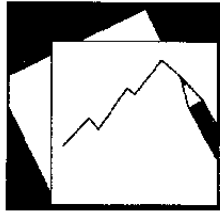


Working Paper

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Former Yugoslav Republic of Macedonia
Banking Soundness and Recent Lessons

Paulo Drummond

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European I Department

**Former Yugoslav Republic of Macedonia
Banking Soundness and Recent Lessons**

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Authorized for distribution by Biswajit Banerjee

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Abstract

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After several years of transition, major weaknesses in the banking and enterprise sectors remain the root cause of low growth. A large share of nonperforming assets in the portfolio of large banks, stemming from losses in the enterprise sector, has been a key impediment to financial sector development. The banking system has been crippled with low levels of intermediation, high cost of capital, severe lack of financial discipline, and poor allocation of credit. Reforms aimed at strengthening lending practices, encouraging foreign bank participation, improving bank supervision and, above all, a consolidation process that breaks away from the past are helping pave the path to economic recovery.

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I. INTRODUCTION

For several years, major weaknesses in the banking and enterprise sectors have hampered faster economic growth and development. A large share of nonperforming assets in the portfolio of large banks, stemming from losses in the enterprise sector, has been a key impediment to development in the financial sector. The banking system has been crippled by the low level of intermediation, high cost of capital, severe lack of financial discipline, and poor allocation of credit. Reforms aimed at strengthening lending practices, encouraging foreign bank participation, improving bank supervision and, above all, a consolidation process that breaks away from the past are helping pave the path to economic recovery.

This paper provides an overview of the soundness of the banking system in FYRM. The paper is organized as follows: Section B presents background information on the structure and composition of the banking system. Section C reviews banking system operations, and outstanding portfolio and recent developments. Section D provides an overview of banking system soundness and vulnerability. Section E reviews the macroeconomic effects of banking system fragility. Section F provides an overview of bank supervision and the legal environment. Section G reviews and draws lessons from the recent Macedonian experience in dealing with unsound banks. Attachment I provides a summary of key definitions used for the purpose of this note.²

II. MARKET STRUCTURE

The number of banks in FYRM is large. As of September, 1999, there were 22 commercial banks, two branches of foreign banks and 15 savings houses. Of the total number of banks, 13 were operating under an NBM license allowing both domestic and foreign operations, while the remaining licensed banks had licenses only for domestic operations. Since end-April 1999, a minimum capital of DM 5 million is required for a domestic operation license and DM 15 million for foreign operations. The minimum capital for foreign operations is scheduled to increase to DM 18 million at end-April 2000 and DM 21 million at end-April 2001.³

The banking system is heavily concentrated. At end-September 1999, Stopanska Banka, the largest bank, accounted for 31 percent of the system's total assets and 41 percent of total deposits (Table 1). Jointly with Komercijalna Banka, the two banks accounted for

² According to the Banks and Savings Houses Act and NBM Regulations. Some terminology may differ from standard usage.

³ The minimum capital requirements for domestic operations are, respectively, DM 6 million by end-April 2000 and DM 7 million by end-April 2001.

Table 1. FYRM: Summary Balance Sheet of Banks

	Dec.97	Dec.98	Sep.99			
	All banks	All banks	All banks	Bank 1	Bank 2	Other banks
(In millions of denars)						
Assets						
Cash and bonds	19,934	21,688	28,219	8,117	8,303	11,798
Credit to nonbanks	31,402	32,183	33,751	14,469	6,313	12,969
Credit to banks	1,067	581	1,477	488	75	914
Capital investments and fixed assets	4,262	4,605	4,936	1,577	578	2,781
Accrued interest and other assets	3,658	7,339	9,595	4,275	551	4,769
Provisions 1/	9,410	7,302	13,394	8,707	770	3,917
Total assets 2/	50,912	59,093	64,584	20,219	15,051	29,314
Liabilities						
Deposits	25,390	32,219	40,556	16,506	10,967	13,084
Borrowing	9,249	9,394	8,663	3,478	714	4,472
Other liabilities	4,166	2,674	4,330	2,087	698	1,545
Owned funds 3/	12,108	14,807	11,035	-1,851	2,672	10,214
Total Liabilities 2/	50,912	59,093	64,584	20,219	15,051	29,314
Off-balance sheet items	12,520	14,736	14,228	7,861	2,896	3,471
(In percent of GDP)						
Assets						
Cash and bonds	10.8	11.4	14.5	4.2	4.3	6.0
Credit to nonbanks	17.0	16.9	17.3	7.4	3.2	6.6
Credit to banks	0.6	0.3	0.8	0.3	0.0	0.5
Capital investments and fixed assets	2.3	2.4	2.5	0.8	0.3	1.4
Accrued interest and other assets	2.0	3.8	4.9	2.2	0.3	2.4
Provisions 1/	5.1	3.8	6.9	4.5	0.4	2.0
Total assets 2/	27.5	31.0	33.1	10.4	7.7	15.0
Liabilities						
Deposits	13.7	16.9	20.8	8.5	5.6	6.7
Borrowings	5.0	4.9	4.4	1.8	0.4	2.3
Other liabilities	2.3	1.4	2.2	1.1	0.4	0.8
Owned funds 3/	6.5	7.8	5.7	-0.9	1.4	5.2
Total liabilities 2/	27.5	31.0	33.1	10.4	7.7	15.0
Off-balance-sheet items	6.8	7.7	7.3	4.0	1.5	1.8

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

1/ Includes unallocated specific provisions.

2/ Net of provisions.

3/ As per banks' balance sheet.

55 percent of total assets and two-thirds of all deposits in the banking system. The rest of the banking system was dispersed across 20 nonsystemic smaller banks, with a reduced deposit base.⁴

The banking system is dominated by banks controlled by formerly socially owned enterprises, most of them now private. Some of the shareholding companies have become shareholders during bank reorganizations in the early years. This pattern of ownership, jointly with underdeveloped capital markets, has resulted in less than active shareholding participation in banks. It has also led to the pervasive connected lending and large exposure to single debtors that permeate the system.⁵

The ownership structure has little foreign participation. The share of foreign capital in the total founders' capital of commercial banks was about 15 percent at end-1998. Foreign capital holds a majority stake in only four banks, including one foreign branch from Turkey, two banks from Russia (one of which is undergoing bankruptcy procedures), and one bank from Bulgaria. Western banks have, so far, abstained from participation in the Macedonian banking system. This changed rapidly in 1999, with one small equity acquisition by a Greek bank, in addition to the large Greek investment in Stopanska Banka.

The banking environment generally allows banks to operate independently but some banks have been subject to a considerable degree of government intervention. The Development Bank created in 1998 to help channel credit lines from abroad has targeted individual commercial banks to carry out its operations. The government has also provided idle budget funds in support of commissioned loans—a substantial share of income for a number of banks. In addition, the government has exercised its ability to shift large deposits of state-owned enterprises across banks, affecting individual banks' liquidity position and profitability. There is also anecdotal evidence of outright moral suasion.

III. BANKING SYSTEM OPERATIONS AND RECENT DEVELOPMENTS

The level of banking system financial intermediation remains quite low, reflecting low confidence in the banking system, a precautionary preference for holding cash in foreign currency and an attempt to avoid the control—and obligations—imposed by the Bureau of Payments Operations (ZPP). Total banking system deposits—denar and foreign currency⁶—amounted to only 21 percent of GDP by September 1999, despite a steady increase in the last two years (Table 1). The low confidence in the banking system has deep roots associated, *inter alia*, with events that go back to the time of FYRM independence, particularly the

⁴ The third largest bank accounted for 5 percent of total banking system assets.

⁵ At end-September 1999, six banks had exposure to a single shareholder in excess of the prudential limit.

⁶ Held by residents and non-residents.

freezing of foreign currency deposits that took place at the time of dissolution of the former Socialist Federal Republic of Yugoslavia (Box 1).

During the past two years, the recovery of deposit-taking activities and a gradual and slow process of reintermediation of financial activities by banks has taken hold. Banking system activities—measured in terms of total assets—have been growing faster than the GDP growth. As of September 1999, total assets of the banking system⁷ stood at 47 percent of GDP, compared with 43 percent in 1998 and 40 percent in 1997 (Table 1). Total banking system assets was split between on-balance assets—gross of provisions—equivalent to 40 percent of GDP, and off-balance assets equivalent to 7 percent of GDP.⁸

Box 1. Frozen Foreign Currency Deposits

At the time of the dissolution of the former Socialist Republic of Yugoslavia (SFRY), commercial banks in FYRM had significant claims on the SFRY National Bank, both from foreign exchange actually redeposited with the SFRY National Bank and for exchange rate losses against which the SFRY National Bank had guaranteed the commercial banks. As of December 1999, outstanding foreign exchange deposits were DM1.1 billion, equivalent to about 17½ percent of GDP, reduced by payment transactions from the original stock of approximately DM 1.7 billion as of April 1992.

After the dissolution of SFRY, the FYRM passed a Law on the “guarantee of the Republic of Macedonia of foreign exchange deposits of citizens.” This Law effectively froze the foreign currency deposits of Macedonian citizens, as these deposits can be used only for the limited payments specified in the Law. The Law provides that the FYRM guarantees the foreign exchange deposits of its citizens with the National Bank of the SFRY. The Law also determines that, as guarantor, the FYRM provides banks with foreign or local currency for the purpose of repaying citizens’ foreign exchange deposits. Under the Law, the deposits accrue interest and commercial banks are currently permitted to pay local currency to depositors, up to specified amounts, for some very limited purposes specified in the law; commercial banks may also provide foreign exchange to depositors for certain kinds of limited payments abroad. However, no other payments or transfers are permitted to be made with the foreign currency deposits guaranteed by the FYRM.

The government is currently preparing a new draft Law to address the issue of servicing frozen foreign deposits within a fiscally sustainable framework.

⁷On- and off-balance sheet items, excluding provisions for loan losses, and without risk-weighting.

⁸The increase in banks’ assets could be overstated, owing to possible inaccuracies and misclassification of accrued interest.

During the last two years, deposits of nonbanks have fluctuated in response to macroeconomic and regional developments around a rising trend (Table 2). Deposits of enterprises, mostly short-term, were particularly strong in the second half of 1999, in the wake of large foreign inflows from abroad. Household deposits have increased gradually, helped, inter alia, by the establishment of the Deposit Insurance Fund set up in January 1997 (Box 2). Households have also gradually reallocated deposits from longer maturities to shorter ones, possibly reflecting a precautionary motive to become more liquid in the period.

Box 2. Deposit Insurance Fund

The Savings Deposit Insurance Fund (DIF) was established in January 1997 as a joint stock company owned by all banks and savings houses allowed to take personal deposits. The government has no capital in the fund. The DIF has been managed by a Managing Board with representatives of five banks, one savings house, and one member appointed by the National Bank.

Deposits are insured in the amount of 75 percent, with an aggregate ceiling of DM 10 thousand. This limit applies to the total of all deposits by individual depositors per bank or savings house. Coverage includes principal and interest combined and is provided for denar and foreign currency deposits. Compensation, however, is to be made in denars. Since its establishment, the Fund has not been called upon to make a pay-out.

The fund is financed through the collection of premiums from the members, up to 2.5 percent of an institution's deposit base, and income from the investment of assets. Until December 1999, banking and savings houses had been paying an actual premium of 1.5 percent, as defined by the DIF managing board. The fund's assets are targeted to be not less than 5 percent of the total savings deposits in the system by September 2000. At end-1999, the total funds available at the fund were about 4 percent of the total amount of deposits of individuals in the banking system, fully held as NBM bills.

The DIF has no role in the supervisory process nor in the management of the assets of failed institutions. The NBM is the sole institution in charge of supervising operations of banks and savings houses. In case funding is needed, the National Bank is allowed to issue loans to the DIF. In case of bankruptcy of a bank or savings house, liabilities to the National Bank are settled first, followed by settlement of any liabilities to the fund.

The currency composition of deposits changed very little between December 1997 and June 1999. Boosted in particular by foreign currency deposits of nonresidents and residents alike, the share of foreign currency deposits in total deposits peaked at 44 percent as of September 1999, compared to 36-40 percent in the earlier period. The share of denar

Table 2. FYRM: Banking System Liabilities

	1997	1998				1999		
	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.
	(In percent of total liabilities)							
Deposits of nonbanks	46.4	46.3	45.8	45.8	49.8	46.1	48.0	57.4
Sight and short-term deposits	40.4	40.3	39.7	39.8	44.3	40.1	42.2	51.5
o.w. in foreign exchange	18.3	16.9	16.5	15.7	21.2	17.6	18.0	24.3
by economic classification:								
enterprises	26.5	25.3	24.5	23.8	28.7	25.4	27.2	35.1
households	8.6	9.1	9.2	10.3	10.1	9.3	8.9	9.4
other	5.3	5.9	6.0	5.8	5.5	5.4	6.0	6.9
Long-term deposits	6.0	6.0	6.0	6.0	5.6	6.0	5.8	6.0
o.w. in foreign exchange	0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.7
by economic classification:								
enterprises	0.9	0.8	0.9	0.9	0.7	0.8	0.9	1.1
households	4.3	4.2	4.2	4.2	3.9	3.9	3.7	3.6
other	0.9	0.9	1.0	1.0	1.0	1.3	1.3	1.3
Borrowings	18.2	17.5	18.1	17.0	15.9	17.5	16.6	13.4
Short-term borrowings	12.0	11.3	11.5	8.9	7.2	8.2	7.8	5.3
o.w. in foreign exchange	7.6	8.0	7.9	5.7	3.6	3.5	3.9	3.3
Long-term borrowings	6.1	6.2	6.6	8.1	8.6	9.3	8.8	8.1
o.w. in foreign exchange	4.9	4.7	5.7	7.1	7.9	8.6	8.0	7.4
Owned funds ^{1/}	23.8	23.6	25.3	24.7	25.1	25.7	25.8	17.1
Other	11.6	12.6	10.8	12.4	9.2	10.7	9.6	12.1
Memorandum items:								
Total banking system liabilities (in millions of denars)	50,912	50,881	50,723	52,143	59,093	57,531	61,503	64,584
Foreign exchange deposits (in millions of U.S. dollars)	172	156	155	165	249	186	196	281

Sources: National Bank of Macedonia (NBM), Banking Supervision Department, and IMF staff estimates.

^{1/} As per banks' balance sheet.

deposits has been sustained at a relatively high cost. The interest rate spread between denar and foreign currency deposits⁹ has fluctuated around 6–7 percentage points.

Fueled by increasing banking system deposits, banks have allocated an increasing share of assets to credit to nonbanks (Table 3). In addition to regular credit, banks have extended credit mostly through off-balance-sheet activity that has come on-balance, classified in the form of receivables and other assets (Table 3)¹⁰ Such assets include denar and foreign currency advances for letter of credit transactions made on behalf of bank's clients in previous periods, as well as receivables from payments made on behalf of banks' clients arising from banks' guarantees. About 90 percent of total bank credit to nonbanks was corporate credit while interbank credit and credit to households remained marginal for banks' business. The latter, in particular, suffered from the weak environment and legal framework for creditors' rights, which has remained a key obstacle to lending by banks (see Section F).

The share of foreign currency denominated loans in total credit increased from 18 percent in December 1997 to 21 percent in 1998 and 25 percent in September 1999, owing to three main factors. First, the cost of foreign currency loans was significantly cheaper—the denar-foreign currency spread on lending rates hovered around 8 percent. Second, there was greater availability of credit lines channeled through commercial banks. About 60 percent of the foreign currency credit flow in 1999 (about US\$28 million) was associated with credit lines from abroad (mostly IBRD and EBRD) and loans disbursed by the Development Bank, out of its own funds (Box 3)¹¹ Third the reduction in the reserve requirement on foreign currency deposits from 100 percent to 61 percent in June 1998 allowed banks discretion to channel resources, previously deposited in accounts abroad, to foreign currency credit.

⁹Paid on three-month deposits.

¹⁰In December 1998, Stopanska Banka reprogrammed denar 6 billion, equivalent to 7 percent of banking system assets, reclassifying "other assets" into "credit to enterprises."

¹¹At end-September 1999, foreign currency credit was equivalent to 13 percent of the banking system assets.

Table 3. FYRM: Banking System Assets

	1997	1998			1999			
	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.
(in percent of total assets, unless otherwise indicated)								
Cash and securities	39.2	35.6	33.8	32.3	36.7	31.7	34.2	43.7
Bank credit to nonbank enterprises	61.7	54.9	55.0	51.7	54.5	56.7	54.2	52.3
enterprises	43.5	35.9	36.6	36.9	42.9 /1	44.5	40.1	37.1
households	3.8	3.6	3.4	3.9	3.6	3.5	3.8	3.6
others	1.7	2.3	2.7	3.5	2.1	2.3	2.5	1.9
Overdue and nonperforming loans	12.7	13.1	12.3	7.4	5.8	6.4	7.8	9.7
Credit to banks	2.1	2.4	2.0	1.4	1.0	2.6	2.3	2.3
Provisions	18.5	19.3	17.8	12.6	12.4	14.1	13.8	20.7
Other assets	15.6	26.4	26.9	27.2	20.2	23.1	23.1	22.5
Accrued interest	4.7	5.4	5.6	5.8	4.1	5.1	4.6	4.7
Other assets 2/	2.5	12.5	13.1	13.3	8.3 /1	9.9	10.6	10.2
Capital investments and fixed assets	8.4	8.5	8.2	8.1	7.8	8.1	7.9	7.6
Memorandum items:								
Total off-balance-sheet items	24.6	27.0	29.6	29.1	24.9	26.7	22.9	22.0
Uncovered letters of credit and guarantees	16.3	17.7	17.9	18.1	16.6	18.1	14.6	14.2
Covered letters of credit and guarantees	3.2	3.1	4.7	4.1	3.0	2.3	2.6	2.7
Other off-balance-sheet items	5.1	6.2	7.0	7.0	5.3	6.4	5.6	5.2
Total risk-weighted assets	81.2	86.4	87.7	91.2	86.9	92.1	84.7	78.1
Risk-weighted on-balance	65.5	69.6	70.6	73.8	71.8	75.3	72.8	71.9
Risk-weighted off-balance	17.7	18.8	19.3	19.5	17.7	19.4	15.8	15.3
Unallocated provisions and other items 3/	1.9	2.1	2.2	2.1	2.6	2.6	3.8	9.0
Total banking system assets (in millions of denars)	50,912	50,881	50,723	52,143	59,093	57,531	61,503	64,584
Foreign currency credit (in millions of U.S. dollars) 4/	94	100	112	120	123	128	142	151
Foreign currency credit (in percent of total banking system assets)	10.2	10.9	12.2	12.8	11.5	12.3	12.8	13.0

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

1/ Includes reprogramming of assets by Stopanska banka (6,271 millions of denars).

2/ Includes other receivables, fees and claims classified in temporary accounts.

3/ Uncovered losses and capital investments as per the Banks' Act.

4/ Excludes exchange rate valuation adjustments.

Box 3. Development Bank

The government, in consultation with the German Bank Kreditanstalt für Wiederaufbau (KfW) founded a hybrid export/development bank in 1998. The bank's founding capital of DM30 million was intended to provide export financing in the form of short-term loans secured against identifiable export receipts and export guarantees.

The bank is not a deposit-taking institution and uses its development arm to pass on to commercial banks official lines of credit received from abroad. The bank is not allowed to extend credits or guarantees to the central government or other public institutions. The Bank started its lending activities in March 1999 and has targeted investment projects in small and medium-sized enterprises and export promotion through six commercial banks. As of December 1999, the bank's credit portfolio consisted of US\$10 million loans for 30 identified projects. About two-thirds of the credit amount disbursed targeted enterprises under a "consumer goods export promotion program" and about one-third was in support of small and medium-sized enterprises.

Banks' operations have been shaped by off-balance-sheet activities equivalent to about 22 percent of total banking system assets (Table 3). About 90 percent of off-balance-sheet assets entails credit risk¹² and more than half of all balance-sheet activity is carried by Stopanska Banka. A separate discussion of the recent impact of off-balance sheet activity on banking system credit is included in Section E.

Banks' modus operandi has changed little over the last two years and banking system efficiency and profitability have deteriorated (Table 4). Interest income remains the main source of income—about 50 percent—while fees and foreign exchange income account for about 30 percent. Despite high lending rates, the effective interest margin¹³ remains extremely low and has been declining. As a result, the banking system has been making losses in the last two years, masked by small accounting profits, which do not reflect the true position of banks but arise in the context of widespread underprovisioning. Given the impact of accrued losses on the balance sheet of Stopanska Banka, the banking system net accounting income, for the first time, became negative, for the first time in September 1999.

IV. BANKING SYSTEM SOUNDNESS AND VULNERABILITY

A. Banking System Soundness

The quality of loan portfolios is extremely poor and has deteriorated in recent months (Tables 5 and 6). As of September 1999, classified exposures stood at 45 percent of total

¹² The ratio could be larger if security held as cover for letters of credit and guarantees entails risk.

¹³ Interest income minus interest expenses, as per banks' balance sheets.

Table 4. FYRM: Banking System Income Statement and Profitability

	<u>1997</u>	<u>1998</u>	<u>1998</u>	<u>1999</u>
	Dec.	Sep. 1/	Dec.	Sep. 1/
(In percent of total banking system assets)				
Total income	16.8	8.9	16.6	9.6
Interest income	7.9	5.6	9.2	5.4
Fees	3.2	3.3	3.3	2.1
Foreign exchange income	3.1	0.0	0.9	0.9
Other income	2.6	0.0	3.3	1.2
Total expenses	13.9	7.6	14.4	8.4
Interest expense	3.9	2.4	3.6	2.6
Provisions	3.7	1.0	4.8	1.4
Wages	2.7	1.8	2.5	1.9
Other expenses	3.6	2.4	3.5	2.5
Gross income	2.9	1.3	2.2	1.2
Unallocated provisions for potential loan losses	0.6	0.5	1.4	7.6
Net income	2.3	0.8	0.8	-6.4

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

1/ January— September.

Table 5. FYRM: Credit Exposure

	1997	1998			1999			
	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.
(In percent of credit exposure, unless otherwise indicated)								
By credit classification								
Regular loans	47.2	45.7	46.6	50.5	60.2	59.1	53.1	59.4
Nonperforming loans	12.7	11.6	10.7	5.7	5.2	5.0	13.4	8.5
Accrued interest	5.2	5.6	5.9	6.4	4.2	5.0	4.4	4.7
Other claims	15.3	16.0	15.4	15.3	9.0	9.2	10.3	9.5
Off-balance-sheet assets	19.6	21.0	21.4	22.1	21.4	21.7	18.8	17.9
By risk classification								
Pass	38.7	38.5	39.5	41.4	40.8	40.0	38.9	35.1
Watch	25.6	27.2	28.7	29.6	26.4	26.1	19.3	20.1
Substandard	11.6	11.3	11.5	14.0	15.6	16.5	22.3	19.4
Doubtful	12.9	12.7	13.1	12.9	14.2	14.3	15.9	13.4
Loss	11.1	10.4	7.2	2.2	3.1	3.0	3.6	12.0
Allocated provisions	23.0	22.0	19.7	15.2	16.3	15.9	18.0	17.8
Memo items:								
Credit exposure (in millions of denars)	45,251	48,353	47,841	46,831	49,944	52,270	52,018	53,008
Credit exposure (in percent of total banking system assets)	88.9	95.0	94.3	89.8	84.5	90.9	84.6	82.1
Guaranty capital (in millions of denars)	11,273	11,446	12,402	12,473	13,304	14,068	13,612	10,174
Allocated provisions (in millions of denars)	10,429	10,661	9,438	7,113	8,119	8,322	9,377	9,444

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

Table 6. FYRM: Banking System Soundness 1/

	1997	1998				1999		
	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.
(In percent, unless otherwise indicated)								
Asset Quality								
Classified exposure/ Total credit exposure 2/	35.6	34.4	31.8	29.1	32.9	33.8	41.9	44.8 /3
Provisions/ Classified exposure	64.7	64.2	62.0	52.3	49.5	47.0	43.1	39.7
Provisions shortfall/ Classified exposure	2.0	2.9	1.8	2.5	5.1 /4	4.6	6.7	20.6 /5
Accrued interest/ Net loans 6/	10.5	14.3	14.2	14.1	9.5	11.2	12.1	11.7
Capitalization								
Guaranty capital/ Risk-weighted assets (C.A.R.)	27.3	26.0	27.9	26.2	25.9	26.5	26.1	20.2 /7
Capital/ Total assets 8/	23.5	23.5	25.3	24.7	23.6	25.5	23.3	16.9 /9
Paid-in capital (millions of DM) 10/	386	394	421	424	476	501	464	473
Banks compliant with 1999 Min.Cap.Req.(DM 15 mil.) 11/	6	6	6	6	9	11	13	13
Banks compliant with 2001 Min.Cap.Req.(DM 21 mil.) 11/	4	4	5	5	6	7	7	7
Liquidity								
Short-term debt/ Total liabilities	12.0	11.3	11.5	8.9	7.2	8.2	7.8	5.3
NBM debt/ Total liabilities	4.6	3.2	3.7	3.4	3.9	4.3	3.3	1.6
Liquid assets/ Short-term liabilities	70.1	64.4	62.1	61.3	65.4	61.2	62.9	70.4
Profitability								
Net interest margin/ Total assets	4.1	1.3	2.5	3.8	5.5	1.5	1.8	2.7
Net income/ Total assets 12/	2.3	0.6	0.6	1.0	1.9	0.0	0.4	-6.4
Memorandum items:								
Classified exposure/ Total credit exposure (adjusted)	35.6	34.4	33.0	33.2	36.5	37.3	45.1	48.0
Provisions/ Classified exposure (adjusted)	64.7	64.2	64.0	60.6	57.0	54.4	50.2	47.0
Provisions shortfall/ Classified exposure (adjusted)	2.0	2.9	1.7	2.0	4.3	3.9	5.9	18.1

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

1/ Definitions are described in Attachment I.

2/ Since June 1998, the ratio has been affected by write-offs of loans classified in the loss category. The adjusted ratio is shown as a memo item.

3/ Reclassification of assets by Stopanska Banka accounts for 2.6 percentage points.

4/ Shortfall in provisions by Almako Banka accounts for 3.6 percentage points.

5/ Shortfall in provisions by Stopanska Banka accounts for 15.0 percentage points.

6/ Net of provisions. Net loans exclude interbank loans.

7/ After reduction in guaranty capital of Stopanska Banka, equivalent to 7.1 percentage points of overall CAR.

8/ As per NBMs Banking Supervision Department.

9/ After increase in unallocated provisions for Stopanska Banka, equivalent to 5.5 percentage points of total banking system assets.

10/ Paid-in capital is used as the benchmark for compliance with the minimum capital requirement.

11/ Number of banks compliant. Since April 1999, capital has been adjusted for unallocated provisions, uncovered losses and requests for capital increases not yet approved by NBM.

12/ Assets and income adjusted for unallocated provisions.

credit exposure. About 11 percent of total credit exposure became classified in 1999, mainly in the context of the Kosovo crisis, when enterprises responded to the shock by stopping servicing their debts. The ratio of classified exposure stabilized in the third quarter of 1999 reflecting a partial reversal of nonperforming loans into regular loans as some enterprises resumed servicing their debts. The quality of exposure is worse than average for some banks at end-September 1999, seven of 22 banks had more than 50 percent of their credit exposure classified.

Total specific loan loss provisions amounted to 40 percent of total classified exposures at end-September 1999, compared with 50 percent in December 1998 and 65 percent in 1997, largely reflecting underprovisioning by some banks, including the large Stopanska Banka and the smaller Almako Banka which became technically insolvent in the period (Section G). Allocated provisions are likely to be inadequate since they are also based on the value of collateral, the market value of which is likely to be lower than the book value.¹⁴ On the basis of anecdotal evidence, and as illustrated by the cases of Stopanska Banka and Almako Banka (see Section F), there is considerable risk that bad assets and losses are understated owing to possible misclassification of loans, and banking sector statistics may severely underestimate the degree of system fragility.¹⁵ Underprovisioning also arises because of provisioning based on loan classifications done several months earlier, which may entail a substantial provision shortfall compared with provisions required under current loan classification.

At end-September 1999, seven banks accounting for 50 percent of banking system assets had CAMEL ratings of 4 or 5.¹⁶ Of this total, two banks are being dealt with either by recapitalization and sale to a foreign strategic investor (Stopanska Banka, which accounts for 35 percent of banking system assets) or by closure (Almako Banka, holding 4 percent of banking system assets).

Measured capital asset ratios (CAR) of banks overestimate the true capitalization condition of the banking system. The high capitalization reflects unallocated provisions that have hidden in the system owing to misclassification of credit exposure. In September 1999, one-off adjustments to the guaranty capital of Stopanska Banka to account for unallocated provisions implied a decline in the overall banking system capitalization ratio of about 7 percentage points, to 20 percent.¹⁷ In general, the high capitalization arises more because of accounting effects rather than economic solvency. For some banks, the high capitalization is

¹⁴ Verification of collateral is part of the regular on-site inspections by the Bank Supervision Department of the National Bank.

¹⁵ Since September 1998, the Banking Supervision Department has started disclosing the amount of unallocated provisions, by banks.

¹⁶ Including Stopanska Banka. Includes off-balance sheet items.

¹⁷ The CAR should be restored with the recapitalization of Stopanska Banka (see Section G).

also a structural feature associated with their low deposit base. Banks with small deposits tend to maintain higher-than-average CARs.

Until mid-1999 the banking system was subject to structural liquidity shortages requiring long-term liquidity support by the National Bank (Figure 1). Largely reflecting broader macroeconomic and regional developments the liquidity position of banks worsened considerably in the period October 1998 through April 1999 as foreign capital outflows created a liquidity squeeze that fed into downward movements in credit quality. Banks came under increased pressure largely because of rapidly deteriorating loan portfolios, raising the prospects of a systemic problem. Beginning in May, the overall liquidity position of banks improved relatively fast as economic activity picked up and unexpected foreign inflows. Banks foreign exchange reserves were boosted by rapid growth in foreign exchange deposits of residents and non-residents alike (Figure 1). Banks used their improved liquidity position partly to withdraw from the deposit auction, which carried relatively higher funding costs, and partly to allocate funds into central bank bills. By November, banks had reduced the outstanding credit from the NBM to almost zero.

The overall improved liquidity position masks large variations across banks. Many banks are net suppliers of funds to the interbank market and their claims are subject to credit risks, while few banks have consistently relied on interbank borrowing, indicating a liquidity shortage. During 1998 and 1999, about 11 banks (excluding Stopanska Banka) have consistently borrowed in the interbank market about 80 to 90 percent of all interbank funds, an amount equivalent to 6 percent of borrowing banks' own funds.¹⁸

Profitability remains weak and in the last two years, the banking system has made losses, largely owing to weak credit portfolio. Until June 1999, profitability indicators show small positive accounting margins, overestimating the true banking system condition. It is difficult to assess the extent of hidden losses but they reflect underprovisioning that stems from misclassification of credit exposure, neglect of the nonaccrual rule by some banks, and episodes of interest capitalization to avoid the suspension of interest payments.

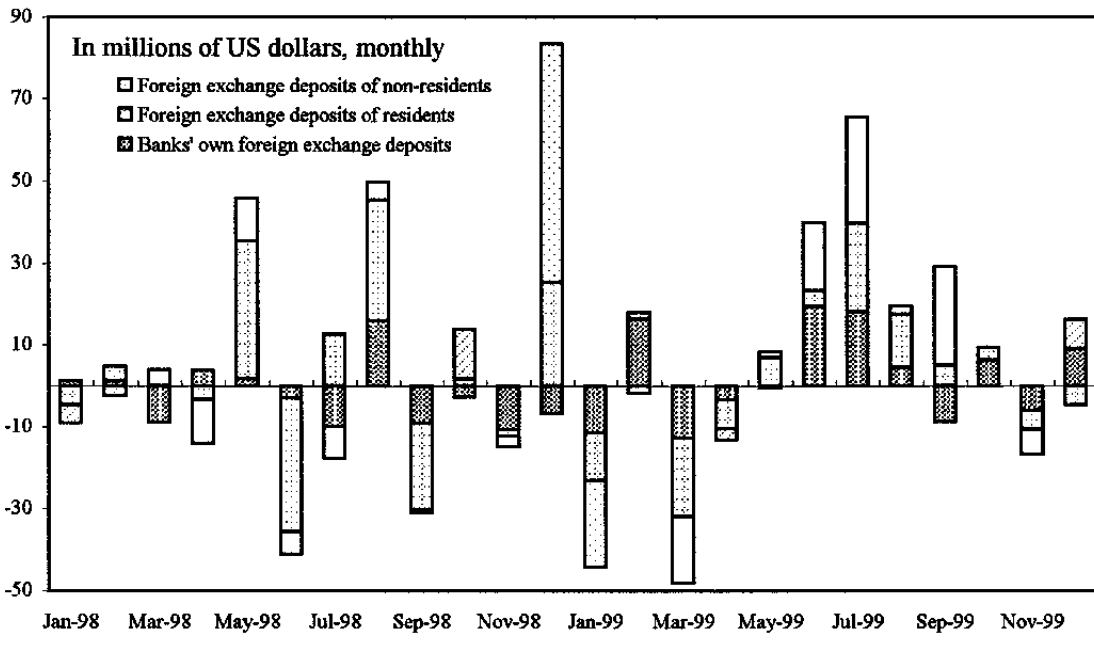
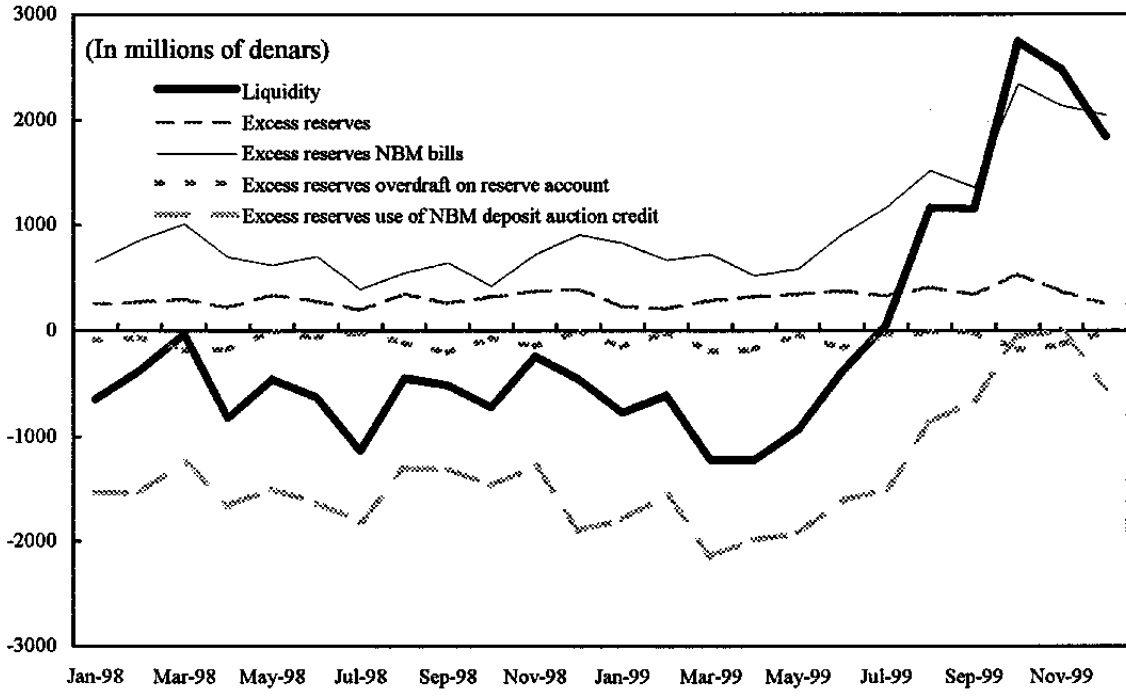
B. Banking System Vulnerability

Assessing the banking system's vulnerability is particularly important in FYRM in light of the repeated macroeconomic shocks with economy-wide implications from the recent past. Although more general systemic risks will be significantly reduced upon completion of the sale and recapitalization of Stopanska Banka, the banking system remains vulnerable and subject to large risks associated with its bad loan portfolio, large off-balance-sheet exposures, maturity gaps, and interest rate and foreign currency risks.

The banking system is highly vulnerable to credit risk, because of the high share of unclassified exposure and possible under provisioning. If one-third of total credit exposure

¹⁸Equivalent to less than 2 percent of total banking system assets.

Figure 1. FYRM: Commercial Bank Liquidity and Composition of Foreign Exchange Reserves



Source: FYRM authorities.

(net of specific provisions) were to become nonrecoverable, then, about 60 percent of the banking system's own funds would be wiped out.¹⁹

Although banks do not have short open foreign exchange positions, they bear a substantial risk to foreign currency exposure. Over the last two years, banks have transferred an increasing part of their foreign currency risk into credit risk, of domestic borrowers, to the extent that the borrowers themselves have open positions. As of end-September 1999, all banks had net long foreign exchange positions, but one-fourth of total credit was denominated in foreign currency. Four banks (excluding Stopanska) carried foreign currency loans in their portfolios in the range of one-fourth to one-third of each bank's total credit exposure. In FYRM's small open economy, particularly vulnerable to trade shocks, banks' vulnerability to foreign currency risks is greatly associated with vulnerability of borrowers' net foreign currency earnings.

The improved overall liquidity position has reduced the maturity gap and the vulnerability of banks to higher interest rates. During 1999, banks have managed to reduce their short-term borrowing and debt to the NBM (mostly short-term deposit auctions). As a result, the coverage of short-term liabilities by liquid assets increased to 70 percent in September 1999, compared with 60–65 percent over the last two years. However, a group of banks with maturity gaps of less than one month has remained dependent on interbank funds for over a year, rendering them vulnerable to liquidity from other banks, eventual NBM support, and/or sustained rising costs of funds.

The banking system's vulnerability to off-balance sheet risks remains very high, given the magnitude of outstanding off-balance sheet claims, the risk of underprovisioning and the low compliance ratios by borrowers. The average default ratio of all uncovered off-balance-sheet items, including letters of credit and guarantees for the whole banking system, was 25 percent during the last six months of 1999 (Table 7).²⁰ The default ratio was slightly higher for Stopanska Banka (28 percent), which accounts for half of all off-balance-sheet exposure.

An assessment of the implications of interbank exposures for a group of identified troubled banks (excluding Stopanska Banka) shows that, on the basis of interbank market transactions, the current levels of interbank exposure makes a small group of banks, vulnerable to illiquidity or insolvency (Box 4). A group of 11 banks that has consistently (for more than a year) relied on interbank funding—of 10 percent or more of their own funds (capital and reserves)—is particularly vulnerable to availability and costs of interbank borrowing. The possible illiquidity or insolvency of a group of identified small banks, however, would seem to pose limited systemic risk.

¹⁹Excluding Stopanska Banka and Almako Bank.

²⁰ The NBM Supervision Department began monitoring off-balance-sheet activity in May 1999.

Table 7. FYRM: Credit and Off-Balance-Sheet Activity 1/

	1999							
	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	(In percent)							
Credit developments								
Credit due to off-balance-sheet activity/(in percent of total new credit) 2/					31.8	37.2	23.0	13.8
<i>Of which: Stopanska Banka</i>					18.0	34.8	25.8	24.1
Default rates 3/								
All banks								
Off-balance sheet items 4/			22.3	34.9	35.7	12.2	20.5	17.0
Letters of credit			19.7	33.4	31.8	30.8	31.1	18.3
Guarantees			23.9	35.9	38.8	7.0	15.1	16.4
Bank 1								
Off-balance-sheet items 4/	41.8	39.4	21.1	33.4	45.2	32.6	18.6	15.9
Letters of credit	37.0	23.2	8.0	34.3	26.1	61.8	22.6	10.0
Guarantees	45.5	51.5	27.7	33.0	66.1	22.8	17.7	17.6
Memorandum items:								
	(In millions of denars)							
All banks								
Off-balance-sheet items 4/								
Current due	1,712	1,466	1,496	1,776	1,213	4,010	1,752	2,074
Paid (by bank)			334	620	433	488	359	352
Letters of Credit (L/Cs)								
Current due	975	731	562	728	539	875	589	666
Paid (by bank)			111	243	172	269	183	122
Collection of overdue L/Cs 5/			186	130	201	243	217	185
<i>Of which: Collection of overdue L/Cs (current month)</i>			24	55	43	58	125	67
Guarantees								
Current due	737	735	934	1,048	674	3,135	1,163	1,407
Paid (by bank)			223	377	262	218	175	230
Collection of overdue guarantees 5/			238	137	129	143	142	319
<i>Of which: Collection of overdue guarantees (current month)</i>			57	68	38	15	18	88
Credit flow due to off-balance-sheet activity			-90	353	103	102	0	-152
Bank 1								
Off-balance-sheet items 4/								
Current due	920	758	816	733	519	973	763	882
Paid (by bank)	385	299	172	245	234	317	142	140
Letters of credit								
Current due	403	325	274	214	271	244	141	192
Paid (by bank)	149	76	22	73	71	151	32	19
Collection of overdue L/Cs 5/	184	98	50	40	48	79	24	63
<i>Of which: Collection of overdue L/Cs (current month)</i>			5	27	2	20	11	14
Guarantees								
Current due	518	433	542	519	248	729	623	690
Paid (by bank)	236	223	150	172	164	166	110	121
Collection of overdue guarantees 5/	74	132	142	99	65	7	30	51
<i>Of which: Collection of overdue guarantees (current month)</i>			14	55	25	6	0	2
Credit flow due to off-balance-sheet activity	126	69	-20	106	121	231	88	26

Sources: National Bank of Macedonia (NBM), Banking Supervision Department; and IMF staff estimates.

1/ Off-site monitoring of off-balance-sheet activity started in April 1999.

2/ Credit measured by NBM (adjusted for exchange rate valuations) may not reflect all credit expansion due to off-balance-sheet activity. Cumulative since July.

3/ In percent of current due.

4/ Uncovered Letters of credit and guarantees.

5/ Data on overdue Letters of credit and guarantees (current month) are available from July on.

Box 4. Assessment of Interbank Exposures

The banking system in FYR of Macedonia presents a somewhat unique situation in that, other than the large Stopanska Banka which is being restructured and sold to a foreign investor, a number of troubled small banks remain. While it is straightforward to verify that each individual troubled bank does not pose systemic risks due to their size, it is less clear whether as a group, the current small troubled banks may eventually come to pose a systemic risk. Assessing the possibility of simultaneous illiquidity or insolvency of several small banks is important in practice in light of the repeated macroeconomic shocks with far reaching and economy-wide implications that have stormed the Macedonian economy. In addition, to the extent that interbank market relations deepens, the assessment of interbank exposures will become increasingly important.

An assessment of the systemic risk posed by interbank exposures was made using indexes that capture the systemic importance of troubled banks in the interbank market (IE indexes; see Attachment II). A set of troubled banks (TB) in FYRM was defined to include all banks (excluding Stopanska Banka) that have received CAMEL ratings of 4 or 5 by the Supervision Department and banks with CAMEL ratings of 3 that have borrowed more than 10 percent of their own funds (equity capital and reserves) in the interbank market. The systemic importance of troubled banks on the interbank market was measured by the share of all sound banks' loans to each one of the troubled banks in their own portfolios. If lending to any one of—or the set of—the troubled banks represent a large share of sound banks assets, then illiquidity or insolvency of troubled banks can be expected to cause difficulties to lending banks.

The assessment of systemic risks of interbank exposures using IE indexes for FYRM was made for December 1998 and December 1999. The set of troubled banks consists of 11 small banks in both periods: 8 banks (excluding Stopanska Banka) with CAMEL ratings 4 or 5 and 3 banks with CAMEL ratings 3 and funds borrowed in the interbank market equivalent to more than 10 percent of their own funds (capital and reserves). As of December 1998, the set of troubled banks as defined above had borrowed denar 277 million in the interbank market, equivalent to 82 percent of total interbank funds. As of December 1999, the amount of funds borrowed was denar 217 million, equivalent to 90 percent of total interbank funds. In both periods, the funds borrowed represented about 6 percent of troubled banks' own funds (capital and reserves). The index of interbank exposures was 0.04 in 1998 and 0.05 in 1999 indicating the group of identified troubled banks posed limited direct systemic risk.

This result, however, must be interpreted with caution. Interbank market transactions do not record all interbank exposures. Interbank market transactions account for about one third of overall interbank exposures and therefore provide an underestimate of the overall potential impact. In addition, given weaknesses in statistics, accounting standards and difficulties in assessing individual bank positions, care needs to be taken to interpret the assessment of systemic potential of interbank exposures according to this methodology. More importantly, to the extent that behavior of depositors of sound banks is affected by the illiquidity or insolvency of troubled institutions, small troubled banks could have a systemic impact above and beyond their relative size in the banking system.

C. Macroeconomic Effects of Banking System Fragility

The fragility and structural problems of the banking system have affected the transmission channels of monetary policy, making it less efficient. In particular, unsound banking practices that continue to lead to misallocation of resources have implied that additional credit has not been channeled in a way that maximizes benefits to the real economy. In addition, the high cost of intermediation and a harmful bias in the cost of credit toward bad debtors have effectively, led to an interest rate wedge that taxes viable enterprises and reduces the availability of bankable projects at current rates.

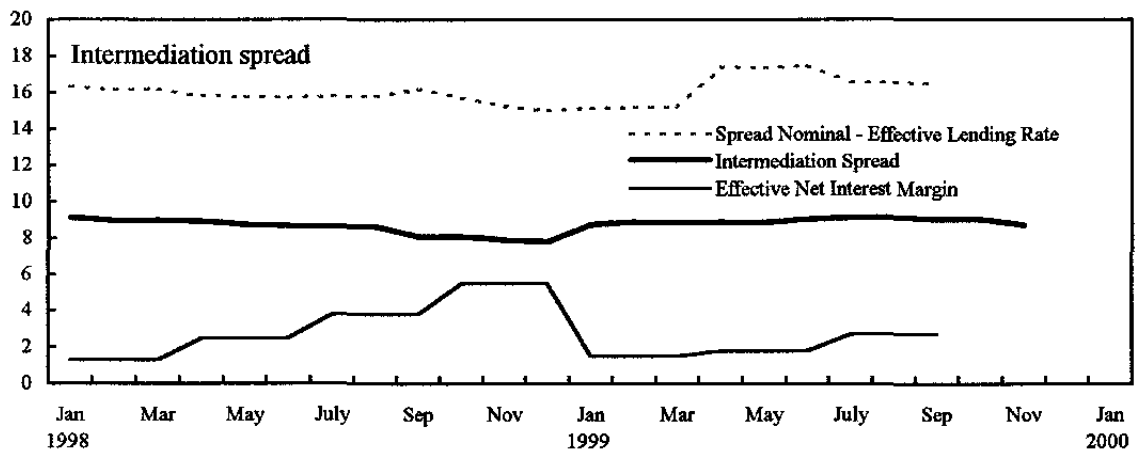
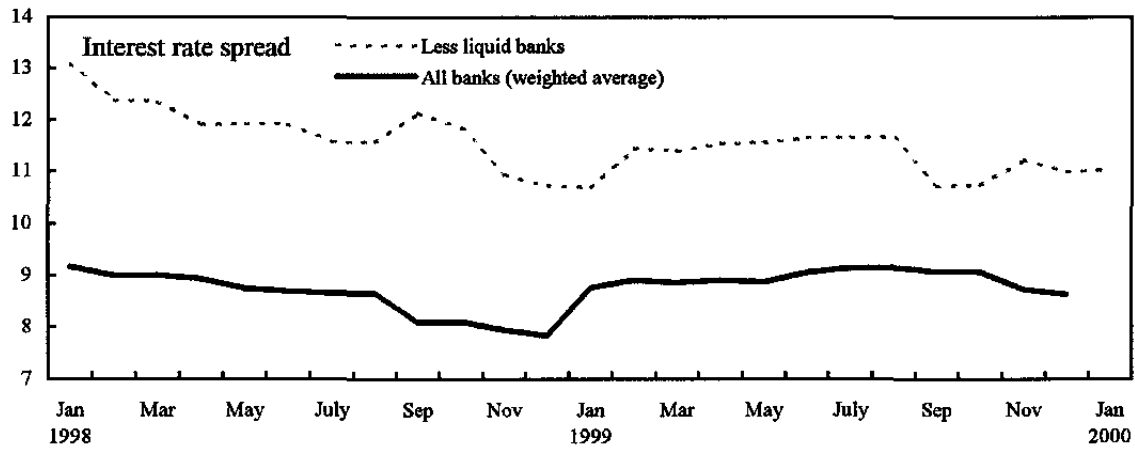
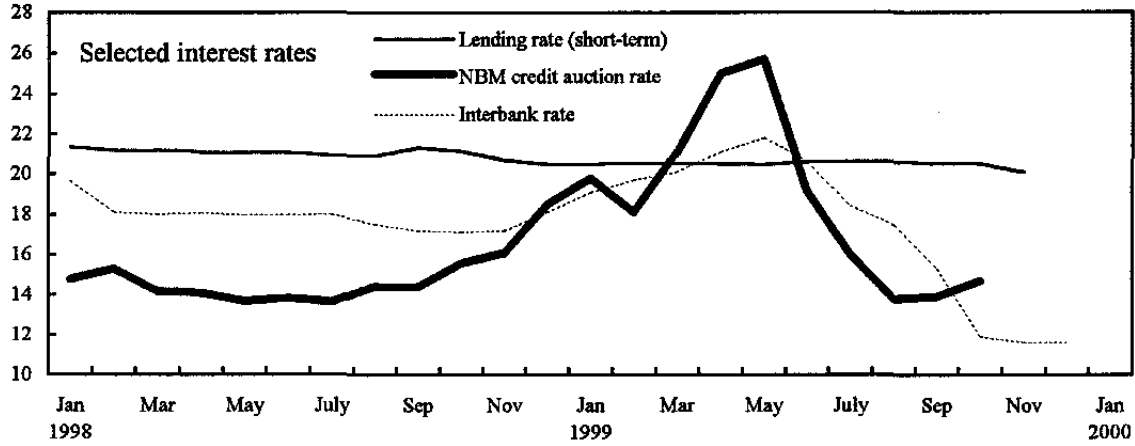
An immediate and direct outcome of banks' poor lending practices has been the biased and poor allocation of credit. Banks have continued to lend without regard to borrowers' capacity to service debt or their creditworthiness. In addition, banks have continued to finance risky borrowers because the cost of rolling over debt and possibly extending new credit to bad debtors, despite weak collection rates, is preferred to the alternative of not doing so and charging losses against capital. The share of total credit flow to the largest 16 debtors with classified exposure was as high as 83 percent in the first three quarters of 1999.²¹

The bad loan portfolio of the banking system has resulted in prohibitive costs of intermediation (Figure 2). Banks have shifted the credit risk burden into higher interest rates, effectively penalizing new and good borrowers and distorting the allocation of credit. The spread between nominal lending and deposit rates has remained high at about 8–10 percent annually, which is associated with a wedge between nominal and effective lending rates (rates effectively collected by banks) in the range of 16–18 percent annually. Despite such high rates, given the implicit interest rate subsidy to outstanding nonperforming borrowers, the effective net interest margin of banks (net interest income) has remained low, hovering around 1–5 percent (Table 6).²²

²¹This ratio may overestimate the share of credit to the 16 largest debtors with classified exposure to the extent that credit arising from denar and foreign currency advances for letter of credit transactions made on behalf of banks' clients in previous periods, as well as receivables from payments made on behalf of banks' clients arising from guarantees (an off-balance-sheet item fee that has come on balance) may have been improperly classified as "other assets" in banks' balance sheets. The ratio, adjusted for potential misclassification, would still be very high (53 percent).

²²Low remuneration of reserve requirements is also partly responsible for the high spread between lending and deposit rates. In June 1998, the National Bank increased the remuneration or reserve requirements by 2.8 percentage points to 6.2 percent, a level that remains below market rates. The higher remuneration, however, has a marginal impact on the intermediation spread, estimated to be only 0.2 percentage point.

Figure 2. FYRM: Interest Rates
(In percent)



Sources: FYRM authorities and IMF staff estimates.

The NBM's monetary policy stance of accommodating the liquidity needs of banks with structural needs has reduced the incentive for banks to change their own interest rates, causing commercial banks' interest rates to remain inflexible and largely insensitive to changes in banks' liquidity position's (Figure 2). As a result, in tandem with increased volatility of NBM's rates, commercial banks' interest rates have remained largely unchanged without affecting interest-sensitive activity in the economy. At the same time, the permanent illiquid position of a number of banks has implied as even higher cost of capital and intermediation spreads for part of the banking system (Figure 2).

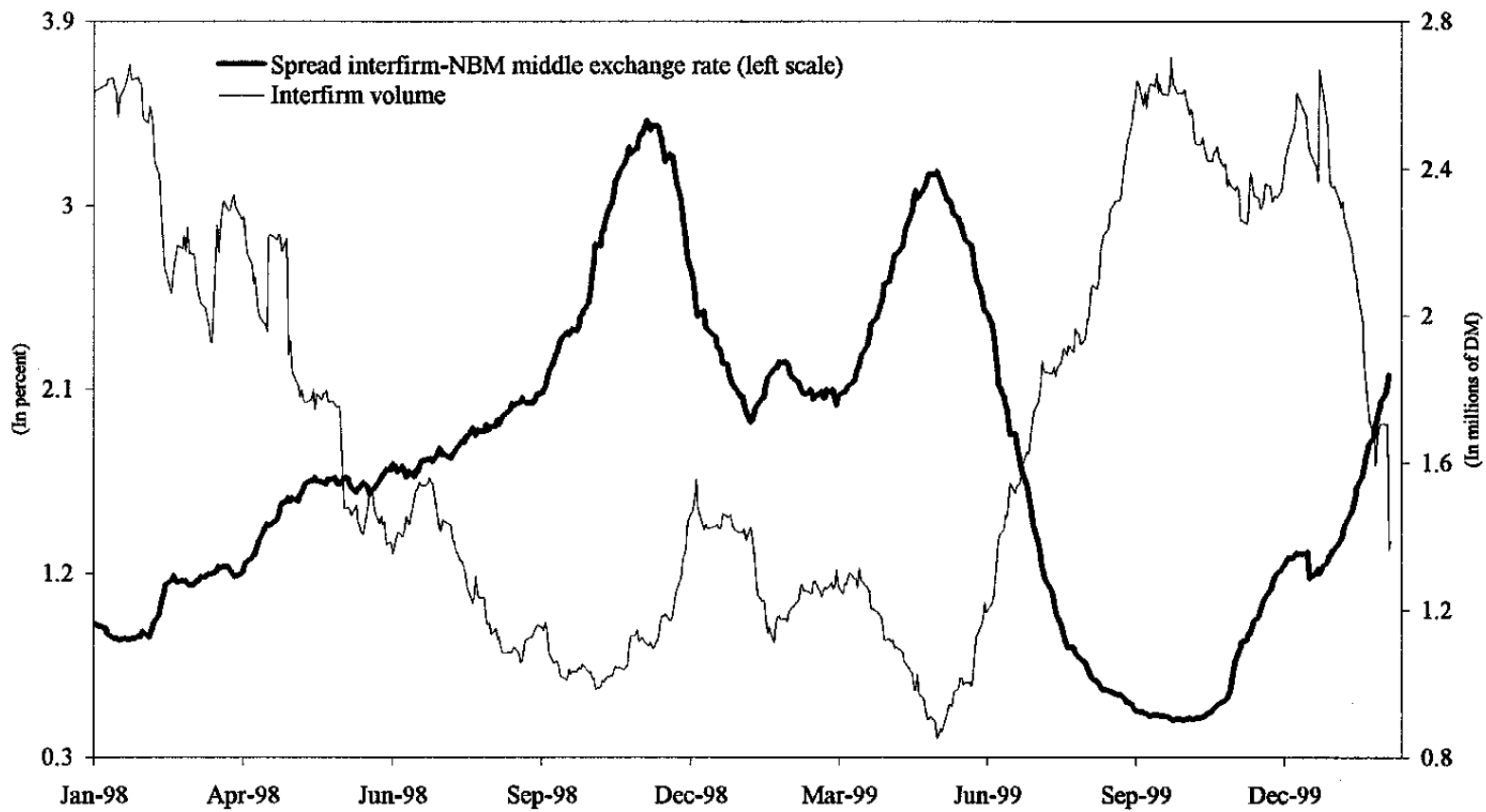
The large share of risky off-balance-sheet exposure has created an endogenous component to credit expansion in the very short term. The amount of receivables from payments made on behalf of banks' clients arising from guarantees and letters of credit that have come on balance peaked at one-third of banks' measured credit to the enterprise sector in the third quarter of 1999 (Table 7).²³ The poor payment and collection ratios of off-balance-sheet exposure have implied a high endogeneity of credit expansion in the very short run, which has limited the ability of the NBM to tighten credit conditions when needed. It has also highlighted the need for an increasing role for the Supervision Department in terms of credit control and monitoring.

Weaknesses in the banking system have also demonstrated the reduced room for maneuver by the NBM. Because troubled banks that posed systemic risks needed support during the Kosovo crisis, the monetary authorities had to tighten, the liquidity position of the remainder of the banking system to maintain a given level of market liquidity. By providing liquidity support and accommodating banks' liquidity needs of weak banks, the NBM effectively redistributed reserves across banks into weak banks, thereby sanctioning a transfer of the adjustment burden to sound banks within the banking system, with a long-lasting adverse impact on compliance and financial discipline.

The fragility of the banking system has added volatility to the foreign exchange market as illiquid banks have dumped foreign exchange inflows into the market to maintain their denar liquidity. Movements in commercial banks' foreign reserves have been closely associated with developments in the foreign exchange market (Figures 3). Between January 1998 and October 1998 the commercial banks' foreign exchange reserve position remained, on average, broadly balanced, and the spread of the interfirm rate remained under 2 percent over the NBM middle exchange rate with a high daily market turnover (above DM 1.5 million). Between October 1998 and June 1999 commercial banks lost about US\$30 million in foreign exchange reserves as pressures on the foreign exchange market exacerbated largely in anticipation of, and as a result of, political and regional developments. The exchange rate spread peaked above 4 percent in early November 1998 and in April 1999, immediately after the start of the Kosovo conflict. In April, the foreign exchange market became very thin and

²³Credit measured by the NBM may not reflect all credit expansion that is due to off-balance-sheet activity, owing to possible misclassification of credit by banks as other assets and temporary accounts.

Figure 3. FYRM: Foreign Exchange Market
(30-day moving average)



Source: FYRM authorities; and IMF staff estimates.

illiquid with small transactions moving the market. From June to December 1999, commercial banks accumulated as much as US\$156 million in foreign exchange, and the exchange rate spread shrank to less than 1 percent in the interfirm market as substantial foreign inflows dampened market pressure (Figure 3).

D. Banking Supervision and the Legal Environment

The weak and fragile conditions of the banking system have developed against a background of incipient banking system supervision and a legal environment that suffers from several shortcomings. In recent years, the NBM has taken gradual steps to reshape and improve its banking supervision capacities. An assessment of compliance with core principles of banking supervision conducted in November 1999 has found favorable compliance with principles related to the regulatory and legal basis of supervision. However, the review found that substantial efforts are required to comply with those principles related to timely and rigorous regulatory enforcement, and off-site monitoring and supervision. In addition, the review found that further work is needed to start preparing to achieve compliance with those principles that postulate the coverage of several types of risks that more mature financial systems face.

The NBM has taken initial steps to strengthen its off-site monitoring ability, including monitoring of off-balance-sheet activity. A separate unit within the Banking Supervision Department has been set up to conduct off-site analysis. The unit has been monitoring off-balance-sheet activity by banks since April 1999, and it is expected to tackle problems on several fronts, including enforcing adequate provisioning, reducing the time lag of monitoring in between on-site inspections, and reviewing adequate and timely banking system data submission and accounts.

To improve enforcement of banking supervision, the NBM has created a troubled bank unit within the Supervision Department. The unit aims to closely monitor banks that are chronic violators of prudential standards and to monitor and specify explicit criteria for addressing problem banks that are illiquid or insolvent and are primary candidates for reorganization or liquidation. The unit is currently establishing rules for the provision of NBM emergency liquidity and government solvency support. The unit is expected to strengthen the NBM's supervisory capacity by seeking to enforce the timely implementation of corrective actions and by strictly enforcing prudential rules and regulations, including the minimum capital requirement.

The NBM is currently redrafting the Banks' Act regulating the banking system, aiming to enable early intervention and resolution of troubled banks, to increase savings house capital requirements, to mandate standards for accounting and auditing, to improve licensing and exit policies and to further develop prudential regulations to bring the draft law in line with the Basle Core Principles of Bank Supervision and EU standards.

Over the last two years, the existing legal framework for creditors' rights has remained broadly unchanged and is a key obstacle to greater banking system intermediation. Poor loan

recovery has been associated with long delays in processing claims to take possession of mortgages and other collateral. Under the current Bankruptcy Law, courts can delay the opening of a bankruptcy proceeding, while under the current Law on Executive Procedures, creditors are not allowed to take possession of collateral without the prior approval of the courts. In addition, under the existing Collateral Law, security cannot be given over a changing pool of assets such as inventories and accounts receivables, based on a general description of the assets, making it more difficult for small and medium-sized enterprises to meet collateral requirements. Finally, the current Mortgage Law does not facilitate foreclosure in case of loans secured by real property.

E. Dealing with Unsound Banks

The combination of weak credit portfolios, hidden losses, poor lending practices, connected lending, and weak collection has led the largest bank, Stopanska Banka, and a smaller bank, Almako Banka to become insolvent between end-1998 and early 1999. Stopanska Banka first failed to meet the minimum reserve requirement in April 1999. At the same time, Almako was declared insolvent by the NBM and then had its operating licenses revoked by the NBM as an intermediate step prior to initiation of bankruptcy procedures. In what follows, this note provides a review of recent developments in Stopanska Banka and Almako Banka with a view to looking into the latest individual problems within the banking system, the nature and timing of response by the NBM's bank supervision, and to drawing lessons from the recent experience.

Stopanska Banka

The bank accounts for almost half total credit exposure and slightly more than half of risky loans in the banking system posing a clearly systemic risk. Stopanska's liquidity position began to deteriorate fast in the second half of 1998, reflecting the behavior of large borrowers/shareholders who defaulted on their payments in anticipation of a failed reverse debt-equity swap made possible by a former prospective foreign investor in the bank.²⁴ In March 1999, the bank deposit base suffered a relatively large shock after the onset of the Kosovo crisis with a resulting worsening of Stopanska's liquidity position that led it to increase its debt against the National Bank. In April 1999, Stopanska failed to meet the minimum reserve requirement and the Governor of the National Bank adopted a decision banning any new credit activity for one month. In May, Stopanska again failed to meet the minimum reserve requirement and the lending ban was extended for one more month. On that occasion, the NBM adopted a decision to cap new credit extension, including off-balance sheet activity, in an attempt to restore the bank's liquidity position.

Beginning in May 1999, the government identified a new strategic investor (the National Bank of Greece, NBG) willing to bid for a majority shareholding stake in the bank with the participation of the EBRD and the IFC. Agreement was reached with the agreed purchase

²⁴ The share purchase contract was expected to be closed on October 1998 but the deal did not go through.

price for 85 percent of the ordinary share capital set at DM 94 million (equivalent to 81 percent of total capital, DM 116 million). Under the investment, the NBG acquires 65 percent of SB's ordinary share capital and the EBRD and the IFC acquire a maximum of 10 percent of SB's ordinary share capital each. The government recapitalized the bank by issuing Euro-denominated bonds to Stopanska Banka in exchange for the four largest borrowers' bad debts amounting to DM 235 million. The bond terms are 15-year maturity, Euribor plus 1 percent coupon and one year grace period. The bad debts have been transferred to the Bank Rehabilitation Agency for collection. However, the active restructuring of the bank's large debtors and the track record on BRA's collection have not yet been established. To help offset the cost of servicing the newly acquired debt the government has agreed to save all of its proceeds from the sale of Stopanska Banka estimated to be about DM60 million (including its equity participation and all the premiums received on the existing shares). The share purchase agreement was signed on December 20 and closing of the contract is expected to take place before March 31, 2000. In addition, the investors undertook to increase capital by about DM50 million before May 31, 2000, largely to help restructure and improve the liquidity position of the bank.

Almako Bank

The bank is relatively small with a reduced deposit base and bank's assets equivalent to slightly less than 5 percent of the banking system's total. The bank's portfolio was originally concentrated in loans to parent mines and metal trading companies (lead and zinc). In light of its long-standing fragile position, the bank's liquidity deteriorated sharply over a period of few months in late 1998 as a result of poor asset collection and some withdrawal of deposits. By end-March 1999, bad and doubtful loans accounted for 59 percent of the bank's overall exposure, up from 15 percent at end-September, 1998. The bank managed to delay adjustment by tapping increasingly into the liquidity provided by the National Bank through deposit auctions, almost doubling its borrowing from the NBM in 1998. On April 14, the NBM's governor adopted a decision declaring the bank illiquid. The bank's payment operations ceased, denar and foreign exchange deposits of households and enterprises were frozen, and the bank was required to submit a bank rehabilitation program to the NBM with specific measures to reestablish solvency and restore liquidity. By end-April 1999, the bank's negative net worth was denar 268 million (DM 8.6 million) with total uncovered losses of about denar 629 million (DM 20.2 million). On March 1, 2000, after a long period of failed attempts to recapitalize the bank, the council of the NBM closed the administrative procedure for appeal and adopted a decision to initiate bankruptcy procedures.

Lessons from recent experience

First, delaying closure or restructuring of nonviable banks entail large adverse consequences. The NBM's provision of perennial liquidity support propping up Stopanska and other illiquid banks delayed achieving a more permanent solution. The consequences have been considerable. By postponing more definite action and accommodating banks' liquidity needs over long time periods, the NBM allowed enterprises to transfer the burden of recurrent losses into the banking system and into the NBM itself. Also, by lessening financial

discipline, a more general long-lasting adverse impact on the banking system was felt because it affected compliance and collection efforts. In addition, the fiscal costs of bank restructuring and closure have been magnified over time as insolvent banks were allowed to continue to operate and more definite action by the Supervision Department was delayed.

Second, the macroeconomic impact of banking system weaknesses, if left unchecked, can be extremely large. The harmful distortions on the availability, cost, and allocation of credit due to the poor conditions of the banking system have had a fairly large negative impact on growth and private sector development. They have also reduced the scope for monetary policy response by the NBM.

Third, the absence of independent and strong enforcement capacity of the supervisory function prevents proper follow-up of the legal and regulatory framework and implies that weak financial discipline may remain unchecked within the system. Lack of enforcement capacity breeds a moral hazard with long-lasting implications on the behavior of banks.

Fourth, in the absence of clear steps that improve financial discipline, banks may reengage in automatic financing of losses accrued by the enterprise sector. Dealing with the stock problem of a poor credit portfolio in the banking system is a necessary but not sufficient condition for reform. Simultaneous steps must be taken—particularly in the enterprise sector—to prevent a resurgence of the flow problem of bad financing to nonviable enterprises. In the mid 1990s, FYRM has undergone a banking system restructuring that has not prevented the recurrence of banking system problems, largely because of its failure to address the issue of loss-making enterprises.

Fifth, the consolidation process in the banking system can be greatly facilitated by, and may require, the entry of foreign banks. The sale of Stopanska Banka to a foreign strategic investor is expected to have far-reaching and economy-wide implications for the banking system as a whole.

Banking Definitions²⁵

Accrued interest: interest due but not paid for less than 90 days. Gross of provisions.

Allocated provisions: specific reserves set by banks by applying specific weights to credits according to their risk classification (2 percent for A; 10 percent for B; 25 percent for C; 50 percent for D and 100 percent for E).

Capital (owned funds): common and preferred shares, general banks' reserves, revaluation reserves and undistributed profits. Net of uncovered losses and unallocated specific provisions identified by the NBM's Banking Supervision Department.

Credit to banks: regular and nonperforming loans and other claims to domestic and foreign banks, gross of provisions.

Credit to nonbanks: regular and nonperforming loans to private and public enterprises, households and other customers, gross of provisions. Includes short- and long-term denar and foreign currency loans.

Classified exposure: credit exposure classified under Substandard, Doubtful and Loss Risk category.

Credit risk classification: NBM classifies credit risk into five categories from A to E, which correspond to Pass (A), Watch (B), Substandard (C), Doubtful (D) and Loss (E). Classification is based on objective and subjective criteria including the amount of time loans have been overdue (A, 15 days; B, from 16–60 days; C, from 61–150 days; D, from 151–365 days and E, more than 365 days or without recovery).

Credit exposure: regular and nonperforming loans, accrued interest, other claims and off-balance-sheet credit exposure that entails credit risk.

Guaranty capital: capital adjusted by current profit (50 percent) and other long-term securities, net of current losses and capital investments.

Liquid assets: cash, claims, and securities rediscounted by the NBM; debt securities and accounts with domestic and foreign banks.

Minimum capital requirement: based on paid-in capital. Since April 1999, the NBM's Banking Supervision Department requires banks to adjust the amount of paid-in capital by

²⁵ According to the Banks and Savings Houses Act and the NBM's regulations. Some terminology may differ from standard usage elsewhere.

deducting unallocated specific provisions, uncovered losses and requests for capital increases not yet approved by the NBM.

Net loans: regular and nonperforming loans to nonbanks, net of provisions.

Nonaccrual interest: interest overdue more than 90 days.

Nonperforming loans: principal of loans classified as Doubtful and Loss and principal of loans for which interest payment has been overdue more than 90 days.

Off-balance-sheet items: covered and uncovered letters of credit and guarantees, performance guarantees, credit commitments, and other uncovered off-balance-sheet items.

Off-balance-sheet credit exposure: uncovered off-balance-sheet items.

Paid-in capital: common and preferred shares and general banks' reserves paid-in in money form, adjusted by annual reports.

Provisions: allocated provisions on credit to nonbanks and banks; unallocated specific provisions and provisions for nonaccrual interest.

Unallocated provisions: provision shortfall identified by the NBM's Banking Supervision Department.

Regular loans: principal of loans (including overdue) other than nonperforming loans.

Risk-weighted assets: risk-weighted on-and off-balance-sheet assets net of uncovered and current losses, capital investments and unallocated specific provisions.

On-balance-sheet items and their risk-weighting is as follows:

- cash, deposits with NBM and gold (0 percent risk);
- claims on NBM and on Government (0 percent);
- claims secured or guaranteed by NBM and Government (0 percent);
- claims covered with cash (0 percent);
- claims on domestic and foreign banks (20 percent);
- precious metals (20 percent); and
- all other assets (100 percent).

Off-balance-sheet items and their risk-weighting is as follows:

- covered letters of credit and guarantees (0 percent risk);
- performance guarantees to nonbanks (20 percent);
- credit commitments to nonbanks (50 percent); and
- uncovered letters of credit and guarantees and other off-balance-sheet items to nonbanks (100 percent).

Performance guarantees, credit commitments, and uncovered off-balance-sheet items to banks (20 percent of risk-weighting for each asset).

Short-term liabilities: deposits and borrowings up to one year. Includes denar and foreign currency liabilities.

Measuring the Systemic Risk of Interbank Exposures

Define a banking system with n banks, of which, m are troubled banks. Define a matrix A where a_{ij} is the logarithmic transformation of A_{ij} , the share of bank i 's loans to troubled bank j as a percentage of that bank i 's total loan portfolio (if one sound bank lends 10 percent and 15 percent of its bank portfolio to two troubled banks, then A_{ij} is 0.1 and 0.15 respectively). Using data from the interbank market, define a matrix W where w_{ij} for $i=1$ to n and $j=1$ to m , is the share of sound bank i 's loans to troubled bank j as a percentage of total interbank loans to troubled bank j (If 10 sound banks lend to 5 troubled banks and each sound bank i lends 10 percent to each troubled bank, then W_{ij} is 0.1 for each i and j).

Then, define the matrix $S = A'W$ where A' is the transposed matrix A . The matrix S has dimension $m \times m$ with indexes s_j , $j=1$ to m , where each index S_j is the weighted share of each sound bank's lending to each troubled bank as a percentage of the sound bank total loan portfolio. Define an index of interbank exposure (IE) as $\text{Tr}(eS_j)$. The impact of potential banks' failures on banks that lend to troubled banks is greater, the closer IE is to 1. The closer IE is to zero, the lower the impact on lending banks.

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