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Winners and losers in bank resolution: Recent examples and a modest reform proposal[1]

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1 INTRODUCTION

In March 2023, Silicon Valley Bank (SVB) experienced a sudden run on its uninsured deposits and, after setting up a bridge bank, was put into receivership. Subsequently, two other regional US banks and Credit Suisse in Switzerland experienced similar funding difficulties. The 2023 banking crisis in the US and in Switzerland caught banking regulators around the world by surprise and led to discussions about possible regulatory reform.

The starting point of our discussion is the observation made by the *Financial Times* after the rescues in 2023 (*Financial Times*, 2023) that acquirers of distressed banks, such as SVB or Credit Suisse, appear to make consistently high profits – in stark contrast to the near-zero profitability expected by acquirers in other, non-bank industries. Significant profits made by acquiring banks possibly come, in particular, at the expense of creditors of the acquired institution, and possibly resolution funds and taxpayers.

We address three questions. First, how large were the gains made by acquirers in the 2023 banking crisis? Second, is the asserted underpricing of distressed targets systematic, and can it be observed in past resolution cases in Europe as well? Finally, can we do better, i.e. how can the resolution process be organised to mitigate underpricing?

Background

In the spring of 2023, a number of banks experienced significant deposit outflows. This led to the failure and takeover of three regional banks in the US and of Credit Suisse in Switzerland. In the US, Silicon Valley Bank, Signature Bank, and First Republic Bank were acquired by First Citizens Bank, New York Community Bankcorp, and JP Morgan, respectively, while in Switzerland Credit Suisse was acquired by UBS.

These transactions resulted in significant losses to the shareholders and bondholders of the acquired banks, and to the Federal Deposit Insurance Corporation (FDIC). Losses incurred by the FDIC are borne by the deposit insurance system and ultimately passed on to the stakeholders of all American banks. In the case of Credit Suisse, the risks were transferred to Swiss taxpayers through state guarantees. Shareholders

1 This Policy Insight originates from a discussion at the CEPR Symposium in Paris on 9 December 2023, on "Banks' excess profitability when taking over a peer institution in resolution".

in all four failed banks suffered total or near-total losses on their investments. In the case of Credit Suisse, investors in subordinated bonds, specifically the Additional Tier 1 (AT1) capital, suffered losses following a decision by the Swiss Financial Market Supervisory Authority (FINMA) to write down these bonds.

While the owners and creditors of the failed banks suffered heavy losses, the owners of the acquiring banks appear to have made significant gains. In an article published in June 2023 entitled "The $44bn bailout bonanza", the Financial Times referred to these resolution cases as "deals of a century" for the four acquirers. This raises the question of whether the profits made by the acquiring banks were excessive. In other words, did the pertinent resolution authorities 'leave money on the table', money that would otherwise have been available to limit losses of the failing banks' creditors and other stakeholders?

The observation of high acquirer profitability in distressed bank sales is rather surprising, as it is inconsistent with empirical evidence from other M&A transactions. In particular, it is well known that in M&A transactions, target shareholders and their creditors tend to benefit (i.e. realise value gains) during an acquisition process, while acquirers tend to lose money or perhaps just break even (e.g. Renneboog and Vansteenkiste, 2019). Given this evidence, what is the difference between the market for distressed banks and the market for ordinary M&A? We argue that the market for banks in resolution is different because resolution authorities typically have little time to arrange the sale of distressed banks; because the market for distressed banks suffers from significant asymmetric information and, more generally, may suffer from a lack of competition; and because the resolution authority has a broader public interest mandate than the acquirer in an M&A transaction.

In the remainder of this Policy Insight, Section 2 takes a renewed look at the profit calculations for the US and Swiss resolution cases in the 2023 banking crisis, based on two papers (Bertay and Huizinga, 2023; Heider et al., 2023) that were commissioned by the European Parliament's Committee on Economic and Monetary Affairs (ECON). In addition, to be able to compare, this section examines the profits made by acquiring banks in a set of takeovers of distressed banks in EU that occurred since the implementation of the Bank Recovery and Resolution Directive (BRRD) in January 2015.[2]

Section 3 considers whether evidence of considerable profits in bank resolutions implies that resolution authorities have done a poor job, leaving money on the table. This section specifically discusses whether resolution authorities' foremost objective should be to minimise resolution costs, and it discusses resolution tools available to resolution authorities to minimise these costs. In addition, this section discusses some peculiarities of the European resolution framework, and what policymakers can do to enhance competition in the market for distressed banks. Finally, Section 4 concludes and formulates a modest reform proposal by addressing backstop mechanisms, bail-in debt, and the strengthening of auction-like settings in asset sales.

2 ARE PROFITS FOR ACQUIRERS IN RESOLUTION EXCESSIVE?

2.1 Approaches to measuring profits in resolution cases

To see whether regulators are 'leaving money on the table' in bank resolutions, one needs to compare the price paid by the acquirer for the bank in resolution with its 'true' value on the day prior to the takeover. This is not a trivial task. Three estimation methods are commonly used.

2 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014.

Accounting-based approach: Goodwill

Following the accounting approach, one can calculate the 'goodwill' associated with the transaction, which is defined as the purchase price minus the book value of the equity of the bank in resolution. If the latter is higher than the former, the goodwill is negative (and called 'badwill'), and the acquiring bank realises an accounting gain on the transaction. While goodwill is an accounting item on the asset side of the balance sheet, badwill is treated as an extraordinary gain on the liability side.

The bank's equity value is calculated as the fair value of the assets acquired less the value of the acquired liabilities at the time of the acquisition. Any inaccuracies in the valuation of the acquired assets and liabilities will also result in an inaccurate accounting profit not reflecting, for instance, integration costs and hidden unrealised future losses in the acquired portfolio and will require an increase in risk-weighted capital ratios after the acquisition. The reported accounting profit can further be imprecise as it ignores the value of acquired customer relations, any synergy effects between the two banks in the transaction, and any repercussions of the takeover for market concentration.

Market-based approach: Abnormal returns over a short horizon

Short-term share price gains for the acquiring bank can be used as an estimate of the acquiring bank's profits, although they are an imperfect measure as they may also reflect any reduced market stress and uncertainty following a successful bank resolution. Short-term share price gains can be measured as the cumulative abnormal return (CAR) relative to an industry-wide bank stock market benchmark. CARs are defined as the differences between realised and expected returns over the event period. The expected return is estimated by regressing the realised return on the benchmark over an extended pre-event period.

This approach to measuring the acquiring bank's gains has two main advantages. First, it is based on the views of shareholders who are typically solely interested in the economic value of the bank. Second, by cumulating the abnormal share price changes over a short period, typically a couple of days, identification is reasonably assured, i.e. differential returns are likely to be driven by the takeover event. Nevertheless, the estimation of excess gains can only be as reliable as the estimation of the counterfactual, i.e. the benchmark return. The less transparent the acquired bank's business model is, the more difficult it is to find an appropriate benchmark, and the noisier is the CAR estimation.

Market-based approach: Long-term returns

A second market-based approach is to examine the long-term share price performance of the acquirer. Again, the performance needs to be calculated against a bank benchmark. This approach has the advantage that it is more likely to capture all relevant information about the transition. However, this comes at a price, as the acquirer's long-term share price performance will also reflect all sorts of idiosyncratic information about the acquirer that is unrelated to the prior transaction.

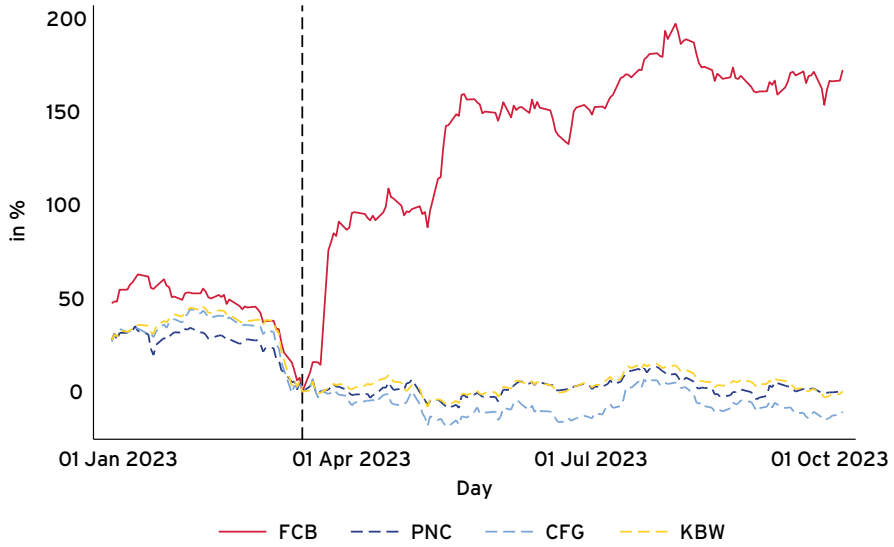
2.2 Marked-based results for distressed bank mergers in 2023

We can now revisit the "$44bn bailout bonanza" (*Financial Times*, 2023) by looking at the accounting and market gains of the four resolution cases in 2023 mentioned above. Total accounting profits of the acquirers are $44 billin (see Table 1 for a breakdown by acquiring banks). Heider et al. (2023) evaluate short-term and long-term market gains for these transactions as well.

In the First Citizen Bank's acquisition of SVB, First Citizen Bank's CAR during the event window was a remarkable 68.7%, surpassing both rival bidders and the US bank benchmark index KBW Nasdaq Bank Index (KBW) by far (see Table 1). First Citizen Bank's total return within the window was an impressive 68%, in stark contrast to the benchmark's modest return of 2.2%.

Conversely, competing bidders PNC Bank and Citizens Bank, a subsidiary of Citizens Financial Group (CFG), failed to generate positive CARs against the benchmark during the event window (see Figure 1).

Figure 1 Abnormal returns for First Citizen Bank, the acquirer of SVB



Source: Yahoo, based on Heider et al. (2023, Figure 3)

Similarly, in the acquisition of Signature Bank, New York Community Bank (NYCB) had a CAR of 31.5%, while the unsuccessful bidders had CARs close to zero. NYCB's superior performance was consistently observed in both short-term and long-term analyses, underlining that gains were not short-lived.

JP Morgan's acquisition of First Republic Bank generated a positive CAR of 2.8% (see Table 1). While this CAR was lower than that of the winning banks in the SVB and Signature Bank acquisitions, it is important to note that JP Morgan, being a much larger institution than First Citizen Bank and NYCB, showed a divergence in CARs due to its much larger market capitalisation. In absolute terms, JP Morgan's gain was significantly larger.

The acquisition of Credit Suisse by UBS, orchestrated by FINMA, created considerable uncertainty due to its hasty nature. UBS exhibited a positive CAR of 4.1%, signalling a favourable impact. Nevertheless, due to the opacity of the negotiations and unknown risks of Credit Suisse, this result should be interpreted with caution. A longer-term analysis until October 2023 shows UBS consistently outperforming the benchmark index only from July 2023 onwards.

Comparing the economic gains among acquirers, JP Morgan led with a gain of $11.17 billion, followed by First Citizen Bank with $4.7 billion, UBS with $2.5 billion, and NYCB with $1.6 billion (see Table 1).[3] The analysis of the three US bank acquisitions shows that the economic gains for the acquirers' shareholders are surprisingly similar measured as a percentage of the assets acquired, ranging from 4.1% to 6.6%.

The acquisition of Credit Suisse by UBS stands out, as shareholders experienced minimal immediate gains of 0.4% relative to acquired assets. As noted, this result might be driven by missing information for shareholders during the event window. The strong outperformance of UBS from July 2023 onwards strengthens this interpretation.

3 These gains were derived by multiplying the CAR with the acquirers' market capitalisation before the event window, representing a significant transfer to the acquiring banks' shareholders at the expense of the failed institutions' equity and unsecured debt holders.

Table 1 Comparison of economic gains for acquirers

	First Citizen Bank (SVB)	NYCB (Signature)	JPM (First Republic)	UBS (Credit Suisse)
CAR	68.7%	31.5%	2.8%	4.1%
Market capitalisation of acquirer (in $bn)	6.9	5.0	398.8	61.9
CAR (in $ billion)	4.7	1.6	11.2	2.5
FT accounting results (in $ billion)	9.8	2.1	2.7	28.9
Total assets acquired (in $ billion)	724	385	2296	575
Discount relative to acquired assets	6.6%	4.1%	4.9%	0.4%

Source: Heider et al (2023, Table 1)

In summary, US acquirers secured failed bank assets at a 4–6% discount, with gains materialising immediately after the auction and continuing to grow over the long term. In contrast, UBS's share price did not significantly outperform until several months after the acquisition of Credit Suisse[7], highlighting the importance of certainty in the aftermath of failed bank acquisitions. Overall, the successful acquirers in these four bank takeovers performed favourably in terms of both short-term and longer-term returns, outperforming peers and benchmarks and implying substantial economic gains for the acquiring banks' shareholders in 2023.

2.3 European cases and results

For comparison with the recent US and Swiss experience, Bertay and Huizinga (2023) examine reported accounting profits and short-term market gains from event studies for acquisitions of distressed banks in the EU. The sample consists of banks that experienced some form of official intervention before being taken over by another bank in the period following the implementation of the Bank Recovery and Resolution Directive in 2015.

Information on reported accounting profits is available for ten acquisitions that are listed in Table 2. These accounting profits (badwill) are positive for seven transactions and negative for three transactions in column 3. For instance, Banco Santander reported negative profits of €248 million related to the acquisition of Banco Popular Espanol in 2017. Column 4 provides information on reported accounting profits relative to the assets of the acquired bank. The average accounting profits relative to acquired-bank assets are about 2.9%. This figure is slightly higher than the corresponding average for the three recent US bank acquisitions of 2.6%, while it is less than the 5.0% realised on the acquisition of Credit Suisse by UBS. Overall, however, these data suggest that the accounting gains realised in EU acquisitions of distressed banks are similar to the US and Swiss experiences in the 2023 banking crisis.

Short-term market gains for the acquirers of distressed banks in the EU can be calculated for a sample of eight transactions. These short-term gains, relative to acquired-bank assets, are estimated as the acquirer's CAR over a two-week event

4 Value is already discounted by $ 16.5 billion. For more information, see https://www.fdic.gov/news/press-releases/2023/pr23023.html.
5 Value is already discounted by $ 2.7 billion. For more information, see https://www.fdic.gov/news/press-releases/2023/pr23021.html.
6 https://www.fdic.gov/news/press-releases/2023/pr23034.html.
7 For more particularities of the Credit Suisse case and resulting policy recommendations, see Lengwiler and Weder di Mauro (2023).

window around the acquisition's announcement date, multiplied by the acquirer's market capitalisation just before the event window, and divided by acquired-bank assets. The resulting average short-term market gain for the eight transactions is around 3.0% (Bertay and Huizinga, 2023, Table 4). This figure is very similar to the average accounting gains relative to acquired assets for distressed mergers in the EU of 2.9% in Table 2, and within the range of analogous market discounts relative to assets during the 2023 banking crisis reported in Table 1. Thus, substantial market gains for acquiring banks can be taken to be common in bank resolutions.

Table 2 Accounting gains in acquisitions of distressed banks in the EU

Acquired bank (1)	Acquirer (2)	Badwill, € millions (3)	Badwill as % of acquired bank assets (4)	Year (5)	Country (6)
Aigis Banca	Banca Ifis	2.9	0	2021	IT
Banca Carige	BPER Banca	948.1	4.25	2022	IT
Banca Populare di Vicenza/Veneto Banca	Intesa Sanpaolo	363	0.58	2017	IT
Banco Internacional do Funchal	Banco Santander Totta	327	2.49	2015	PT
Banco Popular Espagnol	Banco Santander	-248	0	2017	ES
Cassa di Risparmio di Ferrara	BPER Banca	190.9	2.73	2017	IT
Idea Bank	Bank Pekao SA	-0.2	0	2021	PL
Panellinia Bank	Piraeus Bank	-4.6	0	2015	GR
Sberbank Croatia	Croatian Postbank	135.2	9.17	2022	HR
Sberbank Slovenia	NLB	172.8	10	2022	SI
Mean		*188.7*	*2.92*		

Source: Bertay and Huizinga (2023, Table 3)

3 THE COSTS OF RESOLUTION AND RESOLUTION POLICIES

The evidence in Section 2 suggests that acquirer profits in distressed bank mergers have generally been positive and significant in both Europe and the US. Academic literature backs this statement and provides different explanations. Granja (2013) examines how information availability influences resolution costs for failed US banks, resolved by the FDIC through Purchase and Assumption (P&A) transactions. The central hypothesis is that more comprehensive information about a failed bank at the time of resolution reduces the acquirer's risk, resulting in lower resolution costs due to higher acquisition prices. Giliberto and Varaiya (1989) show that in FDIC sealed-bid P&A transactions, the presence of more competitors leads to higher bid levels from all bidders. Additionally, the bids align with both the private-value model and a common value component, indicating significant agreement between the FDIC and bidding banks on the value of the failed bank. Cowan and Salotti (2015) analyse failed bank takeovers and show that stockholders of acquiring banks achieve an average CAR of 3.23%. They conclude that acquiring firms benefit from substantial wealth transfers as the FDIC accepts bids below the fair value of failed banks. Additionally, Granja et al. (2017) report that from 2007 to 2013, the FDIC incurred an average cost of

28% of failed assets when selling a failed bank, although these figures are not directly comparable since the 28% reflects all losses reported by the FDIC and CARs indicate gains for acquirers' shareholders.

We now broaden the view on the profitability of bank mergers by examining some institutional and policy issues. We argue that key features of the market for distressed banks, such as severe time pressure, asymmetric information and a lack of competition, make non-negligible profits achieved by acquiring banks almost inevitable, but we consider potential policy options to help reduce these.

3.1 Should resolution authorities minimise resolution costs?

It is crucial to recognise that minimising resolution costs is not a resolution objective per se, nor even a resolution principle.[8] Similarly, the objective of the resolution authority is not to minimise negative goodwill, but to preserve financial stability and, in particular, to protect taxpayers by ensuring that shareholders and creditors of the failing institution will bear the costs of failure.

Deciding on an effective resolution strategy requires a balanced approach that promotes financial stability, taxpayer protection, and fair market competition. This is of course without prejudice to the responsibility of authorities such as the central bank and the competition authority to contribute to these objectives within their mandates. As discussed in more detail below, the resolution authority is not alone, and cooperation with other institutions throughout the process is crucial.

Any investor seeking to acquire a failed or failing institution decides based on limited information and under high uncertainty. Observing a risk premium is consistent with these conditions. Moreover, while the acquirer may have tried to price the risk correctly, it may take more than a few months for risks and opportunities to materialise. It is therefore difficult to assess the appropriate risk premium at the time of the resolution.

In addition, a potential acquirer must consider regulatory measures such as the increase in risk-weighted capital ratios after the acquisition, integration costs and hidden unrealised future losses in the acquired portfolio.

At the same time, a quick solution is needed to preserve value and financial stability. This is even more important in the event of a liquidity crisis than in a solvency crisis.

Last but not least, it is important to remember that a sale requires a willing and qualified buyer[9] and that the 'fair value' in a sale transaction is the price a buyer is willing to pay, not a hypothetical value.

3.2 Resolution policies to confine profits for the acquirers

With regard to potential resolution policies, a judicious combination of ex-post measures, such as transfer tools and bail-in, and ex-ante preparation through robust bail-inable liabilities (MREL) and resolution planning is crucial.

There is no one-size-fits-all solution in resolution. While in recent years the 'sale of business' has been the preferred resolution approach, it should not be the sole focus in resolution planning, as it always depends on the existence of a willing and qualified buyer. Therefore, in its 2018 Principles on Bail-in Execution (Financial Stability Board, 2018), the Financial Stability Board focused primarily on a so-called 'open bank bail-in' to stabilise a failing bank followed by deep restructuring. The use of a bridge bank is acknowledged as a valuable tool, not least to buy time, but it should not be overlooked that it requires active management and funding. There are no free lunches or magic wands in resolution.

8 In Europe, according to the BRRD preamble, the objective of the bank resolution regime is to "provide authorities with a credible set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of the institution's critical financial and economic functions, while minimising the impact of an institution's failure on the economy and financial system".

9 Any buyer needs to be acceptable to the banking supervisor, i.e. its solvency and liquidity position needs to be sufficiently strong.

BOX 1 ELEMENTS OF RESOLUTION POLICIES

Receivership: The resolution authority acts as a receiver to manage and dispose of the assets of a failed bank. This legal function is only available for the FDIC as the insolvency administrator, and not for the Single Resolution Board, which is purely a resolution authority without deposit insurance or insolvency administration.

Sale of business (asset deal or share deal): A healthy institution purchases some or all of the assets and assumes some or all of the liabilities of a failing bank. A resolution tool.

Purchase and Assumption (P&A): Selling the business (or parts) of the failing bank to another bank. A resolution tool.

Bail-in: Creditors and shareholders bear some of the loss by having their claims reduced or converted into equity. A resolution tool.

Bridge bank: A temporary bank established by the resolution authority to maintain banking services for the customers of a failed bank. A resolution tool.

Asset separation: Problematic assets are separated from the rest of the bank to ensure that the healthy part can continue operating. A resolution tool.

Liquidation: Winding down the operations and assets of a failed bank to pay off creditors in an orderly manner. Part of insolvency procedure – not resolution.

Emphasising the need for a diversified toolkit, incorporating bridge banks, bank transfers and open bank bail-in, is essential to maximise the resolution authority's negotiation bargaining position (Baudino et al., 2023). Furthermore, a lengthy multiple bidding process may not be feasible when the failure is triggered by liquidity stress and resolution is urgent to safeguard financial stability.

Although it is not the main topic of this note, it is worth stressing that a more predictable framework for liquidity provision in resolution (LiR) by central banks could reduce resolution costs by giving stakeholders more control of time, thereby making fire sales less likely and limiting the risk of a deposit run. In the US, the FDIC – as ultima ratio to preserve financial stability – has Treasury backing to provide temporary liquidity support in resolution (Grund et al., 2020). In Europe, there is no such liquidity lifeline. Progress has been made in areas such as better identification of pledgeable collateral in resolution planning, but the discussion on LiR has been mired in controversies between the ECB and governments on whether it is a fiscal or a monetary task, and in discussions within the Eurosystem over whether LiR could be provided by the ECB or by the national central bank, at its own risk. In particular, calls for the European Stability Mechanism to provide a backstop, similar to the US Treasury, have not been taken up at the policy level.

The European Commission's 2023 proposal on bank crisis management and the deposit insurance framework (CMDI) identifies weaknesses in resolution tools and advocates a comprehensive approach. Broadening the range of cases covered by resolution helps avoid reliance on national insolvency regimes, ensuring a more uniform, effective and bank-specific resolution process. Ensuring that 'failing or likely to fail' (FOLTF) will be declared in a timely manner, mandating the creation of virtual data rooms, and promoting earlier engagement with supervisory and resolution authorities with enhanced powers are crucial steps. Finally, making deposit insurance funds more readily available provides an additional layer of financial stability.

Excellent cooperation between supervisors and resolution authorities is of paramount importance in both going concern and (pre)resolution, in order to avoid delaying action or declaring a bank to be failing or likely to fail prematurely.

As stated above, resolution planning is crucial, including planning for a 'data room', as time in the run-up to resolution might be very limited. Nevertheless, the need to find a swift solution will always limit the time that potentially interested parties will have to assess the risk and conduct their due diligence.

3.3 European particularities

The EU resolution framework differs significantly from the US framework. Unlike the FDIC, the Single Resolution Board (SRB) is not the receiver. In the Banking Union, the resolution decision is taken by the SRB after the bank has been declared FOLTF.[10] In case the SRB considers resolution not necessary to preserve financial stability, the bank will go into national insolvency, a judicial process at member state level, which in most cases will mean the break-up of the failing institution. But even in the case of resolution, national insolvency remains relevant as counterfactual under the 'no creditor worse-off' (NCWO) principle: no creditor should be worse off in resolution than in national insolvency.[11] This is the safeguard built into the legal framework. Given the break-up and, potentially, the value destruction in insolvency, resolution can be expected to deliver a superior outcome – without sacrificing financial stability.

To maintain financial stability and to preserve value, resolution decisions need to be taken swiftly. There is just the possibility of a two-day moratorium enshrined in Article 69 of the BRRD. Despite the time pressure, the SRB is obliged to organise a fair and transparent sale process that takes all circumstances into account. In the US, the FDIC's P&A transactions typically provide maximum flexibility to bidders in an attempt to maximise proceeds. The flipside might be perceived intransparency from the outside and complexity as portfolios need to be separated and managed by the FDIC going forward. In some cases, a resolution may require a bridge bank to separate viable and non-viable parts of the failing bank and the adequate funding and management of the bridge bank.

Given the fact that the failures in spring 2023 were caused by unsustainable liquidity outflows, it needs to be reiterated that the Banking Union still lacks a (liquidity) backstop for the SRB.

3.4 Competition considerations

The preference for large banks as white knights in financial acquisitions presents a multi-faceted challenge. While their abundance of internal resources, collateral, and diversified risk profiles make them attractive candidates, their dominance poses significant drawbacks. Even with the full enforcement of the BRRD, large acquirers exacerbate market concentration issues, hindering fair competition. This is all the more so in Europe as tight time frames and a non-unified administrative architecture relating to supervision, resolution and competition have tended to favour local consolidation over cross-border transactions (for reasons such as reduced information asymmetry, local political connections and personal networks). Moreover, market concentration may be only a short-term fix and shift systemic risk into the future, raising even greater concerns about potential rescue scenarios when these behemoth institutions face trouble.

To mitigate these challenges, proper enforcement of competition rules is key. Given the time frame, the competition authority (which in the EU may be the European Commission or the national authority, depending on the size and cross-border activity of the players) will in most cases grant a temporary waiver allowing the acquisition to proceed swiftly, but it should then seriously review the merger by conducting thorough investigations of the combined market power of the new entity across the

10 The decision to declare a bank FOLTF is taken by the SRB in consultation with the ECB's SSM.

11 EU legislation requires that the "Board shall ensure that a fair, prudent and realistic valuation of the assets and liabilities of an entity referred to in Article 2 is carried out by a person independent from any public authority, including the Board and the national resolution authority, and from the entity concerned" (Art. 20, para 1, BRRD). In particular, the so-called "valuation 3" is the legal safeguard for equity holders and creditors that they are not worse off in resolution than in insolvency (NCWO). Otherwise, they are entitled to compensation.

markets where it operates and, as needed, implement remedies such as divestitures. Additionally, in exploring the internalisation of antitrust considerations in the bidder pool selection, perhaps by giving serious consideration to smaller banks, foreign institutions, or non-banks such as investment funds, the resolution authority can take a proactive approach to address the competition concerns associated with large acquirers.

In the broader context of financial stability versus competition, the usual pursuits of (ex-post) efficiency by central banks, following crisis events, have contrasted with competition authorities' proactive efforts for ex-ante efficiency.

In many countries, antitrust intervention in financial services was historically not welcomed by central banks. The emergence of the BRRD from DG COMP's State Aid guidelines in 2013, featuring a junior creditors bail-in requirement, exemplifies the intersection of these divergent approaches. Over time, there has been a noteworthy convergence, with more frequent antitrust intervention in finance (with landmark decisions such as imposed caps on credit card interchange fees or fines on banks colluding on Libor) and central banks acknowledging the merits of opening financial ecosystems to harness innovation (such as opening the payment services to non-banks under the PSD2 directive). In addition, recognising the risks associated with entities deemed 'too big to fail' achieves some convergence with competition authorities' concern about market power. Nevertheless, the current landscape, marked by consolidation trends, poses a potential test to the achieved convergence, demanding vigilant scrutiny to maintain a delicate equilibrium between financial stability and the promotion of healthy market competition.[12]

4 CONCLUSION AND RECOMMENDATION

Persistent and significant profits by financial institutions that acquire other banks in situations of sudden distress raise eyebrows among observers and the general public. Have administrators exerted the necessary effort to protect the wealth of creditors and owners of the distressed institution? And that of taxpayers who, in many cases, came to the rescue when distress hit the bank?

Substantial gains on the acquisition of banks in resolution are the norm. This holds true for market- and accounting-based valuation methods and for US and European cases. These findings run counter to the conventional wisdom that profits in M&As are made by target shareholders rather than the acquirer.

In this Policy Insight, we have reported further evidence in favour of the positive acquisition profit hypothesis, and we see three potential reasons for this outcome: first, a lacking backstop that aggravates the time pressure under which the search for an acquirer takes place when a run on bank assets is under way; second, insufficient market discipline via bail-in debt; and third, the limited number of bidders and often just a singular bidder for the distressed bank's assets in resolution and liquidation.

We will discuss these three arguments in more detail, with an eye to policy proposals.

1 Strengthening a backstop, thereby alleviating time pressure

It is a common argument in bank distress situations that failing banks leave the supervisor at most a few hours over a weekend to find a buyer of bank assets. The reason is that, on Monday morning, after markets re-open, a run is expected on bank assets when the remaining holders of short-term bank liabilities, such as wholesale depositors, withdraw their monies at once. The run, in turn, is a consequence of banks' sequential service constraint subject to limited liquid funds.

12 See Vives (2016) for a discussion of the trade-offs between stability and competition in banking.

The above description points at a straightforward solution: protect the depositor in question against a loss of wealth by some form of government guarantee. For example, offer unlimited deposit insurance backed by credible, usually public funds. This has been the case in some recent cases of bank runs. Unlimited deposit protection could also be supplied ex ante, with or without accounting for full cost premiums.

However, comprehensive deposit insurance is at least controversial among regulators and the general public, because of moral hazard concerns. Fully protected depositors, they argue, have no incentive in monitoring the banks they invest in, and as a consequence, market discipline will tend to vanish unless it can be substituted through other means. A reasonable compromise, which we support, is to somewhat broaden depositor coverage, encompassing transactional accounts of firms and households, but leaving out some larger creditors, such as wholesale financiers and individuals beyond some higher account balance. This would leave a run on the banks as a credible deterrent to excessive risk taking intact, while reducing some of its unintended costs.

To be clear, the elephant in the room remains a potent receivership process, as realised by the FDIC in the US market. This institution is financially capable – but legally not obliged – to take over a failing bank's assets and liabilities, because of its access to a last resort public fund, for example via a dedicated central bank credit line. Moreover, the FDIC combines the deposit guarantee function with the resolution function as receiver in the event of bank failure. This is not the case in the European Banking Union, where this function is split between the SRB at the European level, more than 20 national deposit guarantee schemes and national insolvency procedures. This fragmentation requires extensive cooperation among authorities, which consumes unnecessary time and adds further difficulties to the time-constrained resolution process (see also Beck et al., 2022; Véron, 2024). A different suggestion would be to devise an entirely new regime specifically for cross-border groups with unified supervision, to replace the diversity of national rules that govern the resolution process today (Angeloni et al., 2024). Similarly, a common European regime could be applied to large banks, in contrast to current practice (Acharya et al., 2024).

As far as the SRB is concerned, it would benefit greatly from a last resort public backstop similar to the FDIC to enhance the credibility and effectiveness of its bank resolution framework. A public backstop provides a financial safety net that ensures sufficient funds are available to manage the orderly resolution of failing banks, thereby preventing broader financial instability. This instills confidence among depositors and investors, as they know that there is a reliable mechanism to support troubled banks without solely relying on private sector solutions, which may be inadequate during systemic crises.

We are convinced that an FDIC-type of institution would be a game-changer in Europe's financial architecture, rendering the filigree framework of recovery and resolution much more credible than it is today.

In line with our take on an FDIC-like institutional strengthening, bridge banks are another valuable tool that can serve as a credible option, enhancing the bargaining power of the SRB during bank resolutions. By temporarily transferring a failing bank's assets and operations to a bridge bank, in a legally safe way, the SRB ensures continuity of essential services and stabilises the situation. This strategic move buys time and reduces the pressure to sell assets quickly at potentially unfavourable prices.

Consequently, the SRB can negotiate from a position of strength, seeking better terms from potential buyers or investors. The bridge bank option thus mitigates immediate market disruptions and preserves value, allowing for a more controlled and beneficial resolution process.

2 Fostering market discipline

The route to market discipline, much favoured by European policymakers after the global financial crisis, rests on the assumed incentive effects of bail-in debt, a newly created class of mandatory hybrid debt that ranks just above equity and below all other debt instruments on bank balance sheets. If several side conditions are met, bail-in debt credibly bears default risk. Holders of these instruments will have a proper incentive to price debt adequately, eliminating moral hazard. By internalising risk-seeking incentives, the proper use of bail-in debt contributes to market discipline in banking.

To enhance the use of bail-in debt, policymakers should focus on improving the functioning of the bail-in debt market, raising its credibility as a loss-absorbing debt instrument. This requires, among other things, ensuring that bail-in debt ends up in the portfolios of investors that are capable of loss absorption, and that have the capacity and willingness to play an active role in disciplining banks.

3 Increasing competition between bidders

The third route to better pricing of distressed bank assets relies on the sale process of bank assets itself, in reality often implemented via fire sales. Selling bank assets in a rush will typically lead to inferior prices, not least because more distant potential bidders find it hard to estimate prices when the assets are perceived as being opaque. Thus, reducing opacity and improving the ability to run auction-like processes (Asimakopoulos and Tröger, 2024) will likely raise sell prices and lower loss given default.

The path to increased competition in distressed asset sales, therefore, can use different instruments. The most straightforward argument relies on transparency, making detailed and trusted information about bank asset quality readily available when distress sets in. The necessary data sets have to be collected and stored in a way that allows quick access by potential bidders if the time is ripe, i.e. if distress is ongoing.

To run time-constrained auctions as effectively as possible, the SRB or, more practically, each individual bank by itself needs to set up a data room, where necessary information about banks can be shared directly with potential acquirers. Potential acquirers need to be screened well before an event, so that for every bank, a list of potential acquirers exists upfront. To account for competition considerations, this list should contain not just large banks, but also smaller banks and non-bank financial institutions. Banks' readiness to set up and update such data rooms at short notice needs to be regularly tested by the SRB via its onsite inspections.

Finally, addressing the lack of a robust backstop for the SRB, promoting market discipline through bail-in debt and implementing designs that increase the number of bidders are essential to prevent taxpayer-funded bailouts, ensure that a bank's owners and creditors – and not the public – bear the costs of failures, and enhance the overall stability of the European banking system.

Furthermore, transitioning from the current system, which includes a European resolution authority, national deposit guarantee systems and insolvency procedures, to a European framework similar to the FDIC would be a significant advancement.

By addressing these gaps within the BRRD framework, we can enhance financial resilience and bolster confidence in the sector's ability to manage crises more effectively.

REFERENCES

Acharya, V., E. Carletti, F. Restoy and X. Vives (2024), *Banking Turmoil and Regulatory Reform*, The Future of Banking 6, CEPR Press.

Angeloni, I., S. Claessens, A. Seru, S. Steffen and B. Weder di Mauro (2024), *Much Money, Little Capital, and Few Reforms: The 2023 Banking Turmoil*, Geneva Reports on the World Economy 27, ICMB and CEPR (forthcoming).

Asimakopoulos, I. and T. Tröger (2024), "Reform of the CMDI framework - driving off with the breaks on", SAFE Working Paper No. 418.

Beck, T., J. Krahnen, P. Martin, F. Mayer, J. Pisani-Ferry, T. Tröger, B. Weder di Mauro, N. Veron and J. Zettelmeyer (2022), "Completing the banking union: Economic requirements and legal conditions", CEPR Policy Insight No. 119. s

Bertay. A., and H. Huizinga (2023), "Do 'white knights' make excessive profits in bank resolution?", European Parliament.

Baudino, P., E. Johnston Ross, B. Van Roosebeke, and R. Vrbaski (2023), "Bank transfers in resolution – practices and lessons", BIS Financial Stability Institute Insights No. 55.

Cowan, A.R. and V. Salotti (2015), "The resolution of failed banks during the crisis: Acquirer performance and FDIC guarantees, 2008–2013", *Journal of Banking & Finance* 54: 222-238.

Financial Stability Board (2018), *Principles on Bail-in Execution*.

Financial Times (2023), "The $44bn bank bailout bonanza", 5 September.

Giliberto, S.M. and N. P. Varaiya (1989), "The winner's curse and bidder competition in acquisitions: Evidence from failed bank auctions", *The Journal of Finance* 44: 59-75.

Granja, J. (2013), "The relation between bank resolutions and information environment: Evidence from the auctions for failed banks", *Journal of Accounting Research* 51: 1031-1070.

Granja, J., Matvos, G. and A. Seru (2017), "Selling Failed Banks", *Journal of Finance* 72: 1723-1784.

Grund, S., N. Nomm and F. Walsh (2020), "Liquidity in resolution: comparing frameworks for liquidity provision across jurisdictions", ECB Occasional Paper 251.

Heider, F., J. Schlegel, T. Tröger, and M. Wahrenburg (2023), "Do 'white knights' make excessive profits in bank resolution?", European Parliament.

Lengwiler, Y and B Weder di Mauro (2023), "Global lessons from the demise of Credit Suisse", VoxEU.org, 4 September.

Renneboog, L. and C. Vansteenkiste (2019), "Failure and success in mergers and acquisitions", *Journal of Corporate Finance* 58: 650-699.

Véron, N. (2024), *Europe's Banking Union at Ten: Unfinished yet Transformative*, Bruegel.

Vives, X. (2016), *Competition and stability in banking. The role of regulation and competition policy*, Princeton University Press.

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