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Do “white knights” make excessive profits in bank resolution?



EGOV
BANKING UNION

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Abstract

This paper finds that accounting gains to acquirers in bank resolutions in the EU are comparable to those in recent transactions in other major banking markets. Accounting gains for acquirers are shown to be lower in transactions involving relatively bigger acquirers. This suggests that resolution authorities should aim to tie distressed banks to relatively larger acquirers to reduce resolutions costs.

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CONTENTS

LIST OF ABBREVIATIONS	6
LIST OF FIGURES	7
LIST OF TABLES	7
EXECUTIVE SUMMARY	8
1. INTRODUCTION	9
2. PRIOR STUDIES ON RESOLUTION COSTS OF FAILED BANKS IN THE US	11
3. THE GAINS TO ACQUIRING BANKS IN RECENT BANK TRANSFERS IN THE EU	13
3.1. Stock market and accounting-based measures of gains for acquirers	13
3.2. Data on gains for acquirers	14
4. HOW TO PREVENT EXCESSIVE GAINS FOR ACQUIRERS IN BANK RESOLUTIONS?	19
4.1. Information availability at the time of the acquisition	19
4.2. The role of competition among potential acquirers	20
5. CONCLUSION	21
REFERENCES	22

LIST OF ABBREVIATIONS

AG	Accounting Gain
BRRD	Bank Recovery and Resolution Directive
BVA	Book Value of Assets
BVE	Book Value of Equity
BVL	Book Value of Liabilities
CMDI	Crisis Management and Deposit Insurance
EBA	European Banking Authority
ER	Excess Return
EXP	Expenses
FDIC	Federal Deposit Insurance Corporation
IFRS	International Financial Reporting Standard
LOA	Loss on Assets
LVA	Liquidation Value of Assets
MG	Market Gain
P&A	Purchase and Assumption
PR	Premium
SEC	Securities and Exchange Commission
SRB	Single Resolution Board
TRC	Total Resolution Costs

LIST OF FIGURES

Figure 1: Badwill and the relative size of the acquired bank	16
Figure 2: Change in acquirer market capitalization and the relative size of the acquired bank	18

LIST OF TABLES

Table 1: Badwill relative to assets of recently acquired US and Swiss banks	10
Table 2: Resolution costs by resolution method for failed US banks	12
Table 3: Accounting gains in acquisitions of distressed banks in the EU	15
Table 4: Market gains in acquisitions of distressed banks in the EU	17

EXECUTIVE SUMMARY

Successful resolution requires that the resolution authorities identify a suitable acquirer for a failed bank that is willing to offer a sufficiently high acquisition price. Earlier this year, banking turmoil in the US led to the acquisitions of three failing regional banks, Signature Bank, Silicon Valley Bank, and First Republic Bank, that were taken over by New York Community Bancorp, First Citizens, and JPMorgan, respectively, and more recently in Switzerland, UBS took over Credit Suisse. These bank takeovers generated substantial profits for the acquirers, as evidenced by their share price appreciations and large reported accounting gains relative to the assets of the acquired banks. Specifically, the accounting gains relative to acquired assets averaged 2.6% for the three US takeovers, and it was 5.0% in the case of the purchase of Credit Suisse by UBS. Large gains for acquiring banks are a barrier to successful resolutions, as they increase the costs of resolution to be borne by the failing banks' shareholders, liability holders, industry-financed funds (deposit insurance schemes and resolution funds), and possibly taxpayer.

Recent US and Swiss experiences with large gains to acquirers of distressed banks raise the question of whether acquirers in the EU generally have also realized large gains. To inform on this, this paper analyzes a set of 10 acquisitions of distressed banks since the implementation of the Bank Recovery and Resolution Directive in January 2015. The average value of the accounting gain relative to acquired bank assets was about 2.9%. This is above the corresponding figure of 2.6% for the three recent US transactions but below the 5.0% that was realized in UBS's takeover of Credit Suisse. Overall, these data suggest that resolution outcomes in terms of acquirer gains in the EU are comparable to those in other major banking markets.

Accounting gains for acquirers are shown to be higher in transactions involving relatively smaller acquirers. This could reflect that relatively smaller acquirers demand higher risk premiums, and it suggests that bank resolutions involving relatively bigger acquirers are cheaper to execute. Despite getting apparently better deals as based on accounting information, we find that stock markets reward smaller banks that take over relatively bigger targets less, as also stock market investors may perceive such deals to be relatively risky. While these findings are based on very small numbers of transactions, they suggest that resolution authorities should aim to tie distressed banks to relatively larger acquirers in resolutions.

High profits earned by acquirers in bank resolutions can reflect either a fair return for taking risk or supranormal returns amounting to a windfall gain. While a bank acquisition will always involve some risk, authorities should work to reduce this risk as much as possible with a view to increasing the acquisition price. The main avenue for this is to ensure that the potential acquirer is as well-informed as possible about the distressed bank. Supranormal returns, to some extent, are to be expected in bank resolutions, as the market for distressed banks is not a perfectly competitive one, and hence, acquirers can generally capitalize on their unique characteristics and positions in particular banking markets. Supranormal profits arise from a lack of competition. Resolution authorities can attempt to increase competition in bank resolutions by considering broad sets of possible acquirers in their resolution planning, and also by being ready to apply the bridge bank tool.

1. INTRODUCTION

A failing bank can either be liquidated or enter resolution. Resolution typically implies that a healthy bank takes over the failing bank or key parts of it. Resolution preserves a greater part of the business value of a failing bank as the relationships with lending customers and depositors tend to be maintained, and it may better serve financial stability. Within the EU, the Crisis Management and Deposit Insurance (CMDI) framework, consisting of the Bank Recovery and Resolution Directive (BRRD, European Parliament and Council (2014)), the Single Resolution Mechanism Regulation, and the Deposit Insurance Schemes Directive provide a uniform regulatory approach to dealing with failing banks. In April 2023, the European Commission announced proposals to reform the CMDI framework. The reform aims to eliminate identified policy-related barriers to bank resolution that at present contribute to the occurrence of many liquidations relative to resolutions (European Commission, 2023,a and b).¹

Successful resolution requires that the resolution authorities can identify a suitable acquirer for a failed bank that is willing to offer a sufficiently high acquisition price. This year has seen banking turmoil in the US, leading to the acquisitions of three failing regional banks, Signature Bank, Silicon Valley Bank, and First Republic Bank, that were taken over by New York Community Bancorp, First Citizens, and JPMorgan, respectively, and more recently in Switzerland, UBS took over Credit Suisse. According to an article by Indap (2023) in the Financial Times, these four acquisitions generated substantial profits for the acquirers, as evidenced by their share price appreciations and large reported accounting gains. As seen in Table 1, the accounting gains (called ‘badwill’) relative to acquired assets ranged from 1.3% to 4.6% for the three US takeovers with an average of 2.6%, and it was 5.0% in the case of the purchase of Credit Suisse by UBS. Such large gains can either be fair rewards for risks undertaken by the acquirers or undue windfall gains. Either way, large gains for acquiring banks are a barrier to successful resolutions, as they increase the costs of resolution to be borne by the failing banks’ shareholders, liability holders, industry-financed funds (deposit insurance schemes and resolution funds), and possibly taxpayers.

¹ One issue is that in the current CMDI framework rules for accessing funding differ across the various crisis management tools, which makes the use of these tools less effective by constraining access to industry-based funding without imposing losses on depositors. See European Commission (2023a). According to European Commission (2023b, p. 23), more than 60% and 70% of distressed banks in the EU and the Banking Union, respectively, were managed outside the resolution framework since 2015. See Gortsos (2023) and Ramos-Muñoz, Lamandini, and Thijssen (2023) for discussions of CMDI reform options. Eule, Kastelein and Sala (2023) particularly discuss the option of broadening the use of funds from deposit insurance schemes in resolutions beyond depositor payoffs.

Table 1: Badwill relative to assets of recently acquired US and Swiss banks

Acquired bank	Acquirer	Takeover month	Badwill, bn euros	Assets, bn euros	Badwill as % of assets
Signature Bank	New York Community Bankcorp	March 2023	2.0	103.5	1.9
Silicon Valley Bank	First Citizens	March 2023	9.2	198.6	4.6
First Republic Bank	JPMorgan Chase	May 2023	2.5	199.4	1.3
Credit Suisse	UBS	June 2022	27.1	538.6	5.0

Badwill is the gain recorded in the acquiring bank's financial statement. Assets are the assets of the acquired bank as of December 31, 2022. Sources: Indap (2023), bank financial statements, and own calculations.

Recent US and Swiss experiences with large acquirer gains in bank resolution raise the question of whether acquirers in the EU generally also have realized large gains, which would constitute a barrier to appropriate bank resolution in the EU. To inform on this, this paper analyzes a set of recent acquisitions of distressed banks since the implementation of the BRRD in January 2015 as listed in European Commission (2023b).

In the remainder, section 2 discusses two prior studies on resolution costs based on US data. These studies show that, on average, resolution costs have been larger in case of bank liquidations than bank resolutions, and that greater information availability about the failed bank can reduce resolution costs, consistent with acquiring banks paying higher prices for more transparent failed banks.

Section 3 examines acquirer gains for bank acquisitions in the EU that occurred within the framework of the CMDI since 2015. The average value of badwill relative to acquired bank assets was about 2.9%, based on 10 transactions. This is above the corresponding figure of 2.6% for the three recent US transactions listed in Table 1, but below the 5.0% that was realized in the takeover of Credit Suisse by UBS. Overall, these data suggest that resolution outcomes in terms of accounting gains for acquirers in the EU are comparable to those in other major banking markets.

Accounting gains for acquirers are shown to be higher in transactions involving relatively smaller acquirers. This could reflect that relatively smaller acquirers demand higher risk premiums, and it suggests that bank resolutions involving relatively bigger acquirers are cheaper to execute. Despite getting apparently better deals as based on accounting information, we find that stock markets reward smaller banks that take over relatively bigger targets less, as also stock market investors may perceive such deals to be relatively risky. While these findings are based on very small numbers of transactions, they suggest that resolution authorities should aim to tie distressed banks to relatively larger acquirers in resolutions.

Section 4 discusses how greater availability of information about failing banks and increased competition among potential bidders in bank resolutions in the EU could possibly lead to higher acquisition prices and lower resolution costs in bank resolutions, thereby making resolutions more attractive relative to liquidations. Section 5 concludes.

2. PRIOR STUDIES ON RESOLUTION COSTS OF FAILED BANKS IN THE US

Low prices paid by acquirers in bank resolutions increase resolution costs in the sense that less money remains to be distributed to the claimants of the failed bank or that more money must be provided by deposit insurance schemes, resolution funds or taxpayers. Thus, by considering the determinants of resolution costs one can indirectly obtain some information about what affects acquisition prices in bank resolutions. In this section, we discuss two studies that have examined resolutions of failed US banks that were resolved by the Federal Deposit Insurance Corporation (FDIC).² First, Bennett and Unal (2015) compare resolution costs across different approaches of dealing with a distressed bank, showing that bank liquidation on average implies higher costs than bank resolution. Second, Granja (2013) finds that resolution costs are smaller for banks that are registered with the Securities and Exchange Commission (SEC), suggesting that the disclosure of additional information implied by an SEC registration mitigates resolution costs.

Bennett and Unal (2015) examine resolution costs for 1,244 US banks that were placed into FDIC receivership between 1986 to 2007. Copying their eq. (1), we see that total resolution costs, TRC, can be represented as follows:

$$TRC = LVA - BVL + PR - EXP \quad (1)$$

where LVA is the liquidation or market value of assets in resolution, BVL is the book value of liabilities, PR is the deposit premium paid by the acquirer in a resolution (as the acquirer can realize future profits from the deposits), and EXP are resolution expenses. A more negative value of TRC implies greater resolution costs, and thus greater losses to be shared between bank liability holders (who then recover a smaller share of BVL) and the resolution authorities. Defining the loss on assets, LOA, as the liquidation value of assets, LVA, minus the book value of asset (i.e., $LOA = LVA - BVA$), and noting that the book value of equity, BVE, equals the book value of assets, BVA, minus the book value of liabilities, BVL (i.e., $BVE = BVA - BVL$), Bennett and Unal (2015) rewrite eq. (1) as follows:

$$TRC = BVE + LOA + PR - EXP \quad (2)$$

From (2), we see that the resolution authorities can reduce resolution costs (making TRC less negative) by achieving i) a higher liquidation value of assets and hence LOA, ii) a higher deposit premium, PR, and iii) lower resolution costs, EXP.

Bennett and Unal (2015) calculate average values for TCR and its components in (2) separately for the groups of banks that are liquidated with depositors being paid off by the FDIC, and that alternatively undergo resolution (by way of the broadly defined purchase and assumption (P&A) method). These data are reproduced in Table 2. Banks undergoing deposit payoff had a lower median remaining book value of equity, BVE, of 1.97%, compared to 2.32% for banks resolved through P&A. Banks subject to deposit payoff also had greater losses on assets, LOA, of -27.36% relative to -21.85% for banks undergoing P&As. However, resolution expenses were lower for banks with depositor payouts at 10.06%, compared to 11.46% for banks in P&As. In sum, banks undergoing depositor payoffs experienced greater resolution costs, TRC, of -36.07%, compared to -30.70% for banks in P&As. Greater resolution costs in liquidations than in resolutions are consistent with a relatively greater destruction of the failed bank’s business value in liquidations, giving rise to lower prices paid for its combined assets and liabilities. While the data presented by Bennett and Unal (2015) support the view that resolutions

² See Brescia Morra, Pozzolo and Vardi (2023, pp. 16-18) for a discussion of the FDIC as a receiver in bank failure cases in the US.

are more cost-effective than liquidations, they should be interpreted with caution as the analysis does not take into account that the samples of banks that undergo liquidations and resolutions could differ in ways that affect resolution costs, such as in asset quality and in bank size.³

Table 2: Resolution costs by resolution method for failed US banks

	Deposit Payoff	P&A
Book value of equity	1.97	2.32
Loss on assets	-27.36	-21.85
Premiums	0.37	0.91
Expenses	-10.06	-11.46
Total resolution cost	-36.07	-30.70

Figures represent percent of book value of assets at failure and are medians. Source: Table 4 of Bennett and Unal (2015) based on FDIC General Ledger, Receivership Financial Statements

Granja (2013) considers the role of information in affecting resolution costs for a sample of 304 US failed banks during the period 2008-2010 for which the FDIC implemented a resolution by way of a P&A transaction. The main hypothesis is that a greater availability of information about a failed bank at the time of the resolution reduces risk for any acquirer, and hence leads to lower resolution costs on account of higher acquisition prices. To test this idea, Granja (2013) examines whether banks that were registered with the SEC (and hence faced additional disclosure requirements) generated lower resolution costs. Consistent with the hypothesis, Granja (2013, Table 5) finds that an SEC registration reduces resolution costs by approximately 4.5% of deposits. In further tests, the paper finds that bidders in failed bank auctions tend to bid for larger parts of the failed bank's assets if the bank has an SEC registration, and that in that instance bidding banks tend to be more geographically diverse. All these results point at an important role for increased information availability in improving the resolution process, and its outcome in terms of lower resolution costs. This overall conclusion, while emanating from US data and institutions, should also be relevant for the EU.

³ Considering bank size, Bennett and Unal (2015, Table 5) find that larger banks on average generate smaller resolution costs.

3. THE GAINS TO ACQUIRING BANKS IN RECENT BANK TRANSFERS IN THE EU

In this section, we provide some information on the gains realized by acquiring banks in recent acquisitions of distressed banks in the EU. We consider cases of banks that were subject to the application of the CMDI framework as listed in Annex 9 of European Commission (2023b) and that were acquired by another bank.⁴ These cases arose in the period since 2015 after the implementation of the BRRD. Gains measures can be constructed using share price information or accounting information for the acquirer. After discussing our two gains measures, we provide some information on the gains that were realized by acquiring banks for selected acquisitions of distressed banks in the EU.

3.1. Stock market and accounting-based measures of gains for acquirers

We can estimate the acquirer’s excess stock return resulting from the acquisition, ER, as the actual stock return minus the stock return that is predicted based on the acquirer’s share price co-movement with the overall stock market. This excess return implies a change in the acquirer’s market capitalization relative to the assets of the acquired bank, denoted Market Gain or MG, as follows,

$$MG = ER * [\text{Prior market capitalization of the acquirer}] / \text{Book value of assets of the acquired bank}$$

We consider the acquirer’s market gain relative to the acquired bank’s assets, as the risks stemming from the acquisition for the acquiring bank can be taken to be proportional to the acquired bank’s assets.

In principle, the gains measure MG should reflect stock market investors’ assessments of all the implications of the acquisition for the expected profitability and riskiness of the acquirer. Thus, MG should reflect assessments of the values of the acquired bank’s assets and liabilities as well as of the repercussions of the transaction for market concentration and the combined bank’s systemic importance. Thus, in principle MG is a comprehensive measure of the valuation gain for the acquirer, but in practice it may be imprecise, as investors may lack accurate information about, for instance, the quality of the assets of the acquired bank.

Alternatively, we consider the accounting gain from the transaction that the acquirer reports in its financial statements. Following International Financial Reporting Standard (IFRS) 3 on Business Combinations, the acquirer has to calculate the accounting gains as the fair value of the acquired assets minus the fair value of the assumed liabilities and minus the cost of the acquisition, all at the time of the acquisition.⁵ The acquired bank’s assets and liabilities should reflect any safety-net related support that it has received prior to being acquired, but it will not reflect any support that the acquirer receives subsequent to the acquisition.⁶ Our accounting gain variable, AG, is computed as the accounting gain,

⁴ The Annex also provides information on the type of intervention within the framework of the BRRD that was applied to the distressed bank. The number of banks in our analysis, however, is too small to be able to relate the gains for the acquiring bank to the type of intervention.

⁵ The IFRS organisation website states: “The core principles in IFRS 3 are that an acquirer measures the cost of the acquisition at the fair value of the consideration paid; allocates that cost to the acquired identifiable assets and liabilities on the basis of their fair values; allocates the rest of the cost to goodwill; and recognises any excess of acquired assets and liabilities over the consideration paid (a ‘bargain purchase’) in profit or loss immediately. The acquirer discloses information that enables users to evaluate the nature and financial effects of the acquisition.” See [IFRS - IFRS 3 Business Combinations](#).

⁶ In the case of the acquisitions of Banca Popolare di Vicenza and Veneto Banca by Intesa Sanpaolo listed in Table 3, goodwill does not include a subsequent public cash distribution of 1285 million euros paid on 26 June 2017 to cover integration and rationalization charges related to the acquisitions as mentioned in the acquirer’s annual report for 2017.

or badwill, divided by the assets of the acquired bank's assets to make it comparable to the market gain, MG, as follows:

$$AG = \text{Badwill} / \text{Book value of the assets of the acquired bank}$$

When calculating badwill, the acquirer's accountants may have more accurate information about the quality of the acquired bank's assets than stock market investors had around the time of the acquisition. This suggests that AG could more accurately represent the acquired bank's gains than any estimated MG. However, AG is likely to be biased downward for two main reasons. First, it measures the fair value of assets and liabilities, but not the positive value of the customer relationships that come with these assets and liabilities. Second, it does not reflect possible synergy effects from the acquisition that can arise from, for instance, cost reductions and greater market power in the relevant banking market.⁷

3.2. Data on gains for acquirers

Table 3 provides information on accounting gains for a set of 10 transactions whereby banks (or major parts of banks) were acquired within the framework of the CMDI since 2015. One transaction involved the purchase of two banks (the acquisitions of Banca Popolare di Vicenza and Veneto Banca by Intesa Sanpaolo). To construct our sample of transactions, we started with the banks that were acquired within the framework of the CMDI as listed in Annex 9 of European Commission (2023b). Subsequently, we identified the acquirers, and searched their annual reports for information on badwill related to the transaction, yielding our sample of 10 transactions. In column 3, we see that badwill was positive (negative) for 7 (3) transactions. Notably, the purchase of Banco Popular Español by Banco Santander generated a negative badwill of – 248 million euros for the latter bank. Presumably, the transaction was still beneficial to Banco Santander on account of subsequent benefits from the consolidation of the two banks. Column 5 provides information about badwill relative to the acquired bank's assets (i.e., AG) in percent. For all three transactions with a negative badwill, badwill relative to acquired bank assets was rounded to 0.0%, and hence was negligible. The acquisitions of the two previous Sberbank subsidiaries in Croatia and Slovenia by Croatian Postbank and NLB, respectively, generated very high badwill relative to acquired bank assets of 9.17% and 10.0%, respectively. Resolution costs in these two cases, for which the Single Resolution Board (SRB) was the relevant resolution authority, thus were very high, to the detriment of the prior owner that realized relatively low sales prices in these transactions. The average value of badwill relative to acquired bank assets was about 2.9%. This is above the corresponding figure of 2.6% for the three recent US transactions listed in Table 1, but below the 5.0% that was realized in the acquisition of Credit Suisse by UBS. Overall, these data suggest that resolution outcomes in terms of acquirer gains in the EU are comparable to those in other major banking markets.

⁷ AG is biased upward relative to MG to the extent that it will be subject to taxation before it can be added to, say, book equity as valued by the stock market.

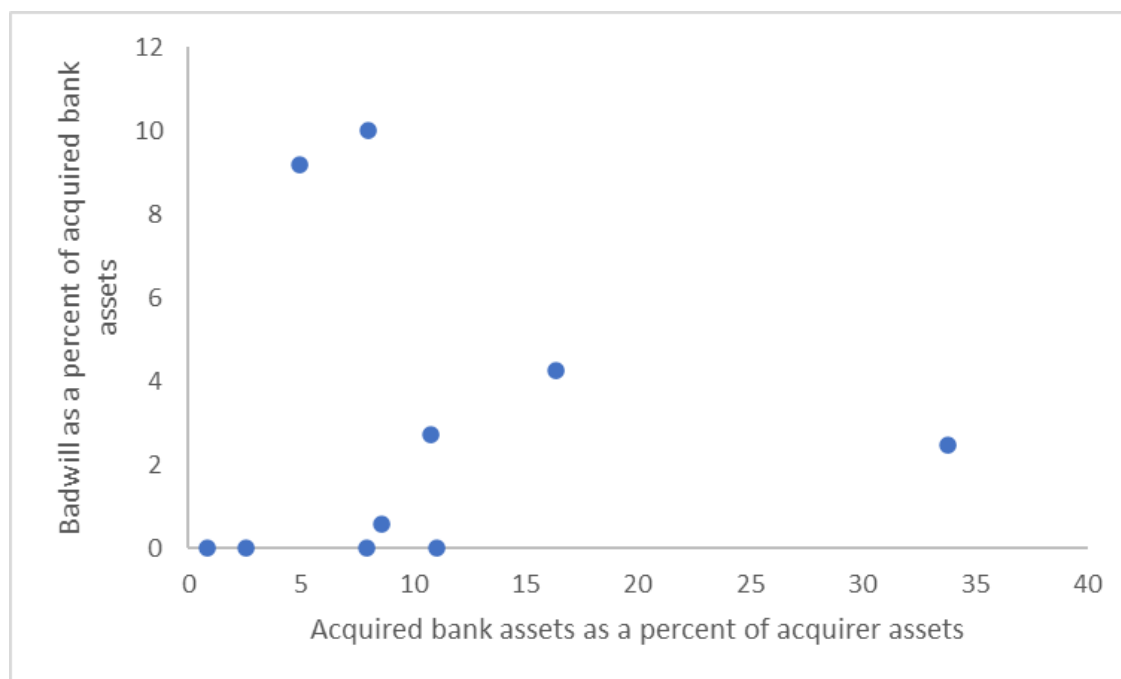
Table 3: Accounting gains in acquisitions of distressed banks in the EU

Acquired bank	Acquirer	Badwill, millions	Acquired bank assets, billions	Badwill as % of acquired bank assets (AG)	Acquirer assets, billions	Acquired bank assets as % of acquirer assets	Acquisition news date	Country
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Aigis Banca	Banca Ifis	2.9	0.301	0	12.03	2.57	23.May.21	IT
Banca Carige	BPER Banca	948.1	22.31	4.25	136.35	16.36	3.June.22	IT
Banca Popolare di Vicenza/Veneto Banca	Intesa Sanpaolo	363	62.50	0.58	725.1	8.62	26.June.17	IT
Banco Internacional do Funchal	Banco Santander Totta	327	13.13	2.49	38.86	33.78	20.Dec.15	PT
Banco Popular Espagnol	Banco Santander	-248	147.93	0	1339.13	11.05	7.June.17	ES
Cassa di Risparmio di Ferra	BPER Banca	190.9	7.00	2.73	64.96	10.77	11.July.17	IT
Idea Bank	Bank Pekao SA	-0.2	4.06	0	50.91	7.97	3.Jan.21	PL
Panellinia Bank	Piraeus Bank	-4.6	0.75	0	89.29	0.84	17.Apr.15	GR
Sberbank Croatia	Croatian Postbank	135.2	1.47	9.17	29.63	4.97	1.Mar.22	HR
Sberbank Slovenia	NLB	172.8	1.72	10	21.58	7.98	1.Mar.22	SI
Mean		188.7	26.12	2.92	250.78	10.49		

Acquired bank and acquirer assets are in billions at the end of the year prior to the acquisition. Sources: European Commission (2023b, Annex 9), financial reports from company websites, Bank Focus and Refinitiv, news reports and press releases, and own calculations.

On average, the assets of the acquired bank are 10.5% of the assets of the acquirer (column 7) To inform on whether the relative size of the acquired bank affects acquirer gains, Figure 1 provides a scatter plot of badwill relative to acquired bank assets, i.e., AG, and the relative size of the acquired bank in terms of total assets. The figure displays a positive relation. This could reflect that a smaller bank perceives the acquisition of a bigger bank to be riskier, and hence demands a higher compensation for the implied risk, resulting in a higher AG. Figure 1 suggests that resolution authorities should search for bigger acquirers to take over smaller distressed banks to reduce resolution costs, with the caveat that the figure is based on only 10 transactions.

Figure 1: Badwill and the relative size of the acquired bank



Figures are from columns 5 and 7 of Table 3.

To be able to calculate market gains for acquirers, we estimate their excess returns, ER, as the cumulative daily excess returns during a period starting one week before the arrival of news about the transaction until one week afterwards. This excess return is then multiplied by the acquirer’s market capitalization just prior to this event window to arrive at an estimate of the change in the acquirer’s market capitalization on account of the transaction. Table 4 provides the resulting estimated changes in acquirer market capitalization in column 3 for 8 transactions. In one of these transactions, three Italian banks (Banca delle Marche, Banca Etruria, and Cassa di risparmio di Chieti) were taken over by Ubi Banca. Market responses were positive for these 8 transactions, with the exceptions of the takeover of Sberbank Slovenia by NLN and the transaction involving Ubi Banca. Column 4 reports MG, i.e. the change in the acquirer’s market capitalization relative to acquired bank assets. The average MG is 3.0%, which is similar to the average AG of 2.9% in Table 3. Figure 2 plots the value of MG against the size of the acquired bank relative to the acquirer, indicating a negative relation. This is surprising, as Figure 1 suggests that acquirers of relatively larger targets can negotiate better terms, giving rise to larger accounting gains, AG. Despite these apparently better deals, stock markets do not reward acquirers for taking over relatively larger targets, perhaps because the implied risks are taken to be larger as well.

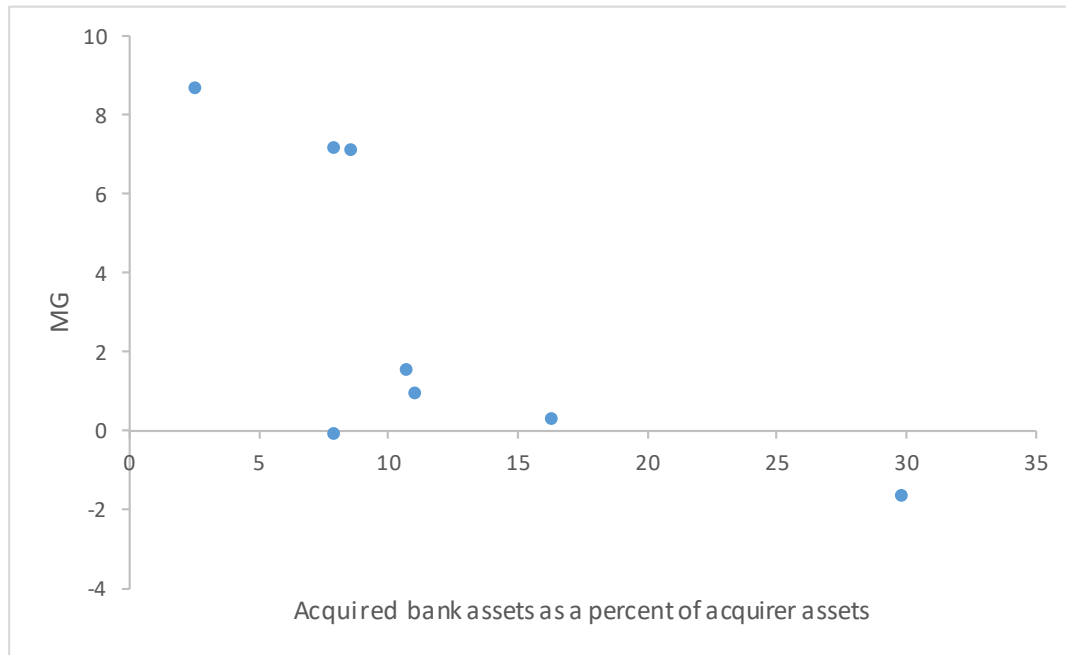
Table 4: Market gains in acquisitions of distressed banks in the EU

Acquired bank	Acquirer	Change in acquirer market capitalization, millions	MG in percent	Acquired bank assets as % of acquirer assets	Acquisition news date	Country
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Aigis Banca	Banca Ifis	26.18	8.70	2.57	23.May.21	IT
Banca Carige	BPER Banca	70.64	0.32	16.36	3.June.22	IT
Banca Popolare di Vicenza/Veneto Banca	Intesa Sanpaolo	4456.71	7.13	8.62	26.June.17	IT
Banco Popular Espagnol	Banco Santander	1419.12	0.96	11.05	7.June.17	ES
Cassa di risparmio di Ferra	BPER Banca	108.77	1.55	10.77	11.July.17	IT
Idea Bank	Bank Pekao SA	292.01	7.19	7.97	3.Jan.21	PL
Sberbank Slovenia	NLB	-0.74	-0.04	7.98	1.Mar.22	SI
Three Italian Banks	UBI Banca	-548.16	-1.63	29.88	10.May.17	IT
Mean		728.07	3.02	10.49		

MG is the change in acquirer market capitalization as a percent of acquired bank assets. The three banks taken over by UBI Banca are Banca delle Marche, Banca Etruria, and Cassa di risparmio di Chieti. These three banks together and Uni Banca had total assets of 33.6 billion euros and 112.4 billion euros, respectively. We excluded the acquisition of Panellinia Bank by Piraeus Bank in 2015 due to irregular share price movements of Piraeus Bank in that year. Sources: European Commission (2023b, Annex 9), financial reports from company websites, Bank Focus and Refinitiv, Bank Focus for share price information, news reports and press releases, and own calculations.

Figure 2 thus also suggests that resolution authorities should aim to tie smaller distressed banks to larger acquirers to bring about that the transaction creates stock market value for the acquirer, with the caveat that the figure provides information for only 8 transactions.

Figure 2: Change in acquirer market capitalization and the relative size of the acquired bank



MG is the change in acquirer market capitalization as a percent of acquired bank assets. Figures are from columns 4 and 5 of Table 4.

4. HOW TO PREVENT EXCESSIVE GAINS FOR ACQUIRERS IN BANK RESOLUTIONS?

High profits earned by acquirers in bank resolutions can reflect either a fair return for taking risk or supranormal returns amounting to a windfall gain. While a bank acquisition will always involve some risk, authorities should work to reduce this risk as much as possible with a view to increasing the acquisition price. The main avenue for this is to ensure that the potential acquirer is as well-informed as possible about the distressed bank.

Supranormal returns, to some extent, are to be expected in bank resolutions, as the market for distressed banks is not a perfectly competitive one, and hence, acquirers can generally capitalize on their unique characteristics and positions in particular banking markets. Supranormal profits arise from a lack of competition, and they can be reduced by increasing competition. In this section, we discuss how authorities can possibly enhance information availability and competition in bank resolutions to prevent excessive profits for acquirers in bank resolutions.

4.1. Information availability at the time of the acquisition

As suggested by the research of Granja (2013) discussed before, resolution costs can be reduced by additional public information about failed banks. Beyond financial reports and Pillar 3 disclosures, in the EU, bank investors have access to public information emanating from EU-wide stress tests and from European Banking Authority (EBA) transparency exercises. However, information from stress tests and transparency exercises is limited to rather few banks, as the 2023 EU-wide stress and current EBA transparency exercise only involve 70 and 124 banks, respectively. Increasing the samples of covered banks would, of course, be costly, but it would usefully add to public data availability also in resolution.

Beyond publicly available information, the provision of private information by resolution authorities to potential acquirers at the time of the resolution is key in reducing the perceived riskiness of the transaction. The BRRD to some extent regulates information flows from banks to resolution authorities and what resolution authorities do with his information, with implications for information provision by these authorities to potential acquiring banks. Resolution authorities can demand information from banks to inform resolution planning and execution (BRRD, Article 11). The Single Resolution Board (SRB), for instance, collects annual information from banks in resolution reports covering on- and off-balance sheet items and, among other things, information on core business lines, critical functions and related information systems.⁸ In case of a pending resolution, the resolution authority is required to request a valuation report of the assets and liabilities of the pertinent bank from an independent source, which can be temporarily replaced by a provisional valuation report drawn up by the resolution authority itself (BRRD, Article 36). Based on the various information at its disposal, the resolution authority can inform potential acquiring banks about the status of a bank earmarked for resolution. To reduce uncertainty, the resolution authority can offer for sale only those parts of the bank and associated assets that are relatively transparent. Bidding prices are likely to reflect the perceived completeness and accuracy of the information that is provided. While resolution authorities no doubt

⁸ See [2024 Resolution Reporting | Single Resolution Board \(europa.eu\)](#). The SRB monitors banks' capacity to provide relevant information to the resolution authority when required for a resolution (SRB, 2023, p. 21).

aim to optimize information flows to potential bidders in resolution cases, it is hard to say how successful they have been in this respect in resolution cases to date.

4.2. The role of competition among potential acquirers

A higher acquisition price can be expected if the resolution process is more competitive, with more banks available to be potential acquirers. In the EU, cross-border bank consolidation has been hampered by regulatory, tax, and legal barriers (Gardella, Rimarchi, and Stroppa, 2020), potentially restricting interest from foreign banks in participating in resolutions. Thus, a useful, though complicated, avenue to make the resolution process in the EU more competitive is to reduce barriers to international banks.

To ensure a competitive bidding process, the resolution authority generally shall not unduly favor or discriminate between potential purchasers (BRRD, Article 39, 2(b)). The resolution authority shall aim at maximizing, as far as possible, the sale price (BRRD, Article 39, 2(f)), but other considerations related to, say, market concentration and financial stability are surely important as well. Adequate resolution planning – leading to a sufficient level of competition among potential bidders – requires that the resolution authority prepares for acquisitions by a wide range of potential bidders rather than just by one or two preferred potential acquirers. Resolution plans are not made public, and thus one cannot easily ascertain how broadly these plans consider potential acquirers.

Resolution authorities can further increase competition by being ready to exercise the bridge bank option as an alternative to a direct sale, with a view to selling the failed bank at a later point (BRRD, Article 40, outlines the bridge bank tool). A bridge bank avoids the need to find an acquirer very quickly, and thus could increase the pool of potential buyers. In this way, the bridge bank option strengthens the bargaining power of the resolution authority relative to any potential acquirer, possibly leading to higher bids. To make the bridge bank scenario realistic, resolution authorities could regularly plan for bridge banks, even if the preferred outcome is a direct sale to another bank. The Single Resolution Board (2023, Figure 2) provides information on preferred options in resolution planning (bail-in and sale of business are the preferred resolution tool for 72 and 16 banks, respectively), but information of this kind does not inform on how frequently and extensively non-preferred options, such as the bridge bank tool, are prepared for as well.

5. CONCLUSION

Accounting gains for acquirers are shown to be higher in transactions involving relatively smaller acquirers. This could reflect that relatively smaller acquirers demand higher risk premiums, and it suggests that bank resolutions involving relatively bigger acquirers are cheaper to execute. Despite getting apparently better deals as based on accounting information, we find that stock markets reward smaller banks that take over relatively bigger targets less, as also stock market investors may perceive such deals to be relatively risky. While these findings are based on very small numbers of transactions, they suggest that resolution authorities should aim to tie distressed banks to relatively larger acquirers in resolutions.

High profits earned by acquirers in bank resolutions can reflect either a fair return for taking risk or supranormal returns amounting to a windfall gain. While a bank acquisition will always involve some risk, authorities should aim to reduce this risk as much as possible with a view to increasing the acquisition price. The main avenue for this is to ensure that the potential acquirer is as well-informed as possible about the distressed bank.

Supranormal returns, to some extent, are to be expected in bank resolutions, as the market for distressed banks is not a perfectly competitive one, and hence, acquirers can generally capitalize on their unique characteristics and positions in particular banking markets. Supranormal profits arise from a lack of competition. Resolution authorities can attempt to increase competition in bank resolutions by considering broad sets of possible acquirers in their resolution planning, and also by being ready to apply the bridge bank tool.

Possible questions.

Q1: Does resolution planning tend to identify a broad set of potential acquirers in anticipated transfers? Does resolution planning regularly involve preparing for a bridge bank?

Q2: To reduce uncertainty for an acquirer, the resolution authority can offer for sale only those parts of a distressed bank and the associated assets that are relatively transparent. How actively do resolution authorities plan for the possibility of a partial sale to reduce opacity?

REFERENCES

- Bennett, R., and H. Unal, 2015, Understanding the components of bank failure resolution costs, *Financial Markets, Institutions and Instruments* 24, 349-389.
- Brescia Morra, C., A. Pozzolo, and N. Vardi, 2023, Completing the Banking Union: The case of crisis management of small- and medium-sized banks, European Parliament. [Completing the Banking Union: The case of crisis management of small- and medium-sized banks \(europa.eu\)](#)
- Eule, J., W. Kastelein, and E. Sala, 2023, Protecting depositors and saving money, ECB Occasional Paper Series 203. [Protecting depositors and saving money: Why deposit guarantee schemes in the EU should be able to support transfers of assets and liabilities when a bank fails \(europa.eu\)](#)
- European Commission, 2023a, Communication on the review of the crisis management and deposit insurance framework contributing to completing the Banking Union. [eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023DC0225](#)
- European Commission, 2023b, Impact assessment report (regarding reform of the crisis management and deposit insurance framework). [eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023SC0225](#)
- European Parliament and Council, 2014, Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms. [DUMMY \(europa.eu\)](#)
- Gardella, A., M. Rimarchi, and D. Stroppa, 2020, Potential regulatory obstacles to cross-border mergers and acquisitions in the EU banking sector, EBA Staff Paper Series 7. [Potential obstacles M&A.pdf \(europa.eu\)](#)
- Gortsos, C., 2023, A reform of the CMDI framework that supports completion of the Banking Union, European Parliament. [A reform of the CMDI framework that supports completion of the Banking Union \(europa.eu\)](#)
- 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.
- Indap, S., 2023, The \$44 bn bailout bonanza, *Financial Times*, September 5.
- Ramos-Muñoz, D., M. Lamandini, and M. Thijsen, 2023, A reform of the CMDI framework that supports completion of the Banking Union, Transfers, funding, ranking and groups, European Parliament. [A reform of the CMDI framework that supports completion of the Banking Union \(europa.eu\)](#)
- Single Resolution Board, 2023, Resolvability of Banking Union banks. https://www.srb.europa.eu/system/files/media/document/2023-09-10_SRB-Resolvability-Assessment-2022.pdf

This paper finds that accounting gains to acquirers in bank resolutions in the EU are comparable to those in recent transactions in other major banking markets. Accounting gains for acquirers are shown to be lower in transactions involving relatively bigger acquirers. This suggests that resolution authorities should aim to tie distressed banks to relatively larger acquirers to reduce resolutions costs.

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