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New Banks in the Former Soviet Union:
How Do They Operate?

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Abstract

There has been rapid development of new banks in the former Soviet Union, but the precise nature of these banks remains unclear. Based on interviews with banks in Kiev, Ukraine, conducted primarily during summer 1991, the authors show these banks remain closely connected to state enterprises, and the more successful banks have strong links to ministries. They also point out that while these banks operate using unusual contractual forms, most of these anomalies can be explained as ways to reduce transactions costs in a credit market with severe monitoring problems and legal restrictions. This interpretation can explain all banking phenomena in Ukraine with one important exception -- the low nominal and negative real level of interest rates, which must be attributed to the central bank's credit policy.
I. Introduction

Commercial banks are prominent among the new forms of business that have emerged and spread rapidly in the former Soviet Union as a result of reforms introduced under perestroika. Permitted only since 1988, commercial banks already number over 2,000. The rapid growth of these banks has raised questions about their economic consequences. In light of the sharp deterioration in macroeconomic performance which coincided with the banking boom, it is not surprising that the existing literature has tended to emphasize the dysfunctional aspects of commercial banks. Two negative views are frequently expressed.

The first view argues that these banks are a means for former communist party elites (the nomenklatura) to convert political power into economic power. One observer has even asserted that the nomenklatura control commercial banks (Rumer 1991, p. 21.) If correct, this view implies that the banks continue the previous allocation of power under a new guise, and probably preserve some negative economic features of the old planning system.

The second view holds these new banks are too closely tied to groups of firms through cross-ownership of shares. These ties are interpreted not as strengthening competitiveness of industrial groups, as in the German or Japanese model, but rather as allowing state enterprises to maintain soft budget constraints, as in the Yugoslav model (International Monetary Fund, Volume II, p.115). Because these banks continue to lend at low nominal interest rates while inflation rises, they also stand accused of providing implicit subsidies to privileged enterprises and of contributing to inflationary pressures.

Previously there was almost no published data about these new commercial banks,
aside from some aggregate numbers, and as a result rival interpretations of bank behavior were based on anecdotal evidence. There has been almost no serious academic work on these issues. This paper is the preliminary report of a project designed to collect a systematic set of data and evaluate rival hypotheses about commercial bank behavior in the former Soviet Union. Our goal is to explain what information can be collected by interviewing banks, and to suggest ways in which banking behavior in the former Soviet Union can be interpreted.

Because organizing empirical research in the former Soviet Union is difficult, we chose to begin our investigation by interviewing commercial banks in one city -- Kiev, capital of Ukraine. According to the National Bank of Ukraine, in summer 1991 there were 14 registered commercial banks in Kiev, and 30 in the whole of Ukraine. In August 1991 two registered Kiev banks were not actually in operation, so the 12 banks we interviewed represented the whole population of operational commercial banks in that city. We are currently in the process of obtaining more updated information on these banks, and our follow-up enquiries in winter 1991-92 indicate the basic situation and structure of Ukrainian commercial banking remains unchanged. However, because the macroeconomy remains unstable and our next round of data collection is not complete, in this paper we will concentrate on the evidence from summer 1991.

In addition to presenting a unique data set, this paper offers an alternative interpretation of banking behavior. Because of the legacies of the traditional "monobank" system and the way this system was reformed after 1987, the environment in which the new commercial banks operate makes it very difficult and costly for them to screen prospective
borrowers, monitor their performance, and enforce debt payments. Interestingly, although our sample includes independently founded banks as well as those founded by groups of state enterprises, all these banks have very similar institutional structures for operating in this environment. We argue that these structures are sensible ways to reduce the transaction costs inherent in banking operations. Our evidence does not refute existing explanations for bank behavior, but it does introduce a substantially new and positive element. It also suggests several promising directions for future theoretical and empirical research concerning banks in post-communist countries.

This argument and supporting evidence are presented in the next three sections. Section II identifies some key structural attributes of the current banking environment and traces them to the reorganization of the traditional monobank system after 1987. Section III examines the profiles of commercial banks in Kiev, and shows that, irrespective of how they were formed, all of them lend to and are owned by state organizations. Using this background, Section IV offers a transaction-cost interpretation for the behavior of commercial banks. Section V deals with the one important aspect of banking which cannot be explained in terms of transaction costs -- low nominal and negative real interest rates. Section V summarizes the main conclusions of the study.

II. The Banking Environment

The present banking environment in the former Soviet Union has three distinctive features. First, the credit market is dominated by large state banks. Second, there is a scarcity of publicly available information on firms, and consequently it is difficult for any
bank to assess a borrower’s credit-worthiness. Even if credit histories did exist, the recent radical changes in economic conditions probably mean they are not good predictors of future creditworthiness. Finally, existing laws do not provide an adequate legal basis for making secured loans. All three conditions are legacies of the monobank system under central planning and the way this system was partially reformed since the late 1980s.

A basic feature of the financial system in the classical central planning system was the integration of all commercial banking operations in a single monobank. Until 1987, the State Bank (Gosbank) was the sole bank responsible for managing the accounts of state enterprises and for issuing them short-term credit to finance inventories and working capital. A system of savings banks was fully subordinate to Gosbank, and the only other banks, the Construction Bank (Stroibank) and the Foreign Trade bank (Vneshtorgbank), were specialized and did not compete with Gosbank.

In an economy where real economic activity was controlled by detailed production and supply plans drawn up in physical terms, banking played only a supportive role. The enterprise financial plan was formed as the monetary counterpart of the physical plan, in large part so that Gosbank could monitor and control enterprise plan fulfillment. Credit was extended for specific purposes in accordance with the plan through a system of segregated accounts earmarked for specific plan targets. Money and credit were passive in the sense that they supported fulfillment of centrally-determined plans rather than influencing economic activity directly.

In such circumstances, there was no need for Gosbank to be concerned with risk appraisal or the availability of legal means for securing debt. While official Soviet doctrine
held that credit should be secured and repayable, in practice the criterion for extending credit was not the borrower's profitability or credit-worthiness, but instead whether a particular transaction was provided for in the plan. As long as the latter condition was met, credit was made available almost automatically (Garvy 1977, pp. 115-116). There were provisions in the existing body of civil law authorizing the use of property to secure loans, but they excluded the lion's share of productive assets by stipulating that enterprises, buildings, equipment and other productive assets owned by the state could not be seized to satisfy the claims of creditors.7

In 1987, the banking system was reorganized by creating three new specialized banks alongside the two existing ones (On the Improvement, 1987). The result was a two-tiered banking system consisting of Gosbank and five specialized banks: the Bank for Foreign Economic Relations (Vneshekonombank), created out of Vneshtorgbank; the Industrial Construction Bank (Promstroibank), created out of Stroibank; the Agro-Industrial Bank (Agroprombank); the Bank for Housing, Municipal Services and Social Development (Zhilsotsbank); and the Savings Bank (Sberogatel'nyi Bank, or Sberbank), which had a monopoly on individual savings accounts. A central aim of the reorganization was to transfer commercial banking operations from Gosbank to the specialized banks. The specialized banks were charged with providing loans and taking deposits in their respective sectors, leaving Gosbank to manage the total supply of money and credit and to coordinate the banks' activities.

Since 1990, there has been a process of commercializing the specialized state banks by converting them into joint-stock companies. Agroprombank was converted into a joint-
stock company in September 1990, and by the end of 1990 Zhilotsbank and Promstroibank also had been targeted for conversion (Mirimskaya and Arkhangelskaya 1991). Parallel with the process of commercialization, the specialized banks started to split up along geographical lines from 1990, and their republic branches were reorganized as independent commercial banks (International Monetary Fund 1991, Vol. 2, pp. 111-113; and Shatalov 1991, pp. 25-26). In some cases, local branches have been able to set themselves up as independent commercial entities.

Confusingly, the specialized banks are now generally referred to as commercial banks and lumped together with private commercial banks. Unlike the specialized banks, however, most commercial banks did not emerge from Gosbank, but were formed independently. The emergence of private commercial banks began with the 1988 Law on Cooperatives, which authorized the formation of cooperative banks to serve the financial needs of cooperatives. The first such banks opened in September and October 1988, and by the end of 1988 there were 34 commercial banks in the Soviet Union. This total rose to 225 by January 1990, and 1500 by May 1, 1991. In the fall of 1991, there were 2,250 commercial banks, with 3,500 branches throughout the former Soviet Union (USSR Business Reports, October 15, 1991).

Similar developments also occurred in Ukraine, but with a lag of several months compared with Moscow. Table 1 shows that new commercial banks began to form in Kiev during 1989; the first to be registered was Ukrinbank, on January 24, 1989. Four of the interviewed banks were formed during 1989, and seven during 1990. In addition, a new National Bank of Ukraine was established in May 1990, and became operational in 1991.
Table 1

Kiev Banks
Date of Foundation and Founders

<table>
<thead>
<tr>
<th>Date of Foundation</th>
<th>Founders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>Gosbank</td>
</tr>
<tr>
<td>January</td>
<td>Ministry</td>
</tr>
<tr>
<td></td>
<td>Independent</td>
</tr>
<tr>
<td></td>
<td>Ukrinbank</td>
</tr>
<tr>
<td>February</td>
<td>Ukrstrombank</td>
</tr>
<tr>
<td>April</td>
<td>LegBank</td>
</tr>
<tr>
<td>April</td>
<td>1990</td>
</tr>
<tr>
<td>1st half year</td>
<td>Bank INKO</td>
</tr>
<tr>
<td>May</td>
<td>Ukrmezhvuzebank</td>
</tr>
<tr>
<td>June</td>
<td>Kiev Narodny</td>
</tr>
<tr>
<td>October</td>
<td>Ukrsotsbank</td>
</tr>
<tr>
<td>November</td>
<td>Percombank</td>
</tr>
<tr>
<td>November</td>
<td>Ukrsnabbank</td>
</tr>
<tr>
<td>Unknown</td>
<td>Vidrogenya</td>
</tr>
</tbody>
</table>

Source: Interviews.
While the structure of the banking system has changed rapidly since 1987, complementary changes in the legal basis for securing loans have been slow to occur. As noted above, existing laws placed severe restrictions on the use of productive assets owned by the state as collateral. Recent legal changes, including provisions of the "Principles of Civil Legislation of the USSR and the Republics" and a new Russian Federation "Law on Pledge", ostensibly allow loans to be secured not only by pledges of any productive asset, but also by pledges of property rights over such assets (Osnovy, 1991, p. 25; Grigor'ev, 1992, p. 25).\textsuperscript{12} The practical effect of these changes, however, remains to be seen. By the time the "Principles of Civil Legislation of the USSR and the Republics" was to have taken effect on January 1, 1992, the Soviet Union no longer existed.

The Law on Pledge was approved by the Russian Supreme Soviet in early January 1992, but one Russian banker complained in a newspaper interview published shortly thereafter that there was still no enforcement mechanism in place for implementing the law (Chto 1992). The fundamental problem, however, is that the current structure of ownership in the former Soviet Union is extremely muddled. While the Law on Pledge allows the assets of state enterprises to serve as the basis for securing loans, implementation of the law will be difficult in the absence of clearly defined ownership rights.

As a result of the reforms outlined above, the commercial banking industry in the former Soviet Union now has a dual structure consisting of a few enormous state banks and many relatively small commercial banks. In banking, as in many other parts of the economy in the former Soviet Union, the old structures have disintegrated, and new institutions -- commercial banks -- are emerging. But these institutions work in idiosyncratic ways, which
are hard to understand using only published sources. In order to comprehend the full effects of the dominance of large state banks, the lack of any information market about borrowers, and the weak legal structure, it is necessary to interview commercial bank managers. The principal findings from these interviews are described in the next three sections.

III. Bank Profiles

This section describes the important characteristics of commercial banks in Kiev. In particular, we report the quantity and quality of resources employed in these banks and find most banks are very similar. However, while almost all banks began with very similar "endowments", there is evidence that some have subsequently performed better than others.

We can divide Kiev commercial banks into three categories: those which emerged out of Gosbank, those founded primarily by a ministry or by a group of enterprises under one ministry, and those founded as "independents". Despite these significantly different origins, our interviews revealed strong connections between all new commercial banks and existing state structures -- state enterprises, ministries and in some cases even state banks.

As Table 1 indicates, in three cases the interviewee stated the bank had been formed directly out of former state specialized banks: Percombank from the Syrets bank of the all-Union Promstroibank, Vidrogenya from Stroibank, and Ukrsotsbank from the Zhilsotsbank. Four banks were founded largely at the initiative of a government ministry: Ukrinbank by the Ukrainian Council of Ministers, Ukrstrombank by the all-Union Construction Ministry, Ukrmezhvuzbank by the Science Department of the Ministry of
Higher Education, and Ukrsnabbank by the all-Union Gossnab. Legbank was formed by 11 firms, the majority of which were in clothing production.

In contrast, several banks were founded more independently, although all of them have state enterprises as significant share-holders. Kiev Cooperative Bank and the Ukrainian Bank for Commercial Development were both founded on the initiative of their respective chairmen. INKO bank was founded in April 1990 as the Kiev branch of Mosinkombank, a large independent commercial bank based in Moscow, but broke away in December 1990.

We should emphasize these are all relatively small banks. Table 2 shows the number of employees by bank in summer 1991. With the exception of Ukrsotsbank -- a former state bank -- the highest number of workers was 115 in Ukrinbank. In nearly all the banks there was a high level of guidance and control by the president and chief executive officer, frequently referred to simply as the "chief". In one case the president was proud to claim personal responsibility for around two thirds of the bank's profits.

Initially we thought banks more closely connected to Gosbank and ministries would tend to have older chairmen. However, Table 3 shows no such pattern. Banks which emerged out of the state monobank tend to have slightly older chairmen: 52 years old (1 year experience in the banking system) at Vidrogenya, 41 years old (19 years in banks) at Percombank, 37 years old (16 years in banks) at Ukrsotsbank. Banks founded by ministries had chairmen with the following characteristics: 50 years old (33 years in banking) at Ukrmezhvuzbank, 39 years old (15 years in banking) at the Ukrainian Bank for Commercial Development, 30 years old (9 years in banking) at Ukrsnabbank. The more independent
Table 2

UKRAINIAN COMMERCIAL BANKS

Number of Bank Employees

<table>
<thead>
<tr>
<th>Bank</th>
<th>Interview Date</th>
<th>Employees (Current)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>1-Aug-91</td>
<td>50</td>
</tr>
<tr>
<td>2 Kiev Cooperative Bank</td>
<td>23-Jul-91</td>
<td>48</td>
</tr>
<tr>
<td>3 Kiev Narodny Bank</td>
<td>30-Jul-91</td>
<td>34</td>
</tr>
<tr>
<td>4 LegBank</td>
<td>24-Jul-91</td>
<td>16</td>
</tr>
<tr>
<td>5 Percombank</td>
<td>10-Jul-91</td>
<td>12</td>
</tr>
<tr>
<td>6 Vidrogenya</td>
<td>31-Jul-91</td>
<td>32</td>
</tr>
<tr>
<td>7 Ukr. Bank for Comm. Dev.</td>
<td>2-Aug-91</td>
<td>35</td>
</tr>
<tr>
<td>8 Ukrstrombank</td>
<td>31-Jul-91</td>
<td>25</td>
</tr>
<tr>
<td>9 Ukrinbank</td>
<td>1-Aug-91</td>
<td>115</td>
</tr>
<tr>
<td>10 Ukrmezhvuzhbank</td>
<td>11-Jul-91</td>
<td>5</td>
</tr>
<tr>
<td>11 Ukrsnabbank</td>
<td>6-Aug-91</td>
<td>29</td>
</tr>
<tr>
<td>12 Ukrsotsbank - Kiev</td>
<td>9-Jul-91</td>
<td>850</td>
</tr>
</tbody>
</table>

Total 1,251
Total w/o Ukrsotsbank 401
Average 104
Average w/o Ukrsotsbank 36

Source:

Table 3

UKRAINIAN COMMERCIAL BANKS
Profiles of Bank Managers Interviewed

Summary Data:
14 interviewees at 12 banks
13 men, 1 woman
10 Ukrainians, 4 Russians
Average age, 40.4 years (Range of ages, 27 - 65 years)
Average years in the banking system, 14.0

6 banks had 8 directors with an average of 22.3 years in the banking system:
Kiev Narodny, Percombank, Commercial Development, Ukrstrombank,
Ukrmezhvuzhbank, and Ukrsotsbank

6 banks had 6 directors with an average of 2.9 years in the banking system:
INKO, Cooperative, Legbank, Vidrogenya, Ukrinbank, Ukrsnabbank

Bank INKO
Chairman of the Board
Age 34
Mechanical Engineering, Kiev Technical Institute
Foreign Economics, Moscow Finance Institute
Bank Experience:
1 1/2 years in the banking system
1 1/2 years at Bank INKO

Kiev Cooperative Bank
Chairman of the Board
Age 33
Kiev Institute of National Economy
Bank Experience:
2 years in the banking system
2 years at Kiev Cooperative Bank
Deputy Head, Department of Revenue, Ukrainian Ministry of Finance

Kiev Narodny Bank
Chairman of the Board
Age 37
Kiev Institute of National Economy
Moscow Finance Institute, 1985 - 1986
Bank Experience:
16 years in the banking system
Gosbank, 1975 - January 1988
Zhilsotsbank, January 1988 - September 1989
Kiev Narodny Bank, October 1989 - Present

August 1, 1991
July 23, 1991
July 30, 1991
Table 3, continued

<table>
<thead>
<tr>
<th>Bank</th>
<th>Officer</th>
<th>Age</th>
<th>Education</th>
<th>Bank Experience</th>
</tr>
</thead>
</table>
| LegBank             | Chief of Foreign Economic Department | 27   | Kiev Institute of National Economy  | Bank Experience: 2 years, four months in the banking system
                                    |                           |      |                                    | Gosbank, 1985
                                    |                           |      |                                    | Chief Economist, Incombank
                                    |                           |      |                                    | Legbank, 4 months
| Percombank         | Chairman of the Board    | 41   | Kiev Institute of National Economy  | Bank Experience: 19 years, four months in the banking system
                                    |                           |      |                                    | Most recently with Promstroybank
                                    |                           |      |                                    | Percombank, 7 months
                                    |                           |      | Note: Percombank was formed from the Syretsk branch of Promstroybank. |
| Vidrogenya         | Chairman of the Board    | 52   | Kiev Institute of National Economy  | Bank Experience: 1 year in the banking system
                                    |                           |      |                                    | 1 year at Bank Vidrogenya
                                    |                           |      | Note: Bank Vidrogenya was formed from the former Stroybank. |
| Ukrainian Bank for Commercial Development | Chairman of the Board | 39   | Kiev - Taras Shevchenko University  | Bank Experience: 15 years in the banking system
                                    |                           |      |                                    | Former Chief of GOSCITY Bank of Ukraine
                                    |                           |      |                                    | 1 1/2 years with Ukrainian Bank for Commercial Development |

Note: Percombank was formed from the Syretsk branch of Promstroybank.

Note: Bank Vidrogenya was formed from the former Stroybank.

Note: Ukrainian Bank for Commercial Development was formed from the former Stroybank.
Table 3, continued

Ukrstrombank  
Chairman of the Board
Age 50
Kiev Institute of National Economy
Bank Experience:
- 30 years in the banking system
  Former Chairman, Finance Department, Ministry of Building
- 3 years with Ukrstrombank

First Deputy Chairman of the Board
Age 65
Odessa Credit/Economic Institute
Bank Experience:
- 38 years in the banking system
  Gosbank, 1963 - 1988
- 3 years with Ukrstrombank

Deputy Chairman of the Board and Director of Foreign Exchange Department
Age 32
Kiev Institute of National Economy
Bank Experience:
- 11 years in the banking system
- 3 years with Ukrstrombank

Ukrinbank  
Vice Chairman
Age 38
Mechanical Engineering, Institute of Cybernetics, Ukrainian Academy of Sciences
Economics, Institute of Cybernetics, Ukrainian Academy of Sciences
Bank Experience:
- 2 years in the banking system
- 2 years with Ukrinbank, formerly with Ukrainian Academy of Sciences

Ukrmezhvuzhbank  
Chairman of the Board
Age 50
B.S., Lvov Technicum
Kiev Institute of National Economy
Bank Experience:
- 33 years in the banking system
  Associate Professor, Department of Credit, Kiev Institute of National Economy
- 3 months with Ukrmezhvuzhbank
<table>
<thead>
<tr>
<th>Bank</th>
<th>Chairman of the Board</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukrsnabbank</td>
<td>Age 30</td>
<td>August 6, 1991</td>
</tr>
<tr>
<td></td>
<td>Kiev Institute of National Economy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank Experience:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 years in the banking system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promstroybank, various capacities, 1982-1991</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 months with Ukrsnabbank</td>
<td></td>
</tr>
<tr>
<td>Ukrsotsbank - Kiev</td>
<td>Age 37</td>
<td>July 9, 1991</td>
</tr>
<tr>
<td></td>
<td>Kiev Institute of National Economy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank Experience:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 years in the banking system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gosbank, 1975 - 1987</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zhilsotsbank, 1987 - October 1990</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 months with Ukrsotsbank, since its conversion to joint-stock status from Zhilsotsbank</td>
<td></td>
</tr>
</tbody>
</table>

banks had chairmen aged 33 years old (2 years in banking) at Kiev Cooperative Bank and 37 years old (16 years in banking) at Kiev Narodny Bank.

There is a pattern in the number of years which interviewees have worked in banks. As Table 3 shows, although the average number of years in banking system was 14, there was a bimodal distribution. In six banks, we interviewed eight directors with an average of 22.3 years in the banking system, while in the other six banks we interviewed six directors with an average of 2.9 years in banking. However, the second group is quite mixed -- it contains the chairmen of former state banks, ministry-founded banks and independent banks.

The similarities in personnel in the three types of banks appear to outweigh the differences. All top bank management have professional training in banking. Almost all the bankers which we interviewed were graduates of the Kiev Institute of National Economy. Interviewees in the two largest independent banks, Ukrinbank and Bank INKO, were trained as engineers and worked outside the banking system, but they also have had training as "financial specialists."

Table 4 does indicate some differences in the hiring practices of different kinds of banks. Independent banks and some ministry-founded banks said they preferred to hire people based on close personal contacts or references, with the additional requirement that people not be tainted by having worked "too long" in the former monobank. Bank INKO only recently began to hire former state bank employees for "technical positions", while Kiev Cooperative Bank's policy is to hire such people just for fairly basic work, such as being a cashier. In contrast, Percombank and Ukrotsbank -- formed from Promstroibank and
Table 4

UKRAINIAN COMMERCIAL BANKS

Bank Source of Hiring

<table>
<thead>
<tr>
<th>Bank</th>
<th>Interview Date</th>
<th>Employees (Current)</th>
<th>Source of Hiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>1-Aug-91</td>
<td>50</td>
<td>Only recently began to hire from state banking sector.</td>
</tr>
<tr>
<td>2 Kiev Cooperative Bank</td>
<td>23-Jul-91</td>
<td>48</td>
<td>Recommendations from former employees. Former state bank employees are considered only for positions such as cashiers or bookkeepers.</td>
</tr>
<tr>
<td>3 Kiev Narodny Bank</td>
<td>30-Jul-91</td>
<td>34</td>
<td>Hire based on professional abilities and personal character.</td>
</tr>
<tr>
<td>4 LegBank</td>
<td>24-Jul-91</td>
<td>16</td>
<td>Hire known people. Hire only &quot;smart, young&quot; state bank employees.</td>
</tr>
<tr>
<td>5 Percombank</td>
<td>10-Jul-91</td>
<td>12</td>
<td>From Promstroybank, other state banks.</td>
</tr>
<tr>
<td>6 Vidrogenya</td>
<td>31-Jul-91</td>
<td>32</td>
<td>Not older than 40 years; bank education and foreign language.</td>
</tr>
<tr>
<td>7 Ukr. Bank for Comm. Dev.</td>
<td>2-Aug-91</td>
<td>35</td>
<td>Hire based on professional abilities and experience, reliability and possibility of additional study.</td>
</tr>
<tr>
<td>8 Ukrstrombank</td>
<td>31-Jul-91</td>
<td>25</td>
<td>Twenty percent from old state banking system; eighty percent from other sources, such as Ministry of Finance.</td>
</tr>
<tr>
<td>9 Ukrinbank</td>
<td>1-Aug-91</td>
<td>115</td>
<td>Most specialist are from the old state banking system, found through interview and recommendation process.</td>
</tr>
<tr>
<td>10 Ukrmezhvuzhbank</td>
<td>11-Jul-91</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>11 Ukrsnabbank</td>
<td>6-Aug-91</td>
<td>29</td>
<td>Ninety percent from old system, hired on the basis of expertise, &quot;diplomacy,&quot; and &quot;commercial soul.&quot;</td>
</tr>
<tr>
<td>12 Ukrsotsbank - Kiev</td>
<td>9-Jul-91</td>
<td>850</td>
<td>Former state bank.</td>
</tr>
</tbody>
</table>

Total 1251
Total w/o Ukrsotsbank 401
Average 104
Average w/o Ukrsotsbank 36

Zhillsotsbank -- hire from state banks without reservations. Of course, experienced bankers are only found in the state system, but some commercial banks are evidently more discerning in their hiring than others.¹⁹

As Table 5 shows, each of these banks has less than 100 owners. Banks with relatively few owners include ministry-founded Legbank (15 owners) and Ukrmezhvuzbank (12 owners), but also Percombank (20 owners) which was formed from a branch of Gosbank, and the independent Kiev Narodny Bank (35 owners). Ukrinbank, which was ministry-founded, had the most owners (95), while the independent Bank INKO had 92. There may be a pattern revealed by these numbers: the five Ministry-founded banks have an average of 37 owners each, while the four independent banks average 64 owners. Of course, our sample is far too small for us to know whether this pattern would hold more generally in the former Soviet Union.

Table 5 also shows the capital per owner ratio for each bank. This ratio was highest for Ukrsnabbank (ministry-founded) followed closely by Percombank (former state bank). Capital value was less than one million rubles per owner in all three banks which we have characterized as independent. However, it was also below a million rubles for the ministry-founded Ukrainian Bank for Commercial Development and Ukrinbank.

Table 6 shows the growth in nominal ownership capital for these banks from their formation to summer 1991.²⁰ In most cases this growth was rapid, ranging from 24 percent in Bank INKO to 462 percent in Ukrsnabbank. However, it should be remembered there was substantial inflation over this same period, and growth rates of less than 50 percent may represent a fall in real values.
### Table 5

**UKRAINIAN COMMERCIAL BANKS**

Ownership Concentration

<table>
<thead>
<tr>
<th>Bank</th>
<th>Capital (Rubles)</th>
<th>Number of Owners</th>
<th>Capital/Owner (Rubles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>86,874,000</td>
<td>92</td>
<td>944,283</td>
</tr>
<tr>
<td>2 Kiev Cooperative Bank</td>
<td>21,000,000</td>
<td>50</td>
<td>420,000</td>
</tr>
<tr>
<td>3 Kiev Narodny Bank</td>
<td>15,000,000</td>
<td>35</td>
<td>428,571</td>
</tr>
<tr>
<td>4 LegBank</td>
<td>22,000,000</td>
<td>15</td>
<td>1,466,667</td>
</tr>
<tr>
<td>5 Percombank</td>
<td>40,000,000</td>
<td>20</td>
<td>2,000,000</td>
</tr>
<tr>
<td>6 Vidrogenya</td>
<td>82,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Ukr. Bank for Comm. Dev.</td>
<td>35,000,000</td>
<td>80</td>
<td>437,500</td>
</tr>
<tr>
<td>8 Ukrstrombank</td>
<td>25,000,000</td>
<td>22</td>
<td>1,136,364</td>
</tr>
<tr>
<td>9 Ukrinbank</td>
<td>46,300,000</td>
<td>95</td>
<td>487,368</td>
</tr>
<tr>
<td>10 Ukrmezhvuzhbank</td>
<td>7,000,000</td>
<td>12</td>
<td>583,333</td>
</tr>
<tr>
<td>11 Ukrsnabbank</td>
<td>45,000,000</td>
<td>20</td>
<td>2,250,000</td>
</tr>
<tr>
<td>12 Ukrsotsbank - Kiev</td>
<td>500,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>925,174,000</td>
<td>441</td>
<td></td>
</tr>
<tr>
<td><strong>Total w/o Ukrsotsbank</strong></td>
<td>42,517,400</td>
<td>441</td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>77,097,833</td>
<td>44</td>
<td>1,015,409</td>
</tr>
<tr>
<td><strong>Average w/o Ukrsotsbank</strong></td>
<td>38,652,182</td>
<td>44</td>
<td>1,015,409</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank</th>
<th>Interview Date</th>
<th>Initial Ownership Capital</th>
<th>Date of Initial Ownership Capital</th>
<th>Current Ownership Capital (2) (in rubles)</th>
<th>Number of Months of Operation</th>
<th>Overall Growth of Ownership Capital</th>
<th>Monthly Growth of Ownership Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>1-Aug-91</td>
<td>$70,000,000</td>
<td>1-Apr-90</td>
<td>86,874,000</td>
<td>16</td>
<td>24.11%</td>
<td>1.36%</td>
</tr>
<tr>
<td>2 Kiev Cooperative Bank</td>
<td>23-Jul-91</td>
<td>3,500,000</td>
<td>1-Apr-89</td>
<td>21,000,000</td>
<td>28</td>
<td>500.00%</td>
<td>6.61%</td>
</tr>
<tr>
<td>3 Kiev Narodny Bank</td>
<td>30-Jul-91</td>
<td>10,000,000</td>
<td>18-Oct-89</td>
<td>15,000,000</td>
<td>21</td>
<td>50.00%</td>
<td>1.95%</td>
</tr>
<tr>
<td>4 LegBank</td>
<td>24-Jul-91</td>
<td>16,366,550</td>
<td>1-Apr-91</td>
<td>22,000,000</td>
<td>4</td>
<td>34.42%</td>
<td>7.68%</td>
</tr>
<tr>
<td>5 Percombank (3)</td>
<td>10-Jul-91</td>
<td>N/A</td>
<td></td>
<td>40,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Vidrogenya</td>
<td>31-Jul-91</td>
<td>15,000,000</td>
<td>1-Jul-90</td>
<td>82,000,000</td>
<td>13</td>
<td>446.67%</td>
<td>13.96%</td>
</tr>
<tr>
<td>7 Ukrainian Bank for</td>
<td>2-Aug-91</td>
<td>22,000,000</td>
<td>19-Jun-90</td>
<td>35,000,000</td>
<td>13</td>
<td>59.09%</td>
<td>3.64%</td>
</tr>
<tr>
<td>Commercial Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Ukrstrombank</td>
<td>31-Jul-91</td>
<td>8,100,000</td>
<td>1-Feb-89</td>
<td>25,000,000</td>
<td>30</td>
<td>208.64%</td>
<td>3.83%</td>
</tr>
<tr>
<td>9 Ukrinbank (4)</td>
<td>1-Aug-91</td>
<td>15,000,000</td>
<td>24-Jan-89</td>
<td>46,300,000</td>
<td>30</td>
<td>208.67%</td>
<td>3.83%</td>
</tr>
<tr>
<td>10 Ukrmehzvuzhbank</td>
<td>11-Jul-91</td>
<td>N/A</td>
<td></td>
<td>7,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Ukrsnabbank</td>
<td>6-Aug-91</td>
<td>8,000,000</td>
<td>1-Jan-91</td>
<td>45,000,000</td>
<td>7</td>
<td>462.50%</td>
<td>27.99%</td>
</tr>
<tr>
<td>12 Ukrsotsbank - Kiev (5)</td>
<td>9-Jul-91</td>
<td>N/A</td>
<td></td>
<td>500,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>167,966,550</td>
<td></td>
<td>925,174,000</td>
<td>162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total w/o Ukrsotsbank</td>
<td></td>
<td>167,966,550</td>
<td></td>
<td>425,174,000</td>
<td>162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>27,994,425</td>
<td></td>
<td>77,097,833</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average w/o Ukrsotsbank</td>
<td></td>
<td>27,994,425</td>
<td></td>
<td>38,652,182</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes: 1 Day of the month not specified in interview given as first day of month.
2 "Current Ownership Capital" is the amount reported during interview.
3 Percombank was formed from a branch office of Promstroybank.
4 Ukrinbank has approval from the National Bank of Ukraine to sell up to 100,000,000 roubles of ownership capital.
5 Ukrsotsbank was formed from Kiev branch of Zhilsotsbank in October 1990.
There was definitely real growth in capital value for five banks: Kiev Cooperative Bank, Vidrogenya, Ukrstrombank, Ukrinbank and Ukrsnabbank. Four of these fast growing banks had very strong ministerial ties, with the exception being Kiev Cooperative Bank. This is suggestive, but not conclusive evidence that banks with closer ties to well-funded ministries tend to grow faster.\textsuperscript{21} We have too few observations to feel comfortable trying to draw any more general inferences from this evidence.

In conclusion, although we have collected a considerable amount of data about Kiev's commercial banks, we can find only small differences between banks in terms of the labor and capital they employ. Most of these banks are quite similar, particularly in the way they remain closely linked to the state sector, although there is some evidence banks with closer ties to ministries tend to have grown faster. As the next section shows, these banks are also remarkably similar in the institutional forms they have adopted.

IV. Transaction Costs

Based on the banking environment described in sections II and III, our reading of the western theoretical literature on banking suggests four types of transaction costs would be important in Kiev. Each cost is the result of some form of asymmetric information which although it exists in a western market economy is probably a much worse problem in the current banking environment of the former Soviet Union. In addition, the lack of an adequate legal framework imposes severe constraints on the types of contracts which can be devised to deal with asymmetric information.

First, adverse selection means it is necessary to screen loan applicants, and this is a
costly undertaking (Stiglitz and Weiss 1981). Potential borrowers may have an incentive to misrepresent their type, and claim they intend to repay even when they do not. Second, moral hazard implies the need to monitor borrower performance, because ex post there is an incentive to claim to be unable to repay a loan. However, it is costly to collect information about borrowers' actual profits. Third, it may also be costly to collect payments owed even, particularly as there is not well-developed contracts or bankruptcy law in the former Soviet Union. Fourth, there are also costs to investors associated with monitoring whether a bank is performing properly (Calomiris and Kahn 1989) and whether other investors in the bank will withdraw their funds (Diamond and Dybvig 1983). Given that in the former Soviet Union, investors in banks are firms which could plausibly lend directly to other firms, they need to consider all four types of transaction costs.

How do Kiev commercial banks screen potential loan customers and attempt to minimize the costs of dealing with adverse selection? One obvious way is by lending primarily to firms connected with the banks' owners. Banks rely on personal contacts to obtain information about borrowers. This is somewhat different from the usual (Anglo-American) view of how banks should operate -- at arms'-length from borrowers and requiring the borrower to put up collateral. However, making arrangements through personal contacts or bank owners makes sense in Kiev because it is hard to arrange collateral for loans or to litigate if there is a default.

Interviewees in commercial banks said they wanted to have loan collateral, and preferred the pledge of tangible goods, but only when the borrower has clear ownership rights. In fact, for most suitable assets -- such as buildings and land -- ownership status
is unclear. Interviewees informed us there is not yet a Ukrainian law on collateral, and they regarded its absence as a problem. A further indication of this difficult legal situation is that in July 1991 the National Bank of Ukraine was unable to tell us how long a lawsuit would take in the case of loan default.

In practice, most loans are "secured" by a letter which is a written pledge to repay and which has unclear legal status. Nevertheless, interviewees did not report a single case of default by a borrower, and nor did we hear any suggestion loans do not really have to be repaid. These commercial banks are profit-making businesses, and they protect themselves by being very selective in choosing to whom they lend.

For example, some borrowers are small enterprises formed by, or firms which want to buy equipment from, bank owners. One bank described a system in which a large state enterprise acts as co-signer on a loan to ensure repayment. The director of this bank also said he can use ministerial contacts to lobby for subsidy payments to enterprises which would otherwise default on their loans. These are all ways to address adverse selection and monitoring problems.

Most commercial bank loans have short maturity, usually 3-6 months, and the majority of credits are explicitly to finance a trading operation or the manufacture of scarce goods, such as food, furniture or housing. Commercial banks do not lend to individuals. Nor do they usually provide long-term investment credits. By concentrating on financing for projects which promise quick profits, commercial banks do not directly deal with the monitoring problem, but they reduce the probability the borrower will genuinely be unable to repay. These banks regard an unpaid debt as extremely unusual, and would probably
make a special investigation of the circumstances. In addition, by offering to roll-over credits, the bank provides an incentive for the borrower to be honest -- so he can borrow in the future.

We should also stress that real interest rates on loans are negative and have been at least since mid-1991. Borrowing from a commercial bank is extremely profitable as long as an investment project pays at least a zero real rate of interest. Until real interest rates become positive, we would not expect to see firms defaulting on their loans.

Each commercial bank is owned by and lends to a group of firms, and rarely looks for customers outside that group -- for example, by advertizing. The commercial bank provides a way for these firms to pool their resources, increase the range of projects which they can fund, and also share the benefits of cheap refinance credit from the National Bank of Ukraine. But if banks perform this role, we still need to know how banks monitor lenders ex post, how they collect on debts and how owners monitor the banks.

Western theoretical literature has linked the form of contracts involving banks with ways in which ex post monitoring costs are reduced. The conventional view is that it makes sense for banks to obtain funds through short-term deposits, and advance funds in the form of debt. However, for Kiev banks we find commercial banks' liabilities are mostly equity, while their assets are primarily short-term debt. How can this be an efficient contractual arrangement?

It is fairly obvious why banks do not advance funds by buying equity, because shares in the former Soviet Union have a number of limitations. Table 7 shows commercial banks have a high proportion of state firms among their customers, and it remains time consuming
**Table 7**

**UKRAINIAN COMMERCIAL BANKS**

Customers by Sector

<table>
<thead>
<tr>
<th>Bank</th>
<th>Number of Owners</th>
<th>Number of Customers</th>
<th>Percentage State Customers</th>
<th>Percentage Non-State Customers</th>
<th>Percentage of Customers from Kiev</th>
<th>Sectors Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank INKO</td>
<td>92</td>
<td>500</td>
<td>90</td>
<td>9</td>
<td>80</td>
<td>Transport, furniture, trading.</td>
</tr>
<tr>
<td>Kiev Cooperative Bank</td>
<td>50</td>
<td>800</td>
<td>10</td>
<td>90</td>
<td>65</td>
<td>Consumer goods, repair, machinery production, services, entertainment.</td>
</tr>
<tr>
<td>Kiev Narodny Bank</td>
<td>35</td>
<td>170</td>
<td>40</td>
<td>60</td>
<td>90</td>
<td>Construction, including construction materials, agriculture, timber, ship building.</td>
</tr>
<tr>
<td>LegBank</td>
<td>15</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
<td>90</td>
<td>Light industry (30%), trading operations (60%).</td>
</tr>
<tr>
<td>Percombank</td>
<td>20</td>
<td>100</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Electronics, commercial trading.</td>
</tr>
<tr>
<td>Vidrogenya</td>
<td>N/A</td>
<td>210</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Building renovation.</td>
</tr>
<tr>
<td>Ukrstrombank</td>
<td>22</td>
<td>200</td>
<td>100</td>
<td>0</td>
<td>5</td>
<td>Building materials production (80%), agriculture and intermediate trading (20%).</td>
</tr>
<tr>
<td>Ukrinbank</td>
<td>95</td>
<td>1000</td>
<td>N/A</td>
<td>&quot;Most&quot;</td>
<td>70</td>
<td>Technology; consumer goods, timber, oil.</td>
</tr>
<tr>
<td>Ukrmezhvuzhbank</td>
<td>12</td>
<td>8</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Educational institutions.</td>
</tr>
<tr>
<td>Ukrsnabbank</td>
<td>20</td>
<td>60</td>
<td>30</td>
<td>70</td>
<td>30</td>
<td>Building materials production, food products, associations, exchanges, newspapers.</td>
</tr>
<tr>
<td>Ukrsotsbank – Kiev</td>
<td>N/A</td>
<td>7500</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Many sectors, including housing (3%).</td>
</tr>
</tbody>
</table>

Total 441 10808
Total w/o Ukrsotsbank 441 3308
Average 44 901 53 47 60
Average w/o Ukrsotsbank 44 276 53 47 60

and costly for state firms to issue shares. It is easier for most state enterprises to obtain outside financing by borrowing. In cases where state enterprises have issued tradeable shares, there is usually no secondary market, and frequently an enterprise stipulates its shares can be sold only back to the enterprise itself -- this is known as a "closed" joint stock company. Even when outside investors hold shares, managers usually retain strong control over the operation of the company and are difficult to replace. Therefore, buying equity is only desirable if the investor intends to make a long-term investment, and has some viable way to force managers to act in shareholders' interests. By itself, equity in Ukrainian state enterprises cannot be used to control managers.

In contrast, short-term revolving credits from a commercial bank are relatively easy to start and to terminate. Although these credits do not help the bank to know the actual performance of firms, they do provide regular checks on whether a firm is willing to comply with its obligations. Presumably, both adverse selection and moral hazard problems are further reduced by lending to firms connected with the banks' owners, as long as the latter have access to inside information about borrowers' performance or are able to punish recalcitrant borrowers by cutting off supplies or evicting them.

If equity has so many unsatisfactory features, why do banks obtain finance by issuing shares? Equity is another contract which has particular features in the former Soviet Union. For example, one interviewee provided us with details on the shareholding arrangement of his bank which has two types of shares: simple shares, and privileged shares. Privileged shares give a fixed return, irrespective of the bank's profitability, but cannot account for more than 10 percent of all outstanding shares. Simple shares pay dividends which vary with
bank profits. However, there is an important drawback. If a shareholder is dissatisfied and wants to sell his shares, he must give right of first refusal to existing shareholders and the bank itself.\textsuperscript{31}

These contractual arrangements give a great deal of power to insiders, particularly to managers (Johnson and Kroll 1991). For most state enterprises shares do not provide a viable way for outsiders to control pre-existing stakeholders, and this makes it difficult to attract new investors. However, new commercial banks are different because they do not have a pre-existing set of stakeholders with a strong claim on profits. Because there are relatively few "inside" shareholders in commercial banks, issuing shares is a feasible way to obtain funds from outside investors.

But this still does not fully answer the question of how shareholders monitor bank management. We know commercial banks have large boards of directors on which all of their owners are represented. Table 8 shows that in every case for which we have data, each shareholder has a seat on the board of directors and this board meets 1 to 4 times a year. On the surface these numbers are surprising -- for many banks more people sit on the board of directors than work as employees! But in most cases the board of directors serves only a general oversight function. In effect, it is a shareholders' meeting in which bank managers must report what they have done.

More detailed monitoring of executive decisions is delegated to the Bank Council, which comprises the largest shareholders. As Table 8 also shows, in those cases for which we have data, Bank Council meetings are quarterly. It makes sense that a few shareholders -- those with the most to lose -- specialize in monitoring bank management.
## UKRAINIAN COMMERCIAL BANKS

### Ownership and Board Size

<table>
<thead>
<tr>
<th>Bank</th>
<th>Number of Owners</th>
<th>Size of Bank Board of Directors</th>
<th>Board of Directors Meetings/Year</th>
<th>Size of Bank Council</th>
<th>Size of Bank Council Meetings/Year</th>
<th>Percent of Board Represented on Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>92</td>
<td>92</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td>7.61%</td>
</tr>
<tr>
<td>2 Kiev Cooperative Bank</td>
<td>50</td>
<td>50</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>14.00%</td>
</tr>
<tr>
<td>3 Kiev Narodny Bank</td>
<td>35</td>
<td>35</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
<td>14.29%</td>
</tr>
<tr>
<td>4 LegBank</td>
<td>15</td>
<td>15</td>
<td>N/A</td>
<td>4</td>
<td>N/A</td>
<td>26.67%</td>
</tr>
<tr>
<td>5 Percombank</td>
<td>20</td>
<td>20</td>
<td>1 or 2</td>
<td>5</td>
<td>N/A</td>
<td>25.00%</td>
</tr>
<tr>
<td>6 Vidrojenya</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>7 Ukr. Bank for Comm. Dev.</td>
<td>80</td>
<td>80</td>
<td>2</td>
<td>11</td>
<td>4</td>
<td>13.75%</td>
</tr>
<tr>
<td>8 Ukrstrombank</td>
<td>22</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>9 Ukrinbank</td>
<td>95</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>10 Ukrmezhvuzhbank</td>
<td>12</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>11 Ukrsnabank</td>
<td>20</td>
<td>20</td>
<td>N/A</td>
<td>12</td>
<td>4</td>
<td>60.00%</td>
</tr>
<tr>
<td>12 Ukrsotsbank - Kiev</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Bank</th>
<th>Number of Owners</th>
<th>Size of Bank Board of Directors</th>
<th>Board of Directors Meetings/Year</th>
<th>Size of Bank Council</th>
<th>Size of Bank Council Meetings/Year</th>
<th>Percent of Board Represented on Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bank INKO</td>
<td>441</td>
<td>312</td>
<td>51</td>
<td>7</td>
<td>7</td>
<td>23.04%</td>
</tr>
<tr>
<td>Total w/o Ukrsotsbank</td>
<td>441</td>
<td>312</td>
<td>51</td>
<td>7</td>
<td>7</td>
<td>23.04%</td>
</tr>
<tr>
<td>Average</td>
<td>44</td>
<td>45</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>23.04%</td>
</tr>
<tr>
<td>Average w/o Ukrsotsbank</td>
<td>44</td>
<td>45</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>23.04%</td>
</tr>
</tbody>
</table>

All our explanations of how commercial banks limit transaction costs show this institution relies on personal contacts, which together constitute networks for obtaining and sharing private information. These networks tend to be based on previous business contacts, and it is not surprising most banks do business with firms in only a few sectors. As Table 9 indicates, new commercial banks provide a feasible institutional arrangement for related firms to pool their resources, and for state firms to build financial relationships with nonstate firms. In our assessment, there are strong grounds for considering the contractual forms associated with these new banks to be efficient.

V. Interest Rates

There is one important element of commercial banks' behavior which cannot plausibly be explained in terms of transaction costs: their interest rates. In summer 1991, commercial banks' loan rates were in the range of 15-20 percent per annum. Most deposit rates were less than 10 percent. By November 1991, loan rates had risen to 25-30 percent (Matvienko 1991). But although it is hard to know the precise rate of inflation during 1991 -- because shortages of goods mean official price statistics are misleading -- it is evident these lending rates were negative in real terms. Why do commercial banks charge negative real interest rates?

The explanation for this aspect of bank behavior must lie with government monetary policy and with the legal restrictions on interest rates. Throughout 1991 interest rate controls existed at least on paper. In November 1990, the all-Union government capped interest rates on one year deposits at 8 percent and 10 percent for one to three year
### Table 9

#### UKRAINIAN COMMERCIAL BANKS

**Owners by Sector**

<table>
<thead>
<tr>
<th>Bank</th>
<th>Number of Owners</th>
<th>Percentage of Owners from State Sector</th>
<th>Percentage of Owners from Non-State Sector</th>
<th>Sectors Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank INKO</td>
<td>92</td>
<td>50</td>
<td>50</td>
<td>2 Ministries, various industry, media, Ukrainian Academy of Sciences</td>
</tr>
<tr>
<td>Kiev Cooperative Bank</td>
<td>50</td>
<td>30</td>
<td>70</td>
<td>N/A</td>
</tr>
<tr>
<td>Kiev Narodny Bank</td>
<td>35</td>
<td>55</td>
<td>45</td>
<td>Construction, publishing, sports organization</td>
</tr>
<tr>
<td>LegBank</td>
<td>15</td>
<td>N/A</td>
<td>N/A</td>
<td>Chemical production, Clothing production, Ministry of Light Industry</td>
</tr>
<tr>
<td>Percombank</td>
<td>20</td>
<td>N/A</td>
<td>N/A</td>
<td>Defense, computer production, software, sports organization</td>
</tr>
<tr>
<td>Vidrogenya</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ukr. Bank for Comm. Dev.</td>
<td>80</td>
<td>70</td>
<td>30</td>
<td>Electronics, shipbuilding, machine production, tourism</td>
</tr>
<tr>
<td>Ukrstrombank</td>
<td>22</td>
<td>100</td>
<td>0</td>
<td>Enterprises of Ministry of Building</td>
</tr>
<tr>
<td>Ukrinbank</td>
<td>95</td>
<td>N/A</td>
<td>N/A</td>
<td>Insurance, Industrial construction, Ukrainian Academy of Sciences</td>
</tr>
<tr>
<td>Ukrmehvuzhbank</td>
<td>12</td>
<td>100</td>
<td>0</td>
<td>High schools, polytech. institutes, universities</td>
</tr>
<tr>
<td>Ukrsnabbank</td>
<td>20</td>
<td>50</td>
<td>50</td>
<td>Ministry of Economic Activity, Recycling Authority, Building Supply Enterprises, Red Cross</td>
</tr>
<tr>
<td>Uksotsbank - Kiev</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>Meat production, clothing, trade unions, Ukrainian Academy of Sciences, hotels.</td>
</tr>
</tbody>
</table>

Total: 441
Average: 44

deposits. Loan rates were limited to 10 percent for one year credits, and 12 percent for between one and three year credits. However, banks could find ways to partially circumvent these controls -- for example, by claiming that loans were "unsecured", which allowed interest rates to rise to 20 percent, and by increasing their commissions (Golubovich 1991).

In November 1991, the National Bank of Ukraine was lending to commercial banks at the incredibly low rate of 8 percent per year (Matvienko 1991), and in January this rate was still only 15 percent (Euromoney 1991), while inflation easily exceeded one hundred percent per year. Does the National Bank of Ukraine effectively control the loan rates of commercial banks? Our discussions with the National Bank of Ukraine on this matter were puzzling. While bank officials refused to state that there were official limits on interest rates, they hinted at informal limitations, either in the form of limits on prudent business - - decisions made by the banks to keep rates low so as not to discourage customers -- or alternatively, efforts by banks to keep rates down so as to avoid implementation of formal credit controls by the National Bank of Ukraine. The fact that all commercial banks regularly borrow from the National Bank probably means they are not inclined to step out of line with official interest rate policy.

From our interviews we know state enterprises can borrow at low rates from the state banking system or obtain subsidies from ministries. Most state enterprises are unwilling to pay the "high" interest rates charged by commercial banks. This environment clearly affects the nature of commercial bank customers, who tend to be of three types. First, small enterprises which do not have recourse to state banks or ministries. Second, enterprises which need credit quickly in order to take advantage of an unexpected and short-lived
opportunity -- such as the purchase of goods on a commodities exchange. Third, state enterprises which -- for reasons best known to themselves -- do not wish to rely exclusively on state banks for credit.

Therefore, the most plausible explanation for the low nominal interest rates charged by commercial banks is the availability of cheap loans from state banks. Because commercial banks compete to some extent for clients with state banks, they have to regard the National Bank of Ukraine's interest rates as a benchmark and not raise their loan rates too far above that level. Commercial banks did not appear unhappy with this situation, presumably because this interest rate policy also held down their cost of capital -- assuming the opportunity cost for their investors is the interest paid on deposits in state banks. Commercial banks certainly are able to make respectable profits on the spread between loan rates and the rate paid to investors. This suggests the legal restriction of nominal interest rates, not directly in commercial banks but on their close competitors, accounts for negative real interest rates.

It still remains unclear why commercial banks do not raise both deposit and loan rates, and draw capital away from the state banks -- particularly because the opportunity cost for investors might reasonably be considered to be a zero real rate, from investing in inventories of goods. None of our interviewees expressed an interest in doing this. The most plausible reason is they fear the National Bank of Ukraine would intervene and set interest rates directly if state banks lost a significant amount of funds. Whether it could and would take such action remains an interesting hypothetical question.
VI. Conclusions

Irrespective of how they were founded, most commercial banks in Kiev tend to behave similarly. They are owned by relatively small groups of connected firms, and they lend to firms closely connected to their owners. These banks obtain funding by issuing shares, but most of their assets are in the form of short-term debt. The institutional arrangements of these banks seem well suited to economize on transaction costs in the prevailing credit market conditions of Ukraine. If our interpretation is correct, it suggests these banks may be able to play a positive role in the restructuring of the economy.34

One important aspect of banks' operations cannot be explained in terms of transaction costs: their low nominal loan rates. There are two reasons for this level of interest rates. First, these banks receive subsidies from the National Bank of Ukraine in the form of loans at interest rates far below the rate of inflation. One reason for forming a commercial bank must be the expectation of getting these credits. Second, banks' loan rates are also less than inflation, and this appears due to the low interest rates charged by state banks and the threat of action by the National Bank of Ukraine if it perceives commercial bank interest rates as "excessive."

Our analysis suggests new commercial banks in the former Soviet Union may serve a more useful economic role than is commonly believed. However, none of our evidence disproves the other two prevailing interpretations mentioned in the introduction. In fact, we showed banks more closely tied to ministries have enjoyed more rapid growth, and commercial banks do contribute to inflationary pressure because they use cheap central bank credit. However, we still view both these negative interpretations with caution. In
order to argue the "nomenklatura" is the primary beneficiary from the creation/new banks, we would need a full accounting of precisely who benefits and who loses within different parts of the nomenklatura.\textsuperscript{35} And surely inflationary pressure would be almost as bad without commercial banks -- probably the volume of cheap central bank credit which flows through state banks would increase. The fundamental cause of inflation lies with government fiscal and monetary policy.

This paper suggests two interesting avenues for further research. The first would be to model the transaction costs involved in banking under the current conditions in the former Soviet Union. It would be useful to derive results in which the efficient institutional structure of banks depended on, among other things, the legal enforceability of contracts, the nature of publicly available information about borrowers, and the nature of available investment opportunities. This might help determine the critical differences in banking environment between the west and the former Soviet Union, and suggest how various policies would change optimal banking arrangements.

Second, more empirical research on the types of contracts used by other banks in the Soviet Union is needed to determine whether our observations and interpretations can be generalized. Furthermore, we need to compare and contrast the institutional arrangements in new commercial banks with those in large state banks. Hopefully, this would throw further light on the question of what constitutes an efficient set of contracts in the difficult economic circumstances of a post-communist economy.
Endnotes

1. Interesting articles with an anecdotal basis include Uchitelle 1992, and Mirimskaya and Arkhangeskaya 1991.

2. There is some recent literature on banking in post-communist countries, but it deals with Eastern Europe where the situation is quite different. Most of these papers assume a partially reformed post-communist banking system does not function well, although they differ in explaining precisely how a weak banking system hurts the economy. Some authors argue an improved banking system is needed to process information about borrowers and to ensure credit continues to flow to good borrowers (Blanchard et al 1991), while others take a more apocalyptic view, and stress the lack of a proper banking system may cause a fall in output when the state decides to stop acting as a "lender of last resort" to industrial firms (Calvo and Coricelli 1991).

3. This information was obtained on July 9, 1991, and confirmed in an interview on August 7, 1991.

4. These two were Neftichembank and Arendbank. Neftichembank had only recently been registered and was not yet in operation. The chairman of Arendbank did not turn up for two appointments with us, and we understood this might have been due to recent management changes.

5. Interviewees stated that their banks had branches in Kharkov, Cherkassy, Dneprpetovsk and Chernikov in Central Ukraine, Nikolaev and Kherson in Southern Ukraine. Very few had branches in Lvov, Ivano Frankovsk or Rovno in Western Ukraine, or in the Donetsk region in Eastern Ukraine.


7. Pledges of property for securing obligations were, and still are, regulated by provisions of the basic civil codes of the various republics. See, for example, the Civil Code of the RSFSR, Articles 98, 101 and 192 to 202 (Szirmai, 1966, pp. 36-37 and 58-60).


9. There is a significant disparity in the scale of commercial banking activities between Moscow and other cities. For example, at the start of 1991, Mosincombank had 50 million rubles in paid-up capital, and assets of around 8,000 million rubles. The Commercial Bank
for Innovations also had capital worth 50 million rubles.

10. Bank Vidrogenya began operations in 1990, but we do not know when it was formed.

11. A new chairman, Vladimir Pavlovich Matvienko, was appointed in spring 1991, but did not assume full responsibility until September 1991. He was formerly director of Promstroibank in Ukraine.

The National Bank of Ukraine is responsible directly to the Ukrainian Supreme Soviet and had founding capital of 1.5 billion rubles and 200 million dollars, obtained not from the budget but from the former Gosbank, Sberbank and Promstroibank (Matvienko 1991). It was formed from the Kiev branch of Gosbank.

12. For a discussion of an earlier draft Law on Pledge, see International Monetary Fund 1991, Volume 2, pp. 244 and 303, footnote 17.

13. Since our interviews were conducted, Bank Ukraina was formed from Agroprombank.

14. Ukrinbank might be considered to have a mixed origins, because its founders were both the Academy of Sciences and the Council of Ministers. However, because this bank has always had very close ties to the government, we classify here as "ministry-founded."

15. This split occurred following public accusations the bank was serving as a conduit for exporting Ukrainian capital to Russia. Mosincombank remains the bank's largest shareholder.

16. Examples for each category are, respectively: Vigrogenya, with 1 year; Ukrsnabbank, with 9 years; and Kiev Cooperative Bank, with 2 years.

17. This technical aspect is important: it is harder to become a bank entrepreneur than just an ordinary businessman. Most private businessmen in the former Soviet Union have had no formal management training.

18. INKO has even established an internship and scholarship program with the leading economics university in Kiev (the Institute of National Economy), in order to hire the bright prospects while they are still students.

19. Apparently the commercial banking department has a hard time keeping bright employees -- they prefer the action and remuneration of commercial banks.

20. Surprisingly, the Ukrainian banking law does not state the minimum capital needed to form a bank. However, we understand that regulations require a commercial bank founded by the state to have 5 million rubles, and a cooperative bank to have 500,000 rubles initial capital. The President of the National Bank of Ukraine has claimed that, "(commercial banks') capital from shareholders is small and their main capital comes from preferential credits from the National Bank," (Matvienko 1991).
21. The Ministry of Higher Education is not well funded, and this has held back the bank it founded -- Ukrmezhvuzbank.

22. This is not a problem which is prominent in the western literature, because in the west contracts are usually legally enforceable. In principle in the former Soviet Union, it is possible to have a problem collecting on debts even if ex post outcomes are completely observable. Presumably, we should regard this as an issue of adverse selection, because what matters is whether the borrower is honest.

23. For example, ownership rights would be clear in the case of a loan made against the security of goods purchased from a commodities exchange.

24. Halich (1991) reports one bank in Western Ukraine states it will lend to small business if there is a co-signer, and prefers equipment as collateral. If a client defaults on a loan, the bank can legally have a freeze put on all the client's accounts in any bank.

25. Why do commercial banks not lend to individuals? We were told by Alina Anatolevna Glushchchenko, assistant head of the Department of Coordination of Commercial Banking Activities at the Ukrainian National Bank, on August 7, 1991:

   "Banks do not yet serve individual persons as clients, except in taking deposits. This ... is due to a lack of space, personnel and papers. However, it is illegal for banks to loan money to individuals.
   
   On August 5, 1991 it became legal to loan money to farmers. Individuals must register as farmers with the oblast executive committee."

26. According to the Ukrainian National Bank, commercial banks have issued 4 billion rubles-worth of credits but only 100 million have gone to "investment". President Matvienko said, "...money is being poured into short-term purposes, mainly into the resale of goods ..." Matvienko also said interest rates, up to 30 percent per year in November 1991, were "too high" and "Naturally, under these conditions, enterprises are not interested in taking long term credits for investment."

27. Bank INKO is unusual because it advertises aggressively and very prominently. Some other banks advertise in newspapers, but others said they did not think advertising to be useful.

28. There was one notable exception. Ukrinbank bank has an innovative scheme for financing innovation which involves obtaining an equity stake.

29. For example, see the discussion in Johnson and Kroll 1991.

30. There is some evidence banks have taken equity stakes in "small enterprises" which are a different legal form from state enterprises. These are new firms which do not have insiders with strong claims.

31. The resembles a western partnership more than a western joint stock company.
32. A good example is the Lis' Bank in Yzgorod. As Halich (1991) reports:
"The majority of the stockholders represent timber and furniture enterprises and organizations ... The dividends that stockholders and depositors receive can be applied to the purchase of furniture from the various member organizations." (p. 4)

33. For example, in fall 1991 Agroprombank could borrow at 3 percent per annum (Matvienko 1991).

34. It has already been suggested that banks could play a key role in privatization, through acquiring shares and providing the outside ownership which is currently lacking -- they are one of the few financial institutions already in existence at the end of communism (Lipton and Sachs 1990, Sachs 1991).

35. This is a complex issue. For example, see Johnson and Kroll (1991).
References


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