BANK CONSOLIDATION IN THE ECA REGION: A MULTICOUNTRY STUDY

SUMMARY REPORT

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To Paul Siegelbaum
1946-2003
Sector Director
World Bank

"An exceptional human being. He managed everything he did with competence, humor and compassion "

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CHAPTER 1. INTRODUCTION

1. Over the past 10 years, the financial sectors of the Europe and Central Asia (ECA) transition countries have undergone substantial reform and development. In most of these, immediately after the ending of the monobank system, large numbers of banks were established before any sound regulatory system was put in place. Against a background of weak regulation and an operating environment that would have challenged even well-managed banks, the "legacy banks" faced problems left over from the monobank system. The new private banks struggled with the circumstances associated with their own chaotic inception. These problems sooner or later posed challenges to financial stability. At a very early stage in this process, the consolidation of the banking sector first appeared on the public policy agenda. This study examines the role of this process, the main questions being:

- What have been the experiences of different ECA countries as regards banking sector consolidation?
- What has been bank consolidation's impact on overall financial sector development?
- What are the factors associated with "effective" and "sustainable" consolidation?
- What are the important lessons for policymakers wanting to ensure that future bank consolidation will prove conducive to financial sector development?

2. The study defines what is meant by effective and sustainable consolidation (box 1.1), as opposed to concentration (box 1.2), and applies these ideas to 10 ECA countries, which were chosen to provide contrasting experiences of both the scale and nature of the consolidation that has taken place. These are

- Three Central European countries, all candidates for European Union (EU) accession but illustrating different patterns of overall financial sector development (Bulgaria, Hungary, and Poland);
- Four Commonwealth of Independent States (CIS) countries (Armenia, Kazakhstan, Russia, and Ukraine) with a common early pattern of financial sector development but for which EU accession is not an issue; and
- Three Baltic states (Estonia, Latvia, and Lithuania), which also shared the early pattern of financial sector development common to former Soviet states but subsequently followed more aggressive financial sector reform programs driven, partly by prospective EU accession.

Box 1.1. The Parameters That Define Effective and Sustainable Bank Consolidation

The market should be consolidated around banks with a demonstrated cost advantage that supports above-average returns on assets and equity without customers being charged excessive overall spread and fee yields.

In those banks that gain market share there should be a demonstrable tendency for cost ratios to keep falling as the successful banks spread their relatively fixed costs over an ever-wider base of income-earning assets.

Capital adequacy requirements must be applied in a rigorous fashion, not only in terms of ex-post levels but also taking a view on whether the profitability of each bank's ongoing business is sufficient to sustain capital adequacy.

Banks need to be transparent (honest with both themselves and the authorities) about the risks they are taking. The authorities need to be alert to the window-dressing that sometimes is used to delay recognizing losses.

The banks gaining market share should convert the bulk of the deposit resources they are mobilizing into income-earning assets.

Box 1.2. Banking Sector Consolidation and Banking Sector Concentration

The terms "banking sector consolidation" and "banking sector concentration" have different meanings, and it is useful to distinguish them from the outset.

Concentration in any sector (including banking) refers to a process in which a subgroup of larger firms (banks) acquires control of an increased share of that industry's total activity. This process has a clear numerical implication and the level of concentration at any point in time is easily measured. There is much debate over which measure is the most appropriate, but those in most regular use are "concentration ratios" (the share of total industry activity accounted for by the "n" largest firms) and the Herfindahl index (the sum of the squared shares of industry activity of all firms irrespective of their size). The latter has the merits that it (a) includes all firms in an industry and (b) has clearly defined upper and lower values of 1.0 (total industry owned by one large firm) and zero (a large number of very small firms, each with tiny shares of the total). In the banking sector, concentration ratios are typically calculated for total assets as the broadest indicator of activity. But they could equally be calculated for total loans, customers, capital, and so on. High concentration levels often are interpreted as symptomatic of various industry performance features: diminished competition levels, high political bargaining power levels, high financial strength levels, or shock resilience. But none of these interpretations are particularly general or robust: all must be interpreted in specific industry contexts.

Consolidation is a less precise concept, referring to a process in which some firms merge with or take over other firms while a third group of firms closes down. It typically involves a reduced number of firms operating in an industry. This may be associated with an increase in concentration, or it may only mean that some small firms have merged or closed. It is more difficult to define a numerical measure of the degree of consolidation other than a simple count of the number of firms operating. Some studies that purport to measure consolidation only measure concentration.

To avoid this possible problem, the present study examines the concept of ***effective consolidation***, already defined in Box 1.1. This occurs when the ongoing process of merger, takeover, closure, and new entry results in a larger share of total industry activity being undertaken by the industry's "better" banks. Some writers appear to mean this when they use the word "consolidation" without "effective." Consolidation in this sense may raise concentration compared to banking systems that have not consolidated or only done so ineffectively, but this is by no means inevitable (for example, compare Poland and Ukraine). Even where measured concentration does increase, measures of bank and market performance are likely to be better in an effectively consolidated system than in non-consolidated or ineffectively consolidated ones.

Case study evidence indicates that standard concentration measures provide little insight into whether or not effective consolidation is occurring. During an era of intense transition, focusing on consolidation indicators would seem to offer greater analytical insights.

3. The country case studies were designed to:
   - Describe the history and results of banking system consolidation between 1991 and 2001;
   - Describe the nature of the pressures for and conditions of consolidation in each country by assessing the contribution of the regulatory environment and enforcement;
   - Assess the relationship between consolidation and bank efficiency and how it may have affected the depth of financial intermediation achieved in each country;
   - Compare the countries as to the type of consolidation and the overall financial depth achieved;
   - Develop conclusions about the merits and nature of appropriate policy actions to support the consolidation process and the preconditions for the likely success of such actions; and

- Reformulate these as policy recommendations that could be used by bank regulators and their advisors (including World Bank) to design future financial sector policy reforms.

4. The ECA countries have demonstrated very mixed experience with banking sector consolidation, but there are two recurrent observations. First, the environment for banking competition evolved only after the establishment in the early 1990s of an excessive number of banks, creating a situation in which some consolidation was almost inevitable. Second, the consolidation process almost inevitably started with a heavy administrative dimension. Studying the genesis and characteristics of this administratively driven stage of consolidation in different countries has allowed conclusions to be drawn on the appropriate role of public authorities in creating an environment conducive to greater competition in banking. Several different histories are suggested:

- In several cases where significant consolidation was evident, especially in the Baltics and Poland, governments have used administrative means to stimulate bank mergers or act decisively when major banks' problems needed resolution. This moreover took place against the background of a strengthening regulatory framework enforced in an unbiased way, with few favors for selected banks of historic importance. In effect the authorities stimulated consolidation in a way that helped market forces take a more decisive role in further consolidation once the earlier administratively driven stage was over. A clear and significant positive impact of the resulting *market internalization* of the consolidation process is apparent in these countries in terms of both their financial systems' overall efficiency and their deepening over time.

- In other countries, most clearly in Armenia and Bulgaria, the authorities took the same proactive approach to consolidation in the early stages but in ways that do not seem to have effectively stimulated increased efficiency and competition. In particular, the consolidation processes in these countries appear to have left the major legacy banks' competitive position broadly unchallenged and led to some ossification of the market shares established at the end of the administratively driven consolidation. Very often this was reinforced by a lack of political will to privatize remaining state banks. These countries can be said to have *overadministered* the consolidation process in a way that blunted the competitive advantage that should have accrued to more efficient and better-capitalized banks, delaying the internalization by market participants of both the need for and the means of effective consolidation.

- In some other countries, such as Ukraine and Russia, consolidation went much more slowly, with the authorities' potentially catalytic role undermined by a tendency to hold back even on the foundations of a sound regulatory structure (e.g. capital adequacy requirements rigorously assessed and enforced). One special factor is the influence of Soviet-era legacy banks and the remaining state-owned banks, as well as pressures to protect particular banks with strong political links. In these countries the process of consolidation can be said to have been *administratively undermined* because the critical conditions under which administrative intervention could have established a level playing field for competitive market forces were not met. In this environment, it becomes virtually impossible for market players alone to establish an effective consolidation process. This is evidenced by the very wide differences in bank performance in terms of efficiency (e.g., costs) across banks in the same countries

5. The present study systemizes these and other findings from the 10 ECA countries by placing each country within a framework that reflects the different stage of its banking consolidation. This positioning is done in terms of the administrative structures now in place and the banks' prevailing market attitudes. The case is made that effective and sustainable bank consolidation must be administratively encouraged at the outset and then sustained by a market-internalized process. The effectiveness and sustainability of this process is defined in box 1.1. There is evidence of greater financial sector re-deepening[1] where the consolidation process has been market-internalized (chapter 3). In those countries where is has not the wide discrepancies in levels of bank efficiency show up quite clearly.

6. The features described in box 1.1 can be characterized in quantitative and qualitative terms. This study assesses whether consolidation is taking place around more efficient banks using a number of standard numerical indicators of operating efficiency and sustainability: asset deployment efficiency; operating overheads; gross and net returns on average total assets; actual capital adequacy; and capacity to maintain minimum capital adequacy. Data for 220 banks in the 10 selected countries were used to calculate efficiency indicators that were then benchmarked against a set of similar indicators for leading banks in more advanced banking systems.

7. The remainder of this report is organized as follows. Chapter 2 surveys the literature on bank concentration and consolidation. It summarizes the discussion in Annex 1: an extended review of international bank consolidation experience in major developed markets, such as the United States and Europe, and Latin America's and East Asia's emerging markets. This chapter also provides the basis for formulating questions about the ECA countries and positioning these countries according to progress achieved to date. Chapter 4 synthesizes the main analytical results from the 10 country case studies and sets out the taxonomy that was used in guiding them. It also reviews selective evidence from the separate country studies in order to shed light on the different countries' progress in achieving deeper and more efficient financial systems. Chapter 4 summarizes this, while Chapter 5 discusses the main cross-cutting issues, as well as presenting selected conclusions and policy recommendations. Chapters 6 to 13 present the individual country case studies (the three Baltic states are presented as one combined study). These chapters locate each country within the taxonomy developed in chapter 3.

8. The study's findings as a whole should provide new insights to understand the strengths and weaknesses of the reforms already undertaken. Annex 2 explains the econometric method used in some sections.

[1] To varying degrees, the ECA region economies were "demonetized" by the exchange rate and price realignments that took place during the first transition stages, with a sharp fall in the ratio of deposits to gross domestic product (GDP). The re-deepening process can be measured by the recovery of this ratio.

CHAPTER 2. OVERVIEW OF LITERATURE AND INTERNATIONAL EXPERIENCE

9. The literature survey presented in detail in Annex 1 relates mainly to the interface between banking consolidation and financial sector development in a fairly general sense and across a wide spectrum of countries. This is the dimension of the problem most directly relevant to the World Bank's policy involvement in this topic in the ECA region. The sub-issues that are assessed include such matters as:

- Consolidation's effects on individual banks' performance (an extension of the more general "structure, conduct, and performance" paradigm of industrial economics[2]);
- Consolidation's influence on the regulatory environment's stringency and nature;
- Consolidation's impact on the availability of banking services, particularly how it affects the provision of small scale lending and other banking activities, especially in out-of-the-way locations.

10. These subtopics are clearly interlinked, both with each other and with the general financial sector development theme. For example, the cost and input efficiency gains that much of the research associates with consolidation constitute an important part of the progress associated with financial sector development (Federal Reserve Bank of San Francisco (1998). This chapter concentrates on issues that will help position the study countries relative to that literature, beginning with some key facts.

Some Facts

11. Three main facts about bank consolidation stand out:

- During the past two decades there has been a global tendency toward bank consolidation and for concentration of the sector to increase in many countries.
- The degree of bank concentration still varies greatly from country to country.
- There are no obvious benchmarks as to the "right" degree of consolidation and concentration, but there is a general presumption that fewer and larger banks are "better."

The United States

12. Evidence for the first of these two propositions is strongest in the United States, a country that has traditionally had a large number of individual, decentralized banks.[3] Annex 1, Table A1.1 shows both the number of banks in the United States and some standard measures of their

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[2] In the Structure, Conduct, and Performance paradigm, the following interpretations are typically attached to the three terms. "Structure" covers factors such as the enterprises' relative and absolute size, ease of entry, and degree of monopoly or oligopoly control as captured in concepts such as elasticity of demand for the output. "Conduct" relates to the enterprises' objectives and behavior in relation to price setting, government interaction, and attitudes to competitors (actual or prospective). The hypothesis is that conduct will be strongly influenced by structure and structure will affect "performance" (outcomes achieved in terms of profitability, cost levels and efficiency, prices charged, and so on).

[3] Mishkin (1998) notes that from the 1930s to the mid-1980s, the number of U.S. commercial banks (charters) was remarkably stable, in the 13,000–15,000 range. The profitability pressures in the next decade shrank the number of banks through bank failure and consolidation.

concentration. It is evident from these data that (a) the number of both U.S. bank charters and banking organizations[4] has contracted since 1988; (b) the degree of concentration has increased in that time; but (c) the number of separate banking offices has actually increased. As for bank concentration, the data show that now the largest eight banks[5] (charters) account for more than 35 percent of total bank assets, compared to 22 percent in 1988.[6] Behind this trend is the process of so-called "disintermediation," the erosion of banks' traditional intermediary role as financial innovations have made it increasingly possible for various non-bank intermediaries (NBFIs) to offer competing products especially to larger corporate borrowers. Disintermediation has pressured bank profits, while their cost advantages in mobilizing funds (liabilities) have been squeezed by competition. This has provoked both an increased search for cost economies of scale and scope and efforts to package banking services in more standardized and lower-cost packages (sometimes referred to inelegantly as "commoditization").

Europe

13. Comparable time series data for the major European countries are not as readily available. However, reasonably current point estimates for a variety of countries are provided in Goldberg and Rai (1996). They provide strong confirmation of the second tendency indicated above, the large cross-country variability in degrees of consolidation and concentration. Table 2.1 summarizes this information for 11 European countries.

Table 2.1. Concentration in European Banking

	Commercial Banks Only				Commercial and Savings Banks			
	No.	**CR3**	**Herfindahl (%)**	**Concentration**	**No.**	**CR3**	**Herfindahl (%)**	**Concentration**
U.K.	68	60%	15%	High	135	50%	12%	High
Denmark	26	85%	30%	High	31	72%	21%	High
Sweden	5	70%	23%	High	5	70%	23%	High
Switzerland	118	63%	14%	High	170	57%	12%	High
Belgium	35	71%	22%	High	42	57%	13%	High
Finland	7	91%	29%	High	7	91%	29%	High
France	119	51%	12%	High	151	49%	11%	Low
Austria	39	49%	11%	Low	50	41%	8%	Low
Italy	41	33%	7%	Low	58	28%	6%	Low
Spain	59	45%	9%	Low	125	27%	4%	Low
Germany	121	31%	6%	Low	214	26%	4%	Low

Source: Goldberg and Rai (1996)

[4] A banking organization is defined as a top-tier bank holding company or a stand-alone bank. Therefore, there can be more charters than banking organizations.

[5] CR8 in the table refers to the eight-bank concentration ratio measured by reference to assets. The Herfindahl index is defined as the sum of squares of each bank's share of total deposits. It is calculated for Metropolitan Statistical Areas only.

[6] The Herfindahl measure indicates a modest reduction in bank concentration. This is mathematically consistent with the concentration ratios evidence to the extent that size equality within the bank population as a whole is moving toward greater equality at the same time that a few banks are becoming larger and more dominant, as indicated by CR8. This is more likely to be possible in a situation such as that of the United States, where there is such a large number of banks. In some of the empirical studies cited below, differences in the estimating coefficients on a Herfindahl measure compared to a CR3-type measure are used to differentiate between sectorwide consolidation as an influence and the relative market power of a few large banks.

14. It has been noted that Europe's concentration measures indicate a generally greater degree of concentration than that of the United States. Table 2.1 presents the share of total banks assets attributable to the three largest banks (the CR3 measure) rather than the CR8 measure shown for the United States. Even so, the European concentration indices are typically much higher than the 36 percent found in the U.S. data. Indeed, all seven European countries classified by Goldberg and Rai as highly concentrated have CR3 ratios of at least 50 percent (49 percent when savings banks are included), and a subset of those seven countries, including notably Denmark and Finland, have CR3 ratios greater than 80 percent.[7] The wide variation in concentration degrees across countries is clearly evident. The least concentrated countries, such as Germany and Italy, have CR3 ratios that are substantially below the United States, while the more concentrated, such as Finland and Denmark, have much higher ratios. Hence the third main proposition above. In approaching the study for the ECA countries it is not possible to claim any global "norm" to which some eventual convergence is likely.

Emerging Markets

15. Similar conclusions emerge from reviewing consolidation in emerging market economies. The general consensus seems to be that consolidation still has a long way to go in most emerging market economies, notwithstanding the bank closures that occurred after the various recent financial crises. For example there were almost 12,000 deposit-taking institutions in the Republic of Korea, Malaysia, the Philippines, and Thailand in 1999 (more than in 1990), of which more than 1,000 were banks. The concentration degree varies significantly across the emerging market countries as a whole. For example Israel and Thailand have concentration ratios (CR5) of more than 90 percent, whereas Colombia, Korea, and Malaysia have CR5s of around 30 percent. These ratios and other data for a subset of emerging market economies are listed in Annex 1, Table A1.3. Note that these countries combined account for 178 of the world's 1,000 largest banks. However, most of these are in just *eight* economies, led by Brazil, Hong Kong, India, Malaysia, and Russia. Most emerging economies have three or fewer banks in this category; banks that are small by international standards are the norm in most emerging and developing economies. Once again, the evidence from this set of countries provides few if any pointers to the benchmarks that could guide ECA consolidation policies.

Europe and Central Asia (ECA)

16. ECA's situation is clearly different because most of these countries' starting points for independent banking in the late 1980s involved highly consolidated and concentrated banks. There followed a disorderly new-entry process that quickly reduced concentration, radically in Russia and some other countries. Still, it was widely recognized that this situation was temporary. The ECA countries' present situation reflects a partial adjustment to this early history, from 1987–1992. During these years several ECA countries (mostly in the former Soviet Union (FSU)) allowed relatively unrestricted entry to banking. Other countries, mainly in Central Europe, were more restrictive. Subsequently, the ECA countries have shown some variability in the speed at which banking has re-concentrated. A brief overview of the current situation and the

[7] There is a problem of interpretation of the Goldberg and Rai data. Their paper makes use of the Compustat Global Vantage database that contains data for Europe's largest banks. However, Table 2.1 is based on commercially purchased data from Sheshunoff's Investment Services. We do not have information on the coverage or definitions used for this source, although it is certainly more comprehensive than the Global Vantage database. The results in table 2.1 need to be read in that light.

trends during the past decade can be found in Siegelbaum and Fleming (2000) and are summarized in Table 2.2.

Table 2.2. Trends and Differences in the ECA Countries

No. of Banks	**1991**	**1993**	**1997**	**2000**
Central Europe				
Albania			9	10
Bulgaria	78	41	34	35
Croatia		43	61	45
Czech Republic		52	50	40
FYR Macedonia			22	21
Hungary	35	40	41	39
Poland		87	83	75
Romania		20	33	35
Slovak Rep.		18	25	22
Slovenia	40	45	34	25
Group Average	***51***	***43***	***38***	***34***
Baltics				
Estonia		21	12	6
Latvia	14	62	32	22
Lithuania		26	12	14

	1991	**1993**	**1997**	**2000**
CIS				
Armenia			30	31
Azerbaijan	43	164	99	59
Belarus			38	27
Georgia		179	53	33
Kazakhstan	72	204	81	48
Kyrgyz Republic	10	20	20	22
Moldova	15	16	22	20
Russian Federation	1306	2009	2526	2084
Tajikistan	1	15	28	17
Turkmenistan			67	13
Ukraine	76	211	227	195
Uzbekistan	30	21	30	35
Group Average	***194***	***315***	***268***	***215***
Exc. Russia	***35***	***104***	***63***	***45***

Source: Siegelbaum and Fleming (2000)

17. In the three country groups—Central Europe, the Baltic states, and the CIS—the tendencies conform to an inverted "U" pattern, indicating an increase in the number of banks through the mid-1990s followed by a pronounced decline through to the year 2000. By that date the average number of banks in the Baltic states had converged to the low number found in several Northern European countries (Table 2.1). The slightly higher number of banks found in Central Europe was generally consistent with numbers seen in EU countries such as Austria, Belgium, and Italy, as was the typical number in the CIS countries, excluding Russia. Russia seems to be an outlier in this sense, although it is of course a much larger country.

What Might Be Different About ECA Countries?

18. Fries and Taci (2001), Roe and Siegelbaum (1998), and other authors describe the unique development features that faced the ECA countries' financial systems after the Cold War. To quote Fries and Taci, "these institutions were primarily book-keepers for the planned allocation of resources, providing 'monetary' accounts for resource flows. Credits were allocated to enterprises on the basis of planned investment priorities, and the repayment of credits was subject to bargaining. Moreover, to facilitate their role in the planning process, socialist banking systems were highly concentrated, with little separation of central banking and commercial banking activities" (p. 1). The last phrase from this quote is key. In 1989, these banking systems were concentrated systems. It was unlikely that their subsequent evolution would be unidirectional. Some deconsolidation was expected to be a part of the creative destruction needed to create a market-friendly banking system from the socialist legacy. Hindsight suggests that this is indeed what happened (Table 2.2). The monobanks and few specialist sectoral banks rapidly split up to create a peak number of 2,576 institutions in Russia in 1997; 230 in Ukraine by 1995;

and 210, 226, and 204 respectively in Azerbaijan, Georgia, and Kazakhstan by 1994 (Siegelbaum and Fleming 2000). A similar but more muted phenomenon was evident in the Central European economies. Subsequent to these mid-1990s peaks, most ECA countries have seen some limited reconsolidation. However, only in a few isolated cases has this tendency been strong (Estonia is the foremost example), and in certain countries, such as Russia and Ukraine, it has been very weak and possibly of little real significance.

19. There has been little direct analysis of the bank consolidation process in ECA, and relatively few studies examine performance on a bank-by-bank basis. Most of the relevant literature provides insights into the consolidation issue only indirectly. Papers that both used bank-by-bank data and tried to specify some of the particular circumstances of transition-country banking include Fries, Neven, and Seabright (2001) and Fries and Taci (2001).

20. The first of these papers focuses on the notion that some ECA banks apply reasonably prudent lending policies and attitudes to their capitalization. In short, they are motivated in much the same way as Western banks and are likely to behave in ways that mirror the consolidation experience of banks in mainstream market economies. For example, if one of these banks faces a decline in profitability, its commercial instinct will be to try to rebuild capital and defend its banking franchise. These banks can provide a benchmark against which to assess a second subset of banks. This second-set of banks deviate from sound risk management incentives in ways that might appear odd in Western banking but which students of banking in certain transition countries know to be relatively common. Behavior here is motivated by some or all of the following conditions:

- The banks have severely impaired capital (and by implication, a low value on their banking franchise) and therefore have little to lose by adopting extremely risky behavior.
- The banks operate in a seriously unreformed business climate in which it is hard to distinguish sound from unsound clients, in part because of unsatisfactory accounting practices. The informational imperfections of such a climate mean that lending to unsound clients may be quite common.
- Some of the banks can afford to be reckless because they perceive that they have political protection, either because of the “too large to fail” notion or more insidious political connections.
- High inflation or inflationary expectations distort the balance sheets’ and profit and loss accounts’ true state and in turn, distort bank decision-making.

21. Fries and Taci (2001) and Fries and others (2001) attempt to confirm this dichotomy of bank behavior by splitting a sample of 515 banks from 16 ECA countries by “high-reform” and “low-reform” states. Annex 1 of this report presents their findings in greater detail. The results confirm the a priori position that care needs to be taken in applying standard consolidation results, derived from the United States and other market economies, to ECA countries. Although an expanding group of ECA countries have banks that operate much like Western banks, these institutions have not experienced the same powerful consolidation pressures seen in the United States, such as disintermediation pressures from powerful NBFIs. The typical bank in a high-reform state remains relatively small and faces a reasonable amount of competition from other relatively small banks. Therefore it is no great surprise to see the small impact of market share on

costs and pricing found in these studies. In these countries a far greater impact on cost efficiency, pricing, and performance seems to be coming from banking system restructuring through privatization and new entry, including foreign banks.

22. In the low-reform states, bank consolidation results must be viewed through the fog of incomplete corporate restructuring, inadequate accounting information, large-scale but opaque political interventions, and substantially distorted incentives. Collectively, these influences mean that many changes in banking sector structure that might be expected to lead to improved bank performance will not necessarily do so.

Conclusions

23. This brief review of a large literature presents many research challenges regarding bank consolidation in the ECA countries. The most significant finding is the great variation in experiences evident across different countries and regions. In spite of "globalization's" popular connotations, banks around the world have experienced its competitive pressures extremely unevenly. Globalization of finance may be increasing, but it has not yet translated into uniform international standards of bank size or performance. The available cross-country cost and efficiency indicators suggest that there are huge differences between banks in different countries (operating costs in Latin America are almost three times those in the United States, for example). Although the U.S. banking industry has definitely experienced huge competitive pressures in recent years, leading to a large reduction in bank numbers, this has not been the worldwide experience. For example, there are more deposit-taking institutions in Asia today than in 1990. In Europe, there is major cross-country variability in banks' numbers and degrees of concentration. This also is true of emerging market economies in general, particularly in the ECA countries that are this study's main subject.

24. Although bankers support the common view that larger banks will be needed for competitive survival in the years ahead, it is unclear what this will mean in practice for emerging and transition countries. The U.S. experience, mostly based on data from very large banks, does suggest that cost and other efficiencies increase with a bank's size. However, these gains typically are associated with total asset sizes that are large by the standards of many ECA countries—US$100 million to US$10 billion, depending on the study. But many of the largest banks in individual ECA countries are not much larger than the smaller of these two figures, and all are much smaller than the larger of the two. For example, the two leading Russian banks, Sperbank and Vneshtorgbank, have total assets of US$27 billion and US$5 billion respectively. Therefore we cannot automatically rely on other countries' experiences to formulate a norm for a banking system's "correct" size or a "correct" concentration level. This conclusion is supported by the wide variations in bank size found in mature banking systems, such as Europe.

25. Another important conclusion is that consolidation pressures on banks are complex and involve much more than the strong market-based competitive pressures that are evident in the United States. In emerging market economies, administrative decisions about stronger sector regulation and its liberalization, including the privatization of banks, have in some cases played a significant role in accelerating consolidation. But also important were the force majeure interventions that were landed on the authorities in the aftermath of the various Latin American, Asian, and Central East European/former Soviet Union crises of the past decade. The fact that many countries' banks have survived for long periods in spite of cost and other performance

records that would be woeful by international standards tells us that a variety of protective mechanisms are at work. The manner in which these mechanisms counteract what might otherwise be a strong push from market forces, is an important aspect of why consolidation proceeds at different rates in different countries. In the ECA transition countries it is to be expected that such factors would play an unusually significant role: after all, these countries are all transitioning from full socialized control to market economies. They are certainly doing so, at different speeds and in different ways.

CHAPTER 3. A FRAMEWORK FOR ANALYZING CASE STUDY RESULTS

26. This chapter first develops a structure and taxonomy for comparing the consolidation experiences of different countries, before providing an overview of the main findings from those comparisons.

The Stages of Bank Consolidation: From Administratively Driven to Market-Internalized

27. In the early days of the ECA transition (the early 1990s) the presumption was that, provided barriers to entry were removed and a level regulatory playing field established, a number of successful private banks would emerge to challenge and eventually gain ascendancy over the large legacy banks. It was almost taken for granted that outdated infrastructure and organization, excessive cost bases, and weak loan portfolios would competitively hobble the legacy banks. Partly due to primitive licensing procedures, lax initial real minimum capital requirements, and delays in establishing effective ongoing supervision, a common early banking transition experience was the creation of large numbers of very small private banks. Most were incapable of challenging the big legacy banks except in soft provision of loans and payments services to connected shareholders. These institutions were described as "pocket banks." Even where large new banks also emerged, they often were characterized by the same governance problems that confronted the legacy banks and by lackluster financial performance.

28. Very quickly the inadequacies of new private bank managements' and asset quality problems in legacy banks created conditions for systemic banking crises, especially where functioning interbank markets speeded up the transmission of problems between banks. Typically these crises emerged within two to four years of the beginning of market reform and put the reconsolidation issue—by force majeure—onto the official agenda. Thus, where it has happened, the first stage of consolidation has always been administratively driven. However, a significant dichotomy in official attitudes to consolidation quickly emerged related to the authorities' degree of problem recognition in each country. Officials in a first group of countries held on too long to the simplistic view that large numbers of banks would guarantee competitive outcomes. They also confused legitimate concerns about depositors' protection and the supply of new credit with concerns about the need to protect *specific* banks that had previously dominated deposit mobilization and credit creation. By contrast, officials in some other countries seem to have had a more sophisticated early view of what underpins an effective banking system. This view revolved around the constraints that proper regulation logically places on the ways in which banks make the profits necessary to create the capital required to sustain ongoing growth. This second approach had a more neutral attitude toward the number and type of banks that should constitute a reformed banking system.

29. Even where the authorities recognized the need for consolidation, most did not have the luxury of laying down sound consolidation administrative foundations before being hit by systemic bank crises apparently requiring large-scale intervention.[8] These interventions typically included some re-nationalization where legacy banks had been privatized, and generalized portfolio clean-ups and recapitalization in order to strengthen the sector before privatization.

[8] Whether or not these actually were required can be debated—often the banking systems involved were small relative to the economies supported, and liquidating rather than restructuring failing banks should have been considered.

Parallel to this, the pillars of a sound regulatory framework were usually set up, at least in principle.

30. Having been forced to face the issue of consolidation by widespread failures, the authorities then had to decide whether their role was to drive or facilitate that process. In the first group of countries, the commitment to preserve major national (often legacy) banks led to a highly interventionist approach that saw authorities rebuilding their banking systems to some master plan. Under this model, failing banks were often grouped together or merged into legacy banks in a way that tended to preserve existing market dominance patterns. This approach also tended to stratify the market. For example, fears that consolidation could lead to over-concentration sometimes resulted in new groupings of failed banks that were still too small to directly challenge remaining legacy banks. Overall, this sort of consolidation process could be described as *over-administered*, because the authorities effectively set the terms for future competition (at least in the near term) by virtue of their strong views as to what the sector's "correct" structure should be. Interestingly, as several of the case studies illustrate, even introducing significant foreign capital as one element of an administratively driven consolidation can take a long time to counteract such prescriptive competitive positioning.

31. In some other countries, however, the authorities did manage to lay sound administrative foundations for consolidation but avoided the risk of over-administering the process. Authorities in these countries recognized and were able to support two important features of a truly market-oriented bank regulation:

- That in the aftermath of a crisis, protection of specific banks that have previously dominated deposit mobilization and credit creation almost always works against the true interests of depositors and the speedy re-establishment of the right environment for the supply of new credit; and
- That international bank regulatory norms, when fully enforced in an impartial way, should lead to the more efficient banks accumulating capital faster than their less well-managed competitors, thus creating the expanding capital base to fund the faster expansion implicit in gaining market share.[9]

32. The regulatory approach following from this second approach leads more directly to a level playing field for market participants, with absolutely no hidden protection for larger established or legacy banks. No obstacles are put in the way of more efficient banks gaining market share, either by taking business from weaker rivals or acquiring those weaker rivals and commercially

[9] These considerations are particularly important in ECA's transition countries because the financial sector re-deepening process described in Footnote 1 means that bank balance sheets must for a time grow significantly faster than GDP. Given that access to capital markets may be very limited, a bank in a market that is doubling in size each year must earn a return on equity of more than 50 percent just to hold market share and organically maintain capital adequacy at safe minimum levels. This problem is even more acute in countries with less developed financial sectors and rising minimum capital requirements. Very often banks in these countries are owned by small groups of connected shareholders that started with limited capital injections and saw this capital grow rapidly in the very high profitability environment that often characterized early transition stages. They may have become used to extracting shareholder value by way of dividends or favorably priced services. A maturing financial sector and rising minimum capital requirements usually turns this situation around dramatically. At this stage, the banks' need for new capital represents a medium- to long-term shareholder resources commitment. Hence the growing pressure for organic creation of the required extra capital, or self-capitalization as it is called in this study.

restructuring their business along more efficient lines. Where administrative actions favor such a competitive dynamic market, participants must come quickly to a realistic appraisal of their own best survival strategy (organic growth, acquisition, merger or being acquired) and the consolidation process can be said to have become market-internalized.

33. Box 3.1 summarizes the main features of each stage of the consolidation process as described in the previous three paragraphs. These features together provide a firm basis for categorizing the different bank consolidation processes that are evident in the case study countries.

Box 3.1. Administrative and Market Consolidation Drivers

Administrative foundations required for any meaningful consolidation:

- A full range of regulatory requirements based on International Accounting Standards (IAS) and Basle Core Standards
- Realistic minimum capital requirements
- Objective and robust enforcement of all regulations, including minimum capital requirements
- Prompt intervention to resolve problems in noncompliant banks, especially where capital is seriously impaired
- Strong and enforced connected lending limits
- A general presumption in favor of privatization
- Enforceable property rights
- A clear framework limiting budgetary support and deposit insurance
- Absence of gross politicization or corruption of regulatory processes

Features typical of **over-administered consolidation**:

- Overemphasis on closing small troubled banks but a tendency to delay tackling problems at major legacy banks
- Overemphasis on importance of legacy banks, verging on hidden support
- Continued political influence over ownership
- Some political direction of remaining state bank activities
- Plans to privatize remaining state banks tend to slip
- Banking system stratified, with little competition between strata and general stasis in market shares
- Lack of any clear competitive advantage to improving efficiency

Market –internalization implies:

- Lower-cost banks (including provisions) able to use lower margins to win business from higher-cost banks
- Lower costs and rising market shares translate into higher profitability and a rising share of total sector capital
- Better capitalized banks able to absorb assets from failing banks or finance acquisition of weaker banks
- No restrictions on entry of new, well-capitalized (often foreign) banks or their freedom to win market share
- Removal of any hidden protection accorded to particular banks
- Any remaining state banks on a clear path to privatization
- A demonstrated if not explicit administrative commitment not only to eliminate banks that fail to meet critical regulatory standards, but also to treat expansion plans of effective banks favorably

A Proposed Taxonomy

34. The features in box 3.1 that characterize different types of consolidation can be used to categorize countries into a number of broad groups. The distinction maintained in all 10 case studies is first of all between consolidation that is mainly driven by administrative interventions and consolidation that has been fully internalized by market participants. This distinction also maps well into the dichotomy used in Fries and Taci's 2001 study as discussed in the previous Chapter.[10] This two-way taxonomy is not of itself sufficient to categorize different country

[10] Details can be found in chapter 2.

approaches across ECA. Various differentiations are observed in practice within either one of the two approaches, because pressures on policymakers are varied and complex. There may be several different reasons why the authorities might choose to exercise some administrative policy influence over the banking system's emerging structure, some of which will be more market-sympathetic than others. For example, the authorities might try to exert influence because of a deep-seated belief in the "U"-shaped nature of banks' cost curves and the associated idea that the country needs more large banks. They may do it *force majeure* because they have been landed with a large number of failed banks after a major financial crisis. They may do it because they wish to favor a particular bank or group of banks for political reasons. Therefore, the market-administrative dichotomy can hardly be watertight.

35. A variety of intermediate cases, involving elements of each approach, might be a better representation of most countries' experiences. In order to accommodate this, each part of the initial two-way dichotomy is divided in a manner that reflects the alternative approaches implied in box 3.1. This broader taxonomy is shown in the 3 X 2 matrix in Figure 3.1.

Figure 3.1. Categories of Consolidation Experience: The Structure

	MARKET ATTITUDES	
	Antipathetic *neutral*	*internalized*
undermining **ATTITUDES OF AUTHORITIES**	**A**	**B1**
strongly encour-aging	**C1**	**D**
over-administered	**C2**	**B2**

36. Area D defines a market-driven consolidation in which the banks and market are taking the lead to deliver most of the competitive features shown in the right-hand column of box 3.1 and the regulatory bodies play a strongly encouraging, complementary, or facilitating role by exercising their administrative discretion in a way that eliminates hidden support to undercapitalized and inefficient banks as indicated in box 3.1's left-hand column (but have not gone so far as to try and administer the whole process). Area A defines the opposite extreme and describes a situation where not much consolidation is happening. Here market forces are *not* providing much consolidation momentum. Indeed, any consolidation forces are likely to be

disabled quickly because the regulatory authorities are operating in a largely passive mode or even discouraging any consolidation by *failing* to respond to the administrative drivers indicated by box 3.1's left-hand column.

37. Areas C_1 and C_2 represent the most likely intermediate outcomes. Here the authorities have put in place the right administrative framework for consolidation but the process has yet to be internalized by market participants. In area C_2 this is because the process has been over-administered—the authorities installed the right framework to enable consolidation but have tried to bring about a particular number and mix of surviving banks. This situation would have the features described in Box 3.1's bottom left column and would inevitably blunt any scope for the process to become market-internalized. Area C_1 is an intermediate case in which the authorities have neither over-administered the process nor done quite enough to support full market internalization. Three of the 10 countries seem to inhabit this territory.

38. Areas B_1 and B_2 are less likely intermediate outcomes, and no examples were found in the 10 case-study countries. This is because no consolidation process is likely to be strongly market internalized if the authorities are actively undermining the process or over-administering it.

The Categorization of the ECA Countries

39. The case study results suggest that the 10 selected ECA countries fit the 3 X 2 categorization as indicated in Figure 3.2.

Figure 3.2. The Positioning of the Case Study Countries

ATTITUDE OF AUTHORITIES	MARKET ATTITUDES	
	Antipathetic *neutral*	*internalized*
undermining	UKRAINE A RUSSIA	➔ B1
strongly encouraging	LATVIA C1 KAZAKH HUNGARY	POLAND D LITHUANIA / ESTONIA
over-administered	BULGARIA ARMENIA C2	

40. The usefulness of this classification is best illustrated by first considering the two polar extremes from our sample of countries: Ukraine and Estonia/Poland. The case study evidence (see chapter 8) places Ukraine squarely in segment A. Banks in that country do not yet seem to be experiencing any strong market consolidation pressures, and the number of operating banks has declined only very slowly. This is partly because the financial services markets are still significantly distorted and are impaired by the institutional and legal framework's various inadequacies. Also, some weakly capitalized and relatively inefficient banks have retained

significant market share and even increased that share. As will be shown later, one important manifestation of market failure is that many significant banks in Ukraine have operating ratios that are severely out of line with more established banking systems' good practices—high operating overheads, wide spreads, and negative self-capitalization ratio indicators.[11] Above all the rates of profit and capital growth the "successful" banks are achieving are insufficient to support the fast growth of bank assets that Ukraine needs.[12] None of the market conditions defined in box 3.1's right-hand column are truly present; and at the same time Ukraine's regulatory authorities have not yet taken an active role regarding the various factors that promote faster consolidation shown in box 3.1's left-hand column. There is increasing rhetoric about the need to change the banking sector's structure but not yet much concerted action to do so.

41. At the opposite extreme is Estonia (chapter 6), which case-study evidence places in segment D. The Estonian authorities have consistently driven an otherwise market-internalized consolidation process to reduce significantly the number of banks operating in what is a small economy in absolute terms (population 1.5 million, total GDP US$5 billion). The instrument has been the uncompromising enforcement of solvency requirements and selective intervention where liquidation genuinely would have proved economically destructive. All of the conditions for market-internalized consolidation listed in box 3.1 were met. Administrative pressures, reinforced later by market-based action, gradually reduced the number of banks to six and opened the way to extensive Scandinavian ownership, which now controls just under 95 percent of total banking system assets. It also has led to significant concentration (one bank accounts for just over half of total banking system assets), but there are no obvious signs that this has resulted in significant abuses of monopoly power. A similar situation can be said to apply in Poland but the pace of consolidation in its much larger economy has been less dramatic.

42. Although the available evidence does not support such a precise placing of the other seven countries, their positions relative to the two extreme cases seem reasonably clear. This positioning is based on the case study discussions and various performance indicators (defined below) that proxy the principles of effective consolidation as defined in box 1.1. The positioning of countries and their degree of deviation from box 3.1's essential principles is described for all the case-study countries in box 3.2. This also provides a useful basis for assessing the types of further reforms that the various countries will need in order to achieve greater financial sector depth and efficiency.

Box 3.2. Scoring Effectiveness of Consolidation Processes in Case-Study Countries

	Pol	Est	Lit	Lat	Kaz	Hun	Bul	Arm	Rus	Ukr
Administrative foundations										
♦ IAS/Basle standards adopted	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
♦ Realistic minimum capital requirements	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
♦ Objective, robust & enforced regulation	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗

[11] This ratio will be explained in detail later. It is a measure of whether banks are achieving sufficient profit to build their capital to defend a capital adequacy ratio of 10 percent. Any value below zero implies that a bank does not meet this condition.

[12] As chapter 8 explains, some Ukrainian banks have seen extremely fast credit growth since 2000. However, since this growth is not located in the cost-efficient banks, it cannot generate enough capital to be self-sustaining unless various forms of official protection substitute for bank efficiency.

♦ Prompt moves against non-compliance	✓	✓	✓	✓	✓	✓	✓	✓	×	×
♦ Strong connected lending limits	✓	✓	✓	✓	✓	✓	✓	~	×	×
♦ Presumption favoring privatization	✓	✓	✓	✓	✓	✓	✓	✓	×	×
♦ Enforceable property rights	✓	✓	✓	✓	✓	✓	✓	×	×	×
♦ Framework limiting budgetary support	✓	✓	✓	✓	✓	✓	✓	×	×	×
♦ No gross politicization or corruption	✓	✓	✓	✓	✓	✓	✓	~	×	×
Tendency to overadministration										
♦ Overemphasis on small bank failures	×	×	×	×	✓	✓	✓	✓	✓	✓
♦ Delays tackling legacy bank problems	×	×	×	×	×	×	×	~	✓	✓
♦ Over-importance of legacy banks	×	×	×	×	×	~	✓	✓	✓	✓
♦ Political influence over ownership	×	×	×	✓	✓	✓	✓	✓	✓	✓
♦ Some political direction of state banks	×	×	×	×	×	×	×	×	✓	✓
♦ Slippage in privatization plans	×	×	×	✓	×	~	~	×	✓	✓
♦ Stratification of market shares	×	×	×	×	×	×	×	×	✓	✓
♦ No clear advantage to efficient banks	×	×	×	×	×	×	×	×	✓	✓
Market internalization										
♦ Best banks taking business from worst	✓	✓	✓	~	~	×	×	✓	~	×
♦ Best banks gaining share in total capital	✓	✓	✓	~	✓	×	×	✓	~	×
♦ Best banks absorbing weaker banks	✓	✓	✓	✓	×	×	×	×	~	×
♦ No obstacles to sound new entrants	✓	✓	✓	✓	✓	✓	✓	✓	×	×
♦ No protection of state/legacy banks	✓	✓	✓	✓	✓	✓	✓	×	×	×
♦ State banks on path to privatization	✓	✓	✓	×	~	×	~	✓	×	×
♦ Commitment to eliminate weak banks	✓	✓	✓	✓	✓	✓	✓	✓	×	×
♦ Favoring of best banks expansion plans	✓	✓	✓	✓	~	~	×	×	×	×
		Effective			*Incomplete*		***Overadmin***		***Undermined***	

KEY TO SYMBOLS USED: ✓ Unambiguously True/Applied
× Unambiguously Not True/Not Applied
~ Ambiguous (neither clearly true nor untrue or not clearly applied/applicable)

43. Bulgaria and Kazakhstan are intermediate cases in which the administrative interventions listed in box 3.1's upper left-hand column above have been activated in the generally right direction—and often quite aggressively—but in a manner that has yet to deliver the full benefits of a competitive process fully internalized by market participants. In these cases the authorities' laudable and often expensive[13] interventions have created to varying degrees the environment needed for market forces to begin the next consolidation stages towards completion (that is, the basic requirements to concentrate growth on those banks with clear cost advantages and the ability to generate the capital to sustain growth). In Bulgaria's case (chapter 10), the authorities did institute some early, strong administrative measures to consolidate banks in some of the areas listed in box 3.1's left-hand column. However, the potential beneficial effects were wholly overwhelmed by the failure to eliminate the distortions and perverse incentives that both banks and state-owned enterprises (SOEs) faced, at least until after the 1996 financial crisis. The earlier reforms also established an enhanced role for the three largest existing banks that can also be

[13] The major costs have been those associated with taking over bad loan portfolios and recapitalizing banks. They have been extremely high as a percentage of GDP in Bulgaria and Hungary.

considered "legacy" banks from the former system, a key feature of an over-administered consolidation. Kazakhstan (chapter 12) has moved further to internalize the market influences on consolidation, hence its position to Bulgaria's right in Figure 3.2. From a peak of 203 in 1993, the number of banks has reduced to 41 under strong central bank direction, and mergers and acquisition activity complement active competition between banks**.** Nevertheless, the banks with the best financial performance indicators have not gained market share since 1998, and the relatively low level of capitalization is a major challenge for the continuation of a market-driven approach. Therefore, the sector's future growth is not unambiguously assured, and Kazakhstan's financial depth remains surprisingly low given its sound policy framework.

Characterizing Effective Consolidation

44. What regulators needed to understand as they faced the mid-1990s challenge of excessive numbers of weak banks was that fully enforced international bank regulatory norms give well-run banks very little choice in the way they expand their businesses. There is an important distinction between expansion based on greater risk-taking, versus expansion based on genuine cost advantage over competitors. Risk-based capital adequacy rules mean that expanding into riskier areas of business to generate the higher profits needed to support continued growth will disproportionately raise the capital required to operate. When sound risk-based capital adequacy rules are supported by provisioning rules that require realistic and timely recognition of risk-related losses, then it quickly becomes difficult to generate enough retained income to support ever-greater risk-taking. By contrast, a bank that establishes a solid stream of capital additions from retained income because it has a cost advantage over its competitors can sustain high growth rates for much longer because the increased capital requirement does not grow any faster than the business volume. These considerations are of fundamental importance in a transition context where access to capital markets to raise new equity is often limited and the growth rate that must be achieved to retain market share, let alone increase it, can be very high.

45. The qualitative requirements of effective bank consolidation as defined in box 3.1 can be summarized as follows:

- Rigorous application of capital adequacy requirements,
- Good standards of regulatory governance and low tolerance for insolvent banks,
- Consolidation around banks with demonstrated cost advantages (most efficient banks),
- Sound governance at the level of individual banks.

46. A *quantitative* version of this list was built around measurable indicators of individual banks' financial efficiency. These in turn were compared with market performance indicators for each bank (current market share and share gain or loss over time), as well as international norms for the same indicators. This was done for the 10 case-study countries using detailed bank-level data for 220 banks,[14] covering four main financial sector efficiency and performance indicators to make comparisons between banks. The four efficiency indicators are

[14] In all cases the data available ensured that more than half of all bank assets was covered by the analysis, and in all but two countries this proportion rose to 85 percent or more.

- Efficiency of asset deployment, capturing the proportion of a bank's borrowed resources (interest-bearing liabilities) deployed in income-earning assets rather than, for example, in unproductive bank buildings or nonperforming loans;
- The delivered cost of service as a proportion of income-earning assets. This captures the yield a bank achieves or requires from those income-earning assets by way of the interest rate spread it adds to costs plus the fees charged;[15]
- Operating overhead, expressed as operating costs as a percentage of average income-earning assets (i.e., an inverse measure of operating cost efficiency); and
- Gross and net returns on average total assets, a broad measure of a bank's overall profitability calculated before and after loan loss provisions and taxes paid.

47. These four indicators demonstrate much interaction and much co-linearity, but together they seem to summarize reasonably a bank's efficiency. In addition, two additional indicators were used to assess the *sustainability* and *stability* of each bank's performance:

- The level of capital adequacy as crudely proxied by the ratio of shareholder funds to non-risk-weighted assets; and
- A less well-known indicator, the self-capitalization ratio—a measure of the degree to which a bank's net profit can cover the additions to capital that its balance sheet growth would require if the bank is to maintain a 10 percent capital adequacy ratio on an ongoing basis. This has a value greater than zero when the bank can sustain reasonable capital adequacy at current growth rates and less than zero when it is non-sustainable.[16]

48. Box 3.3 describes the two analytical techniques—graphical and econometric—the case studies used to analyze differences in performance between banks in the same country.

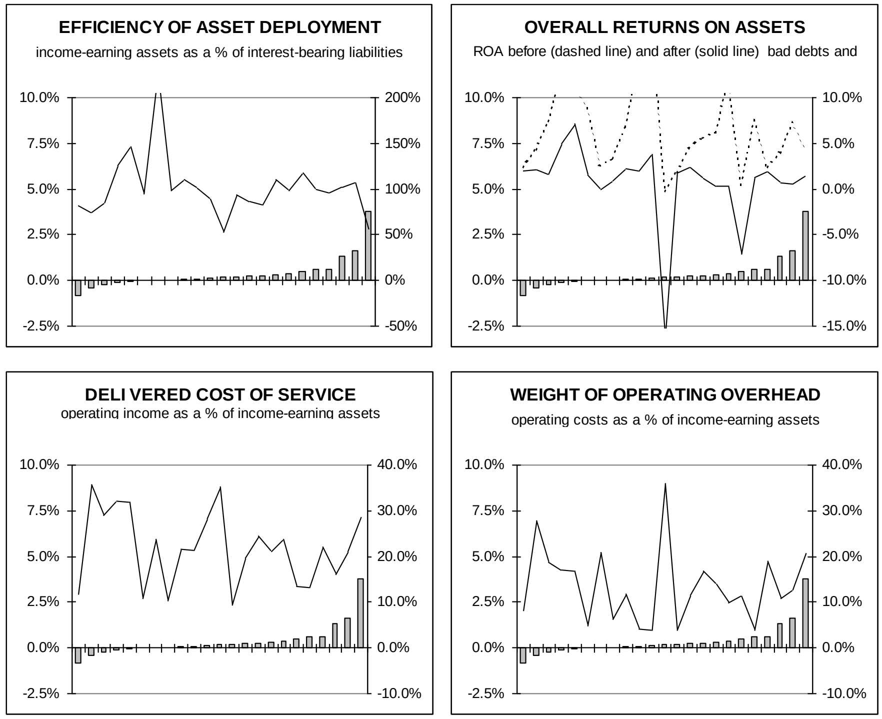
Box 3.3. Overview of Analytical Techniques Used

The substantial contrasts in the quality of consolidation between countries are illustrated graphically for all the case study countries in chapters 6–13. This is done by plotting data for each of the six performance indicators described in chapter 3 for each bank against its change in market share. In order to illustrate the dramatic range of variation across ECA countries this box includes two of these bank-by-bank comparisons: for Ukraine, where market pressures appear so far to have done least to promote improved banking sector performance, and for Estonia, where the process of consolidation has gone furthest. These plots are shown in figures 3.3 and 3.4. The shaded bars indicate the gains or losses in market share by individual banks in the period 1998–2000 and are calibrated on the left-hand axis of each chart. The continuous line on each chart plots the individual banks' performance in relation to the efficiency measure in question and is calibrated by the right-hand axis in each case. Each point on the line represents a different bank.

[15] Operating income: net interest before provisions, net commissions and fees, net trading profits, and valuation gains and losses but excluding any recoveries from past bad debts, all divided by average income-earning assets. This variable combines the interest spread on lending with the bank's fees plus commissions. This measure, however, fails to distinguish between when a bank is gouging its clients by extracting very large interest spreads and when an innovative bank is able to achieve a very high fee income.

[16] The exact calculation is the ratio of i) net profit minus ii) the change in capital required to maintain the crude capital adequacy ratio of 10 percent, all divided by iii) total assets at the end of the period concerned. This gives an indication of how rapidly a bank's growth strategy would create or consume percentage points of capital adequacy. It is preferable to looking at the change in actual capital adequacy, in that it abstracts from dividend policy, recapitalization, and below-the-line one-off bank reserves adjustments (and as such is a closer proxy to free equity cash flow used in shareholder value calculations).

Figure 3.3 Sample Bank-by-Bank Analysis for Ukraine



It is noted that the banks that gained market share in Ukraine had generally poor performance. This is seen by the height of the line plot for these banks relative both to other Ukrainian banks and, more important, to the known level of international "good" practice for each efficiency indicator (around 98 percent for asset deployment; 2 to 4 percent for delivered cost of services; 3 to 4 percent for operating costs; and around 2 to 4 percent for net returns). At least one Ukrainian bank gaining market share had an asset deployment ratio of only 50 percent, which implies a huge deadweight of nonproductive bank buildings and nonperforming loans. Most banks that gained market share had spreads (delivered cost of service) of between 15 and 30 percent; most had operating cost ratios of well over 15 percent. Above all, figure 3.3 shows that those banks that gained market share were neither particularly good banks in absolute terms nor consistently better in terms of their performance than banks that lost market share during that period. Note also the large variation across banks in all four indicators. In the case of the Baltic states it should be noted first that the performance of almost all banks (see also table 3.1) is absolutely much better than banks in the Ukrainian sample, with relatively low costs (typically less than 10 percent) and spreads (also typically less than 10 percent) and better asset deployment (typically close to 100 percent). Note also that within this higher general level of system performance, the banks that gained market share had generally lower operating costs, lower spreads, and slightly higher returns on assets than did most other banks. Although some individual banks offer some exceptions (one reason why the econometric results in table 3.1 do not provide a robust set of relationships), it is very clear that banks gaining market share in the Baltics were "good" as judged by the performance indicators used in this study. In this type of competitive environment, it does not seem necessary to be the "best" performing bank to gain market share, but there is a presumption that a bank must achieve a reasonable minimum standard. This is the main contrast with the far less competitive environment found in Ukraine.

This contrast in behavior is confirmed for these two countries by the provisional econometric analysis undertaken for this study (and explained in more detail in Annex 2). The formal model used the first four performance indicators bulleted in the text as explanatory variables in a regression equation where the variable explained was first the level of each bank's

– Graphical and Econometric

market share in each country, and second, changes (1998–2000) in that market share. The model and estimating methods are described in more detail in Annex 2. A sample of the results from the econometric estimates is shown in table 3.1 for the case where it is changes in market share that are being explained. The first entry in each pair of rows in the table shows the regression coefficient for the variable in question (for example, 0.107 relates to the effect of the quality of asset deployment on changes in market share in the case of Armenia), together with an indicator of the degree of statistical significance (indicated by asterisks). The second entry in each pair of rows indicates the "t" statistic attached to the corresponding coefficient.

The basic proposition underlying this econometric approach is that in any reasonably competitive banking environment, the observed gains in market share should be accruing mainly to more efficient banks. In countries where failures of regulation or failures in various aspects of market processes (as in Box 3.2 above) are common, the link between gains in market shares and the efficiency indicators will break down: the regression coefficients will in other words carry the wrong signs or be statistically insignificant.

Figure 3.4. Sample Bank-by-Bank Analysis for Baltics

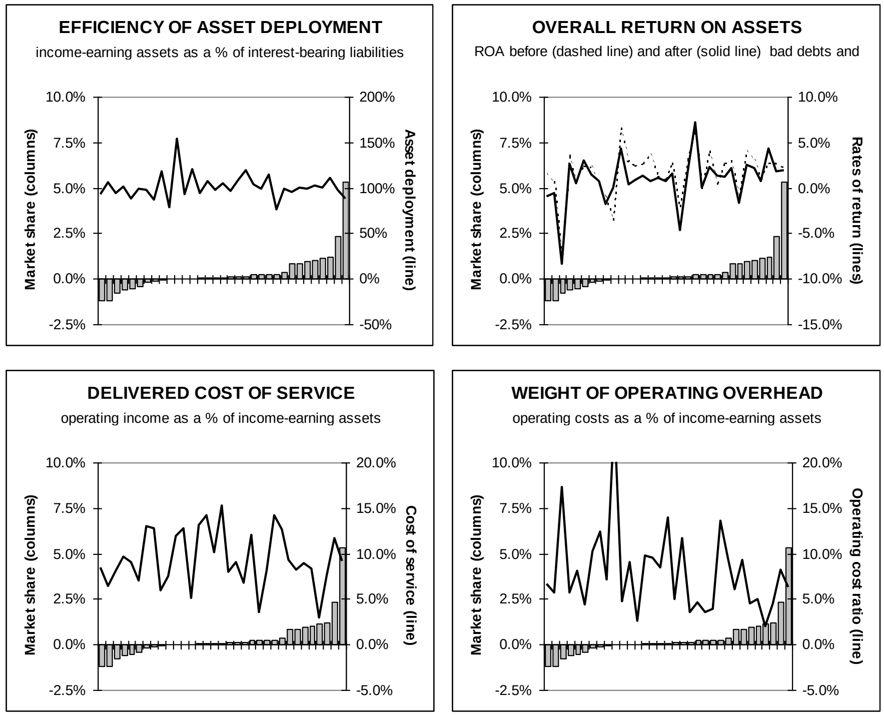


Table 3. Fixed Effects Model of Changes in Market Shares

	Armenia	Baltic	Bulgaria	Hungary	Kazakhstan	Latvia	Poland	Ukraine
Asset Deployment	0.107	-0.228	-0.782	-0.045	-0.297	0.1033	-0.094	1.51
[t stat]	-.85	-0.37	-0.26	-0.22	-0.51	-0.13	-0.37	-1.56
Delivered Cost of Service (Spread)	1.645	-4.889**	-13.472	0.492	-14.828**	-5.365*	-1.856	4.954**
[t stat]	-1.01	-2.03	-0.41	-0.34	-2.34	-1.76	-0.37	-2.34
Operating Overhead Costs	-1.291	5.208*	-7.398	-0.598	12.932	6.633*	13.788*	-8.252
[t stat]	-0.4	-1.81	-0.2	-0.64	-1.28	-1.88	-1.97	-1.47
Return on Assets (Net)	-0.477	5.882**	34.339	-1.209	28.369**	7.101**	10.256	4.218
[t stat]	-0.18	-2.43	-0.46	-1.23	-2.49	-2.38	-1.5	-0.96
[t stat]	-0.24	-0.82	-0.57	-1.01	-1.51	-0.25	-0.44	-0.7
No. of banks	29	35	22	31	14	19	35	17
Adjusted R-squared	-1.15	-0.47	-0.67	-0.58	-0.45	-0.4	-0.39	0.07

* significant at 10%; ** significant at 5%;]

The expectation is that the closer the banking market of a country approached a condition of genuine competitiveness, the more the results would show significant influences coming from some at least of the explanatory variables that have been identified. The reality as revealed by table 3.1 is that only a few countries—mainly those earlier located nearer to segment "D" of the taxonomy—do in fact come out with significant and correctly signed estimated coefficients in table 3.1—notably the Baltics and Kazakhstan. In these countries it is noted in particular that banks that maintain large spreads (delivered cost of service) suffer significant losses of market share. However, in almost all the intermediate countries or countries that have so far relied mainly on administrative forces to achieve consolidation (countries nearer to segment "C" in the taxonomy), the estimated coefficients were of no statistical significance or were incorrectly signed. In the extreme case of Ukraine, the one significant coefficient in table 3.1 relates to the delivered cost of service but that it has the incorrect sign. In other words, it suggests, perversely, that Ukrainian banks that maintained the largest spreads plus fees relative to total assets achieved significant gains in market share! In general, the results indicate that in most of the selected ECA countries, there are still significant noncompetitive elements at work that prevent relative bank efficiency from being translated predictably into gains in market share.

49. The objective was to indicate whether system-wide efficiency gains were achieved by concentrating a larger share of total banking business in the better banks. This was done by comparing the degree of bank consolidation visible in the data during 1998–2000 (as measured by market share at the end of that period and changes in share during the period) against all of the indicators listed above. By systematically assessing consolidation relative to bank performance, it was possible to identify (a) the extent to which consolidation was occurring, (b) the extent to which banks gaining market share were the more efficient banks in the system, and (c) whether the consolidation process is approaching an end point where wide variation in performance between the best banks and the rest of the banking system has been eliminated. Certain prior expectations underlie this approach. The most important is that in countries where an effective consolidation process delivering a competitive banking environment is underway, any observed gains in market share will be accruing mainly to the more efficient banks (see the earlier discussion on the qualitative aspects of consolidation). Second, in countries where administrative actions (as listed in box 3.1) have been used to encourage the more efficient banks, the competitive environment will be more assured and the various financial indicators will be converging toward the levels of such indicators found in well-functioning market economies. Finally, where a fully effective competitive environment has been established, there will be less *variability in bank performance within a country* because there is no regulatory forbearance or hidden protection for poor performing banks. The case studies use these priors to try to position the individual countries in the taxonomy described in Figures 3.1 and 3.2.

50. The same data can also be aggregated in ways that illustrate the considerable variations in the measured quality of bank performance across the 10 countries. *Differences in bank performance across countries and in relation to the international "norms"* provide an indication of the potential efficiency gains that might accrue to the poorer-performing countries by embracing the reforms and structural changes (including bank consolidation) of the better-performing countries appearing in Area D of the taxonomy.

51. The degree of variation revealed by these cross-country comparisons for four of the six numerical indicators plus one derivative measure is shown in Table 3.1, together with a measure of the overall financial depth in each country (measured as bank deposits as a percentage of GDP). Two measures are given for each indicator in each country:

- The **average** for the whole sample of banks in the banking system, and
- The average for the **best quartile** of banks.

To get into the group of best banks, an individual bank must be turning a high proportion of its deposits into earning assets, have relatively low overheads, and charge less than competitors but still make a good return on assets without then dissipating this margin in high bad debt charges. An international benchmark is provided for each performance measure based on exactly the same data source and calculations for a group of 40 large EU banks.

Table 3.1. Bank Performance by Country, 2000 (percent)

Performance measures		**Intl. bench mark**	**Hungary**	**Poland**	**Bulgaria**	**Baltics**	**Russia**	**Ukraine**	**Kazakh.**	**Armenia**
Depth (deposit : GDP ratio)			35	34	21	19	14	9	8	8
Operating overhead ratio	*Average*	1.9	6.8	5.1	6.6	6.3	8.8	18.0	9.5	12.9
	Best qtl.		1.7	3.2	4.8	4.3	5.4	6.5	5.7	7.6
Delivered cost of service	*Average*	2.7	9.0	8.1	9.7	8.6	15.1	25.0	14.1	17.2
	Best qtl.		5.0	6.2	7.9	7.4	14.0	13.6	10.5	11.7
Profit margin on earning assets	*Average*	0.8	2.2	3.0	3.1	1.1	6.3	7.0	4.6	4.3
	Best qtl.		3.3	3.0	3.1	3.1	8.6	7.1	4.8	4.1
Net return on total assets	*Average*	0.4	1.1	1.0	3.0	1.7	4.3	0.0	2.1	0.7
	Best qtl.		0.9	2.0	4.6	3.9	7.1	1.9	4.1	2.4
Self-capitalization	*Average*	-0.4	-0.2	-0.6	1.4	-1.2	0.8	-3.4	-1.8	-1.8
	Best qtl.		-1.4	0.4	3.2	1.0	2.4	-0.6	-0.1	-1.1

Source: authors' calculations

52. Three striking results emerge from this analysis:

- First of all, there is still a very wide variation in the degree of financial sector depth in the different case study countries (row 1). It ranges from a low of 8 percent in Armenia to a high of 35 percent in Hungary. It is a matter of some significance that we see such wide gaps some 10 years or more after serious reform began in most of the countries. The countries in Table 3.1 are ranked by reference to this measure of depth.

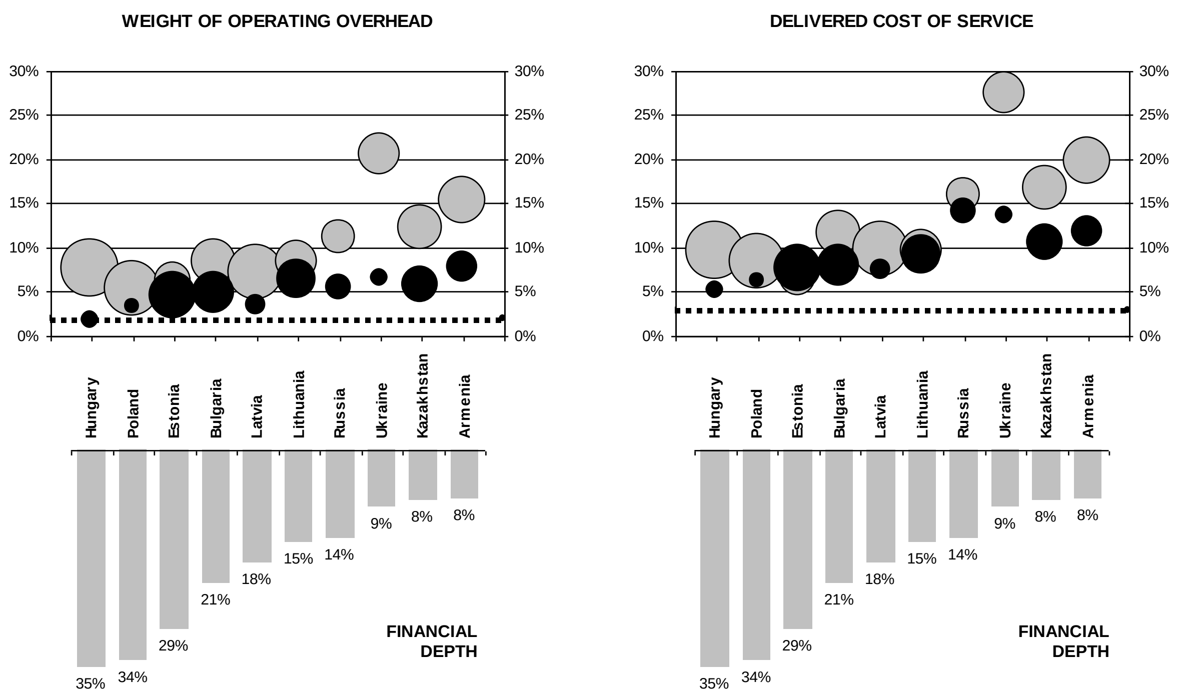
- Second, in relation to all performance indicators there is substantial variation across the bank averages for the different countries. This is especially true of the operating overheads indicator (a best performance of 5 percent of assets in Poland compares to a worse performance average of 18 percent in Ukraine) and the delivered cost of service (spreads plus fees range from 8 percent of assets in Poland to a massive 25 percent in Ukraine). The best of these averages are not hugely out of line with international standards of good practice. The worst are light-years away from being considered good practice.

- Third, there is much less variation in the performance of the *best* quartile of banks across countries, particularly as regards operating overheads: the maximum variation between performance is only 5 percentage points instead of the 13 points when overall averages are considered. Under this measure, the best quartile banks in Ukraine, for example, now compare quite favorably with the equivalent banks in the Baltics, at least on the overheads indicator (although a much larger gap emerges when the average delivered cost of service of the best banks in the Baltics is compared to that of the best banks in Ukraine). Also, the best banks in countries such as Poland and Hungary compare favorably with international benchmarks.

53. An examination of the differences in each performance measure between the best quartile of banks in each country and the average for the whole banking system provides a clear indication of the large potential that exists to improve overall sector performance by allowing these better

banks an improved market share. An extra dimension of detail becomes clear when the same data are presented graphically, as in Figure 3.5. This figure draws a distinction between the performance of the best banks and their share of the market (the location and size of the black circles in each chart) and the performance of the rest of the sample banks and their share of the market (the location and size of the gray circles). This relative positioning of the two groups of banks is then compared with an international benchmark for the performance measure considered (the dotted line across the top section of each chart) and the measured financial depth of the country's banking sector (the gray columns in the bottom section of each chart).

__Figure 3.5. Banking Efficiency and Financial Depth__



54. These comparisons help to illustrate the link that can be established between the effectiveness or otherwise of the consolidation process in each case-study country and the overall depth of that country's financial sector. Figure 3.5, for example, can be used to examine a number of pair-wise comparisons between countries:

- Estonia and Lithuania illustrate the importance of performance relative to international standards—in both countries the best banks dominate the whole market and the rest of the banking system does not lag far behind. However, Estonian banks are markedly closer to the norms of good international performance than Lithuanian banks. This has helped the Estonian banking system to become much larger relative to GDP.
- Estonia and Latvia by contrast show that it is important for the best banks to have significant market power as well as perform well. Latvia's best banks are slightly more efficient than Estonia's best bank, but they account for a much smaller proportion of the

market (compare the size of the black circles for the two countries). As a result, the Latvian banking system is much smaller relative to GDP than the Estonian banking system.

- Lithuania and Ukraine illustrate how important it is that the rest of the banking system does not lag too far behind the best banks. In both countries the best banks demonstrate similar efficiency levels, but in Ukraine a much greater gap is apparent between best bank performance and the rest of the banking system, compared to Lithuania. One consequence is that the Ukrainian banking system is much smaller relative to GDP than the Lithuanian.

55. Obviously quite a complex relationship is emerging here. A country's financial depth may be explained, at least in part, by a combination of:

- The cost of intermediation at the country's best banks, relative to international standards;
- The gap between the best banks' costs and the costs of a country's other banks; and
- The best banks' relative market power versus the rest of the banking system.

This study does not have a sufficient data platform to specify this relationship econometrically and test these variables' explanatory power compared to other, more traditional factors thought to explain variations in financial depth. However, there would be considerable merit in doing so and a separate paper is proposed expanding the tentative econometric analysis in box 3.3 and Annex 2.

Consolidation and Financial Stability

56. The discussion so far has focused mainly on the links between effective consolidation and bank performance efficiency. The point is made that in countries where an effective, market-internalized consolidation process has taken root, competitive processes drive banks toward converging their efficiency levels with those of banks in more developed financial systems. A similar logic can be used to develop the point that effective consolidation should also be a route to a more stable banking system.

57. This argument starts from the earlier proposition that any bank that establishes a solid stream of capital from retained income by virtue of a cost advantage over its competition can sustain its growth rate more readily because the increased profits/capital requirement does not need to grow any faster than its business volume. The case study evidence clearly shows that countries (such as the Baltic states and Poland) that most closely achieve "effective consolidation" conditions also have relatively low cost bases as judged by international benchmarks and relatively low variability of performance for this indicator across banks in their respective banking systems. If it can also be shown that these banking systems have indeed converted these cost advantages into capitalization levels compatible with their growth rates, there is a strong presumption that these banking systems also have reasonable resilience to deal effectively with external shocks that might threaten future crises.

58. The case studies have investigated this by examining the bank-by-bank levels of the capitalization indicators defined earlier. Table 3.1 indicates that with the exception of Hungary,[17]

[17] Hungary gives a particularly interesting indication as to when the self-capitalization indicator will become less

the best banks in each country also have better-than-average self-capitalization levels (note that the best banks are defined without reference to this indicator). In almost all these cases the best banks' performances also compare favorably with the international benchmarks. Therefore, the bank instability threat seems to come mainly from *the other banks*—those in the lower three quartiles when ranked by the composite indicator used to separate the best from the other banks.

59. Three indicators should determine the degree of such vulnerability. The first is the degree of variability in self-capitalization among the country's weaker banks. The bank-by-bank data show that this is extremely high in the countries where forces for consolidation are non-existent or undermined, notably Ukraine and Russia. The deviations from the (generally reasonable) average self-capitalization ratios shown in Table 3.1 are large. Second, the top-quartile banks' market share is low in several countries: so good capitalization in the best banks in and of itself is only a weak guarantor of overall system soundness. Third, in countries where reasonable self-capitalization is associated with very poor efficiency indicators (e.g., spread), the gradual correction of these inefficiencies could itself be a source of future instability. The study of bank-by-bank data in Chapters 6–13 and the data in Table 3.1 and Figure 3.5 suggest that several of these countries—Armenia, Kazakhstan, Russia, and Ukraine—clearly show vulnerability and instability based on this line of reasoning. Banking systems in countries that have more clearly achieved effective consolidation conditions appear much more stable when assessed this way.

Conclusions

60. This chapter has presented a taxonomy that provides an analytical basis for differentiating the experiences of the 10 case-study countries with bank consolidation. Some numerical contrasts show how these countries' practices have differed. The evidence reveals a number of important points. First, there are major performance differences between banks *within* individual countries that indicate the potentially large benefits of a more consolidated banking structure that favors the better banks. The reasons why some countries' best banks fail to gain market share is an obvious topic for deeper inquiry in the countries concerned. Second, average bank performance *across* countries vary greatly. A broad relationship has been observed between some of these differences and the depth of banking intermediation: better-performing banks on average seem to drive a system toward greater financial depth. Third, an econometric model that assumes consolidation is driven by a variety of market pressures on banks performs rather badly in most cases. In those countries where market pressures on banks are still heavily distorted, this negative result is understandable—the model chosen is wrong. In some other countries, such as the Baltic states, good performance by banks that are gaining market share is matched by almost equally good performance by other banks—insights from the formal model are obscured by the lower performance variation across the banks. Finally, studying sustainability and stability indicators

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relevant. In banking markets with ready access to new infusions of capital from shareholders, a bank's return on equity becomes at least as relevant as its self-capitalization capacity, but the latter still has a role. In Hungary, because so many banks are wholly or virtually wholly owned by foreign strategic investors for whom their Hungarian banking operations' capital needs are a small part of their global capital strategy, most Hungarian banks do have ready access to new capital infusions provided their prospective growth and rates of return justify further investment. Even in these circumstances self-capitalization is still relevant to calculating the potential surplus return over and above the cost of capital required to justify ongoing investment. A bank that is not self-capitalizing and requires heavy near-term capital infusions from shareholders, will have to have a higher prospective medium-term return on equity than a self-capitalizing bank to deliver the same internal rate of return on its shareholders' whole investment.

suggests a stronger likelihood of financial stability in countries where the conditions for effective consolidation have been met most completely. Even in poorly performing countries, the best banks perform reasonably well by international standards. Their inability to become more dominant in the overall system is a main source of potential financial instability.

CHAPTER 4. SELECTED FINDINGS FROM INDIVIDUAL COUNTRY CASES

61. Following the general set of comparisons, we selectively review results from the various case studies. To assist the interpretation of differences, the country cases are grouped in a manner that follows the earlier taxonomy's guidelines (Figure 3.2). This same structure is maintained in the more detailed results in chapters 6 to 13. First are cases of *effective consolidation*, where both the administrative and market drivers (box 3.1) appear to have worked to concentrate banking business increasingly on the system's more efficient banks. In these cases, banking performance variability was also greatly reduced and efficiency indicators show strong convergence towards the standards of more advanced banking systems. Next are examples of weak or *undermined consolidation*, where neither administrative nor market drivers of structural change were truly active or effective. Finally there are *intermediate cases*, where administrative interventions were either too prescriptive (over-administered, as in box 3.1) or insufficiently complete to enable markets to drive the process of deepening consolidation toward better banks.

The Effective Consolidators

62. The *Baltic states* have all seen significant banking sector consolidation in the 10 years since the restoration of their independence (also see chapter 6). The total number of banks operating in the sub-region fell from 110 in 1992–1993 to only 39 in mid-2002. The initial consolidation stages were both traumatic and clearly administratively led and thus conform to the general pattern described in Chapter 3. However, at a relatively early stage, market pressures became the driving forces in the consolidation process.[18] The end-point for the three Baltic banking markets has been the emergence of a number of significant regional players, all foreign-owned, that increasingly compete in a pooled market. Competitive advantage expresses itself in the stronger banks' ability to acquire better positions in other parts of the region rather than grow organically. As a result, Hansa Group (the largest banking group in the Baltics) now has a combined banking balance sheet that would place it ahead of all the large private banks in the Russian case study sample.

63. The case study evidence suggests that Estonia recovered more easily from its early and very sharp crisis-driven 1993 consolidation than did Latvia and Lithuania from similar but later crisis-driven consolidations. Moreover, emerging earlier from a systemic banking crisis left the remaining Estonian banks much better placed competitively to gain scale and ultimately acquire significant market presence in the other two Baltic markets. This is evident from Chapter 6 Table 6.3, which shows the more rapid balance-sheet growth of the Estonian banks.

64. Not surprisingly, strong consolidation has brought about some very high concentration ratios in Estonia and to a slightly lesser degree in Lithuania, but much less so in Latvia. In this case high final (bank concentration levels are clearly associated with the consolidation process. Specifically:

- Estonia's largest bank (Hansa) accounts for 60 percent of total Estonian banking sector assets, and the top two banks (both foreign-owned) together account for nearly 90 percent;

[18] Although periodic exogenous shocks to the banking system (the Asian and Russian crises in particular) often provided the trigger for actual consolidation and foreign capital the means.

- Lithuania's three biggest banks (all foreign-owned) account for just over 80 percent of total Lithuanian banking sector assets; and
- Latvia's three biggest banks (two of them foreign-owned) account for 55 percent of total Latvian banking sector assets.

65. However, the bank-by-bank analysis shows that this has *not* resulted in monopolistic pricing. Indeed, the largest banks neither charge their customers significantly more for services (even though they often maintain the largest branch networks) nor carry a higher weight of overheads (often a sign of monopolistic complacency) than their smaller competitors. Indeed the reverse is often true, suggesting that many of the smaller competitors are subscale. However, the returns that banks earn on assets are typically higher for the larger banks (although this indicator shows considerable variation) and this is most marked in Estonia, where concentration is greatest. The same pattern is evident for the self-capitalization indicator—because the dominant banks tend to extract higher returns, they typically create enough capital from their new business to continue growing at least as fast as their market (and thus maintain their dominance), and in some cases further increase their market share. In this sense rapid and successful consolidation in the Baltic states has created self-sustaining momentum favoring the larger banks.

66. A striking result of the Baltic states' experience is that their banks have come closer than those of any other ECA country to achieving performance indicators convergent with the benchmarks of developed-countries' banking systems (Table 3.1 and box 3.3). The relatively low variance of these indicators across banks also shows that the consolidation process has been effective, in part because of effective competition.

67. Prospective accession to the European Union will become a new driver in the Baltic states. Undoubtedly foreign capital played an important role in completing earlier, locally driven consolidation and almost certainly now drives the pan-Baltic consolidation that is gathering momentum as EU accession approaches. However, as some other case studies demonstrate, foreign capital is neither a necessary nor a sufficient condition for an effective consolidation process. Overall, consolidation in the Baltic states has delivered a reduced cost of intermediation, which must have contributed to the financial re-deepening seen in these countries during the last decade. The authorities shaped and facilitated this process but did not drive it. In Estonia and Lithuania, market participants fully internalized the consolidation process. Latvia presents a slightly different case, as its banking sector serves both domestic and offshore Russian customers. This dual focus seems to limit the effectiveness of narrow domestic competitive pressures and blunts the internalization of the effective consolidation process. To some degree the Latvian authorities have acquiesced in this, in that they argue that no fixed number of banks is optimal for a country of Latvia's size. However, it is interesting that Latvia's top-quartile banks have a much lower market share than do the top-quartile banks in Estonia and Lithuania. Its financial re-deepening has also lagged from where it possibly should be in a pan-Baltic context.

68. In the case of *Poland* (chapter 7), the sequence of events that led to consolidation was also driven initially by very determined and effective administrative actions. However, appropriate and credible incentives were established so that the market quickly internalized the process. The process is ongoing, and both bank privatization and banking sector consolidation have contributed to the desired outcome of increasing banking sector competitiveness. The bank

merger and acquisition market is very active and the largest banks, those leading the consolidation process, are also the most profitable.

69. The most striking characteristic of Poland's banking sector today is the dominant share of foreign-owned banks and state banks' very modest share.[19] As of the end of 2001, foreign investors controlled 46 of Poland's 71 banks.[20] These banks accounted for 80.2 percent of banking sector capital and 69.2 percent of banking sector assets.[21] Not only are the foreign banks the largest by size, but Pekao, purchased in 1999 by UniCredito Italiano, is considered the pacesetter in terms of overall performance. The sector is also moderately highly concentrated, although far less than so than in the Baltic states. In Poland, five banks account for around 50 percent of total assets. Although concentration levels are associated directly with consolidation, the level achieved is lower than that in some other countries where consolidation proceeded more slowly.

70. An overview of financial trends gives some indication of the government's privatization strategy's success. Not only is the banking sector majority privately owned, but these private owners have made the sector more competitive. This in turn has resulted in significant intermediation growth (the banking assets-to-GDP ratio increasing from less than 50 percent in the mid-1990s to 66 percent now); decreasing net interest margins; visible efforts to find new revenue sources and reduce costs; and healthy capitalization levels. Small and medium enterprise (SME) lending has played an important part in the search for new revenue streams; it now accounts for 52 percent of total lending which matches SMEs' 55 percent contribution to Poland's GDP. Both the cooperative banks, on one end of the spectrum, and large banks such as Pekao and PKO, on the other end, lend to this sector. Kredyt Bank grew itself into a top-10 bank based on a strategy focusing on SMEs.

71. The initial 1989 banking reforms had three elements. First, the 1989 Banking Act enabled the creation of new, privately owned banks. Second, the government introduced tax incentives to encourage foreign banks to operate in Poland. Finally, the government created nine state-owned banks from 400 of the National Bank of Poland's (NBP's) branch offices. However, the new state banks were intended from the outset to become attractive privatization candidates. Although the Ministry of Finance owned these banks, each was assigned an independent supervisory board in an attempt to create an appropriate corporate governance structure. Twinning programs effectively introduced foreign expertise at an early stage. Then the government implemented the comprehensive 1993 Enterprise and Bank Restructuring Program (EBRP), both to strengthen the banks and enforce hard-budget constraints on SOEs.[22] The

[19] Today only two significant commercial state banks remain.

[20] Poland also has 642 cooperative banks, accounting for 4.5 percent of banking sector assets at the end of 2001.

[21] National Bank of Poland, "Summary Evaluation of the Financial Situation of Polish Banks, 2001," Warsaw, May 2002, p. 7.

[22] For fuller descriptions and analysis of the program, see Cheryl W. Gray and Arnold Holle, "Bank-Led Restructuring in Poland: An Empirical Look at the Bank Conciliation Process," Policy Research Working Paper 1650, Policy Research Department, Finance and Private Sector Development Division, World Bank, September 1996, and Fernando Montes-Negret and Luca Papi, "The Polish Bank Experience with Bank and Enterprise Restructuring," Policy Research Working Paper 1705, Financial Sector Development Department, World Bank, January 1997. Note also that the general view of the program was that it was more successful in restructuring the banks than in restructuring the enterprise sector.

program covered seven[23] of the new state-owned banks on a mandatory basis, and other banks had the option of using the program's debt resolution provisions.[24]

72. Using these various interventions in the first half of the 1990s, the Polish state successfully initiated a bank privatization and consolidation process. However, later actions also played a role in strengthening the process.[25] In-depth examination of the bank data shows the generally strong performance indicators already summarized in Table 3.1. These data also suggest a great deal of similarity between banks. The banks that were the major market share gainers during 1998–2000 do not appear to have had markedly *better* performance in the four key indicators than do the banks that were the major market share losers. As in the Baltic states, most banks are performing to a *good* standard, and the variance around the average performance is quite low (chapter 7, Figure 7.2). This suggests that at least by the period covered by the data sample, the Polish banking system had become highly competitive.

73. Poland is a clear example of a market that internalized the incentives created by the state and subsequently developed its own momentum in changing bank ownership structure and performance parameters. The level of financial intermediation is one very positive result. The Polish case is particularly interesting because the market is also very dependent on entities controlled by foreign investors. During 1999–2002 significant ownership changes took place in all eight of the majority foreign-owned banks that are among Poland's 10 largest banks. Despite their being Poland's largest banks, their *individual* market shares are still relatively low, with the third-largest bank accounting for only 10 percent of banking sector assets. Therefore it seems likely that this group of banks will contribute to ongoing merger and acquisition activity, both by buying smaller banks and merging with larger banks.[26]

The Undermined Consolidators

74. The Ukrainian banking sector (chapter 8) shows the most substantial contrast with the Baltic states and Poland. Although it remains small in absolute size (with very low financial depth), it still comprises a large number of banks relative to the magnitude of total banking transactions (154 banks as of May 2002 share total assets equivalent to just US$8.9 billion).[27] By contrast

[23] WBK and Bank Slaski were the two state-owned banks not covered by the program, because they were scheduled for privatization in the near term.

[24] The principle characteristics of the EBRP program were (a) it was an integrated program to (1) recapitalize the banks and prepare them for privatization and (2) restructure the overindebted enterprise sector; (b) it introduced workable, streamlined procedures for restructuring problem loans, including out-of-court conciliation procedures managed by the banks and the option of converting debt to equity; (c) the SOEs hard-budget constraints were made credible by upfront exclusion from the program of especially critical SOEs that eventually would have required exceptions; (d) banks were given incentives to implement the program—(1) banks could retain loan recoveries above the estimated problem loan, (2) individual bank recapitalization did not take place until the bank had taken concrete measures to restructure its loans, and (3) bankers were given the right to participate in the privatization of their banks at preferred terms.

[25] In particular, in 1996 the authorities were concerned that most of Poland's banks remained relatively small. In response to this concern, in 1996 the procedures for privatizing and consolidating state-owned banks were expanded by enabling state-owned banks to merge by creating banking groups.

[26] For example, the 2002 BPH-PBK merger was the result of a merger between their parent banks, Bank Austria and Hypovereinsbank.

[27] Since the Soviet monobank breakup in the late 1980s, Ukraine has been populated by a large number of banks and NBFIs, with as many as 279 banks registered by the early 1990s. Many were nonstarters from the outset and the number of banks that survived long enough to be noticed is normally given as 190 to 200. Another 70 banks were

with some other countries in this study, the Ukrainian authorities have not articulated or enforced a particularly active policy towards failing banks. Their approach has typically involved long delays in problem recognition and similarly slow decision making, enforcement, and liquidation processes. The first main proposition emerging from this case study is that there was no systematic administrative leadership of the bank consolidation process, as was seen in the Baltic states and Poland. The second main proposition is that the market forces that might have encouraged faster consolidation were seriously muted by various factors disabling market pressures' on banks. Hence some relatively poor-performing banks were able to survive and often achieve rapid growth while better banks, including several foreign banks, have struggled to retain market share.

75. Banking system concentration today is moderately high in terms of most measures (such as total assets, capital, and deposits). Specifically, between 48 and 56 percent of total business belongs to the top 7 banks[28] and between 65 and 73 percent belongs to the top 20 banks.[29] However, this high level of concentration is not new—it has been relatively stable for several years. Moreover, in the rapid banking growth since 2000, the concentration measures conceal a considerable switching of relative positions between the largest banks. Both of the two remaining state banks (Oschadny and Ukreximbank) have so far been able to retain a top tier position, in the former case because of the privileged state guarantee of its household deposits. Being state-owned may have helped these two banks escape such limited market disciplines as exist in Ukraine. However, several private banks that have grown rapidly in recent years also benefit from their connections with quasi-state institutions. Whatever form it takes, certain banks' ability to capitalize on a variety of political advantages has diluted the consolidation pressures that should have derived from market forces.

76. The past three years of rapid bank growth have seen substantial bank repositioning. This has involved movements *between* tiers, with the smaller banks losing out to the largest and to the medium-sized banks. Consolidation by the liquidation of smaller banks has occurred to some limited extent but has not affected standard bank concentration measures. And there has been little or no merger or takeover activity involving large banks. Consolidation in general has not occurred; certainly "effective" consolidation has not. The numerical comparisons do not suggest that the stronger banks (in terms of general performance) are the ones gaining market share, nor do the econometric results. Nor are these "successful" banks particularly profitable.

77. As for the future, there is no immediate prospect of regulatory changes to the status quo as currently observed: the disablement of the Box 3.1 drivers seems likely to persist. It appears unlikely that the complex mix of politics and market forces will change in the near future in such a way as to stimulate the emergence of a more genuinely competitive environment that will reward efficiency and penalize inefficiency. The data also indicate that (a) the banks that had the largest shares of the market in 2000 and (b) the banks that achieved the greatest gains in market share during 1998–2000 are both characterized by significantly *negative* self-capitalization capacity. In other words, they are consuming capital very rapidly. Equally important for the bank consolidation analysis is the fact that the largest market share gainers have no better capital adequacy than those banks that have lost market share. They also have worse capital adequacy

removed from the register after their liquidation or reorganization into new banks.

[28] As defined based on 1999 National Bank of Ukraine [NBU] data.

[29] Table 8.3 shows various measures of concentration and their trends during the past 3 years.

than those maintaining share and an absolute level of capital consumption that could reasonably be described as disastrous. This is clearly not a sustainable situation and ought to be a major concern for bank supervisors.

78. The situation in *Russia* (chapter 9) reflects a more important albeit recent role for market pressures on banks. Most notably, several of Russia's largest banks have developed new expansion strategies based on acquisitions. Several others have announced their readiness to diversify their ownership structure or have already implemented such changes. However, as in Ukraine, the number of banks has diminished only slowly in recent years: the 2,552 banks operating in 1997 declined only to 2,113 by end of 2000. Since once again the demise of banks affected the smaller banks, bank concentration measures were little affected.

79. In spite of some signs of new attitudes, three factors seem likely to slow the pace of any market-based consolidation. First, no matter how much consolidation activity is generated by privately owned banks, the dominant role of Russia's state-owned banks, especially Sberbank and Vneshtorgbank[30] seems likely to dissipate the overall impact of these changes on the banking sector. Second, because of the system's relatively low level of capital, increased consolidation or even concentration is unlikely to have a significant short-term impact on Russia's historically (since 1992) low intermediation levels. Third, more than half of the 20 largest banks are closely held and tied into an industrial group, often in the natural resources sector. These banks historically have had strategies that derived largely from their group interests.[31] Bank profitability, or the lack of it will be less directly relevant to consolidation considerations than a model of a fully competitive market would suggest.[32] The market drivers of change shown in box 3.1 are partly disabled by this reality.

80. Despite the shock of the 1998 financial crisis and the large structural shake-up it was expected to provoke, the actual degree of concentration in Russia's banking sector has changed remarkably little since 1998. Policymakers displayed little apparent interest in actively encouraging consolidation of the type that is a common sequel to disruptive financial crisis: in their eyes this would have only delayed the return to the pre-1998 status quo "stability". As a result, the environment was inimical to initiatives by the banks themselves, which in any case were focusing on recovering from the crisis and for which the aberrant pre-crisis incentives were more familiar than those associated with normal mature banking. Table 9.2 shows that the market share of Russia's five largest banks (CR5) based on total assets has remained in the low 40 percent range from before the crisis until now. However, a significant structural change has been foreign banks' gradual assumption of a larger presence in the sector. Foreign banks, of which International Moscow Bank (IMB), Citibank, and Raiffeisenbank are the largest, have been expanding their operations, raising performance standards, and introducing new products. Of these banks, 36 now account for a 10 percent share of bank assets. Whether this is a sufficiently big and secure toehold to boost overall Russian banking standards remains to be

[30] The CBR owns 63 percent of Sberbank voting shares. It also owns 99.9 percent of Vneshtorgbank, although the ownership is being transferred to the Ministry of Finance during 2002. Together they account for approximately 35 percent of banking sector assets.

[31] A particularly relevant statistic in this regard is that intergroup loans account for approximately 40 to 45 percent of all Russian bank lending, excluding that of Sberbank and VTB..

[32] In econometric terms, a missing explanatory variable from the simple model used earlier would be each bank's involvement (or noninvolvement) in a finance-industry group.

seen.

81. The data on individual Russian banks show huge variability in performance measures, in common with Ukrainian banks (but quite different from the Baltic states' situation). This variability and large deviations from international benchmarks in individual banks' performances indicate a still-flawed competitive environment (see Figure 3.5). Little consistency is to be found and certainly the performances of many individual banks contradict any idea of a robust link between market share (or changes in market share) and performance quality. One important feature is that both state-owned and large private Russian-owned banks had operating cost ratios twice those of internationally owned banks but seemed able to pass these on to customers via a much higher delivered cost of service (spread). This too is an inefficiency marker that mirrors performance in Ukraine.

82. Signs of change began to emerge at the beginning of 2001 (after the data period for individual banks used in this study), when several large banks began to acquire other banks. The two banks with the most articulated acquisition strategies are MDM Bank, which acquired controlling shares in 10 banks as of the third quarter of 2002, and Uralsibbank, formerly Bashkreditbank, which acquired 4 banks.[33] A possible explanation of the belated changes developed in chapter 9 is that as Russia's "blue chips" begin to compete more actively in international markets, they will need world-class international banking services and products. Not only did Russian banks not have international banks' expertise, they did not have sufficient capital to provide the needed funding. As a result, Russia's large banks, even those whose top-tier companies were part of their initial financial-industrial grouping, have had to turn to other market sectors. This could be how market forces begin to gain greater significance as a consolidating force. Also, purchasing banking services from offshore suppliers distorts the interpretation of some indicators, an experience that Russia shares with Hungary and Kazakhstan. New regulatory developments, especially the joint government-CBR strategy for developing Russia's banking sector, adopted in December 2001, also point in that direction and represent significant steps forward.

83. As for future prospects, the fact that some of Russia's most rapidly expanding banks are also the most profitable, at least on the basis of their 2000 results, would seem to augur well for further banking sector growth based on adequate capitalization. However, there are important caveats. One is the dominant role of Sberbank and to a lesser extent Vneshtorgbank. The non-market advantages these banks enjoy dissipate the impact of increasing competitiveness among the privately owned banks. Second, the privately owned banks are still too small to challenge the behavior of the state-owned banks, and are likely to remain so. Third, the performance of the largest banks was achieved with operating costs and spread ratios that are very poor by normal international standards (Figures 9.1 and 9.2): this signals the continuation of sub-par performance in terms of efficiency. Fourth, although some of the most actively expanding banks were among the most profitable of Russia's 20 largest banks in 2000, some of them employ corporate structure and governance models that may not be optimal for developing an efficient and competitive banking sector.

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[33] Other large banks, such as Industrial and Construction Bank St. Petersburg, BIN Bank, and Menatep St. Petersburg, also have bought or are rumored to be buying regional banks, but the scale of their activities has been smaller.

84. This argues for a more active CBR role in monitoring the various processes detailed in this case study and then using the resulting information to guide if not lead the future consolidation process. The CBR needs to streamline the merger and acquisition process to ensure that it remains relevant. The holding company structure that several banks have implemented should also be evaluated in terms of corporate governance and the protection of minority shareholder rights. Also the CBR should determine whether the banks that have taken the lead in the acquisitions seen so far represent organizational and ownership models that they would like to see replicated and, if so, how to ensure that the model's potential strengths outweigh its weaknesses.

Intermediate Cases: Overadministered Consolidation

85. The two cases where consolidation was undermined and the four where it has proceeded more successfully help us to categorize other countries where some of the observed features have conspired to create some but not all the outcomes seen in the six countries already considered. The term "incomplete" is chosen as a catch-all to indicate the sorts of things that can go wrong with the administratively led and subsequently market-internalized consolidations that worked well in the Baltic states and Poland.

86. The clearest example of an incomplete and historically over-administered consolidation process is *Bulgaria* (chapter 10). From a very early stage the Bulgarian authorities took a proactive approach to rationalizing a highly distressed banking sector, establishing the Bank Consolidation Company (BCC) in 1992. All commercial bank shares possessed by state-owned enterprises and other state institutions were transferred to BCC. In its early stages BCC actively sought to reduce the total number of state-owned banks through mergers or acquisitions on a voluntary basis. This led to the creation of the United Bulgarian Bank (UBB), which merged 2 midsized banks and 20 small banks.[34] Similarly, in 1993 the BCC helped create Expressbank by sponsoring the merger of 12 banks and established Hebrosbank by merging another 8 banks. In 1994 BCC encouraged the voluntary merger of four commercial banks to create Sofiabank, which one year later merged with another midsized bank and several smaller banks to create the enlarged Biochim Bank.

87. Unfortunately, these interventions did not lead to the significantly improved bank performance that might have been expected. A major reason is that from the outset the Bulgarian authorities chose an easy but ineffective approach to "nationalizing" nonperforming bad loans made by banks prior to 1990. This was done without any complementary banking sector structural reforms.[35] This approach substantially eroded financial discipline in the economy's banking and real sectors. Nearly all SOEs got the message that they no longer needed to service their old bad loans, and the banks continued to make further imprudent loans. None of the explicit bank incentives built into similar reforms in Poland, for example, were incorporated in the Bulgarian loan restructuring. Similarly flawed incentives were associated with the moves to recapitalize banks by trading nonperforming pre-1991 loans for the so-called ZUNK bonds (the

[34] P. Jotev, "A Review of Bulgarian Privatization: the Consolidation, Rehabilitation and Privatization Process of Bulgarian Banks," OECD Publications, 1998, p. 2.

[35] The estimated amount of bad loans taken over by the state at that time was the equivalent of about 7 percent of GDP. The government also wrote off similar volumes of bad loans in 1992–1993; see OECD, "The New Banking Landscape in Central and Eastern Europe: Country Experience and Policies for the Future," *OECD Proceedings*, 1997, p. 102.

Bulgarian acronym). The banks were adversely impacted by the ZUNK bonds' lower-than-market return, which exacerbated their liquidity difficulties. Specifically, they needed to pay higher interest rates on their liabilities than they earned on the ZUNK bonds. In order to cope with this problem, the bank managers resorted to methods that further worsened their financial difficulties, including higher spreads, higher deposit rates, and increasingly expensive Central Bank (BNB) refinancing. These negative banking sector trends, the continuing real sector recession, and the failure to restructure the SOEs were major factors in the 1996 banking crisis.

88. The crisis itself resulted in another major round of banking sector restructuring. By the end of 1996, 16 commercial banks (state-owned and private) had been placed under special supervision and bankruptcy procedures initiated against several of them.[36] The banking crisis as a whole resulted in the closure of 19 banks that together accounted for more than 30 percent of banking sector assets.[37] However, the crisis did serve to create the improved political consensus for tough reform measures. These were centered on the 1997 establishment of a currency board but also included major banking legislation amendments that have contributed significantly to more recent structural changes in banking. Armed with these new powers, the BNB quickly initiated further closures and gave some support to merger activity.[38] Prudential regulations were also strengthened in 1996 and 1997.

89. The greater banking stability achieved by the post-crisis measures have prompted significantly more flux in bank ownership and foreign interest in strategic participation in Bulgarian banks. Through various phases, two of the three big legacy banks were privatized in the late 1990s (Bulbank ultimately to Unicredito and UBB to National Bank of Greece). The Postbank was sold to American Life (the major international insurance group) at the same time and three banks under intensive BCC rehabilitation—Express Bank, Hebros, and Biochim—were sold over a period of three years to Societe Generale, Regent Pacific, and CreditAnstalt, respectively. Finally, privatizing the last big legacy bank (DSK, the state savings bank) began in late 2002.

90. Bulgaria has seen a radical reduction in its number of operating banks—34 currently—but in a manner that until very recently did not link this reduction with the efficiency gains that accompanied similar processes in the Baltic states and Poland. Over-administration continued even after the 1996 reforms, resulting in some continued ossification in banking sector structure. As a consequence, the case study's bank-by-bank analysis shows significant residues of inefficient performance among the larger banks. For example, the evidence on delivered cost of service (spread plus fees) indicates then even the largest banks in the Bulgarian sample in 2000 still had ratios close to or more than 10 percent (see Figure 3.3). The operating overheads picture is similar. The largest bank in the sample achieved an excellent operating overhead cost ratio of 4 percent (close to international benchmarks), but the next-largest bank had a ratio almost twice that.

91. In the Bulgarian case, administrative involvement in the consolidation process had to be sustained for a very long period because of flaws in the early interventions and the 1996–1997 crisis to which these contributed. A further, more market-oriented administrative lead was also

[36] Ibid.

[37] Merrill Lynch, "Bulgaria's Banking System and Bulbank." Draft report, 1998, p. 4.

[38] Specifically, it placed 16 banks in receivership and petitioned the courts for their bankruptcy. By early 1998, one of these banks' situations was resolved through merger while the 15 other banks were declared bankrupt. OECD, *Bulgaria: Economic Report*. OECD Publications, 1999, p. 28.

needed in the aftermath of that crisis, and this has started to show up in increased privatization and improved performance by some banks. Improved competitive and regulatory forces have helped to push spreads and costs down—at least relative to the levels of some FSU countries—but in absolute terms they are still high. Also the wide performance variations across the surviving banks indicate significant remaining slackness in the competitive process (see figure 10.1).

92. Looking ahead, the shape of Bulgaria banking sector and the further consolidation that will shape it appear to depend on the decisions and behavior of (a) the big three legacy banks created in the first wave of administrative restructuring; (b) the five second-tier banks re-launched by the post-1996 restructurings; and (c) the smaller banks. The evidence presented in chapter 10 shows little sign that the second-tier banks yet have the capacity to pose a significant competitive threat to the established market positions of the big three legacy banks' (although more recent data suggest that SG Express Bank and First Investment Bank are pursuing a more aggressive growth strategy in 2002 and competition among the big three may finally be accelerating). The best prospect for market-internalized consolidation is probably among the smaller banks, given that this group displays greatly mixed performance, and with only 15 percent of total banking sector assets at end of 2000 should not be a target of further administrative intervention.

93. The *Armenian* authorities were similarly active in driving consolidation of their banking sector in the mid-1990s. 2001 saw what is almost certainly the start of a further phase of consolidation (Chapter 11). The first consolidation phase was an inevitable consequence of the unruly proliferation of banks during the early 1990s (from 6 at the time of separation from the Soviet Union to 74 by early 1994), together with a particularly traumatic transition from a planned to a market economy.[39] Through strictly enforced bad-debt classification and provisioning requirements and pragmatic use of flawed banking legislation (since significantly improved), the Central Bank of Armenia (CBA) managed a strongly administered consolidation process that halved the number of banks by 1996 (20 licenses withdrawn and 13 mergers arranged). Thereafter a period of stability saw a few more closures up to the end of 2000, bringing the number of banks down to 29, including 7 small banks under CBA-initiated curatorship. Significant improvements to the bank bankruptcy law in 2001 enable CBA to move much more quickly to put another four troubled banks, including two of the largest locally owned banks, under direct temporary administration. The two groups of troubled banks combined account for about one-quarter of total banking sector assets and interbank activity but one-third of sector-wide lending and deposit-taking. Further consolidation pressures come from rising minimum capital requirements coming into force in 2002. In this context, the self-capitalization issue identified in chapter 3 is particularly important.

94. The Armenian banking sector appears to be on the threshold of significant maturation; administered consolidation has weeded the grossest abuses of connected lending and pocket banks, but the market is still overpopulated relative to its small real size. So the actions taken, although sound, have not yet provoked deepened consolidation through market forces as seen in the Baltic states. Only a market-internalized consolidation process will enable a more competitive banking system to develop, but this presents the Armenian authorities with a particular dilemma. One of the larger banks that got into trouble in 2001 was Ardshin, a legacy

[39] This process was severely exacerbated by war and economic blockade.

bank that already had been recapitalized in the mid-1990s at significant budget cost, and another was a well-connected private bank that grew from nowhere to take fourth place in the overall rankings of Armenian banks. Neither of these banks was necessary for a successful consolidation process, as there were other banks with better performance indicators and the capacity to take over their deposit mobilization and credit creation roles. Actions since 2001 give mixed indications as to how the process will progress. Sound assets and supporting deposits from Ardshin (a legacy bank) were rolled over to a new bank but liquidation looks more likely for the other troubled banks.

Intermediate Cases: Incomplete Consolidation

95. *Kazakhstan*'s banking system shows some of the same features as Bulgaria, with three big banks dominating the banking system (58 percent of total assets and 43 percent of total capital), but it is differentiated by what appears to be a more effective marriage of administrative and market consolidation pressures (chapter 12). A 1995 crisis, the resolution of which continued until 1998, contributed to a significantly reduced number of banks, which had reached a peak of 204 banks in 1993. The authorities took an active role in this process, setting up a special-purpose vehicle, the Rehabilitation Bank, to hold problem assets from failed banks. One of the big three—Bank Turan Alem—was created from two private banks that had to be temporarily nationalized, restructured, and re-privatized to a consortium of shareholders, including international financial institutions (IFIs) and other foreign institutions. By 2002, only 43 banks were still operating. This is still a large number for a country with a relatively small banking system (total deposits equal only 11 percent of GDP), and on average overhead and income-spread ratios across all banks are little better than those of Ukraine—10.7 percent and 16.0 percent respectively. Nevertheless, only one of the big three can be considered to be a genuine legacy bank, and analysis of bank-by-bank performance reveals that bigger Kazakh banks cost less to run and charge less to customers than do smaller banks (which is important given the big three banks' dominance). More important, there is less of the stasis in market shares that typified Bulgaria until 2002. The Kazakh banks that are gaining market share generally have lower costs and extract from their customers lower overall spread and fee yields than do most banks that are losing share.[40] Although share-gaining banks are not fully self-capitalizing, the banks gaining the greatest share are not consuming surplus capital faster than banks that are gaining share more slowly. These are all pointers that indicate greater market internalization of the need for and requirements of effective competition-led consolidation than is evident in Bulgaria. As already noted, however, the consolidation process is by no means complete.

96. Kazakh experience also gives some interesting insights into foreign capital's role in transition banking systems. There are 16 banks with foreign capital, the most important being ABN Amro and Citibank with a combined 10 percent of total banking sector assets, but there is no sign of any trend toward Baltic-style foreign sector domination. None of the foreign banks yet rival the big three Kazakh banks, although there is some cross-ownership between the second largest (KKB) and ABN Amro.

97. Ownership issues are also an interesting feature of *Hungary*'s banking system (chapter 13).

[40] With two notable exceptions—Kazkomertz, one of the big three, and ABN Amro, the leading foreign bank, both linked by cross-shareholding—they appeared to hold back deliberately on matching market growth in 2000 in order to preserve capital adequacy, and thus lost market share.

The Hungarian authorities rapidly privatized the entire state banking system early in the 1990s, mostly to foreign investors. Some 67 percent of the Hungarian banking sector is now foreign owned. There are still four small- and medium-sized state banks whose privatization is discussed but is clearly not progressing. Many privatized legacy banks retained their original national identities (OTP, Foreign Trade, Savings Coop Bank) even when they are majority owned by foreign strategic investors, but some were rebranded under their foreign parents' names (ABN Amro, Erste). At the same time, the number of "greenfield" foreign-owned banks rose sharply, from 4 to 19. Table 4.1 shows that while full integration into a foreign parent's brand delivers a very slight cost, price, and profitability advantage, on average overhead and income-spread ratios still remain at Latin American rather than parent (major industrialized) country standards. Moreover, the benefits of full integration are very much focused on the four greenfield subsidiaries established in the 1980s (one of which is locally branded), and on average the new greenfield banks established since 1990 perform no better than legacy banks privatized to strategic foreign investors.[41]

Table 4.1. Hungarian Bank Performance by Ownership and Size

	All Banks in Sample Grouped by Ownership/Branding		**27 Foreign-Owned Banks Grouped by Original Genesis**		
	State/ National	**Foreign branded**	**Privatized (ex–OTP)**	**Old Greenfield**	**New Greenfield**
Number of banks in sample	12	19	8	4	15
Market share end 2000 (%)	69	31	37	17	13
Change since 1998 (%)	*-4*	*4*	*1*	*2*	*1*
Efficiency of asset deployment (%)	89	103	97	109	99
Weight of operating overhead (%)	7	6	6	5	6
Delivered cost of service (%)	9	7	7	7	6
Return on assets:					
Gross (%)	1	1	1	2	1
Net (%)	1	0	0	2	0

Source: authors' calculations.

98. This points to the at best mixed benefits of privatizing a fragmented banking system in the way the Hungarian authorities did in the early 1990s. Most of the banks were sold as distinct entities to different foreign shareholders, which appears to have blunted the pressure to compete and consolidate locally. The bank-by-bank analysis in Chapter 13 shows no evidence that foreign-owned privatized banks with a retained national identity are any more efficient than the remaining state banks. Moreover, legacy banks still dominate the big five that control just over half of the market. There is considerable volatility in the various performance indicators and very nearly as strong a cross-correlation between operating overhead and income-spread ratios as in any of the less developed banking systems included in this study. This suggests that many foreign-owned greenfield banks have very specifically segmented markets and considerable scope to pass on high costs to clients. If this is so, it could explain why the higher-overhead,

[41] A number of the new greenfield banks have established useful market niches, particularly in consumer and asset finance—see Maznoni, Shankar, and Várhegyi, *Dynamics of Foreign Bank Ownership: Evidence From Hungary*, preliminary draft, February 2002.

state-owned/nationally branded banks (particularly the big five) are only slowly losing share to lower-overhead, foreign-branded banks. The capital sustainability analysis produces very similar results to the performance analysis. Banks gaining market share tend to consume capital whereas losers tend to create it, but the correlation is very weak. This almost certainly reflects the blunted key capital constraint—so critical to effective consolidation—that happens when foreign shareholders have taken a strategic marketing decision that they "must" retain a presence in such an important transition economy. In these circumstances shareholders (particularly in greenfield operations) appear to be prepared to cover inadequate profitability with continued capital infusions to stay in the Hungarian market, even though their operations have failed to achieve a profitable scale. This almost certainly means that Hungarian banking market consolidation will have to await EU banking market consolidation.

99. Therefore, the dynamics of competition and consolidation in Hungary overall seem to be less effective than those for Poland, and this explains their relative positionings in the taxonomy described in chapter 3.[42]

[42] One important caveat must be borne in mind: of all the transition economies, Hungary has by far the most developed nonbank financial sector. When banks have cobranded operations in nonbank financial markets, it is possible that the recorded bank balance sheet may understate the true asset base supporting costs and income.

CHAPTER 5. MAIN ISSUES, CONCLUSIONS, AND RECOMMENDATIONS

100. The variety of experiences illustrated by these selected cases suggest a number of important general propositions that can help to guide future policy advice to ECA countries. The chief conclusion is that an effective bank consolidation process can be an important part of the further financial development of the ECA countries' banking sectors. This is because effective consolidation requires that market participants internalize the competitive processes that ultimately shape a developed banking system. This chapter describes these processes, which as already noted were not defined at the outset of transition and needed to be constructed by a blend of administrative intervention and market participant behavior. These processes set the parameters of an effective consolidation process. The chapter then discusses what the authorities can do to bring this about, particularly phasing their involvement, and how to avoid the pitfalls of over-administering the consolidation process. Finally, the chapter addresses some of the more troubling issues that may arise during the consolidation process.

Consolidation as a Precursor to Competitive Banking

101. The insights derived from the different country cases broadly confirm the priors set out in Chapter 1 about the factors needed to underpin both active banking competition and a genuinely effective, market-internalized bank consolidation. These elements include the following:

1. A tight and serious constraint on capital and an emphasis on the importance of self-capitalization. If this constraint is binding, banks must worry continuously about capital adequacy and work to ensure that their growth is genuinely profitable. Taking greater risks than their competitors merely aggravates their task.
2. The need for banks also to focus on cost advantages in order to sustain growth and capital adequacy, so that even the larger banks are more likely to be market price-takers than price-setters.
3. A healthy standard of regulatory governance that offers virtually no tolerance to insolvent banks and no protection to specific banks in the system. This requires not only that the formal rules comply with Basle requirements but that the regulators apply these regulations seriously and objectively, without fear or favor.
4. Reasonably sound governance at the level of individual banks, with few distortions from imperfect competition providing excessive power to a few players or mafia-type powers exercised via the political process or at the interface between shareholders and managers. Once again, bank profitability becomes disconnected from its performance if this condition is not met.

102. It has been observed that achieving these four elements requires sound actions by bank regulators and sound behavior on the part of individual banks—hence this study's focus on *internalizing* a sound competitive process driven by consolidation. The four elements also help to identify the wide variety of things that can and have gone wrong in the consolidation processes of particular countries. In countries such as Ukraine, where there has been significant tolerance of poorly capitalized banks, the banks have no particular reason to see the building of capital as a necessary condition for growth. Hence their failure on point 1 has resulted in individual bank growth being disconnected from economic performance. A failure on point 2 has occurred in the

Russian industrial banking groups where the pricing of banking services is partly determined by relationships within the groups. Banks in these systems do not need to focus as closely on the costs at which they deliver their services. Point 3 refers to barriers to effective consolidation when, for example, legacy banks are still large and attract special regulatory treatment (Ukraine is again an example, as are the over-administered consolidation scenarios seen in countries such as Bulgaria). It also indicates that some countries with soundly based prudential rules nonetheless may have problems if they are not properly enforced and regulatory forbearance is arbitrarily offered to certain banks. This can enable some sub-par banks to survive and even thrive. The issue relates partly to the even-handed enforcement of *public* authority rules but also to *private* governance at the bank's level. A high degree of traditional economic monopoly power or equivalent power achieved via political connections (point 4) can also scupper effective competitive forces.[43]

103. Recommendations to correct failures in relation to the four points are relatively standard components of policy advice offered to ECA transition countries. The present study investigates how individual countries that diverge from this consolidation model also fail to develop the effective competitive process that is vital to achieving sustained progress in financial development and deepening. Therefore greater use of microeconomic analysis of individual bank performance is recommended (both for regulators and advisors) as a means to develop more effective macroeconomic policy interventions. The questions that this microanalysis must assess are implicit in boxes 1.1 and 3.1, and laid out more explicitly below:

- Are capital adequacy requirements applied rigorously to all banks?
- To what degree is each bank's ongoing business self-capitalizing?
- Are the risks banks take as they grow their business transparent?
- What is the scope for window-dressing losses and which banks resort to it?
- Are banks with a demonstrated cost advantage gaining market share?
- Do lower costs and rising market share translate into higher profitability?
- Do banks' cost ratios fall as they gain share?
- Do banks gaining market share turn new deposits into income-earning assets?
- Are the better banks gaining share in the total capital of the banking sector?
- Can the better banks absorb assets from failing institutions or acquire weaker ones?

[43] Consider in this context one common intermediate case in the ECA countries today: where competition may be working up to a point as implied by a reasonably tight capital condition. Bank regulations and the regulators are also functioning with reasonable competence and honesty. However, there are big distortions in governance at the bank level. This may be because some banks are able to maximize relative to a profit function that is defined not only for the bank but for a broad range of industrial activities, including the bank. Behavior may be such that these banks can set the prices of banking products substantially below cost and so gain market share even though they are less competitive in a narrow banking sense. This behavior can erode better banks' cost advantages and help finance the expansion of new (but long-term non-sustainable) banking activities. ECA experience is replete with examples of this type, which need to be better documented and more rigorously addressed by regulators.

104. The need for this additional microanalysis is clear from the very wide variations in performance levels by banks holding or gaining significant market share in the countries studied here. In many cases the variation can only be explained by a failure in one or more of the four effective consolidation conditions and therefore competition. The absence of robust results from the simple econometric models described in box 3.3 also indicates that failures in these conditions are still widespread in the case-study countries. This is confirmed by the more qualitative analysis in the eight country chapters.

The Role of the Regulatory Authorities

105. The case studies also provide important insights into the role of the regulatory authorities. First and most important, an internalized, effective consolidation process cannot work unless the regulators play their role by creating an equal operating environment for all banks. The elements of this environment are listed in box 3.1's top-left segment:

- Adoption and full enforcement of Basle regulatory requirements;
- Prompt intervention when requirements are not met;
- No gross corruption or politicization of the regulatory process;
- Limited public resources devoted to supporting failing banks;
- A presumption in favor of privatization and foreign participation in banking markets;
- Strong and enforced connected lending limits; and
- Enforceable property rights.

106. Ideally, the regulatory foundations for effective consolidation would have been completed early during the transition to a market economy, but this rarely was the case in the ECA region. Introducing new laws and regulations typically has been relatively straightforward. The effective and even-handed enforcement of such regulations has been more problematic. Yet even when new regulations and good enforcement could be achieved, this did not avoid the inevitably traumatic consolidation to weed out banks that were either insolvent at the time they were carried over from the pre-reform banking system, or so badly governed afterwards that their solvency was compromised.[44] Therefore, phase one of any administrative intervention must cover both establishing the foundations for effective consolidation (and ultimately competition) and managing any systemic crises requiring the closure of at least some banks. This first phase is when the authorities must be proactive and direct the process, using a wide range of administrative interventions. Sometimes this may involve taking banks back into temporary state ownership, but it is vital that any interventions of this nature clearly signal what does and does not constitute sound bank management and provide incentives for improved management and governance at the remaining banks. The Polish and Bulgarian case studies provide examples of good and not-so-good practices during this phase. Best practices would incorporate most of the Polish approach's elements, including:

- An integrated program involving both the banks' recapitalization and preparation for privatization and a parallel restructuring of the over-indebted enterprise sector;

[44] Whether the banks to which this applied were legacy banks or were established after the beginning of transition is irrelevant.

- Workable, streamlined procedures for restructuring problem loans, including out-of-court conciliation managed by the banks and the option of converting debt to equity;
- Hard-budget constraints on the SOEs made more credible by the up-front exclusion from the program of critical SOEs that eventually would require exceptions.
- Coherent incentives for banks to implement the program, including possibly (a) permission for the banks to retain any loan recoveries above the estimated problem loan amounts; (b) delayed bank recapitalization until the bank has taken concrete measures to restructure its loans and reduce operating overheads; and (c) giving bankers the right to participate in their banks' ultimate privatization at preferred terms.

107. This first phase is unlikely to be the end-point of the consolidation process but almost certainly represents the limit of what the authorities can do themselves to drive an effective consolidation process. The differing outcomes described in the case studies point to the need for significantly different approaches to be taken by the authorities once the first phase is over. During phase two, administrative interventions must switch from driving the process to facilitating a market-internalized process. The regulatory authorities' role has already been mentioned in chapter 3 (particularly box 3.1's right-hand segment) and includes:

- Maintaining a sound regulatory framework and enforcing it evenly across banks in order to foster real banking market competition;
- Promptly sanctioning and even closing failing banks so that they are not allowed to cloud competitive market signals, and above all ensuring that capital constraints are binding on all banks;
- Being alert to the dead weight that large legacy banks can impose on an otherwise competitive system, and taking steps to reduce any negative competitive influences from these banks;
- Eliminating ownership-related obstacles to well-capitalized banks gaining market share, particularly entry barriers to foreign banks or capital, and continuing the privatization of any remaining state banks; and
- Monitoring the individual consolidation process elements (new mergers, takeovers); and while not actually leading that process, being prepared to assess whether or not the banks that are taking the lead represent models of good governance that are worthy of replication, and acting on those judgments to prevent mergers or takeovers where this clearly is not the case.[45]

108. It is recognized that interventions during this phase are difficult to specify in completely general terms and hard to blueprint. There has to be a pragmatic balance between (a) the need to avoid any return to centrist direction of the minutiae of banking development and (b) the recognition that in most ECA countries, the competitive process can be and often is still compromised in a wide variety of ways. The key goal of this second phase must be that any intervention be designed in a manner that will respect the primacy of a market-driven,

[45] A recent example from Kazakhstan where this was not done is noted in chapter 12, confirming that the authorities sometimes need to act against proposed mergers that may weaken participating banks or seem to be a cover for delaying the resolution of existing weaknesses

competitive process toward further bank consolidation. The main risk is that having had to take so proactive an approach to consolidation's first phase, the authorities will try to *over-administer* the second phase in a way that compromises its effectiveness. The specific risks to guard against are listed in box 3.1 (bottom left) and can be summarized as follows:

- Too much focus on failing small banks, which delays addressing legacy bank problems;
- Overemphasis on legacy banks' continuing importance;
- Continued political direction of state/legacy bank activities; and
- Continued political influence on ownership (domestic/foreign and state/private).

109. Probably the main cause of over-administration in phase two is confusion between (a) protecting specific banks that in the past were important to deposit mobilization and credit creation, and (b) protecting depositors' and borrowers' interests. It is this confusion of objectives that encourages public bail-outs for legacy banks even where they are no longer publicly owned and the tendency to use legacy banks as administrative vehicles for consolidating together the activity of smaller, failed banks. These interventions inevitably preserve or even bolster the legacy banks' market dominance even when they are not particularly efficient. These practices also rarely address ongoing corporate governance and operational management weaknesses at legacy banks, and therefore do little to close the efficiency gap that often exists between legacy banks and better-run banks in the same system.

Issues Arising During the Consolidation Process

110. Consolidation, whether or not it is effective, is rarely a smooth process. Many issues arise that trigger political objections to the regulatory authorities responsible for an effective consolidation strategy. However, in each case it is important to address (a) whether the costs highlighted by these objections are special to effective versus ineffective consolidation and (b) how these costs compare to the gains that can come from effective consolidation.

The Link Between Consolidation and Concentration

111. A particular feature of phase two regulation is the need for policies designed to identify and then correct any market power abuses associated with increased banking concentration. The first point to make is that much of the banking concentration in ECA countries today is a legacy of pre-reform market positions. However, effective consolidation, particularly in the Baltic states, has established significant new concentration levels around non-legacy banks, and the evidence to date suggests no serious abuses of the market power associated with this increase in concentration. In general the banks that have gained the most market share in these countries are lower-cost than their immediate competition and do not charge above-market prices. To the extent that these winning banks can extract monopoly profits, it is because their size enables them to sustain lower cost-income ratios than their competitors. Moreover, often the dominant merged entities produced by the Baltic consolidation process operate at lower cost ratios and pricing levels than even the stronger of their precursor banks.

112. The policy message is that the degree of concentration per se is not yet an issue in most ECA countries. Far more important is the nature of the competitive situation and pressures that may be contributing to relatively high bank concentration levels. Nevertheless, bank regulation throughout ECA must be increasingly aware of the potential downside risks of increased

concentration and be armed with devices, including financial services' openness to international competition, that can avoid a deterioration in service quality.

The Role of Legacy and State Banks

113. A constant theme of this study has been the explicit or hidden favoring of state or legacy banks and the adverse effects this has on the competitive environment. This is not to say that all such banks will necessarily perform badly, but when they do under-perform it is vital that they should not be specially favored, particularly during any crisis. Consolidating banking business around the major legacy or state banks if they do not have the capacity to match the best performance indicators in their banking system (a) increases the performance gap between the rest of the banking system and the best banks and (b) reduces the best banks' market power. In chapter 3, these were two of the three factors that appeared to be correlated with suppressed financial depth, almost certainly because the overall result is to raise the cost of intermediation to the economy as a whole. Qualitatively as well, protecting underperforming state or legacy banks sends very bad signals to the rest of the banking sector and makes more difficult any internalization of the need for and requirements of effective consolidation.

Bank Consolidation and Lending to SMEs

114. A particular concern in the U.S. bank consolidation literature is the damage that could be done to SME lending by the typical bank's increasing scale. This study has been careful to point out that the scale that even large ECA banks are currently achieving (with or without consolidation) still leaves all of them considerably smaller than the large U.S. banks that are the object of this anxiety. Nonetheless, it has been useful to confirm some of the possible connections between bank consolidation in ECA thus far and banks' attitudes toward SME clients.

115. The main conclusion from the case studies is that both bank consolidation and SME banking business development are in their infancy in ECA, and that it is too early to draw strong conclusions. However, it seems significant that in three case-study countries (Ukraine, Russia, and Armenia) that have seen low degrees of consolidation, SME lending also is relatively and absolutely low. However, any strong link between the degree of bank consolidation and the scale of SME lending also depends critically on two other variables. The first is the level of SME activity in the country as a proportion of GDP. In Poland, where SME activity has grown from 30 percent of GDP in 1995 to 55 percent in 2001, the banks now provide 52.6 percent of their corporate lending to the SME sector and attract almost 50 percent of their corporate deposits from that source. Estonia is another country in which SME activity is high and bank loans to SMEs are a large portion of banking business. Bulgaria is intermediate on both of these measures. The second relevant variable is the quality of market-supporting institutions; Bulgaria, Estonia, and Poland also score relatively high.

116. Notwithstanding these reservations, the ECA country studies reported here and other studies provide some support for the idea of a link between competitive banking and enlarged SME banking activity (rather than the diminished role that concerns some of the U.S. literature). First, in countries where SME lending is an embryonic activity (all ECA countries in the 1990s) it is to be expected that the market would develop first in those countries with the most competitive banking sectors and where banks are actively seeking new markets. Second, although SME lending can provide higher margins, it is also more costly in several respects. The

banks best able to absorb these costs are those investing in methodology and training to achieve economies of scale. This in turn requires the long-term strategies and resources that are more likely to be found in the competitive banks. Other banks may enter the SME market, but with far less chance of long-term success. Third, the IFI credit lines often have been the catalyst for opening up the SME market in these countries.

Bank Consolidation and Financial Stability

117. The results presented in Table 3.1 indicate that in almost all countries studied, the *best* banks also have better than average levels of self-capitalization. In almost all country cases the best banks' performances also compare favorably with international benchmarks. Therefore, it is fair to conclude that the threat of overall banking system instability (an insufficient cushion of capital to deal with most significant shocks) seems to lie mainly with the other banks—those *below the top quartile*. This study suggests that three indicators together determine the degree of such vulnerability. The first is the degree of variability of the self-capitalization indicator among the country's weaker banks. The bank-by-bank data show that this variability is extremely high in the weak consolidating countries, notably Russia and Ukraine. Second, the best-quartile banks' market share is low in several countries: in these cases, strong capitalization in the best banks is a very weak guarantor of overall system soundness. Third, in countries where reasonable self-capitalization levels are associated with very poor efficiency indicators (such as spread), the gradual correction of these inefficiencies could itself be a source of future instability. The scrutiny of bank-by-bank data in chapters 6 through 13 and the data in Table 3.1 and Figure 3.5 suggest that several of the countries show clear symptoms of vulnerability or instability based on this line of reasoning. More positively, it would seem that the banking systems in countries that have most clearly achieved the conditions for effective consolidation are much more stable when assessed in this manner. This is because the best banks that have the financial characteristics to absorb shocks account for a much larger proportion of the total banking system.

Bank Consolidation—The Role of Foreign Ownership

118. In both of the most effective consolidation processes—the Baltic states and Poland—foreign capital played a leading role in completing domestically driven consolidation processes. Other countries were just as open to foreign capital but did not see the benefits that accrue to truly effective consolidation processes. Hungary is perhaps the best example of this. Its fragmented banking system was privatized mainly to foreign strategic investors before any significant consolidation took place, and the proliferation of new banks was entirely foreign-driven. The new bank owners seemed to have run them as part of a wider regional strategy, prepared to accept low profitability in return for gaining a foothold in a key Central European market. This meant Hungary's market internalization of the need to consolidate was counterbalanced by foreign owners' intentions to maintain an individual presence in the market. This made the Hungarian subsidiaries' low profitability or losses relatively trivial in the context of overall group profit management. Banking consolidation in Hungary will almost certainly have to wait for further consolidation in Western European banking markets.

119. Hungary also provides interesting insights into the way widespread foreign involvement in an economy's industrial and commercial base can blunt domestic market pressures for bank consolidation. So many Hungarian companies have foreign owners that the choice of local banking partner may be determined by parent group policy rather by than local competitive

pressures. Moreover, much of Hungarian company finance is provided by shareholders rather than banks, again reducing demand-side pressures that might otherwise favor more competitive lenders. Kazakhstan also provides examples of a similar effect: many of the highly internationalized energy sector’s financing needs are met directly from abroad.

120. A balanced conclusion would appear to be that while openness to foreign capital alone does not appear to be either absolutely necessary or sufficient for delivering effective consolidation, and can sometimes even delay the process, foreign capital can help steer a domestically driven consolidation process toward effective results.