it useful to execute MoUs to set the framework for mutual cooperation. Whatever the form of arrangement chosen, it *must* ensure that the exchange of information can take place under the most difficult of circumstances, eg during a time of severe bank problems.

87. Some banks, especially global systemically important banks with significant cross-border activities, may have institutionalised crisis management groups (CMGs), which are designed to coordinate international information-sharing in times of stress. In addition to CMGs, some jurisdictions have adopted so-called “resolution colleges” to address recovery and resolution planning issues at banking groups for which CMGs have not been established. While CMGs typically are responsible for coordinating resolution plans, coordination of recovery plans varies across jurisdictions. In some cases, either CMGs, supervisory colleges, or a third body (eg resolution colleges) can be responsible for coordinating recovery plans, while in other cases these groups may share the responsibility.

Market signals

88. Signals from the market, through information in the press, external credit ratings or otherwise, are a valuable source of information about the condition of a bank and its possible direction. The supervisor should treat information from these sources carefully since it may be unreliable. Nevertheless, it may often be an indicator that warrants further investigation.

4.2.4 Supervisory evaluation systems

89. Many supervisors use a supervisory rating system (SRS) to draw together a numerical expression of risks to which the bank is exposed and their possible prudential impact. A major benefit of the SRS is that it provides a structured and comprehensive framework. Quantitative and qualitative information is collected and analysed on a consistent basis and supervision is focused on deviations from the norm. In many countries, banks below a certain rating would automatically receive special supervisory attention. The SRS identifies the banks that are more susceptible to future problems, which helps focus further supervisory resources. Supervisory ratings should be the basis for subsequent supervisory actions, which may be targeted on specific issues (eg poor asset quality, weak credit risk management, inadequate profitability) or the general condition of the bank.

90. Although rating systems may vary in name and in the particular components they encompass, they typically include many common factors. Importantly, an SRS will incorporate a judgemental assessment of the bank’s board and senior management, including the appropriateness of their strategy

²⁵ See Basel Committee on Banking Supervision (January 2014).

and the quality of risk management and internal control systems. These qualitative judgements help to provide forward-looking assessments of a bank's credit, liquidity, market, interest rate and operational risks and their implications for earnings and capital adequacy.

91. In providing a comprehensive picture of the current and future profile of banks, the SRS should highlight the main strengths, weaknesses and risks of the bank. The rating given to each component (eg credit risk, capital adequacy, profitability) should consider all information available, taking into account the appropriateness of a bank's risk mitigation measures and the quality of its risk management and internal control systems. Indicators based on quantitative information, which are often evaluated through peer-group analysis, can be contextualised with qualitative information. This allows supervisors to focus on outlier banks. An SRS does not preclude ad hoc decisions to collect and analyse specific data outside the SRS framework.

92. The SRS process should combine in a consistent way the information and analysis of both off-site and on-site supervision. On-site examiners should be promptly informed of indications of weaknesses in specific banks, and they should alert off-site examiners to look for specific areas, banks and/or activities where they suspect that weaknesses may exist. The use of a common methodological framework should lead to closer cooperation between off-site and on-site supervisors.

93. The methodological framework underlying the SRS should support a forward-looking approach to supervision through early intervention. The adoption of early intervention measures should aim to correct or at least reduce identified weaknesses in order to prevent a further deterioration of the situation that may ultimately threaten the bank's viability. Supervisors should pay particular attention to deficiencies in bank governance and risk management, since problems in these areas are often leading indicators of a bank's future risk profile. Material shortcomings in these areas should therefore be subject to prompt supervisory intervention to address the noted weaknesses.

Part II: Dealing with weak banks

5. Contingency and recovery planning

5.1 Supervisory planning for dealing with weak banks

94. The supervisor, in coordination with the resolution authority where one exists, needs to prepare detailed and comprehensive plans for dealing with weak banks in order to respond promptly in a crisis. These plans can draw on a wide range of tools that supervisors can use in identifying and dealing with weak banks, including statutory powers and the ability to exercise moral suasion. In drawing up their plans, supervisors must thoroughly understand the limits of these powers and their capacity to be challenged.

95. A supervisor, together with the resolution authority, should prepare a plan that will encompass a range of scenarios. This might range from the sudden collapse of a large, systemically important bank to the decline of a smaller bank that can be managed out of the industry with little disruption. Systemic problems may arise when a number of small banks fail simultaneously or where a small bank has a critical position in a particular market segment.

96. Deciding on the appropriate level of systemic protection is a policy question to be addressed by the relevant authorities, including the government and the central bank, particularly where it may result in a commitment of public funds. For non-systemic banks, the supervisor should consider at an early stage whether a detailed, individual recovery and resolution plan for the bank, including a resolvability assessment, is needed, or if a range of general scenarios is sufficient.

97. The supervisory plan should be tested regularly. At a high level, it should consider:

- mechanisms by which the supervisor will become aware of a weak bank and/or systemic problems;
- the authority to make decisions relating to the identification and assessment of a weak bank (ie at what point must the supervisor's involvement move from normal oversight to more intensive day-to-day supervision?);
- arrangements to discuss the problems at the bank with its board and management without delay;
- arrangements to conduct an in-depth assessment, including the use of independent experts if necessary;
- arrangements for reporting the assessment findings and who will be informed, inside and outside the supervisory agency;
- responsibilities for determining the supervisor's detailed course of action, including taking physical control of the banking facilities and transferring or repaying deposits;
- the means of communicating and coordinating supervisory action with other relevant parties (in particular, resolution authorities, finance ministries and central banks);
- internal coordination between relevant departments;
- arrangements for any public announcement, where appropriate, and the subsequent management of public information;
- potential conflicts with the objectives of government or other relevant agencies and how these might be resolved;

- mechanisms for monitoring the success (or otherwise) of supervisory actions and adjusting them as necessary; and
- adequate financial and staff resources for intense supervision, including an ongoing recovery and resolution planning process.

98. In addition to financial information, the supervisor must have rapid access to a wide range of relevant non-financial information about the bank, including its organisational and legal structure, participation in payment systems etc. Some of this information should be kept by the supervisor; the rest (primarily operating data that are frequently changed) should be kept at the bank.

5.2 Bank contingency plans, recovery plans and resolvability assessment

99. The supervisor should ensure that banks themselves, especially systemic banks, have a contingency plan for handling periods of unexpected stress, including episodes that will pose a serious risk to their viability.

100. Where warranted or required by supervisory regimes, the contingency plan should include a robust and credible recovery plan.²⁶ The plan should describe the bank's strategy and organisational setup and the measures available for restoring the bank's financial strength and viability under stress, especially with regard to a capital shortfall and liquidity pressures. It should furthermore comprise credible processes and indicators that ensure the timely implementation of recovery measures (eg functioning internal processes, IT systems, clearing and settlement facilities, and supplier and employee contracts that enable banks to continue to operate). It is important for supervisors to encourage banks to consider the means by which broader financial difficulties would be handled.

101. Where banks have developed contingency plans or recovery plans with measures for restoring financial strength and viability under stress, banks should activate or revise the measures after the conditions for intervention have been met and after consulting with supervisors. Supervisors should monitor a bank's progress in implementing these recovery measures and seek improvements if deficiencies are identified.

102. Recovery plans should be updated annually, or when circumstances change. Authorities should review the recovery plan as part of the overall supervisory process, assessing its credibility and ability to be effectively implemented and the consistency of the stress scenarios used by different banks. The authorities should have the powers to implement the recovery measures as soon as the critical resolution thresholds are reached or the chosen indicators of non-viability are identified.

103. Importantly, any sort of financial difficulties (particularly if these are known or suspected in the market) will require the bank to have adequate liquidity to enable it to meet its obligations while the weaknesses are being corrected or other action is taken. Hence, effective and detailed contingency liquidity planning is necessary. Such a plan should, at a minimum, address how to resolve a liquidity crisis triggered by a loss of confidence in the bank itself. The plan should anticipate that the bank may experience difficulties in rolling over its liabilities and demonstrate how it would continue to meet its obligations for a reasonable period of time in such a case. Supervisors should request and regularly examine bank contingency plans that provide or activate new funding sources, allow for capital to be raised in a short period of time, or provide for assets to be sold or securitised. These plans should be aligned with and integrated into the firms' recovery plans.

²⁶ See Financial Stability Board (2011), Annex III, Section 3.

104. During the crisis, it became clear that large banks may be difficult to resolve because of their interconnectedness in financial markets and the complexity of their corporate and legal structure, as well as their business model. In preparation for future crisis situations, and with the goal of avoiding the use of taxpayers' money, resolution authorities and/or supervisors in many countries now carry out resolvability assessments on systemic and, in some cases, other banks. One consequence of resolvability assessments is that supervisors may be able to use the information to require banks to make changes to their business practices, structures or organisation before they become weak. While this will not directly identify weak banks, the information is useful for supervisors when considering options.

6. Corrective action

105. Corrective action is action required by supervisors to deal with deficiencies and change behaviour in a weak bank. They can be implemented by the bank under the supervisor's informal oversight or, if necessary, through formal supervisory intervention. Resolution techniques, as discussed in Section 7, are employed when failure is imminent. They will typically involve stronger supervisory intervention and some changes to the legal structure and ownership of the bank. A flow chart to assist the supervisor is provided in Annex 2.

106. Under normal circumstances, it is the responsibility of the board of directors and senior management of a bank, not the supervisor, to determine how the bank should solve its problems. However, should the bank engage in unsound banking practices or breach statutory or other key supervisory requirements – eg regarding capital adequacy and liquidity – the supervisor should have powers to compel the bank to take remedial action and a statutory responsibility to ensure that the remedial action taken is appropriate. The role of the supervisor is to guide and steer the bank in its rehabilitation. This is consistent with the widely shared supervisory objectives of financial stability, minimum disruption to depositors and other bank counterparties and, in many countries, promoting economic activity. The range of supervisory powers should feature early intervention – eg requiring realistic reviews of the bank's business strategy – even though identified weaknesses have not yet resulted in the breach of any statutory or supervisory requirements.

107. Corrective action should be considered in accordance with the magnitude and/or stage of a bank's weakness. For example:

- Early remediation triggers should be based on regulatory capital and liquidity levels, stress test results, risk management weakness and market indicators.
- Remediation requirements range from a heightened supervisory review at the outset to restrictions on expansion and dividends, with action being taken at the early stages of financial weakness.
- More severe requirements – including a prohibition on expansion and capital distributions, raising capital and divesting certain assets – would apply to banks at more advanced stages of financial weakness.

6.1 General principles for corrective action

108. The principles for dealing with weak banks are set out in Section 2.2. In essence, the following should guide supervisors in implementing corrective action:

- **The fulfilment of supervisory objectives**, including financial stability and depositor protection.
- **Immediate corrective action**. The bank and the supervisor should take prompt action to prevent the problems from growing and exacerbating the financial weakness of the bank.

- **Senior management commitment.** The senior management of the bank must be committed to the action plan for corrective action. Otherwise, the replacement of management should be considered.
- **Proportionality.** Corrective action should be appropriate to the circumstances and scale of the problem.
- **Comprehensiveness.** Both causes and symptoms of weakness must be addressed by the corrective programme.

6.2 Implementation of corrective action

6.2.1 Determining the nature and seriousness of the weakness

109. Formulating a corrective action plan requires an in-depth assessment of the nature and seriousness of the weakness. After a weakness is first detected, the supervisor has to decide on who is to do the assessment and how it should be done. The assessment must identify causes, the size and character of the problem and whether liquidity and solvency are going to be an immediate concern.

110. The bank's board of directors, its management and the supervisor may have different views as to the nature and seriousness of the bank's weaknesses. An on-site assessment is usually the most efficient way to identify the full extent and nature of the problems faced by a bank. Problem banks may mask their most significant troubles in a way that can be detected only by on-site work. An on-site examination also helps to uncover the underlying causes of a weakness rather than merely the symptoms. Depending on the circumstances, the supervisor may require the assistance of external auditors and other independent expert advisers.

111. An essential part of the assessment is to determine the bank's present and expected liquidity and capital position, evaluate the bank's contingency plans and, if relevant, evaluate the recovery plans.

112. In assessing the prospects of insolvency, there has to be an assessment of the fair value of the bank's net assets. In this regard, it is essential to determine correctly the quality of the loans, how many are impaired and whether collateral can be enforced and the proper recognition of, and provisioning for, non-performing loans. It is also essential to assess the extent of insider and connected lending, and to measure prudently the fair value of "hard to value" assets and complex financial products held in the trading book or otherwise carried at fair value.²⁷ On the liabilities side, the assessment must verify whether recorded values are adequate (eg with reference to liabilities measured at fair value through profit and loss); that all contingencies are recorded; and that all off-balance sheet items are known and under control. In the assessment, the bank should take into account the effects of (close out) netting and possible setoffs.

113. An accurate assessment of the fair value of the bank's net assets should indicate the actions required. However, even if the value of the net assets is positive, solvency problems may arise in the near term.

114. In assessing the bank's liquidity position, the bank's cash flow for a meaningful period ahead should be analysed to identify the real inflow and outflow of funds. For both normal and stressed conditions, any potential mismatches must be taken into account to ensure that a sufficient stock of unencumbered high-quality liquid assets is available to meet any cash flow gaps. Moreover, supervisors

²⁷ This includes, for example, financial instruments carried at fair value under the fair value option and securities carried at fair value through other comprehensive income.

should be aware of the bank's survival time under different scenarios, while also considering impediments, such as liquidity transfer restrictions within cross-border groups (eg ring-fencing measures).

115. If the supervisor forms the view that there is an immediate and significant threat of illiquidity or insolvency, immediate corrective action is essential. On the other hand, where the bank is exposed to financial strain or another form of weakness that does not pose an immediate threat, the supervisor's possible range of actions is broadened and may include "close monitoring" to better assess conditions and prompt the bank to adopt adequate corrective measures.

6.2.2 Range of corrective actions

116. Supervisors generally have a variety of tools for dealing with weak banks. These range from the ability to require specific action by the bank to mitigate the weakness, to prohibiting activities that will aggravate the weakness. Supervisors should possess effective means of addressing management problems, including the power to have controlling owners, directors and managers replaced or their powers restricted. Examples of the main corrective measures which supervisors need to have at their disposal follow. Section 6.3 discusses how these measures apply to particular problems.

Impact on governance

- Require the bank to enhance governance, internal controls and risk management
- Require the bank to submit an action plan of corrective actions
- Require the activation of recovery plans
- Require changes in the legal structure of the banking group
- Remove directors and managers
- Limit compensation (including management fees and bonuses) to directors and senior executive officers
- Require prior supervisory approval of any major capital expenditure, material commitment or contingent liability

Impact on cash availability

- Call for cash injection by shareholders
- Call for new borrowing/bond issuing and/or rollover of liabilities

Impact on shareholders' rights

- Suspend some or all shareholders' rights, including voting rights
- Prohibit the distribution of dividends or other withdrawals by shareholders
- Appoint an administrator or conservator

Impact on bank operations and expansion

- Require the bank to enhance or change capital and/or liquidity and strategic planning
- Restrict concentrations or expansion of bank operations
- Downsize operations and sales of assets, including the closing of branches at home or abroad
- Prohibit or limit particular lines of business, products or customers (including concentration limits)

- Require immediate or enhanced provisioning for assets of doubtful quality and for those not carried at fair value

6.2.3 Incentives for timely corrective action and preventing forbearance

117. When dealing with weak banks, timely corrective action is critical. International experience has shown that bank problems can worsen rapidly if not promptly addressed. In many cases, the bank's board of directors, management and shareholders, as well as supervisors, have tended to postpone taking timely and adequate corrective action.

118. The most basic cause for inaction is that all parties may be reluctant – in good faith – to take the measures needed to remedy the situation in the hope that the problems will rectify themselves. In addition, the legislation may not be very explicit and the supervisor may want to avoid the risk of having its decision challenged in court. Finally, the supervisor may be under explicit or implicit pressures from politicians or lobby groups to postpone measures. To prevent undue forbearance, international standards (such as the Basel Core Principles) include recommendations that countries enact laws and regulations to ensure that supervisors act promptly and adequately in relation to the bank problems encountered.²⁸

119. Thus, it is important to establish incentives for supervisory authorities that encourage early and decisive action in response to indications of material deterioration in the condition of financial institutions. These could be positive (eg recognition in performance reviews of pre-emptive stances) or negative (eg government-sponsored reviews of possible regulatory failures). Unless such incentives are firmly established, supervisors may not take action soon enough to prevent further financial deterioration or failure. Moreover, supervisors should supplement their focus on the individual banking organisation with a macroprudential perspective, through liaison with macroprudential authorities where the authorities are separate, and be encouraged to require appropriate actions by all supervised institutions at the earliest sign of a threat to financial stability.

120. In the absence of a breach of specific supervisory thresholds, most countries have no laws mandating corrective action for weak banks, ie obliging the supervisor to take specific actions according to some objective measure within a certain time. Generally, supervisors have the discretion to act pre-emptively, without waiting for a threshold to be breached. Supervisory measures have to be flexible and tailored to the specific situation. There is usually no pre-specified time limit within which the supervisor must act after identifying a problem. The absence of a clear legislative requirement, however, does not provide a reason for inaction; the best practice is normally to act as quickly as possible to prevent an escalation of the problem. Decisions not to take action in a particular case (and the reasons for that conclusion) should be documented in the same way as decisions to take action.

121. In many countries, the law itself provides an obstacle to forbearance. Where legislation prescribes that the supervisor must act with due promptness in all situations, failure to do so will make the supervisor liable to formal criticism or even financial responsibilities to the injured parties, such as depositors.

122. A balance has to be struck between rigid "prompt corrective action" regimes and general, less binding frameworks. One effective combination would include rules for pre-agreed acceptable supervisory actions – which protect the supervisor from undue interference in the decision process – plus room for flexibility in particular circumstances. In any case, supervisors must, at a minimum, set up a structured internal governance process aimed at ensuring that discretionary decisions are taken at a level appropriate to the significance of the issue, and with a clear indication of the underlying reasons. In

²⁸ See Basel Committee on Banking Supervision (September 2012), especially Core Principles 1 and 11.

case of a breach of early warning threshold levels, the process should also track the reasons behind any decision to defer or mitigate the severity of supervisory measures that are ordinarily taken in these situations.

6.2.4 Escalation of corrective action and supervisory resources

123. Corrective measures differ in the level of intrusiveness into a bank's management of its affairs. The specific measures used by a supervisor will depend on the nature and seriousness of the difficulties encountered by a bank and the level of cooperation provided by its management.

124. Typically, supervisors are willing to use informal methods and less intrusive corrective action when the bank's problems are less serious. It helps also if bank management is cooperative and moves promptly and vigorously to deal with its problems. Supervisors should monitor the bank's progress in implementing changes, including those from recovery plans, where relevant.

125. If the bank faces more serious problems or is not cooperating, the supervisor may have to take formal action to ensure compliance with its recommendations. Formal action is binding on the bank, with penalties for non-compliance. Depending on domestic regulations, formal action will involve the issue of some form of supervisory or enforcement notice outlining the measures that the bank and its management must take and the time frame for acting. It could also involve "cease and desist" orders requiring the bank and/or its management to stop engaging in a specified practice or violation. In some countries, such orders may also be issued to parties affiliated with the bank, such as the bank's accountants or auditors, to prevent or halt violations or unsafe or unsound practices.²⁹

126. More severe corrective action should be considered if there is an increased danger of insolvency. In such cases, the supervisor may impose a sale and payment prohibition on the bank to prevent or limit the dissipation of assets. To prevent new customers from being disadvantaged, the bank might be prohibited from accepting payments that are not intended for the redemption of debts to the bank unless there is a deposit insurance scheme in place which undertakes to satisfy the entitled parties in full. The appointment of an administrator may also be considered. Such drastic measures, used mainly for resolution, can lead to a further reduction in public confidence and must be considered and implemented in a careful manner.

127. An escalation of the corrective action would mean an increase in the intensity of supervision. Escalation therefore has resource and cost implications for the supervisor, which should be acknowledged and addressed. However, a lack of resources cannot be used as a justification for inaction. A supervisor should ensure, consistent with the Basel Core Principles, that its operational budget allows for the additional costs associated with corrective action, eg legal and consulting fees. It should also include in its supervisory plans (Section 5.1) a statement of how additional financial and staff resources would be obtained if necessary.

6.2.5 Formulating a plan of corrective action

128. In formulating a corrective action plan, it makes sense to give priority to the more serious weaknesses. A coordinated plan that attempts to deal concurrently with the various weak areas may, however, be necessary because, quite often, the various issues are interrelated.

²⁹ The prompt corrective action (PCA) framework used in the United States is a specific tool for critical situations. As a basis for PCA, insured depository institutions are divided into five capitalisation categories, ranging from well capitalised to critically undercapitalised. Supervisory actions are required for banks that are not adequately capitalised. PCA is not an early intervention supervisory tool; typically, supervisors actively use any number of informal and formal supervisory tools well before resorting to PCA. In fact, PCA is one of the last supervisory tools used when other measures have been exhausted.

129. Any action plan, therefore, should comprise a package of corrective measures which, taken together, will resolve not only symptoms but also causes. Given that poor management is usually a contributing factor, an assessment of management's ability should be included in the action plan.

130. As part of its action plan, the bank should be required to develop a detailed capital and operating plan showing how the bank's financial health will be restored. The plan must show the bank's projections for its income, dividends, assets, liabilities, capital, liquidity, non-performing assets and loan charge-offs, assessed in a conservative manner.

131. A key factor in determining whether the action plan will be successful is the commitment of the board of directors, and ultimately of the major shareholders, of the bank. It is important for the supervisor to establish an open and frank dialogue with the board, particularly the major shareholders, so as to secure their commitment to the bank, including the possibility of promptly injecting new capital or finding new shareholders.

132. Clearly, if management is to focus on turning around the bank, it should have as few distractions as possible; it should therefore shelve any plans for new branches, acquisitions or major new business initiatives in the interim. A voluntary undertaking of this nature can be incorporated into the action plan.

133. The action plan prepared by the bank should be approved by the board of directors and should give the supervisor reasonable assurance that the weaknesses will be satisfactorily addressed within an acceptable period of time. In some cases, for example, where statutory requirements have been violated, or where formal supervisory action has been taken against the bank, the law may require the supervisor to formally approve the action plan.

6.2.6 Monitoring and enforcing compliance with corrective actions

134. The board of directors and the management, as well as the supervisor, should carefully monitor the implementation of the action plan. Banks should be asked to provide the supervisor with regular updates on the progress of the remedial programme against the action plan. In turn, the supervisor must be able to assess whether there is satisfactory progress, or whether additional corrective actions are necessary. Usually this approach can resolve a large number of weak banks.

135. In some countries, the commitment by the board of directors to the action plan and its time frame is formalised in a written agreement signed by the supervisor and the bank, and the bank will be put under more intensive supervision.

136. The supervisor may have to consider the use of all available penalties and sanctions to enforce compliance with supervisory regulations and recommendations. These can range from warnings and fixed fines for minor violations to substantial fines of corporate officers for major violations. Corrective actions such as the dismissal of managers or directors can also be used to enforce prior supervisory orders that have not been complied with. It is important that the penalties and sanctions be applicable to the bank itself or to the relevant individual persons. The ultimate sanction is the threat of bank closure or revocation of the bank licence.³⁰

137. The decision to close a bank or revoke its licence should be taken only when it is clear that the bank is not in a position to pay its present or future depositors and other creditors or when its affairs are being conducted in a manner detrimental to the interest of depositors or to the public interest. The sanction of revoking the licence is absolute and should be exercised with utmost care to avoid

³⁰ There may be legal frameworks allowing other options for taking over the bank and eliminating its shareholders, or suspending its operations in full or in part without necessarily revoking its licence.

exacerbating the problems for the bank's stakeholders and the financial system. This does not mean that the revocation tool should not be used, but rather that the consequences of the action must be carefully considered and anticipated. In general, revocation of a banking licence should be accompanied by other resolution strategies (see Section 7).

138. Supervisors should stipulate a time frame within which banks should comply with the remedial actions. This time frame should be related to the urgency and seriousness of the weakness, including the risk of contagion. If so provided in the banking legislation, supervisors could bring an action in court to enforce them.³¹

139. Banks faced with orders from the supervisor may, depending on domestic law, appeal against them. Given the importance of prompt compliance with corrective action, it is important that this not be delayed in the courts. Some countries have established arrangements whereby some decisions of the supervisor are immediately effective, even if the bank challenges them in the courts.

6.2.7 Cooperation and collaboration with other agencies

140. Just as information-sharing and close cooperation with other agencies are important in the identification of bank weaknesses, collaboration is even more important when it comes to dealing with a weak bank. In enforcing corrective action, the bank supervisor needs to consider whether to consult with or inform the government, the central bank, and other regulatory agencies about the assessment and proposed course of action. The supervisor usually has an interest in reciprocal consultation with the central bank, as its action may have an impact on the central bank's dealings with the weak bank, and vice versa. For instance, the central bank might want to exclude a weak bank from its list of eligible counterparties to monetary policy operations or from major payment and settlement systems. Conversely, such a decision by the central bank will limit the options available to the supervisor. The supervisor should also understand the circumstances in which it can involve the government and other agencies in the supervisory action plan. This applies in particular to those having a direct interest in the soundness (including liquidity issues) of the bank. In some countries, supervisors may need to consult with the ministry of finance or apply to the court for orders to revoke licences.

141. As a financial stability issue, a systemic crisis situation may trigger special procedures involving the finance ministry and the central bank. It is essential for each agency to know the relevant procedures and be able to activate them promptly.

142. For larger cross-border banks, supervisors may maintain crisis management groups (CMGs) involving the relevant authorities from home and key host jurisdictions, with the objective of preparing for and facilitating the management of a cross-border crisis (see Section 8.3 for more detail).

6.3 Dealing with different types of weakness

143. In practice, of course, individual weaknesses do not appear in isolation – a bank and its supervisor will have to deal with a range of problems simultaneously. As noted above, the keys to turning around a weak bank are timely assessment and a comprehensive, credible and proportionate corrective action plan. In the process, it is critical to fully understand the risk culture and appetite of the bank and effectively challenge management's assumptions. Depending on the circumstances, disclosure

³¹ In many cases, failure to comply with supervisory orders could result in civil money penalties or criminal fines. Supervisors should be able to work cooperatively with law enforcement officials in developing cases that may result in criminal prosecution.

of the fact that the bank has embarked on a corrective action plan may help maintain or restore confidence in the bank. The recovery plans provided by banks should consider a variety of scenarios.

6.3.1 Business strategy

144. Supervisors should periodically assess a bank's business strategy to identify strong inconsistencies that could lead the bank into solvency problems. Deviations from the budget associated with poor results and unrealistic assumptions may reveal weaknesses even before they are captured by performance indicators. Business strategy assessment may be of great help in identifying the causes of a bank's weakness before solvency problems become imminent.

145. To distinguish a common weakness from a weakness that might lead to solvency problems is never an easy task. Potential problems are usually connected to the rationale behind the strategy. For large banks, early identification is particularly challenging because the combination of multiple business lines might hide the actual contribution of each facility to overall performance and compromise the early detection of weaknesses. For simpler banks, aggressive plans incompatible with the bank's structure and scale, and rapid growth when associated with historically poor earnings, should be of particular concern.

6.3.2 Capital adequacy

146. Declines in capital ratios have different explanations. Here are the four most common:

- a rapid increase in risk-weighted assets;
- a reduction in the absolute amount of capital, which is generally determined by the redemption of low-quality capital instruments, eg redemption of subordinated loans;
- overall losses in bank operations; and
- adverse exchange rate movements, where there is a currency mismatch between risk-weighted assets and regulatory capital.

147. Improving the capital position addresses the symptom. To determine whether other measures are needed, the supervisor should also seek to understand in each instance why the capital ratio fell. In the first explanation listed above, the supervisor must assess whether the bank has the financial strength and the managerial and organisational capacity to handle the new risks.

148. In the second explanation, the supervisor should determine whether the reduction of capital was voluntary, and evaluate the need to increase the amount of high-quality capital. In the third explanation, the underlying causes of the losses must be identified. A temporary loss, eg one emanating from unexpected market developments, calls for a different treatment than do chronic losses. In the fourth case, the supervisor should assess the bank's management of its foreign exchange exposure.³²

149. A drop in the bank's capital adequacy ratios below, or close to, the supervisory and/or statutory minimum should trigger formal action by the supervisor against the bank to restore the ratio.

150. The supervisor's main consideration is whether, and how soon, the bank can restore the level and quality of its capital to an acceptable level. The bank should therefore be required to provide the

³² If a bank's regulatory capital is denominated wholly in domestic currency and it has foreign currency assets, the capital adequacy ratio will change with movements in the external value of the domestic currency. As a prudential requirement, and as part of its foreign exchange risk management, a bank is expected to broadly match its foreign currency assets with its foreign currency liabilities to protect the value of its capital from currency movements. With a matched position, the capital adequacy ratio will fall when the domestic currency depreciates. Banks should take this risk into account, but clearly, the currency depreciation could be so severe that the capital adequacy ratio could fall below the statutory minimum even at prudent banks.

supervisor with a clear account of how it will restore the capital ratios (eg common equity Tier 1 ratio, total capital ratio) and the time frame, with relevant milestones, for doing so.

151. Outside of stress periods, banks should hold buffers of capital above the regulatory minimum. When buffers have been drawn down, one way banks should seek to rebuild them is by reducing discretionary distributions of earnings. This could include reducing dividend payments, share buybacks and executive bonus payments. Banks may also choose to raise new capital from the private sector as an alternative (or in addition) to conserving internally generated capital. The balance between these options should be discussed with supervisors as part of the capital planning process.³³

152. It would be prudent for the supervisor to ask for assurances from the bank's major shareholders that they continue to support the bank and are prepared to contribute to restoring the capital position by means of capital injection if the bank's position deteriorates further.

153. If the existing shareholders are unable to provide the necessary capital injection, other various options can be considered, such as:

- selling or securitising assets, thereby reducing the capital needed to support the business;
- replacing assets to lower the portfolio's risk weight;
- cutting operating costs and capital expenditure, including bonuses to managers and directors;
- limiting or restricting the payment of dividends and variable compensation;
- restricting the redemption of subordinated debt or other instruments; and
- bringing in a new shareholder who can contribute new capital.

154. A less obvious problem involves a capital adequacy ratio that drops (eg because of a loss) to a level below what the market expects, but remains above the supervisory and/or statutory minimum, while true loss-absorbing capital in fact remains weak. This may affect confidence in the bank, particularly if there is an expectation that it may fall further in the future.

155. A prudential regulatory leverage ratio, for example, is a regulatory standard that places a constraint on the maximum degree to which an institution can leverage its equity base and serves as a complement to the risk-based supervisory capital ratios.³⁴ For larger banking institutions, the leverage ratio captures on- and off-balance sheet exposures of an institution.

156. As noted in the section on symptoms, some banks had limited understanding of and control over their potential balance sheet growth and liquidity needs. These banks failed to properly price the risk that exposures to certain off-balance sheet vehicles might need to be funded on the balance sheet precisely when it became difficult or expensive to raise such funds externally.

157. In such circumstances, a capital injection (perhaps restoring the capital adequacy ratio to the level before the loss was incurred) may also be appropriate, in order to reassure depositors and the market in general that the bank's position will remain secure. In such cases, supervisors will need to cooperate closely with the bank's management.

6.3.3 Asset quality

158. Asset quality problems can become serious in different ways. Provisions and write-offs can result in the bank incurring losses, leading to a reduction in its capital adequacy ratio. This is one of the

³³ See Basel Committee on Banking Supervision (June 2011).

³⁴ See Basel Committee on Banking Supervision (January 2014).

most common reasons for a decline in a bank's capital strength. But even if the bank continues to make a profit, poor asset quality can still pose problems for four main reasons:

- If the problem is not dealt with by proper problem loan management, the loan write-offs are likely to remain large or even escalate.
- Problem loans in excess of the industry norm may indicate not only poor credit underwriting standards, but in all likelihood poor management, which may be a warning of incipient problems elsewhere.
- Public and market knowledge of the bank's relatively poor performance on asset quality may affect confidence in the bank, leading to deposit withdrawal or increased cost of funding.
- Asset encumbrance may limit the options in recovery and resolution, as there are fewer unsecured creditors and less collateral available to deal with liquidity risks. Supervisors may wish to consider how encumbered the assets of the bank are when considering what action to take when the bank becomes weak.

159. For asset quality problems, on-site examinations are usually the most useful way of evaluating the extent of the problem. The examination should focus on whether problem loans are being identified promptly; whether the bank has a dedicated problem loan management/recovery unit that is operating effectively; whether problem loans are being classified correctly; and whether adequate provisions are being set aside. While the maintenance of adequate provisions is, in the first instance, primarily a matter for the bank and its auditors, the supervisor has a major role to play in determining whether the provisioning policy is prudent and is being applied effectively. If provisions are not adequate, the bank's capital adequacy ratio will be overstated.

160. The supervisor is likely to be able to make use of (1) peer group comparisons (eg experience from other on-site examinations) and (2) stress testing to gauge the scale of the problem and the particular areas of concern. Supervisors are increasingly requiring some larger banks and banks with significant concentrations to do stress testing as a routine management practice.

161. A bank with asset quality problems should devise an appropriate remedial action plan. This may include:

- negotiating new agreements with its viable but weak debtors (eg through loan maturity extensions, interest rate reductions, partial debt forgiveness and debt-to-equity swaps);
- taking possession of loan collateral or other debtor assets;
- writing off long-term problem loans; and
- selling assets or transferring them to a special-purpose debt management vehicle – although the supervisor should determine that such transactions are not designed only as a form of regulatory arbitrage.

162. In practice, however, whatever approaches the bank takes, certain principles apply. First, the bank needs a realistic assessment of its current asset quality and should not be tempted to hide the problem by entering into cosmetic restructurings with insolvent debtors. Second, it needs to put resources into strengthening its problem loan management unit so that it can boost recoveries. Third, it needs to be prepared to "bite the bullet" on provisioning. Prolonged problems with asset quality cast a shadow over the bank. To be effective, provisions must be determined on the basis of the short-term realisable value for collateral, or a conservative present value estimate of the borrower's likely repayments, not on longer-term, potentially optimistic projections of future value. If the bank has the resources or can secure additional resources (for example, by capital injection), it is preferable to try to clean up the balance sheet as expeditiously as possible. This may, however, result in the bank suffering a large reduction in profitability and capital.

163. The supervisor will almost certainly expect the bank to set targets in terms of a reduction of problem loans to a certain level by a particular time and will want to monitor the progress the bank is making by means of on-site visits or reports by the bank's external or internal auditors. It should ensure that all restructured debt is classified as non-performing and is provisioned until the bank demonstrates that the debtors have regained their capacity to repay the loans in full.

164. Beyond dealing with the immediate problem, the supervisor should also ensure that the bank fully reviews its processes for credit assessment, credit approval and credit monitoring. Weaknesses in these will almost certainly have played a large part in the general asset quality problem.

6.3.4 Governance and management

165. Weaknesses in either the philosophy or the practices associated with corporate governance are likely to be a problem in most weak banks. Problems include inadequate involvement of the CEO in the risk management process and a failure to keep critical control functions and control personnel truly independent from income-producing functions and personnel. Supervisors do not select senior management for banks, but they should be responsible for evaluating the expertise and integrity (the "fit and proper" test) of proposed directors and senior management, and they should prevent or discourage appointments they deem detrimental to the interests of depositors. They may require one or more members of the management body or senior management to be removed or replaced if they are found unfit to perform their duties or deemed detrimental to the interests of depositors. Supervisors should also evaluate directors and senior managers as part of the regular supervision of the bank. Moreover, supervisors should ensure that a bank's corporate governance structure provides appropriate incentives that support the bank's business plan; the governance structure should clearly communicate risk limits and expectations for integrity throughout the organisation.³⁵ Supervisors should also understand the bank's management succession plans and opportunities.

166. Incentive compensation plans for bank management that were in place before the crisis rewarded short-term increases in revenue without consideration of risk exposures and contributed to a large increase in weak banks and financial instability during the crisis.³⁶ To prevent such misalignment of incentives, supervisors often set enhanced expectations for incentive compensation programs.³⁷ These include requiring the board of directors to form subcommittees to oversee remuneration and ensure that incentives do not inadvertently increase the risk profile of the banks. In addition, supervisors have required banks to strengthen the role of the board in setting remuneration policies to provide a check on management incentives to take risk and to reduce conflicts of interest. Increasingly, banks have deferred incentive-based payments to remove an incentive for employees to take significant risks to enhance short-term compensation; under such plans, future payments may be cancelled if an employee's activities result in losses. In some cases banks have also provided for the clawback of incentive compensation for employees whose activities result in increased risk and losses.

167. If the supervisor is of the view that an employee is not up to the job, as indicated by the bank's performance, it may be difficult in many jurisdictions for the supervisor to formally request the removal of the employee in the absence of fraud or massive incompetence. In such situations it may be more effective for the supervisor to discuss the quality of management with the board of directors or the major shareholders of the bank and to seek their commitment, voluntarily, to strengthening

³⁵ For further information on the role of corporate governance in preventing weak banks, see Basel Committee on Banking Supervision (October 2010).

³⁶ See Senior Supervisors Group (2009, pp 24–5).

³⁷ See Financial Stability Forum, *Principles for sound compensation practices*, Basel, April 2009.

management. The emphasis should be on bringing in strong individuals with the skills the bank needs in key positions – eg CEO, financial controller or head of credit – or consultants to boost the performance of the existing team.

168. As a last resort, if the law permits, a supervisor may appoint an individual to run the affairs of the bank temporarily for the purpose of seeking solutions to the difficulties encountered. The appointment should be made in a manner that does not give the impression that the responsibility of bank management has shifted to the supervisor.

6.3.5 Earnings

169. A decline in bank earnings may be rooted in a variety of factors. These include:

- unfavourable macroeconomic conditions;
- increased competition in core activities or markets, leading to net interest margin compression;
- changing trends and/or regulations driving down profitability in core markets;
- unprofitable investments in new activities or in branches, subsidiaries or overseas operations;
- insufficient diversification and unsustainable income streams;
- non-core income items; and
- poor cost control.

170. Deteriorating earnings must be addressed, as they will lead directly to reduced liquidity and weaker solvency. Banks must be required to reduce or restructure unprofitable activities (eg close branches) and to reduce costs (eg cut bonuses and salaries and/or the number of employees). If the problems are severe, a significant reorganisation of the bank may be necessary. In parallel, other actions must be taken to turn around its earnings, such as changes to the business model and operating plans. When weak earnings derive from risk-taking activities, some banks may also seek to claw back incentive compensation from the employees responsible.

6.3.6 Liquidity

171. Liquidity can be a problem when a bank's holdings of cash and marketable assets provide little margin above the level necessary for business and thus little scope for manoeuvre in times of stress. During a period of market turmoil, a bank may experience higher borrowing rates and may be unable to obtain funding in amounts or maturities that are close to historical norms. Moreover, the market turmoil may last longer than banks anticipated in their contingency plans. In fact, during the early, "liquidity" phase of the financial crisis, many banks – despite adequate capital levels – still experienced difficulties. Prior to the crisis, asset markets were buoyant and funding was readily available at low cost. The rapid reversal in market conditions illustrated how quickly liquidity can evaporate and that illiquidity can last for an extended period of time. It was a vicious cycle – a "market run" – in which the decline in market liquidity reduced the funding liquidity of financial institutions, which then further eroded market liquidity. Thus, a strong liquidity base is as important as a strong capital base, and the need for early intervention in the case of liquidity problems may be even greater.

172. Liquidity may be a problem in and of itself in the scenario where the bank expands its loan book more quickly than it can secure adequate, reliable funding. Similarly, as noted in section 2.3, most banks in the run-up to the crisis had not assumed that the size of their balance sheet would increase during a stress event. In fact, many banks have been faced with growing balance sheets: some needed to hold underwriting commitments on their balance sheets longer than anticipated; others purchased assets to support sponsored asset-backed commercial paper (ABCP) conduits or affiliated asset management funds. In their planning for contingency funding, banks had not considered the need to fund certain off-balance sheet obligations. Some of these liquidity obligations were contractual, but

treasurers were neither monitoring the risks nor incorporating them into their processes for managing liquidity risk.

173. Other liquidity obligations were not contractual but were nevertheless fulfilled in order to protect the reputation of the bank. Concerns about reputational damage also drove some banks to provide unanticipated support to off-balance sheet vehicles or conduits, including consolidating these positions onto their balance sheet when no contractual support was required. Furthermore, banks' liquidity management plans generally did not account for the reduced use of market "material adverse change" clauses and narrower flex pricing in their syndicated lending business – changes in business practice that materially altered the contingent funding risk of these positions.

174. However, liquidity problems are more often than not a symptom. The underlying problem may be a lack of confidence in the bank or the banking system – as demonstrated, for example, by customers withdrawing deposits and by other banks cutting interbank lines. Or investors' interest in purchasing some asset classes may fall sharply. Another factor may be a softening in banks' willingness to extend credit and liquidity to others because of uncertainty about counterparty risk and a wish to retain liquidity for their own needs.

175. Supervisors and banking organisations alike should take into account operational limitations to the transferability of liquidity. Thus, they should ensure that, during economically stressed periods, liquidity is maintained in a quantity sufficient to be in compliance with legal and regulatory restrictions on the transfer of liquidity among regulated entities. The degree of centralisation in managing liquidity should be appropriate for the depository institution's business mix and liquidity risk. An institution's failure to manage intraday liquidity effectively, under normal and stressed conditions, could leave it unable to meet payment and settlement obligations in a timely manner, adversely affecting its own liquidity position and that of its counterparties.³⁸

176. Supervisors' liquidity requirements may differ in terms of how required minimum levels of liquidity are expressed. A decline in liquidity below the required minimum will normally trigger a series of actions by the supervisor, such as requiring the bank to indicate how, and how soon, it plans to restore its liquidity to an acceptable level. Corrective measures must first of all strengthen the short-term resilience of the bank's liquidity risk profile by ensuring that it has sufficient high-quality liquid assets to survive a stress scenario. Moreover, the bank should implement structural measures to promote resilience over a longer time horizon (eg increasing the most stable components of funding, reducing the loan to deposit ratio).

177. If the bank is unable to restore its liquidity position, or the position shows signs of weakening further, prompt action is critical. To facilitate such action, the supervisor should require the bank to prepare detailed cash flow projections that would allow the bank to continue at least to the end of the business week, at which time the supervisor would decide whether the bank should reopen in the following week. Stress tests should be carried out on the basis of these projections so as to give a better idea of how long the bank's liquidity can last if the liquidity losses continue or accelerate.

178. Stress tests and scenario analyses aim to identify potential weaknesses or vulnerabilities in a bank's liquidity position, enabling changes to be put in place to counter those weaknesses (eg a diversification of funding sources or an increase in contingent liquidity sources). The bank's cash flow projections should take into account, among other things, premature withdrawals and offsetting of the

³⁸ The Basel Committee, in consultation with the Committee on Payment and Settlement Systems, has developed a set of quantitative tools to enable banking supervisors to monitor banks' intraday liquidity risk and their ability to meet payment and settlement obligations on a timely basis under both normal and stressed conditions. See Basel Committee on Banking Supervision (April 2013). The monitoring tools complement the qualitative guidance in the Basel Committee's *Principles for sound liquidity risk management and supervision* (September 2008).

bank's placements against the liabilities owed by the bank on a global basis. Adequately designed and properly implemented liquidity stress tests can generate valuable information on a bank's liquidity profile that cannot be generated from a limited set of standardised liquidity metrics.

179. Such stress testing allows a banking organisation and its supervisor to identify vulnerabilities related to liquidity adequacy in light of both firm-specific and market-wide stress events and circumstances. The testing helps identify and quantify the depth, source and degree of potential liquidity and funding strain and to analyse possible effects on the bank's cash flow, liquidity position, profitability and other aspects of its financial condition over various time horizons.

180. The bank can take a number of actions to improve its liquidity position. First, as regards withdrawals and assuming the bank's underlying position is healthy, it can issue statements to reassure the public, and it may wish to address large depositors directly. Second, as regards its liquidity stock, it can try to secure lines from friendly banks or sell or repurchase assets so as to boost liquidity. It can also seek liquidity support from its major shareholders.

181. The question of liquidity support from the central bank is also likely to arise. The central bank may be able to assist a solvent bank in acquiring liquidity, on published terms and against acceptable collateral, within its normal standing loan facilities such as the discount window. On a case by case basis, the central bank may also consider providing emergency liquidity assistance, ie beyond that provided through its normal standing facilities, to illiquid banks that are presumed solvent. Private sector mechanisms should usually be exhausted before emergency liquidity assistance is considered, partly to reduce moral hazard and partly to minimise the risk of losing public funds. Also to reduce the risk of losing public funds, collateral should be required, if possible, for emergency central bank assistance. Depending on the circumstances, the central bank may wish to restore confidence by issuing a statement confirming that it stands ready to provide liquidity support in the current case and to any other illiquid but solvent bank.

6.3.7 Risk management processes

182. The bank's risk management processes must be adequate to address all the risks that the bank is facing. The following paragraphs deal with two examples of the scope required of risk management and supervisory interventions that may be required to rectify shortcomings.

183. First, as financial intermediaries, banks cannot avoid market risk, and bank management is primarily responsible for monitoring and controlling it. Management has a duty to establish prudent risk limits in relation to its financial strength and risk management capabilities. Management must carefully and routinely monitor these limits and take prompt corrective action if the risk threatens the financial condition of the bank. If, however, management is unable to reduce excessive market risk, supervisory action may be required. In that case, the supervisor may address not only the excessive exposures but the weak risk management and lax controls that permitted excessive risk-taking to develop.

184. Second, there is growing awareness of operational risk, especially given the increasing reliance on information technology (IT).³⁹ Breakdowns of IT systems as well as deficiencies in other operational areas can lead to large losses, an erosion of public confidence and possibly insolvency. The supervisor must require the bank to address the systemic/operational deficiency promptly, and in many cases urgently. However, a lasting solution requires that the bank deal with the underlying deficiencies, eg the inadequacy of backup systems.

³⁹ See Basel Committee on Banking Supervision (June 2011).

185. More generally, banks should also have business resiliency and continuity plans in place to limit losses in the event of business disruption. Banks are exposed to disruptive events. Some of these events may prevent the bank from fulfilling some or all of its business obligations. Incidents that damage or render inaccessible the bank's infrastructure or a pandemic event that affects human resources can impose significant financial losses on the bank as well as disrupt the broader financial system. To provide resiliency against these risks, a bank's business continuity plans should be commensurate with the nature, size and complexity of its operations. Such plans should take into account different types of likely or plausible scenarios to which the bank may be vulnerable.

7. Resolution issues and exit

186. This section sets out (i) guiding principles for resolving banks that have reached the point of non-viability; (ii) specific resolution techniques; (iii) guidance on the use of public funds in resolution; (iv) the process of closing a bank and paying off depositors; (v) approaches to the management of impaired assets; and (vi) issues in public disclosure.

187. Resolution techniques require specialised skills, so supervisors may need to hire experts to assist them. Some jurisdictions may have designated authorities to carry out the resolution of banks that supervisors have deemed non-viable.

7.1 Guiding principles for bank resolution policy

188. Resolution should be initiated when a bank is no longer viable, or likely to be no longer viable, and has no reasonable prospect of recovering. There should be clear standards or suitable indicators of non-viability to help guide decisions on whether banks meet the conditions for entry into resolution. As discussed in Section 5.2, resolvability assessments can help supervisors make banks more resolvable before a crisis occurs. For example, they provide supervisors with the opportunity to consider the sufficiency of the bank's gone-concern loss absorbing capacity in a resolution.

189. The principles for dealing with weak banks, as set out in Section 2.2, are elaborated upon below to guide supervisors in bank resolution policy and in the choice of the appropriate resolution technique. Not all of these principles can necessarily be implemented simultaneously.

- *Bank failures are a part of risk-taking in a competitive environment.* Supervision cannot, and should not, provide an absolute assurance that banks will not fail. The objectives of protecting the financial system and the interests of depositors are not incompatible with individual bank failures. The occasional bank exit may help provide the right incentive balance. Therefore, a credible resolution regime enhances market discipline. There should be well-defined legal or economic criteria for determining when a bank requires intervention or closure. When such criteria are met, the supervisor should take action promptly to ensure an orderly resolution process. Losses to shareholders, relevant debt holders and other creditors should be allocated in a manner that respects the hierarchy of claims. Normally, shareholders of the institution under resolution bear first losses, and creditors bear losses after the shareholders in accordance with the order of priority of their claims under normal insolvency proceedings. The general principle that no creditor should be worse off in a resolution procedure than in liquidation should apply.
- *Private sector solutions are best.* A private sector solution – one that does not impose a cost on taxpayers and introduces the least amount of distortion in the banking sector – is in line with the least-cost criterion. This solution usually entails a takeover by a healthy institution that finds ownership of the bank attractive. The supervisor has a role to play, if necessary, in encouraging a private sector solution. The resolution regime should not rely on public solvency

support or create expectations that there will be support. Public funds are only for exceptional circumstances, ie during very severe periods of market stress, to avoid adverse effects on financial stability at a national or cross-border level. Furthermore, the use of public money should be subject to the application of stringent and immediate constraints on the bank.

- *Expeditious resolution process.* Speed, transparency and predictability are important in resolving a bank. Weak banks should be rehabilitated or resolved quickly. Banking assets from failed institutions should be returned to the market promptly to minimise the eventual costs to depositors, creditors and taxpayers and to prevent the unnecessary destruction of value. The longer a bank or banking asset is held by an administrator, the more value its franchise is likely to lose. Experience has shown that if left unchecked, the resolution of weak banks may drag on for a long time.
- *Preserving competitiveness.* In a resolution by merger, acquisition or a purchase-and-assumption transaction, an acquiring bank should be selected on a competitive basis. The effect on competition for banking services must also be considered. Any incentives to facilitate transactions should not penalise other banks by distorting competition.
- *Minimise disruption to market participants.* If the bank provides systemically important (or “critical”) functions to the real economy and financial markets, a strategic analysis of those functions is necessary for resolution planning and for assessing resolvability.^{40,41} Resolution should ensure continuity of systemically important functions. Borrowers may find it difficult to establish a relationship with a new bank and may find existing projects threatened if expected bank credits are not forthcoming. It may take the deposit insurer some time to determine who are the insured depositors, to close their accounts and to pay them off.⁴² In the absence of a deposit insurer, the delay in the return of insured funds to depositors will be even longer, as liquidation procedures can be protracted. In any case, the choice of resolution measures and the choice between resolution and closure should be made with the aim of minimising market disruption.

7.2 Resolution techniques

190. The distinction between a legal closure and an economic closure of the bank is important. In a legal closure, the bank’s licence is withdrawn and the legal entity ceases to exist. In an economic closure, there is interruption or cessation of the bank’s operations, which may often lead to severe disruption and possibly losses for the bank’s customers.

191. The resolution plan should facilitate the effective use of the powers of the resolution authority or supervisor to resolve the bank without severe systemic disruption and without exposing taxpayers to loss. Authorities should on a regular basis review potential resolution strategies and the necessary preconditions and operational requirements for their implementation, including cross-border

⁴⁰ See Financial Stability Board (2013). Paragraph 2.2 provides a guideline for the determination of critical functions.

⁴¹ To avoid unnecessary destruction of value and minimise the costs of resolution to authorities and losses to creditors, authorities need to undertake their own assessment for each bank, taking into account specific aspects of the market and the firm and the characteristics of a country’s financial system, its economic and competitive landscape and the range of functions banks provide. A bank closure may disrupt the intermediation of funds between lenders and borrowers, with potential negative effects on the economy.

⁴² The law or regulations must ensure that the deposit insurer has access to bank information early in the process and that such information is accurate and relatively complete. The staff of the deposit insurer should also have sufficient expertise to respond quickly and put money in the hands of the depositors.

coordination. In addition to the overall resolution strategy and the underlying strategic analysis, authorities should identify some elements of a resolution plan before the bank becomes weak.⁴³ Once the pre-validated conditions described under these scenarios are met, the resolution plans should include the potential use of the full array of available resolution powers, including but not limited to:

- forced restructuring;
- sales of portfolios or viable business units;
- complete or partial run-off of activities;
- changes in the governance and management organisation of the bank;
- creditor recapitalisation;
- bail-in (without a bridge bank);
- transferring systemically important and other viable operations to a bridge institution; and
- exchanging claims against the bank for equity in the bridge.

192. In the case of cross-border groups, national authorities should provide clearly defined procedures for implementing the resolution strategies and the operational resolution plan across multiple countries in different jurisdictions and time zones.

193. Whatever choices are made by different authorities, resolution plans should take the adopted strategy into account in advance while retaining flexibility to modify the strategy based on actual crisis circumstances, and doing so is one of the focal points of the work within CMGs. A weak bank with large and widespread foreign operations will likely remain a challenge in a resolution process depending on its structure. Indeed, as long as foreign subsidiaries can demonstrate that they are well capitalised and self-sustaining, some authorities could expect them to remain open and operating and fund their operations from customary sources of credit through normal borrowing facilities.

7.2.1 Restructuring plans

194. A weak bank may be required to reorganise its operations as a corrective action, but if insolvency is imminent, the bank may be required to carry out a radical restructuring. Such a strategy is worth adopting only if there is a real chance of getting the business back on a sound footing in the short term. Far-reaching restructuring may be the only solution for large and complex institutions that are unlikely to find partners with the financial resources to carry through a merger or acquisition.

195. On top of operational and organisational restructuring, there can be financial restructuring. If the bank has issued capital instruments that count as regulatory capital under the Basel Committee standards, the holders of these instruments must be available to absorb losses. The absorption of losses, by way of writedown or conversion into equity (after eliminating existing shareholders' claims) must be triggered prior to failure of the bank. In addition, if the supervisor or other authorities have the required legal means, they should determine whether subordinated debt could be converted into preferential or new equity.

196. If the board of directors, management or controlling shareholders are reluctant to take timely action, supervisors should consider the appointment of an administrator to draw up the restructuring plan and implement its initial phases. In such cases, the administrator should replace the management and take over the running of the company and have all the functions and powers of the ex-directors. Some curtailing of shareholders' powers could also be necessary.

⁴³ See Financial Stability Board (2011), Annex III, paragraph 4.

7.2.2 Bail-in within resolution

197. Some countries may have the power to conduct bail-in within resolution to support the continuity of essential functions. Such bail-in can be accomplished either by recapitalising the entity or alternatively by capitalising a newly established entity or bridge institution to which these functions have been transferred following closure of the non-viable bank. This ensures that relevant debt holders also help pay for the cost of resolution.

198. The bail-in tool can be used in conjunction with other resolution powers (eg removal of problem assets, replacement of senior management and adoption of a new business plan) to ensure the viability of the bank or newly established entity following the implementation of bail-in.

7.2.3 Mergers and acquisitions

199. When a bank cannot resolve its weaknesses on its own, it should consider a private sector resolution. This may consist of a merger or acquisition or purchase and assumption transaction involving a healthy bank or the creation of a bridge bank that is subsequently sold to a healthy bank. Banks, even those that fail, are attractive targets to investors, especially financial institutions, because of their intrinsic franchise value.⁴⁴

200. Arrangements for a merger or acquisition should take place early, before assets dissipate in value. In some cases, owners and certain creditors may have to make concessions to attract acquirers. Acquirers should have capital sufficient to acquire and run the new bank and a management team capable of implementing a reorganisation programme. If the acquirer is a foreign bank, the supervisor faces additional concerns, such as the laws and regulations of the relevant foreign jurisdictions. The supervisor will also need to coordinate closely with foreign supervisors to learn about the acquirer and its related activities.

201. Authorities should keep in mind that, even in good times, mergers and acquisitions (M&As) are not easy for the institutions involved. This stems from different corporate cultures, the incompatibility of IT systems, the need for personnel layoffs, etc. The integration of staff and information systems must be very carefully thought through in any merger plan.

202. The interested acquiring institution should have a clear understanding of the underlying causes and problems of the weak bank. Full and accurate information should be provided by the weak bank to all potential acquirers, although this may have to be provided sequentially and under strict confidentiality agreements. In countries where the law permits, this could be done in cooperation with the supervisors. Restricting access to information will discourage potential acquirers, leading them to demand more concessions from the regulators or acquired bank. Although access to full information may result in the interested institution deciding to abort the planned merger or acquisition, that is better than an ill-considered takeover that may result in serious difficulties for the acquiring institution itself. The supervisor must be careful to ensure that in solving one problem, the strategy does not create another (larger) problem at some stage in the future.

203. If the controlling shareholders of a weak bank delay the merger or acquisition, the authorities may consider appointing an administrator having all the powers of the former management. Some pressure to persuade the weak bank's shareholders to accept the transaction may be necessary – even up to the expropriation of the majority stake. All of the above will be subject to legislation, which should

⁴⁴ Intangible benefits may include instant access to a particular market segment, acquisition of a desirable deposit pool and a financial distribution system with a minimum investment.

also provide for fair treatment of the disenfranchised shareholders. A key issue is how, when and with what authority the supervisor/resolution authority can write down the value of shares.

204. There are other considerations. Owners of a weak bank who are trying to sell their stake to minimise their own personal losses will generally not attach great importance to the identity of the prospective buyers. These circumstances may open the way for some potential buyers who may be less interested in the banking operations of the bank than in its legal title and registration. Such buyers may wish to misuse the bank (eg for money laundering) or use it for other business interests that may jeopardise the bank's continuing existence. In accordance with the Basel Core Principles, supervisors are obliged to check the reliability of any new shareholder and have the power to reject applicants. Supervisors should use these powers uncompromisingly.

205. The advantages of an M&A solution is that it:

- maintains the failing bank as a going concern and helps preserve the value of the assets (thereby reducing the cost to the government or deposit insurer);
- minimises the impact on markets, as there are no disruptions in banking services to customers of the failing bank; and
- transfers all assets, and all depositors and creditors are fully protected.

206. In an M&A resolution, the supervisor should actively monitor the problems in the acquired bank and take steps to ensure that they will be adequately addressed by the management of the resultant bank.

7.2.4 Purchase and assumption transactions

207. If an M&A solution cannot be arranged, a purchase and assumption (P&A) transaction may be considered. In a P&A transaction, a healthy institution or private investors purchase some or all of the assets and assume some or all of the liabilities of the failed bank. P&A transactions in most countries require withdrawal of the bank licence and the commencement of resolution proceedings by the liquidator. The acquirer purchases assets of the failed bank but not its charter.

208. A P&A may be structured in many different ways, depending on the objectives and requirements of the purchaser, the deposit insurer⁴⁵ and the government. The transaction may be structured so that the acquirer purchases all assets and assumes all deposits. As with an M&A transaction, this type of P&A can be attractive to an acquirer – because of the intangibles – even when the bank is insolvent. However, such situations are rare. More often than not, a financial inducement may be necessary to make the bank attractive for potential acquirers. Incentives may take the form of cash injections by the deposit insurer⁴⁶ or, in exceptional cases, by the government. This form of assistance must be justified as the least-cost alternative.

209. A P&A transaction may be arranged so that the acquirer purchases only a portion of assets and assumes a portion of the deposits. For example, the liquidator may assign to the acquirer performing loans and other good-quality assets for an amount corresponding to the insured deposits it will

⁴⁵ The role of the deposit insurer in a resolution is mentioned here in a narrow context. In some countries, the deposit insurer plays a much bigger role, including providing financial support, assisting with capital restructuring and facilitating mergers with other institutions.

⁴⁶ In some countries, the deposit insurer is restricted to paying out to depositors only. This resolution technique will still be considered a private sector solution if the financial inducement is provided by a privately funded guarantee scheme.

assume.⁴⁷ A "clean bank" P&A transaction occurs when the acquiring institution assumes the deposit liabilities and purchases the cash and cash equivalent assets plus the "good" loans and other high-quality assets of the bank.⁴⁸ Assets not sold to the acquirer at resolution are passed on to the liquidator for disposal.

210. If non-performing loans and other risky investments are to be assigned to the acquirer, some arrangement will be needed to mitigate the consequent risk. This may take the form of a loss-sharing agreement or a put-back provision that allows the acquirer to return assets that become impaired within specified periods. In the sale of such assets, the acquirer must not be indemnified for all losses; otherwise the acquirer has no incentive to manage the bad loans to minimise losses, leading to a higher cost of resolution. Alternatively, the acquirer could be hired, with appropriate incentives, to manage the non-performing loans but not take them onto its own balance sheet.

211. A P&A transaction should be completed as quickly as possible. This will avoid the interruption of business so as to preserve the value of the bank and reduce the resolution cost.

212. As in a merger or acquisition, the P&A acquirer should have the financial and organisational capability to combine with the failed undertaking. If there is more than one eligible acquirer, a winner could be decided by competitive bidding so that the best price is obtained for the net assets of the failed bank.

213. Closing the bank as a legal entity implies that the shareholders lose their investment and management is removed. From this standpoint, a P&A transaction is compatible with minimising moral hazard.

214. The benefits of the P&A solution are that it:

- helps preserve the value of some or all the assets of the failed bank (thereby reducing the resolution cost);
- minimises the impact on the market by quickly returning assets and deposits to normal banking operations – it can typically be completed over a weekend; and
- protects customers with insured deposits from loss of service if the P&A transaction can be completed over the weekend.

7.2.5 Use of a bridge bank

215. Use of a bridge bank in resolution allows certain critical functions and viable operations to remain in effect until a permanent solution can be found. The weak bank is closed by the licensing authority and placed under liquidation. A new bank, referred to as a bridge bank, is licensed and controlled by the liquidator. The resolution authorities should have the power to establish the terms and conditions under which the bridge institution has the capacity to operate as a going concern.⁴⁹ The liquidator has discretion in determining which assets and liabilities are transferred to the bridge bank. Those assets and liabilities that are not transferred to the bridge bank remain with the liquidator. A bridge bank is designed to bridge the gap between the failure of a bank and the time when the

⁴⁷ The deposit insurer should give the liquidator cash equal to the insured deposits, whose protection is ensured through the assignment. The uninsured depositors will jointly share with the deposit insurer the allotments that the liquidator will distribute using the cash given by the deposit insurer and the recoveries obtained from the disposal of the poor-quality assets.

⁴⁸ This is one way of implementing a so-called good bank-bad bank separation (see Section 7.5).

⁴⁹ See Financial Stability Board (2011), paragraph 3.4.

liquidator can evaluate and market the bank to a satisfactory third party. It also allows potential purchasers the time necessary to assess the bank's condition in order to submit their offers while at the same time permitting uninterrupted service to bank customers.

216. A bridge bank transaction is most commonly used when the failed institution is unusually large or complex; or when the deposit insurer or the government believes that value can be realised or costs minimised, but does not have a ready solution other than a payoff. It has the advantage of allowing time to find another bank willing to step in and prepare the terms of the operation. However, it should not be used to postpone a permanent solution, nor should the arrangement be allowed to remain in place for any significant length of time, as the bank will lose value if customers withdraw.

7.3 Use of public funds in resolution

217. Public funds are to be used only in exceptional circumstances. Public funds for the resolution of weak banks may be considered in systemic situations, including the risk of loss or disruption of credit and payment services to a large number of customers. An intervention of this nature should be preceded by a cost assessment of the alternatives, including the indirect cost to the economy.

218. Government support may take the form of financial inducements to facilitate a resolution measure, as discussed in Section 7.2. Alternatively, the government may offer solvency support to a weak bank to allow it to remain open for business. Such "open bank assistance" may take the form of a direct capital injection; or loans provided by the government to the bank; or the guarantee against loss extended to certain institutions that purchase troubled assets.

219. As the provision of solvency support puts taxpayers' money at risk, the decision to do so should always be taken and funded by the government, and not by the central bank. However, the central bank is often required to advance the funding until legal changes have been made or budgetary appropriations have been approved, which requires close cooperation and information sharing between the central bank and the government.

220. The provision of solvency support is not a resolution measure in the sense of providing a lasting solution to the underlying weaknesses of the bank. The disbursement of public monies should be made dependent on the implementation of an action plan, approved by the supervisor, which includes measures to restore profitability and good management. The government should always retain the option of getting its money repaid if the resolution of the bank allows it.

221. If public funds are used, shareholders and, if necessary, relevant debt holders of the weak bank should bear the cost of the resolution through a dilution or even elimination of their interest. When public support is provided to the bank, the legal framework for resolution should ensure that shareholders' approval is not required for any related reduction of their interests. Otherwise, one principal difficulty of arranging such transactions is the time required to receive shareholder approval. When shareholders realise that government assistance may be forthcoming, negotiations can be complex and lengthy.

222. By rescuing a troubled bank, the government may find itself as the majority or sole owner, ie the bank is in practice nationalised. This should be a temporary solution, and the government should actively seek to divest its holding by finding appropriate buyers. In the meantime, the government should operate the bank on market-oriented terms and with professional staff. The government should also make its intentions very clear to other market participants and to the general public.

7.4 Closure of the bank: depositor payoff

223. If the preceding resolution options are not available, the repayment of insured depositors and the liquidation of the bank are unavoidable. In countries with a deposit insurance scheme, closure of the bank and depositor payoff is also the right decision when such a payoff is less costly than other

resolution measures. The costs of a depositor payoff will fall on other banks if the insurance scheme is privately funded, and on the government otherwise.

224. The liquidators will proceed with the direct realisation of the assets in order to pay creditors under the rules governing general insolvency proceedings or bank-specific insolvency proceedings, depending on the institutional framework in place. If depositors are protected by deposit guarantee schemes, the schemes usually acquire creditor status after making payment and participate in the liquidation allotments in place of the depositors.

7.5 Management of impaired assets

225. Unless all of the assets of a weak bank are acquired by another institution, a large amount of impaired loans and other bad assets will remain and need to be managed. This need arises both for open bank assistance and for resolution techniques that result in a closed bank. Asset recovery should be economic, fair and expeditious and aim to maximise recovery on a net present value basis. Recovery of the value remaining in impaired assets can be done through direct collection (foreclosure of assets of debtors, especially from large debtors) or sales of assets to third parties or by managing the assets (eg through debt workouts) to prepare them for later sales.

226. If assets in the portfolio are sold individually to different acquirers at different times, a strategy should be defined that balances the risks and advantages of holding and managing the assets with the risks and advantages of rapidly selling them. Adverse economic effects from a strategy of rapid recoveries of non-performing loans should also be considered. The choice also depends on the capability and skills available for active management of the assets.

227. Various methods are available for selling the assets, such as sales en bloc, "portfolio" sales, asset-by-asset sales, securitisation, or sales to a restructuring agency. The choice of method depends on the quality of the assets, overall economic and financial market conditions, interest on the part of domestic and foreign investors, and the available resources.

228. Experience provides several reasons for removing bad assets from the rest of the bank:

- It improves the balance sheet and thus makes the bank more attractive.
- Bank management can focus on steering the bank through its present problems and on its strategic development rather than devote scarce time to problem assets.
- Specialists may be hired to maximise the recovery of value from the impaired assets, for instance by adapting the assets to make them more attractive for investors.

229. The separation of assets can be accomplished in various ways. They include use of a division in the bank, of a subsidiary or of a separate asset management company funded and managed by private investors or by the government.

230. A resolution technique called "good bank–bad bank" separation entails selling all non-performing and other low-quality assets at market values to a separate company specially set up for the purpose. The asset management company – the bad bank – will need to be capitalised by the government or deposit insurer if, as is typical, no private investor is initially available or interested in acquiring the low-quality assets. The bad bank manages the assets to maximise cash inflows. Transparency, expertise, sound management and appropriate incentives are essential for the maximisation of recoveries by this company. The good bank will require recapitalisation if no share capital remains, and then it should focus on its ongoing banking activities and the correction of operational weaknesses. Alternatively, the good bank can be offered for sale. A good bank–bad bank solution should be considered only if there is franchise value in the good bank.

7.6 Public disclosure of problems

231. Public disclosure of problems affects a great number of stakeholders and will influence the final outcome of the process. Supervisors often face difficult trade-offs in public disclosure because it must balance two conflicting social interests. On one hand, information transparency is important for stakeholders' decision-making. On the other hand, such disclosure may trigger bank runs, hurt the bank's access to financial markets and lead to financial instability as a whole. Thus, the timing, content and methods of disclosure are critical for contingency planning both by the authorities and the bank. It is important to determine: (i) at what point public comments can be made, whether by the bank, the supervisor, the resolution authority, the central bank or perhaps the government;⁵⁰ (ii) the contents of such communication; and (iii) effective ways to deliver the message. A communication strategy may already be part of a bank's recovery plan. Generally, disclosure should be made by the bank itself rather than the supervisor or another party.

7.6.1 When should communication start?

232. Experience from banking crises indicates that public disclosure or communication is important in order to maintain confidence in the system as a whole. Authorities should carefully consider the best way to publicly react to any and every piece of information disseminated to the public, regardless of whether it is formal news, a rating downgrade, an investment bank report or a simple rumour or speculation about the financial health of the bank. In particular, rumours tend to be continuous and impossible to suppress; they worsen the situation even if the authorities deny their validity. Authorities should nevertheless monitor and attempt to limit the damaging effects of all these events, as they might limit the bank's access to funding markets. If rumours about the bank's problems already exist, publicising the remedial actions taken by the bank may help to maintain or boost confidence in the bank. Before an announcement by the authorities, the bank might be encouraged to make its own comment on the prospects for returning to normal activity. Close liaison may be needed with the relevant market authorities, although of course legal decisions about disclosure obligations must be taken by the bank itself.

233. For individual banks, communication should generally start once a formal resolution has been decided (ie the removal of the board of directors, a capital injection from the government or the start of a resolution procedure). If the bank's problems are not yet in the public domain, the supervisor should consider whether it is less costly and disruptive to disclose the problems after resolution has started. If the bank's problems are severe, premature disclosure may result in a bank run (ie emergency liquidity assistance or early remedial action might prompt unnecessary bank runs). Further ad hoc communication actions could be envisaged depending on how the crisis develops.

7.6.2 Contents of disclosure

234. The initial information presented by the supervisor should be succinct and clear. It should contain only the content of the decision taken, a brief description of the reasons, and the goals being pursued by the supervisor.

235. To better address financial stability, authorities may also want to consider additional messages emphasising the efforts to avoid any operational and practical disruption within the bank. When feasible, such messages should include a statement that the bank will continue operating normally and will meet its obligations with third parties and that daily interactions with the bank will not be affected. However,

⁵⁰ The discussion of public disclosure covers all weak banks, whether under corrective action (Section 6) or under resolution measures (Section 7).

before the authorities make any statement, it is important to give consideration to the legal regime, because comments such as “depositors have no cause for alarm” may be interpreted as implying endorsement of, or support for, the bank, and the supervisor may subsequently feel morally obliged to bail out the bank.

236. Reassuring messages should be conveyed to depositors in other banks in order to prevent inappropriate contagion across peer banks (ie putting into context the size of the bank if it is small, or guaranteeing that the problem is ring-fenced).

237. In all cases, close coordination between the bank, the supervisor, the central bank, the resolution authority, the deposit insurer and the government is critical. The coordination applies to both the timing and the content of the disclosures. Experience has shown that inconsistent or discordant disclosures sow confusion and make the resolution effort more difficult.

7.6.3 Communication strategy

238. Authorities should be prepared for crisis situations and have a communication strategy ready. The initial communication regarding a bank resolution should be the dissemination of an official news release, which should also be posted on the websites of the authorities and bank. A hotline phone service with clear messages may also be a useful instrument to address initial reactions.

239. Banks themselves are likely to have their specific communication strategies and arrangements (ie increased internet outsourcing capacity, press releases) in case of approaching difficulties. Authorities should be informed of the relevant details and should encourage banks to avoid reputational problems. If a bank is weak, it needs to plan for reputational risk events. For example, a bank needs to ensure increased IT support for its internet banking facility so that it minimises the chance of any interruption being interpreted as a liquidity problem. And a bank needs to minimise the chances of retail withdrawals being interpreted as a bank run (hence there is a point to efforts aimed at reducing the visibility of any ATM queues).

240. Once resolution has been made public, prompt and adequate monitoring of media coverage (including online and social media) is necessary to identify communication risks. Subsequent reactions by the authorities or the bank should be carefully balanced, and authorities should also have arrangements ready for public hearings, news conferences and interviews if needed.

7.6.4 Other general considerations

241. Eventually, banks should have their own communication plan. In all cases, the parties involved have to be mindful of any statutory or regulatory obligations to make disclosures. For example, if the bank’s shares are listed on the stock exchange, certain disclosures may be required by the listing rules. Authorities may also have obligations, formal or informal, to keep other parties informed, such as other domestic supervisors and overseas supervisors if the bank has overseas presences.

242. A related issue is whether formal supervisory action taken against the bank should always be disclosed. The considerations already discussed still apply. In some countries, all enforcement actions are made public in the interest of transparency.

8. Selected institutional issues

8.1 Conglomerates

243. Additional factors may apply to a bank that is part of a conglomerate. Events and weaknesses in the wider group, including in the ownership and organisation structure, could have an adverse effect on

the bank even if the latter is in good health. A particular risk is that the bank's assets or liquidity will be used to support weak entities in the group, particularly those that engage in unregulated activities.

244. Conglomerates can comprise exclusively financial entities or be a mix of financial and non-financial firms. More often than not, the situation will be complicated by an international dimension – for example, if the bank is part of a multinational group. The prudential approach to be taken in each case is similar, namely to obtain all relevant information and resolve financial institutions in an orderly manner that limits contagion from the wider group. Supervisors must consider risks arising from the activities of entities within the financial conglomerate (or within the wider group to which the financial conglomerate belongs) that are not directly prudentially regulated.

245. The Joint Forum sets out the principles to guide policymakers and supervisors in the oversight of financial conglomerates:⁵¹

- for policymakers, to ensure that they provide supervisors with the necessary powers, authority and resources to perform comprehensive group-wide supervision of financial conglomerates; and
- for supervisors, to ensure financial conglomerates have robust governance, capital, liquidity and risk management frameworks.

246. The supervisors overseeing a financial group can use a combination of the following tools:

- Undertake a *group* assessment. By pooling information from all the group's supervisors, a clearer picture of group-wide risks may emerge, facilitating the identification and resolution of problems. It is helpful to hold regular meetings with the other relevant sector supervisors, even while the group is problem-free. This helps build trust among the supervisors, making information flows easier when difficulties emerge.
- Obtain *information* regarding other entities in the group. This is most straightforward where the other entities are financial and their supervisors are prepared to share information. If a group contains an important unsupervised entity, supervisors will have to seek information through other routes, eg from publicly available data or by applying pressure via the supervised entity.
- Appoint a *coordinator*. Especially in a crisis affecting the whole group, it is important that one supervisor take the lead. This does not mean taking decisions on behalf of all individual supervisors but acting (i) to collate information from the other supervisors; and (ii) as a point of contact and liaison for the group on group-wide issues.
- *Ring-fence* the bank. Options here include limiting exposures to the rest of the group; limiting funding from group entities (in case it is withdrawn at short notice); and imposing more stringent capital and liquidity requirements.
- Ensure that *governance* of the bank is relatively *independent* of the wider group. This can be achieved by, for example, insisting that some or all of the bank's directors are independent of the group.

⁵¹ See Joint Forum (September 2012).

8.2 Global systemically important banks

247. The issues and basic options that apply to conglomerates apply as well to G-SIBs, which have certain additional requirements. For example, additional data are collected from G-SIBs to enable authorities to better understand their linkages with the rest of the financial sector and the wider economy. In addition, G-SIBs will eventually be subject to (i) tighter limits on exposures to other G-SIBs so as to reduce the risk of contagion; and (ii) higher loss absorbency requirements, which would help reduce their probability of failure.

248. The FSB's Key Attributes⁵² provides detail about the duties of supervisors in a G-SIB resolution regime. In particular, supervisors should see to the creation and maintenance of:

- a recovery and resolution plan;
- regular resolvability assessments; and
- institution-specific cross-border cooperation agreements.

249. Information-sharing on a cross-border basis may present a number of difficulties, particularly legal difficulties (eg data protection agreements). Supervisors should make sure that G-SIBs have institution-specific agreements establishing processes for cooperating, including setting out the process for information-sharing with clear reference to the legal bases and to the arrangements that protect the confidentiality of the shared information.

250. One lesson from the resolution of banks with cross-border operations is that differences in legal structures may limit the range of available tools to resolve problems. The FSB's Key attributes document says that, for all G-SIBs, the home authority should lead the development of the group resolution plan in coordination with all members of the firm's crisis management group (CMG). Host authorities can have their own resolution plans for the bank's operations in their jurisdictions, but they should cooperate with the home authority to ensure that those plans are as consistent as possible with the group plan.

8.3 Cross-border issues

251. Home and host supervisors of cross-border banking groups share information and cooperate for effective supervision of the group and its entities as well as coordinate the supervisory response for effective handling of crisis situations.⁵³

252. There are four permutations of cross-border operations: a foreign bank with a subsidiary or branch in a host country; and a home country bank with a subsidiary or branch in a foreign country. The different permutations involve legal differences and create different supervisory perspectives. In all cases, however, coordinated supervisory responses are needed for an optimal outcome. Such an outcome is most likely when a supervisory college has given advance consideration to the handling of potential problems and has established clear emergency planning arrangements.

253. A subsidiary of a foreign bank is legally incorporated in the host country and is subject to the same supervisory and regulatory measures as domestic banks in the host country. Being part of a foreign bank group creates additional risks but also additional channels for information gathering that may increase the range of available remedial actions. The main additional risk is that the subsidiary is affected

⁵² See footnote 9.

⁵³ See Basel Committee on Banking Supervision (September 2012).

by events elsewhere in the group, including in its parent's home country. In the event of a problem in the subsidiary, the host supervisor should inform the home authorities and consult with them about planned supervisory decisions. In turn, given the need for proactive dialogue and speedy information exchange when problems occur, the host country supervisor must keep abreast of group-wide developments, including via information from the home country supervisors.

254. In the event of continuing significant problems in the parent bank or elsewhere in the group, and after liaison with the home supervisor, the host country supervisor may, if the law permits, try to protect the subsidiary by ring-fencing.⁵⁴ This may entail limiting the subsidiary's exposures to the other parts of the banking group, stopping the parent bank from booking exposures in the subsidiary, or closing the bank if it does not meet authorisation requirements. Efforts to ring-fence the subsidiary will be made more difficult if large parts of the subsidiary's operations are outsourced to the home country. The home country supervisor should use available supervisory cooperation structures, eg colleges of supervisors or bilateral contacts, to inform relevant supervisors about this development and possibly coordinate a supervisory response. Before taking such action, the host country supervisor should consider carefully the possible impact on the banking system generally and on the specific bank in particular. It should also take into account the potential impact of its decisions on the banking system in other countries.

255. A branch of a foreign bank is not legally incorporated in the host country, and the home country supervisor bears responsibility for its solvency. However, when necessary, the host supervisor may apply corrective measures while recognising that ring-fencing would not be as effective as in the case of a foreign bank subsidiary. As noted above, any such action should only be taken after proactive dialogue with the home supervisor and consideration of potential wider impacts. The host country supervisor may also wish to require the branch to maintain certain assets to meet their obligations. Ultimately, the host country supervisor has the power to revoke the banking licence of either a subsidiary or a branch and to require the home authorities to close the branch. These powers could be applied when the bank violates prudential rules or when other conditions are not upheld, such as if the parent bank refuses access to vital information.

256. A home country's bank subsidiaries and branches abroad should be treated equally (as the inverse) in the situations mentioned above. It is important for the home country supervisor to:

- have a clear view of the legal and financial situation in the host country, including of the competence of its supervisory authority;
- obtain agreements with the host authorities on information sharing in crisis situations as well as in relation to recovery and resolution planning;
- ensure that the parent bank has full information on the risks and a full understanding and control of the activities of the foreign entity; and
- have access to all relevant information on the entity abroad, through the entity itself, its parent, the foreign supervisor and on-site examinations.

257. Cross-border issues also arise when a domestic bank is controlled by a large foreign shareholder. The bank can become weakened if that shareholder suffers reputational damage. To some

⁵⁴ This possibility is recognised in Principle 11 of the Basel Core Principles, which notes: "The supervisor has the power to take corrective actions, including ring-fencing of the bank from the actions of parent companies, subsidiaries, parallel-owned banking structures and other related entities in matters that could impair the safety and soundness of the bank or the banking system."

extent, actions similar to those above and also as described in Sections 8.1 and 8.2 may be applied, such as more intensive information-sharing with the authorities of the shareholder's home country.

258. For all G-SIBs, home and key host authorities should maintain CMGs to enhance both the preparedness for a cross-border crisis and the management and resolution of the bank. The CMG should include all entities that are material to the bank's resolution and should cooperate closely with authorities in other jurisdictions where the bank has a systemic presence. A CMG should also be set up to enhance the management and resolution of a cross-border financial crisis affecting the bank. There are many examples of regular cross-border dialogues between supervisors. On occasion, joint inspection visits in the host country can also be valuable.

259. An important aspect of a CMG's work is obtaining advance agreement on the preferred resolution strategy for the banking group. As discussed in Section 7.2, the agreement may use a "single point of entry" or "multiple point of entry" strategy or it may take an intermediate approach.

260. The cross-border issues have additional complexities in the case of a foreign subsidiary that is designated as a domestic systematically important bank (D-SIB).⁵⁵ In this case, the host authority should assess the need for higher loss absorbency, which might affect the resolution plan for the banking group.

8.4 Public sector banks

261. The Basel Core Principles state that, in general, all banks should be subject to the same operational and supervisory standards regardless of their ownership. In practice – and for historical, institutional and ideological reasons – many countries have a legacy of very large public sector banks. Many of these banks do not operate on market terms; instead they are used to provide special services to the public and to the economy at large. Examples of such non-commercial activities include:

- offering loans to specific sectors at the behest of the government without requiring that the customer meet normal credit underwriting criteria, or pricing the loan at a level that is not commensurate with the level of inherent risk;
- granting credits to public enterprises on the basis of public guarantees rather than prudent credit underwriting and risk assessment;
- performing various social services not normally conducted by banks; and
- subsidising certain banking services and products.

262. A further problem arises because public sector banks often hire directors and managers who do not have sufficient experience in for-profit banking. In general, the public tends to be less willing to tolerate restructuring and staff reductions at public sector banks than at private sector banks.

263. Against this background it is not surprising that in many countries there are large, even dominant, public sector banks with significant financial and operational weaknesses. In some cases, these weaknesses are not immediately evident from the bank's financial statements. For example, delinquent loan payments "covered" by guarantees from the government or other public bodies may not be classified and provisioned, even though in reality it is unlikely that the bank will be able to collect the amounts due from the guarantor.

⁵⁵ See Basel Committee on Banking Supervision (October 2012).

264. The effects of such practices at public sector banks include high levels of non-performing loans and low levels of interest income; inadequate provisioning; high administrative and operational costs; and ultimately a declining capital base. Liquidity problems are normally averted because of special access to public facilities, such as the central bank's discount window or other arrangements.⁵⁶

265. In many cases, weak public sector banks require an approach different from that used when dealing with private banks. This is not to say, however, that the treatment should be less stringent. For all weak banks, the aim is to bring them to financial strength and profitability. If this is not possible, the bank, whether public or private, should be sold or closed and the assets liquidated. It is imperative that the treatment of public sector banks include terminating their various non-market diversions and interferences. If these functions are still needed, eg financial services to people in remote places, the authorities should consider a more cost-efficient and streamlined method of providing them. Moreover, the costs associated with such functions should be financed through explicit government budget appropriations and other, less resource-consuming channels.

266. The sheer size of many public sector banks complicates their resolution. It may be impossible to find a partner willing and able to absorb a large public sector bank in a merger or acquisition. Some countries have solved this problem by splitting the bank into several smaller entities and dealing with each one separately. Indeed, such an approach can succeed when resolving large private sector banks.

267. To be effective, corrective measures and resolution strategies for public sector banks must address the financial and political issues simultaneously. Strategies addressing the financial issues must treat the bank like any other commercial entity. Strategies focusing on political issues require actions to free the bank from its non-commercial operations and influences. As a consequence, implementing corrective measures and resolution strategies for public sector banks will typically require more time; in the meantime, the government is likely to be called upon to provide additional capital.

268. Finally, for competitive reasons and in order to maintain credibility in the financial sector, it is imperative that the supervision and resolution of weak public sector banks be carried out in a manner that is not more favourable than that applied to private banks.

9. Conclusions

269. All supervisors have to face the problem of dealing with weak banks. This report offers supervisors some guidelines based on recent experience. The main guidelines are summarised below:

- (i) Supervisors should be prepared. In a crisis, time is short and problems have to be faced immediately – often several at once. Delay worsens the situation and makes the solution more costly. It helps considerably if supervisors understand the issues and the options for handling weak banks and also who they can talk to in other organisations and countries.
- (ii) To deal effectively with weak banks, supervisors need clear objectives and a clear operating framework, as provided in the Basel Core Principles. The increasingly widespread adoption of these standards is lessening the risk that legal and accounting gaps and political interference will undermine supervisory action.

⁵⁶ In the case of the European Union, however, Article 101 of the European Community Treaty prohibits public sector banks from special access to public facilities and, in particular, to the financial resources of the central bank.

- (iii) Prevention is normally better than a cure. Supervisors should use both new and existing tools to know their banks. A combination of financial reporting and monitoring, on-site examination, and regular liaison with auditors and bank management provides a good basis for detecting problems early. And early detection often means that the problems can be remedied before a bank's solvency is threatened.
- (iv) Supervisors must be discriminating. Unless they can distinguish between the symptoms of weakness and its underlying causes, supervisors will not be able to fashion effective corrective actions. They have to allow for the "special" factors of (international) conglomerates, G-SIBs and public sector banks, but this does not imply forbearance or lenient treatment. Supervisors have to be proportionate and flexible in their use of tools, judging when a remedial programme is more appropriate than penalties and whether to publicise restrictions.
- (v) As in any other line of business, banks can and do fail, and the public should be aware of this. But public bailouts are a last resort rather than a normal aspect of failure. Liquidation is often the right solution, particularly where deposit insurance is well established. Short of liquidation, there are a number of resolution and exit techniques that can suit certain circumstances to minimise resolution costs and limit disruption to the financial system.
- (vi) In an increasingly interdependent world, close international cooperation among supervisors and other relevant authorities is essential. Weak banks, especially large weak banks, create problems that spill over national boundaries very quickly. These guidelines contribute in a practical way to the goal of cooperation.

Annex 1

Bibliography

This list contains works cited in the report as well as selected other documents on identifying and dealing with weak banks. It is not intended to be comprehensive.

Causes and costs of problems in banks and banking systems

Bagehot, W (1873): *Lombard Street*, Henry S King.

Bell, J and D Pain (2000): "Leading indicator models of banking crises: a critical review", Bank of England, *Financial Stability Review*, December, pp 113–29.

Groupe de Contact paper for the Advisory Committee (1999): *The causes of banking difficulties in the EEA 1988–1998*, Groupe de Contact GC/99/17, London, August.

——— (2000): *Follow-up work on the causes of banking difficulties and comparison of provisioning practices in the EEA*, Groupe de Contact GC/2000/03, London, March.

Hoggarth, G, R Reis and V Saporta (2002): "Costs of banking system instability: some empirical evidence", *Journal of Banking and Finance*, May.

Cases

Bingham, Lord Justice (Chair) (1992): *Inquiry into the supervision of the Bank of Credit and Commerce International*, London: HMSO, October.

Board of Banking Supervision (1995): *Report of the Board of Banking Supervision inquiry into the circumstances of the collapse of Barings*, London: HMSO, July.

Financial Services Authority (2011): *The failure of the Royal Bank of Scotland*, December.

Lessons learned from resolution of banking problems until 2002

Asia-Pacific Economic Cooperation (2001): *APEC policy dialogue on banking supervision – policy lessons*, summary of Policy Dialogue on Banking Supervision held in Acapulco, Mexico, June.

De Luna-Martínez, J (2000): *How to manage and resolve a banking crisis*, Washington DC: Institute of International Finance.

Enoch, C, G García and V Sundararajan (1999): "Recapitalizing banks with public funds: selected issues", *IMF Working Paper* no WP/99/139, Washington DC.

Federal Deposit Insurance Corporation (1998): "Managing the crisis: the FDIC and RTC experience 1980–1994", Washington DC, August.

Freixas, X, C Giannini, G Hoggarth and F Soussa (2002): "Lender of last resort: a review of the literature", Chapter 2 in C Goodhart and G Illing (eds), *Financial crises, contagion, and lender of last resort*, Oxford University Press.

He, D (2000): "Emergency liquidity support facilities", *IMF Working Paper* no WP/00/79, Washington DC.

Ingves, S and G Lind (1997): "Loan loss recoveries and debt resolution agencies – the Swedish experience", in C Enoch and J Green (eds), *Banking soundness and monetary policy issues and experience in the global economy*, International Monetary Fund, Washington DC.

Nakaso, H (2001): "The financial crisis in Japan during the 1990s: how the Bank of Japan responded and the lessons learnt", Bank for International Settlements, Basel, October.

Organisation for Economic Co-operation and Development Directorate for Financial, Fiscal and Enterprise Affairs, Committee on Financial Markets (2001): *Experiences with the resolution of weak financial institutions in the OECD area*, Paris, September.

Woo, D (2000): "Two approaches to resolving nonperforming assets during financial crises", *IMF Working Paper* no WP/00/33, Washington DC.

Lessons learned from the 2007–09 financial crisis

Department of the Treasury and Federal Deposit Insurance Corporation (2010): *Evaluation of federal regulatory oversight of Washington Mutual Bank*, April.

Institute of International Finance (2008): *Final report of the IIF Committee on Market Best Practices: principles of conduct and best practice recommendations. Financial services industry response to the market turmoil of 2007–2008*, Washington DC, July.

International Monetary Fund (2010): *The making of good supervision: learning to say "no"*, Washington DC, May.

Organisation for Economic Co-operation and Development (2008): *Resolution of weak institutions: lessons learned from previous crisis*, Paris, December.

Senior Supervisors Group (2008): *Observations on risk management practices during the recent market turbulence*, New York, March.

——— (2009): *Risk management lessons from the global banking crisis of 2008*, New York, October.

Publications by the Basel Committee, Joint Forum, Financial Stability Board and International Monetary Fund

Basel Committee on Banking Supervision (1996): *The supervision of cross-border banking*, Basel, October.

——— (2001): *Essential elements of a statement of co-operation between banking supervisors*, Basel, May.

——— (2006): *Basel II: International convergence of capital measurement and capital standards*, Basel, June.

——— (2008): *Liquidity risk: management and supervisory challenges*, Basel, February.

——— (2008): *Principles for sound liquidity risk management and supervision*, Basel, September.

——— (2009): *Principles for sound stress testing practices and supervision – final paper*, Basel, May.

——— (2010): *Compensation principles and standards assessment methodology*, Basel, January.

- (2010): *Report and recommendations of the Cross-border Bank Resolution Group*, Basel, March.
- (2010): *Principles for enhancing corporate governance*, Basel, October.
- (2010): *Guidance for national authorities operating the countercyclical capital buffer*, Basel, December.
- (2010): *Basel III: International framework for liquidity risk measurement, standards and monitoring*, Basel, December.
- (2011): *Basel III: A global regulatory framework for more resilient banks and banking systems*, Basel, June.
- (2011): *Principles for the sound management of operational risk*, Basel, June.
- (2012): *Peer review of supervisory authorities' implementation of stress testing principles*, Basel, April.
- (2012): *The policy implications of transmission channels between the financial system and the real economy*, Basel, May.
- (2012): *Models and tools for macroprudential analysis*, Basel, May.
- (2012): *The internal audit function in banks*, Basel, June.
- (2012): *Core Principles for effective banking supervision*, Basel, September.
- (2012): *A framework for dealing with domestic systemically important banks*, Basel, October.
- (2013): *Principles for effective risk data aggregation and risk reporting*, Basel, January.
- (2013): *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, Basel, January.
- (2013): *Monitoring tools for intraday liquidity management – final document*, Basel, April.
- (2013): *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, Basel, July.
- (2013), "Liquidity stress testing: a survey of theory, empirics and current industry and supervisory practices", *Basel Committee on Banking Supervision Working Papers*, no 24, Basel, October.
- (2014): *The Liquidity Coverage Ratio and restricted-use committed liquidity facilities*, Basel, January.
- (2014): *Basel III leverage ratio framework and disclosure requirements*, Basel, January.
- (2014): *Basel III: The Net Stable Funding Ratio – consultative document*, Basel, January.
- (2014): *Revised good practice principles for supervisory colleges – consultative document*, Basel, January.
- (2014): *A sound capital planning process: fundamental elements*, Basel, January.
- (2014): *External audits of banks*, Basel, March.
- (2014): *Supervisory framework for measuring and controlling large exposures*, Basel, April.
- Basel Committee on Banking Supervision and International Association of Deposit Insurers (2009): *Core principles for effective deposit insurance systems*, Basel, June.
- Financial Stability Board (2010): *Intensity and effectiveness of SIFI supervision – recommendations on enhanced supervision*, Basel, November (with progress reports published in 2011 and 2012).
- (2011): *Key attributes of effective resolution regimes for financial institutions*, Basel, November.
- (2013): *Recovery and resolution planning for systemically important financial institutions: guidance on identification of critical functions and critical shared services*, Basel, July.

Financial Stability Board, International Monetary Fund and Bank for International Settlements (2011): *Macroprudential policy tools and frameworks – progress report to G20*, Basel, October.

Financial Stability Forum (2008): *Enhancing market and institutional resilience*, Basel, April.

——— (2009): *Principles for sound compensation practices*, Basel, April.

International Monetary Fund (2013): *Key aspects of macroprudential policy*, Washington DC, June.

Joint Forum (2008): *Credit risk transfer – developments from 2005 to 2007 – final document*, Basel, July.

——— (2010): *Review of the differentiated nature and scope of financial regulation*, Basel, January.

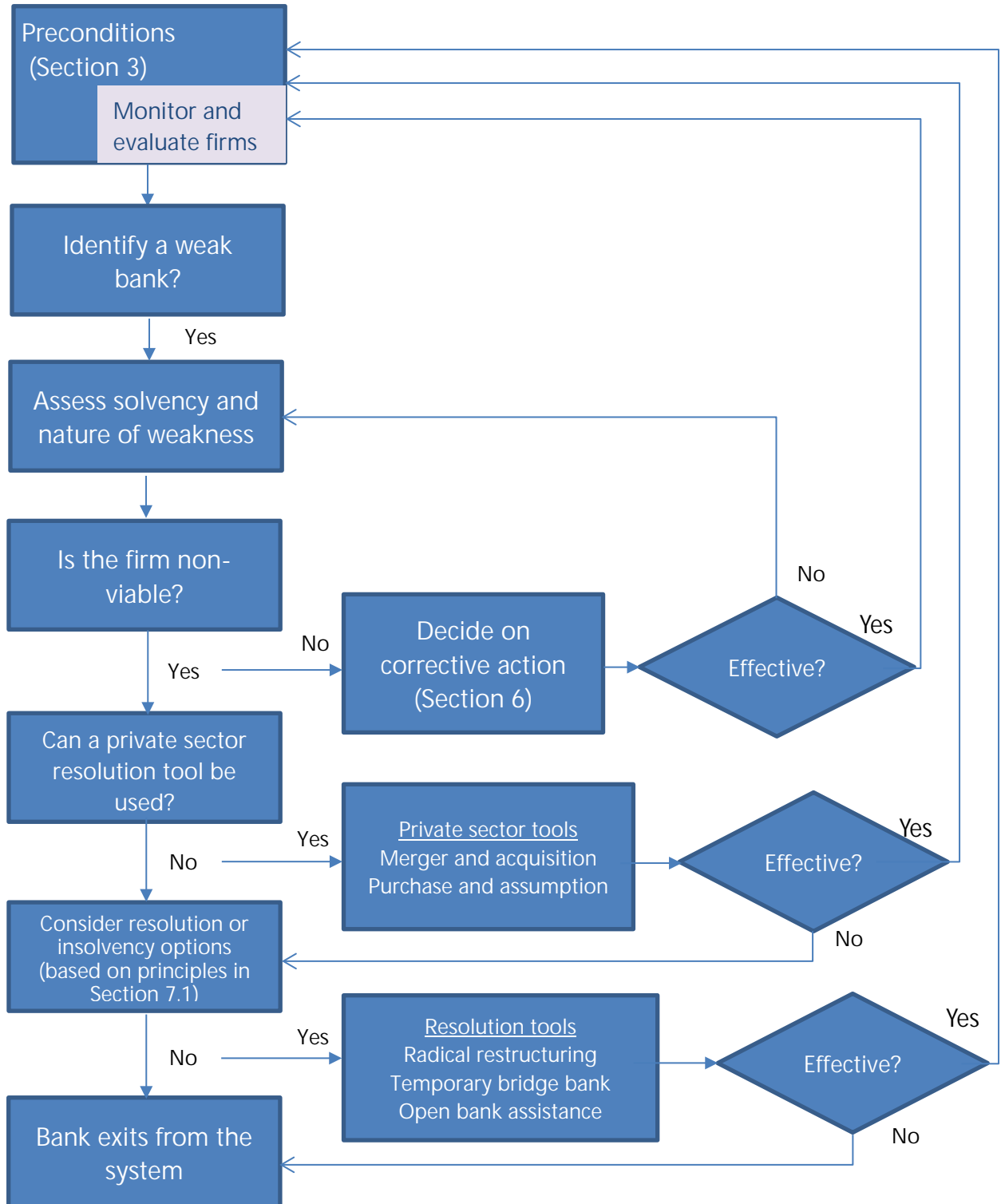
——— (2012): *Report on intra-group support measures*, Basel, February.

——— (2012): *Principles for the supervision of financial conglomerates*, Basel, September.

Sahajwala, R and P van den Bergh (2000): "Supervisory risk assessment and early warning systems", *Basel Committee on Banking Supervision Working Papers*, no 4, Basel, December.

Annex 2

Flow chart to assist in the resolution of weak banks



Annex 3

Glossary

This glossary contains a definition of the terms used in this report. In different countries, the same term may have a different meaning, or different terms may be used to describe the same matter.

Glossary item

Asset management company – A special-purpose company set up by a government, a bank, or by private investors to acquire loans and other assets, a majority of which are usually impaired, for subsequent management (including restructuring) and, in many cases, sale to investors.

Administrator – A person or entity, including a government agency, appointed by the court or relevant authority, to operate a weak bank in an effort to conserve, manage and protect the bank's assets until the bank has stabilised or has been closed. Also called "Conservator" in some jurisdictions.

Bridge bank – A resolution technique that allows a weak bank to continue its operations until a permanent solution can be found. The weak bank is closed by the chartering authority and placed under liquidation. A new bank, referred to as a bridge bank, is chartered and controlled by the liquidator according to statutory or legislative provisions. It is designed to "bridge" the gap between the failure of a bank and the time when the liquidator can evaluate and market the bank in a manner that allows for a satisfactory acquisition by a third party.

Cease-and-desist order – A written directive, usually legally enforceable, issued by a supervisor to a bank and its management that requires the bank to stop engaging in specified unsafe or unsound practices or violations of laws and regulations.

Conservator – see Administrator.

Contagion – The risk that adverse events affecting one bank are quickly transmitted to other banks, eg bank runs.

Contingency and recovery plan – A contingency plan, developed and carried out by the bank, describes what it has to do in order to respond promptly in a crisis and deal with a variety of weak bank problems. Among other things, the plan should consider the options available. If warranted by its risk profile and systemic importance, the contingency plans include robust and credible recovery plans that take into account the specific circumstances of the bank.

A recovery plan should include three elements: (1) credible options to cope with a range of scenarios, including both idiosyncratic and market-wide stress; (2) scenarios that address capital shortfall and liquidity pressures; and (3) processes to ensure timely implementation of recovery options in a range of stress situations. Some banks, such as G-SIBs, have formal requirements to draw up a robust and credible recovery plan that identifies options for restoring financial strength and viability when the bank comes under severe stress.

Core principles on effective banking supervision – A set of 29 principles established by the Basel Committee on Banking Supervision that represent minimum requirements for an effective supervisory regime.

Corrective action – Action required by supervisors to deal with deficiencies and change behaviour in a weak bank. It can be implemented by the bank under the supervisor's informal oversight or, if necessary, through formal supervisory intervention.

Depositor pay-off – An exit strategy whereby a bank is closed and the liquidators pay creditors, including depositors, from the proceeds of the liquidation of assets under insolvency laws applicable to banks. Where there is deposit insurance, the deposit insurer pays all of the failed bank's depositors the full amount of the insured portion of their deposits. The deposit insurer then participates in the liquidation allotments as a creditor (the insured depositors having exchanged their claim against the receivership estate for payments under the deposit insurance protection scheme), together with depositors with uninsured funds and other general creditors.

Early warning system – Empirical models that attempt to estimate the likelihood of failure or financial distress of the bank over a fixed time horizon, based on the bank's current risk profile.

Emergency liquidity assistance – See Lender of last resort.

Exit – The closure of a failed bank followed by its liquidation and the involvement of a deposit insurance agency where applicable.

Fit and proper – The evaluation of the competence, integrity and qualifications of major shareholders, directors and management officials in order to assess their banking skills, other business experience, personal integrity, other relevant skills, and ultimately to determine their suitability for office.

Good bank-bad bank separation – A resolution technique where all non-performing and other sub-quality assets of a weak bank are sold at market values to a separate company specially set up for this purpose. The company – referred to as the "bad bank" – will need to be capitalised by the government or deposit insurer, and has the objective of managing the assets to maximise cash inflows. The remaining part of the bank is referred to as the "good bank". Recapitalisation will be needed if no share capital remains. The good bank should now focus on correcting operational weakness and its ongoing banking activities. Alternatively, the good bank can be offered for sale.

Lender of last resort – The central bank's role as a lender whom banks may ask for emergency liquidity after all other alternatives have been exhausted. On a case by case basis, the central bank may consider the discretionary provision of emergency liquidity, in addition to its normal standing facilities, either to illiquid but presumed solvent individual banks or to the market as a whole. In order to minimise moral hazard and the risk of possible losses of public monies, the central bank will maintain ambiguity as to the exact circumstances in which such lending would be made. Such lending is sometimes referred to as emergency liquidity assistance.

Liquidation – The winding up of the business affairs and operations of a failed bank through the orderly disposition of its assets after it has been placed in receivership. The petition to wind up a bank may be presented by a creditor, the bank itself or the supervisor of the bank.

Liquidator – A person or entity, including a government agency, appointed by the court or relevant authority to liquidate the assets and pay off the creditors of a failed bank.

Moral hazard behaviour – Behaviour that results in an individual not having to bear all the costs associated with his or her actions. For example, people may take excessive risks in order to obtain higher returns, in the confidence that they are assured of government support.

Open bank assistance – A resolution method whereby a bank in danger of failing receives government financial assistance in the form of a direct loan, capital injection, guarantee or a purchase of troubled

assets by asset management companies whose losses are covered by the government. The bank continues to offer all of its normal banking services. Open bank assistance does not provide a lasting solution to the weaknesses of the bank and should be linked to the implementation of other measures.

Public sector bank – A bank that is controlled, directly or indirectly, by the government, including banks that provide special or social services at the direction of the government.

Purchase and assumption (P&A) – A P&A is a resolution transaction where a healthy institution or private investor(s) purchases some or all of the assets and assumes some or all of the liabilities of a failed bank.

Resolution – The plan to resolve a bank when failure is imminent, typically involving some change to the legal structure and ownership of the bank. The art of resolving bank problems entails achieving a legal closure of the bank while avoiding economic closure. Some banks such as G-SIBs have formal requirements to draw up a robust and credible resolution plan.

Revocation of licence – The cancellation of a banking licence by the chartering authority, and hence the requirement to cease all banking business.

Ring-fencing – The supervisory process of protecting the assets or liquidity of a foreign branch or subsidiary by limiting its exposures or liabilities to the parent bank and banking group. In the context of a conglomerate, the term is used to describe the process of protecting a bank from the adverse impact of events occurring in the wider corporate group, especially when they involve unsupervised activities.

Risk-focused supervision – Supervision based on an assessment of risks. The supervisor assesses the various business areas of the bank and the associated quality of management and internal controls to identify the areas of greatest risk and concern. These areas receive the most intense supervision .

Sale and payment prohibition – The supervisor or some other authority vested with this power may order a bank to freeze payments and asset sales in order to stop outflows from the bank. This could be done eg to gain time for finding a suitable resolution.

Sanctions – The penalty for a breach of a rule, a law or a supervisory order, or for engaging in unsound practices. Sanctions can be ordered by the supervisor or, where appropriate, by a court of law. They may consist of a fine, or in some countries, criminal charges. The penalty can be imposed on the bank itself or on an individual.

Securitisation of assets – This involves the legal or economic transfer of assets or obligations to a third party which issues asset-backed securities (ABS) that are claims against specific asset pools.

Supervisory rating system – A rating system used by supervisors, the purpose of which is to reflect in a comprehensive fashion a bank's financial condition, compliance with laws and regulations, and overall operating soundness. As such, the system helps to identify those banks whose financial, operating or compliance weaknesses require special supervisory attention and/or warrant a higher than normal degree of supervisory concern.

Surveillance – Monitoring by the supervisory authority of the financial condition of individual banks and the general condition of financial markets as a whole.

Systemic situations – One with serious adverse effects on the general health or structure of the financial system and on financial stability. For example, the failure of a major bank might cause a substantial number of other banks to fail, leading to a loss of confidence in the safety and soundness of a

significant sector of the banking system and the disruption of payment services. Systemic problems do not arise only with large banks. They may arise when a number of small banks fail simultaneously or where a small bank has a critical position in a particular market segment.

Timely corrective action – Speedy action by the supervisor to deal with bank problems so as to prevent the problems from growing and becoming more difficult and costly to handle. Some countries have a formal legal framework which requires the supervisor to take a certain prescribed course of action in the event of certain defined weaknesses or violations.

Weak bank – One whose liquidity or solvency is impaired or will soon be impaired unless there is a major improvement in its financial resources, risk profile, business model, risk management systems and controls, and/or quality of governance and management.