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Removing the 'Barrier' of Valuation in Bank Resolutions

Highlights

» An international push to make bank resolutions viable is putting economic valuations of bank balance sheets front and center. The Financial Stability Board (FSB) identified the issue as within "remaining obstacles to resolvability" (FSB, 2015). Now, regulators are getting specific about what they expect from banks and the repercussions if they fail to do so.

» The first resolution tackled by the Single Resolution Board (SRB) in Europe involved Banco Popular. The bank's valuer pointed out the impediments of preparing a valuation with limited time and poor information (SRB, 2017). The solution in the eyes of regulators is for banks to have done the legwork ahead of time.

» Valuation of an entire bank poses challenges. Banking book instruments do not tend to be marked-to-market; thus, the valuer will need to depart from accounting concepts. Laying the groundwork ahead of time means that banks must prepare timely, accurate, product-level data and business forecasts for the supposed resolved bank.

» Here, we set out the challenges and give guidance on best-practice methodologies to resolve them.

» The paper is split into two sections. We start by setting out why valuation features as an important part of a resolution framework and explore what is meant by Economic Value. We then move on to recent regulatory developments and cover best-practice solutions.

How does valuation support resolvability?

Why does valuation feature as part of resolution?

Government support of failing banks is out of favor. The alternative path carved out by a raft of legislation is to make banks "resolvable" with no, or limited, financial support from the authorities. With this approach, investors in the creditor hierarchy take the hit. Their investment is written down to recapitalize or liquidate the bank.

Here's where the importance of bank valuations comes in. If a bank starts looking likely to fail, resolution authorities now have powers to insist the bank is sold or liquidated. To determine the best action in these scenarios, a comparative set of valuations is required. However, valuing a bank in benign conditions is already challenging. Attempting to do so when the bank is in crisis increases the pressure severely.

> "I am referring to…… ensuring good quality data for valuation purposes. If this data is not quickly and easily accessible, implementing resolution in a short timeframe is extremely difficult."
> *FSB Vice-Chair, July 2019* (DNB, 2019)

The risk of getting a valuation entirely wrong during a resolution event is exacerbated by the crisis conditions under which the bank is operating. Another factor is the pressure to execute the process swiftly before the situation deteriorates further.

The impact of a shoddy valuation, unsupported by robust methodologies and data, has two results. Either the bank will need recapitalization again in the future or, in an under-valuation, creditors will drag the resolution authorities through the courts (Hellwig, 2018). This outcome wastes the public money the regime was implemented to avoid.

What is the purpose of valuation in a resolution event?

The purpose of undertaking valuations for resolvability is to choose the option in which the bank's creditors would be better off.[1] A valuer is in effect trying to assess the best of a set of bad choices.

Whether the options include bail-in, a bridge bank, a complete or partial sale, or a full liquidation, each alternative will engender a different valuation. It is likely that a bank (or its Resolution Authority) will have identified a preferred resolution strategy. However, an assessment of alternatives is prudent.

Recognizing that any third-party valuer must complete this process quickly, resolution authorities are insisting that banks ready the relevant information ahead of time.

How is economic value relevant?

The International Valuation Standards Council identifies three types of valuation for assets (IVSC, 2016):

1. An income approach using discounted cash flows to establish an intrinsic Net Present Value (NPV).
2. A market approach using comparatives to establish a relative value versus other similar instruments.
3. A cost approach establishing a replacement or reproduction cost.

The cost approach is best for non-income generating assets. Thus, the income and market approaches are the most suitable for valuation of the majority of a bank's assets.

[1] The European resolution scheme cites three types of valuation. Here, we are referring to the so-called valuations 2 and 3, which are to be performed by an independent valuer, as we consider valuation 1 to be an assessment of solvency by the resolution authority (EBA, 2017). The US FDIC, in fact, prioritizes the impact of each option on its deposit insurance fund over other creditors.

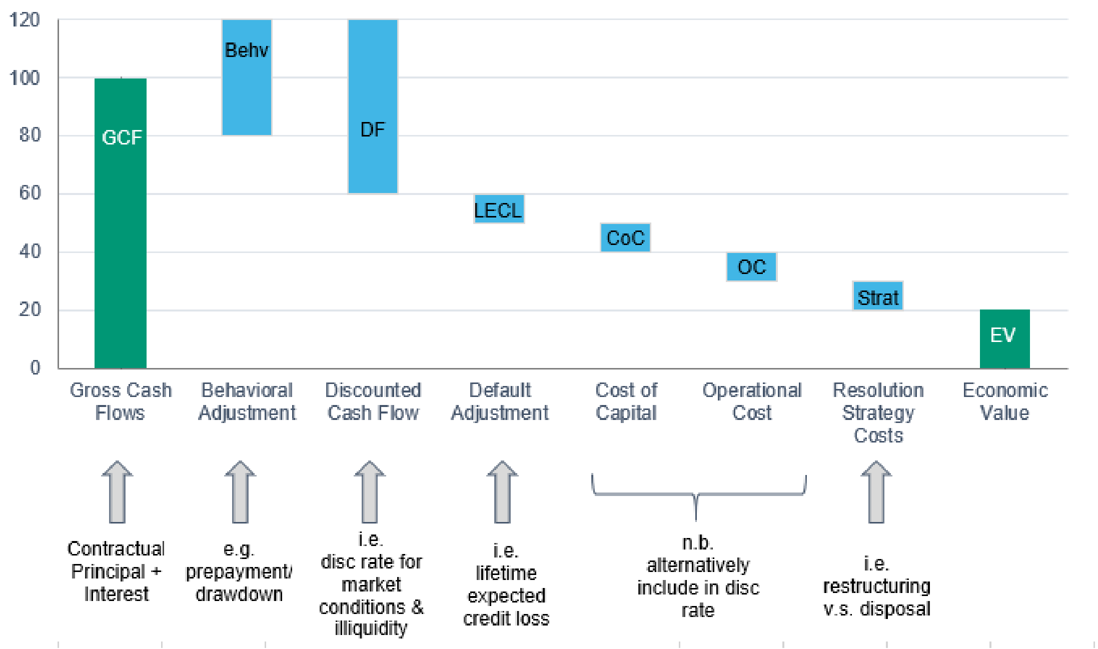
The market approach is most appropriate when assets have observable, liquid market prices. For trading book assets that are marked-to-market, this may be achievable even when adjusting for stressed market conditions. Assuming the bank is a retail or wholesale bank, however, a substantial proportion of its assets may be in instruments that are non-traded. Examples are mortgages, corporate loans, credit card portfolios, and other assets traditionally associated with the banking rather than the trading book of a financial institution. Although comparators for sales of these assets exist, notably in the form of securitizations, they tend to encompass only the most homogenous portions of a bank's assets.

Therefore, the income approach seems most accepted by regulators for performing bank valuations. In the United States, they have been using this approach for decades. In the early 1990s, the US resolution authority was mandated to calculate the cost of resolution alternatives on a "Present Value basis using realistic discount rates" (GAO, 1994). In Europe, this type of valuation has more recently been termed the establishment of an "Economic Value" (EV).[2]

In their recent Handbook for Valuation, the European Banking Authority explains how—to calculate EV—contractual cash flows form the basis of a valuation, overlaid by cash flow adjustments. This valuation is then discounted at a suitable market rate to give the NPV. Considerations for various risks can either be included in the cash flow adjustments or, alternatively, the discount rates used (EBA, 2019).

Suggested steps to calculate EV for a loan are illustrated in Figure 1. Starting with the projected contractual cash flows, adjustments are made for behavioral aspects, expected credit defaults, and various costs, and the net result is discounted back to today.

Figure 1 Steps in constructing 'Economic Value'



We assume here that EV depends on the resolution strategy in two ways. First, the timeframe envisaged to complete the resolution, which will influence the market conditions and liquidity/illiquidity assumed for the loan in question. Second, the type of costs incurred through, for example, restructuring costs in a bail-in scenario versus the cost of employing an insolvency practitioner in liquidation.

The concept combines data and methods crossing credit risk, finance, planning, as well as asset and liability management, which will prove a challenge to many banks.

[2] In banking, the term EV is most commonly applied to analysis of Interest Rate Risk in the Banking Book (IRRBB). Note that the aim of IRRBB is to observe delta EV caused by interest rate changes to establish a magnitude of interest rate risk and not establish a "price" for assets. However, some of the same concepts can be used.

What information do valuers need?

Although top-down valuation methods exist, bottom-up approaches are viewed as preferable (EBA, 2019). This approach means valuers need access to loan-by-loan data with granular cash flows. It is required that this information is made available by banks through Virtual Data Rooms (VDRs). Also, to remain crisis ready, this information must be kept up-to-date.

There are a few best-practice considerations banks can make in this regard. One might be using a centralized data source or "data lake" that contains all the required information. Another would be delivering data in the cloud, which would enable more efficient access for third parties, including prospective new owners. To reduce the expense, costs could be minimized by combining valuation with other data requirements of the bank.

How are regulators pushing for valuation in resolution frameworks?

Why is valuation a hot topic?

If any large banks hoped resolution requirements were going to go away, they were wrong. In fact, certain Resolution Authorities have been getting more active in the last few years about eliminating impediments, or barriers. One of these is valuation.

On the global stage, the FSB in 2015 named "rapid and accurate valuation" within bail-in execution as an impediment to resolvability (FSB, 2015). Since then, several jurisdictional Resolution Authorities have taken it up as a focus.

The progress on international valuation regulations, as compared with other resolution topics, can be seen in Figure 2. Progress varies across regions, likely due to the differing political pressure placed on government support of banks. However, nearly all regulators have, or plan to have, guidance on valuation capabilities. The United States and Europe are clear leaders in all areas of resolution regulation, including valuation.

> "No one can avoid the task of making their bank resolvable, postponing is not an option."
> *Chair of the SRB, April 2019* (SRB, 2019))

Figure 2 International progress on resolution topics

Jurisdiction	Total loss-absorbing capacity (TLA)	Early termination of financial contracts	Operational continuity	Funding in resolution	Continuity of access to FMIs	Valuation capability
Banking Union	Final rules published (Jun 2019)	EU rules – Directive 2019/879 (May 2019)	SRB Guidance on the Critical Functions Report (Dec 2018), Regulation 2018/1624 (Oct 2018)	Regulation 806/2014 (Jul 2014), Terms for the common backstop (Dec 2018)	SRB 2019 Guidance on the FMI Report (Dec 2018)	SRB Framework for Valuation (Feb 2019), EBA Valuation Handbook (Feb 2019), EBA RTS for Valuation (May 2017)
United Kingdom	Policy statement published (Jun 2018)	Policy statement published (Nov 2015)	Policy statement published (Jul 2016), Resolvability Assessment Framework (Dec 2018)	Resolvability Assessment Framework (Jul 2019)	Resolvability Assessment Framework (Jul 2019)	Policy statement published (Jun 2018)
Switzerland	Final requirements published (Oct 2015)	Final requirements published (Mar 2017)	Requirements published in Banking Act and Banking Ordinance	Regulation under development	No relevant regulation/ guidance	No relevant regulation/ guidance
United States	Final rule published (Dec 2016)	Final rule published (Sep 2017)	Final Guidance for 2019 and subsequent resolution plan submissions by eight US G-SIBs (Feb 2019)			
Canada	Final guidelines published (Apr 2018)	Rule in force under the CDIC Act (Dec 2017)	CDIC Resolution Planning By-Law (May 2019) CDIC Resolution Planning Guidance (2016), Resolvability Assessment Framework (2019)			Self-assessment process to determine valuation capabilities
China	Regulation under development	No relevant regulation/ guidance	Commercial Banking Law (Aug 2015), Deposit Insurance Regulations (Mar 2015)	Deposit Insurance Regulation (Mar 2015), Law on the PBOC (Dec 2003)	No relevant regulation/ guidance	Guidelines on Due Diligence in Disposing of Non-Performing Financial Assets (Nov 2005)
Hong Kong	Final rules published (Dec 2018)	Regulation under development	Regulation under development	No relevant regulation/ guidance	No relevant regulation/ guidance	Regulation under development
Japan	Final policy published (Mar 2019)	Regulation published (Apr 2017)	Supervisory guidelines published (Jul 2018)	Final guidelines published (Jul 2018)	Final guidelines published (Jul 2018)	Self-assessment process to determine valuation capabilities

Key: Active regulation/guidance No relevant regulation/guidance Regulation/guidance limited or under development
Source: Financial Stability Board and Hong Kong Monetary Authority

In the United States, banks required to submit Resolution Plans have faced repeated guidance, templates, and individual letters highlighting shortcomings the Federal Deposit Insurance Company (FDIC) want addressed. These notices have explicitly mentioned valuation analysis (FDIC, 2018).

In Europe, the first resolution overseen by the SRB seems to have highlighted valuation as a particular pain point. Banco Popular's arranged write-down and sale (for 1 Euro) to Santander in 2017 caused the independent valuer to stress how severely limited they were by unreliable and unavailable financial information combined with a stringent timeline (SRB, 2017). The regulatory response has recently included the production of an EBA Handbook on Valuation (EBA, 2019). This response is due to be followed by a Dataset for Valuation. Institutions will be expected to "test the banks' capacity to produce the relevant dataset that is needed to conduct an economic valuation" (SRB, 2019).

In the United Kingdom, individual letters were sent to CFOs on Valuation Capabilities (BoE, 2018). Following that, the Bank of England named valuations as one of eight barriers to resolvability.[3] UK institutions will be required to disclose their progress in this area as of Q2 2021.

In this way, regulators are placing the responsibility for eliminating the remaining barriers to resolution firmly in the hands of the banks themselves.

What do regulators want?

Regulators accept that valuing a bank during a crisis is tough. For this reason, they are pushing banks to prepare the groundwork for an independent valuer ahead of time, including executing "dry-run exercises" (SRB, 2019).

Best practice would be to fore-run the valuer by having executed their job for them, but that is a heavy requirement. To effectively do so, the bank must prepare several forecasts of its entire balance sheet, including bottom-up cash flow profiles of non-traded assets.[4]

For example, the Present Value of a portfolio in an accelerated sale during distressed market conditions will differ substantially to that of an orderly transfer to a bridge bank over an extended period. To be adequately prepared, a bank should run a range of scenarios that:

a) Vary the external parameters that might impact the balance sheet value in terms of macroeconomics, competitor environment, market conditions, and so on[5]

b) Vary the envisaged resolution strategies in terms of business restructuring for wind-down or sale versus bail-in

c) Vary the timeframes the strategies might encompass

Finally, the bank must ensure that the information and assumptions are updated frequently so that it remains ready if a resolution event arises.

Conclusion

In an environment where failing banks are not to be supported by taxpayers' money, creditors will take the burden. Decisions must be made regarding the form of restructure or sale that will harm them the least. Those decisions need informed valuations relating to the different options to be prepared in a tight timescale.

[3] The eight barriers are: Minimum Requirement of Eligible Liabilities (MREL), Valuations, Funding, Stays, Operational Continuity, Continuity of Access to Financial Market Infrastructure, Restructuring Planning, and Communications (BoE, 2019).

[4] Impacts on liabilities in various scenarios, such as deposit outflows, should also be considered but are out-of-scope of this paper.

[5] Some authorities provide macroeconomic scenarios under which resolution plans should be prepared. In the United States, these include a baseline, adverse, and severely adverse scenario (FDIC, 2018).

It is not in the nature of many businesses to prepare for failure, but for banks, regulators are leaving them no choice. If banks are to embrace what they are being asked to do, they should consider performing the valuer's tasks ahead of time. Interactions with other disciplines in the bank would reap benefits—from preparing timely, accurate, product-level data to running various stress scenarios and forecasts.

There is evidence that some banks are taking the lead in tackling this subject head on. In the United States, some banks employ third-party valuers to run valuation options annually, and then perform internal reviews of the results (BoA, 2018). The US regulator has declared that the banks have made significant progress regarding valuation processes and information provision (FSB, 2019).

With regulators in other jurisdictions pushing the same subject into the spotlight, affected banks should consider these best-practice examples when evaluating their own approach.

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