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Republic of Moldova: Financial System Stability Assessment—Update

This update to the Financial System Stability Assessment on the Republic of Moldova was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on February 26, 2008. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Republic of Moldova or the Executive Board of the IMF.

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REPUBLIC OF MOLDOVA

Financial System Stability Assessment Update

Prepared by the Monetary and Capital Markets and European Departments

Approved by Jaime Caruana and Michael Deppler

February 26, 2008

The Financial System Stability Assessment (FSSA) is based on the work of the joint IMF-World Bank Financial Sector Assessment Program (FSAP) update mission to Moldova in October 2007. The team met with the Deputy Prime Minister, the ministers of Finance and Economy, the governor and staff of the National Bank of Moldova (NBM), the president and staff of the National Commission on Financial Markets (NCFM), as well as with banks, other financial institutions, and other private sector participants.

The FSAP team consisted of Judit Vadasz (IMF, Mission Chief), Sonja Brajovic-Bratanovic (World Bank, Deputy Mission Chief) Marie-Therese Camilleri, Nikoloz Gigineishvili, Annamaria Kokenyne, Silvia Ramirez (all IMF), Serap Gonulal, Sue Rutledge (all World Bank), Keith Bell (banking supervisions—World Bank expert), Tyge Rasmussen (securities market—World Bank expert), Alexander Shishlov (National Bank of Kazakhstan, payment systems—World Bank expert), and Walter Zunic (banking supervision—IMF expert).

- Overall, vulnerabilities of the financial sector appear to be manageable. Stress tests on likely scenarios do not indicate major vulnerabilities for the banking system as a whole.
- Since the 2004 FSAP, the NBM has made progress in identifying bank owners, an issue then flagged as a major vulnerability, but other financial supervisors have been considerably less successful in this respect.
- The main challenges faced by the financial sector policy-makers are the following:
    - focus monetary policy credibly on inflation and improve liquidity management by developing the capacity and instruments for handling inflation;
    - upgrade the analytical tools used by the NBM to assess and monitor financial stability for the whole of the financial system;
    - enhance and institutionalize the cooperation between the NBM and the NCFM;
    - ensure the effective operation of the newly established NCFM and expand its remit to leasing; and
    - improve the infrastructure of financial markets and of the payment systems.

The summary assessments of compliance with two international standards (Basel Core Principles and Core Principles for Systemically Important Payment Systems) are attached. Compliance was found to be good overall, but full compliance requires further substantial efforts.

The main author of this report is Judit Vadasz with contributions from all mission members.

FSAPs are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAPs do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.

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GLOSSARY

AIPS	Automated Interbank Payment System
AML	Anti-money laundering
BCP	Basel Core Principles for Effective Banking Supervision
BIS	Bank for International Settlements
BRSD	Bank Regulation and Supervision Department
CAR	Capital adequacy ratio
CCECC	Center for Combating Economic Crime and Corruption
CP	Core Principle
CPSIPS	Core Principles for Systemically Important Payment Systems
CPSS	Committee on Payment and Settlement Systems
DNS	Designated-time net settlement
FDI	Foreign direct investment
FSAP	Financial Sector Assessment Program
IFRS	International Financial Reporting Standards
IT	Information technology
LFI	Law on Financial Institutions
MDL	Moldovan leu
MOF	Ministry of Finance
MOU	Memorandum of understanding
MSE	Moldova Stock Exchange
MTPL	Motor third party liability
NBM	National Bank of Moldova
NBM Law	Law on National Bank of Moldova
NCFM	National Commission on Financial Markets
NPL	Nonperforming loans
NSCM	National Securities Commission of Moldova
NSD	National Securities Depository
RTGS	Real time gross settlement
TA	Technical assistance
T-bill	Treasury Bill

EXECUTIVE SUMMARY

The 2004 FSAP had identified governance (specifically bank ownership) as a significant source of financial sector vulnerability, but this update found that the bank supervisors have made successful efforts to address this problem. Nevertheless, the assessment of the related principles of the Basel Core Principles for Effective Banking Supervision (BCP) indicates that despite these efforts, supervisors do not yet have full information on some owners in at least one of the systemically important banks, while in several other banks this information is incomplete. Recently, reputable foreign investors were allowed to purchase domestic banks, which is an encouraging sign, indicating that the authorities are determined to clean up the sector. Supervisors in other parts of the financial sector (particularly the insurance and the securities sectors) had much more limited success in clarifying ownership. One of the reasons for this is the recent overhaul of the regulatory and supervisory system, with the newly established National Commission on Financial Markets (NCFM) has yet to function in its full capacity.

Monetary policy credibility and excessive domestic liquidity that led to inflation pressures and the possibility of unsound credit growth are the major, interlinked sources of vulnerability in the financial system today. These sources of vulnerability are essentially macroeconomic in nature and their handling is largely outside the scope of the FSAP update (but is covered in the staff report). In addition, because dependence on remittances is one of the highest in the world (more than 30 percent of GDP), the financial system is vulnerable to potential volatility in these inflows. Simultaneously with enhancing monetary policy credibility by focusing on inflation and dealing with excessive domestic liquidity, the National Bank of Moldova (NBM) should make further improvements in its liquidity management capacity, tools, and transparency of monetary policy.

Nevertheless, the effects of the above macroeconomic risks on the financial system appear manageable at present. Stress tests aimed at simulating these possible shocks and even more extreme (but still within historical parameters) scenarios, show that the banking sector as a whole can withstand them. It should also be noted that the financial sector and particularly the banking sector withstood serious exogenous shocks during the past year-and-a-half. The situation in some major banks, however, should be followed more closely with a view to timely supervisory/central banking intervention in case a shock simulated in stress tests occurs.

The developmental needs of the financial sector are substantial, as evidenced by lagging benchmarks against Moldova's more advanced peers. Overall, the share of the financial sector in the economy is still small, markets are shallow, and some elements of the infrastructure are missing (e.g., there is no central registry for securities). These indicators are worse for the insurance and securities sectors than for banking. To address the developmental needs while maintaining the soundness of the financial system, the supervisory and regulatory authorities have major tasks before them.

Financial sector supervision should be viewed by the institutions (primarily the NBM and the NCFM) as a joint task. While unifying banking and nonbank financial sector supervision is not necessary at this time, the NBM and the NCFM face similar challenges:

- The supervisors continue to lack information on some of the ultimate beneficial owners of financial sector institutions. They should make further efforts to identify all such owners. This should be a priority for all financial sector supervisors, not just bank supervisors.
- The financial institutions in Moldova, as in many other countries, are becoming more intertwined by cross-ownership (several banks are part-owners of insurance companies). Financial products also cross financial subsectors (life insurance products that resemble bank products are already sold in Moldova). Both bank and nonbank supervisors should take these developments into account and develop practical mechanisms (including signing of Memoranda of Understanding, sharing experience, doing joint studies etc.) to cooperate with each other in sharing information and developing the capacity to analyze this information.
- The NBM and the NFCM should make joint efforts to modify the Law on The Core Principles of Regulating Entrepreneurial Activities to exempt the financial sector from some of its provisions that might impede supervisory actions by the obligation to immediately and automatically subject such actions to judicial review.

The supervisory/regulatory authorities should enhance their capacity and effectiveness

- After the 2004 FSAP, the NBM has begun to conduct stress testing. The challenge now is to build up the capacity to make adjustments to the stress testing scenarios to align them with the changing situation in the economy generally and the financial sector specifically. The capacity build-up and a reorganization (if needed) within the NBM to achieve the above goal should be one of the short-term priorities.
- The supervisor should recognize and react to the risks that the banking system faces. To this end, the NBM should implement an early warning system for potential domestic and external disruptions.
- The supervisor should be cognizant of, and enforce standards for the internal risk-management systems in banks. The recent investments of well-regarded foreign banks in the Moldovan banking system give an opportunity to the supervisors to spread these banks' knowledge of higher quality internal risk-management systems to other banks. This can be accomplished through regulatory changes and consultations with the banks.

The NCFM should start effective operations as soon as possible

- The NCFM was set up with the aim to significantly enhancing the quality of supervision of the nonbank financial sector. This task has been complicated by the differences in the risk profiles of various financial intermediaries and in supervisory cultures. For instance, the top priority for the insurance and securities sectors is not the same. While in the insurance sector the NCFM should focus on developing an adequate regulatory and supervisory regime, in the securities sector the main task is to develop a strategy to revitalize the securities markets and to extend its supervisory activities to cover leasing.

- The financing of the NCFM is based on fee payments by the supervised sectors. Because these sectors are small and there are large upfront costs to setting up the NCFM, it is doubtful that this financing will be sufficient in the short- to medium-term. To meaningfully start operations, the NCFM should be guaranteed budgetary support, as needed.

In addition to improvements in supervision, the infrastructure and the governance of the financial sector should also be enhanced:

- *Infrastructure:* The setting up of a real time gross settlement system (RTGS) has been a major improvement for wholesale payments. The key issue now is to improve other elements of the national payment infrastructure, including settlement systems for the securities markets, for electronic payment instruments, and the domestic foreign exchange market.

- *Governance:* While the revision of the accounting and auditing laws has been accomplished, further actions are needed to improve governance, including a functioning central registry for company financial statements, requiring the posting of full financial statements of banks on their websites, and establishing full fiduciary duties for all company Board members and executive managers.

The key recommendations stemming from this assessment are included in Box 1. A number of other technical recommendations are discussed in the report.

Box 1. Summary of Key Recommendations

A. High priority

- ***Tighten monetary policy to eliminate excess liquidity and reduce inflation*** (details in the Staff Report).
- ***Improve liquidity management***
    - Develop the capacity to better forecast and manage liquidity, inter alia by the necessary staff increases and the development of forecast models.
    - Further increase the transparency of monetary operations.
- ***Create the framework for effective cooperation between the supervisors***
    - Make joint NBM and NCFM efforts to exempt the financial sector from the application of some provisions of the Law on The Core Principles of Regulating Entrepreneurial Activities
    - Sign Memoranda of Understanding between the NBM and the NCFM and separately between the central bank and all subsectoral supervisors.
    - Develop the joint handling of some of the supervisory databases.
- ***Improve the effectiveness of bank supervision***
    - Issue guidelines for the implementation of consolidated accounting requirements.
    - Continue to make efforts to identify the beneficial owners of banks.
    - Improve the capacity to adapt stress testing scenarios to the changing circumstances.
    - Enhance bank risk management capacity by setting guidelines.
- ***Start the effective operation of the NCFM***
    - Review and redefine the licensing process for intermediaries under the NCFM.
    - Ensure the necessary NCFM funding through the government budget, if needed.
    - Upgrade staff technical capacity to implement and enforce insurance legislation.
    - Move to a modern Central Securities Depository structure, including the registrar functions (and RTGS payments) for at least the listed companies.
- ***Implement, with the leadership of the NBM, the National Net Settlement Service for leu transactions.***

B. Medium term and developmental

- ***Upgrade nonbank financial supervision***
    - Set new prudential standards for all entities supervised by the NCFM based on international standards and best practices.
    - Develop statutory returns in the insurance sector that provide relevant information on solvency, reinsurance, claims, and expenses. Build technical capacity in the NCFM to analyze reinsurance programs; develop minimum reinsurer criteria.
    - Implement risk-based supervision principles for the capital markets sector.
    - Expand the NCFM's remit to include leasing.
- ***Improve the financial sector environment***
    - Expand the public disclosure statements of banks and require that the financial statements, bank charters, and statements of compliance with the Corporate Governance Code be posted on their websites.
    - Revise the insurance legislation to reduce the threshold for approval of shareholders by the supervisor and provide a detailed description of indirect holdings in the capital of insurers.

I. Progress Since the 2004 Financial Sector Assessment Program

1. **The 2004 FSAP concluded that the key issues in the financial sector were related to weaknesses in the regulatory framework and gaps in its implementation**. For the banking sector, the most critical issues were considered to be: (i) the implementation of the "fit and proper" standards for owners of financial institutions; (ii) the privatization of Banca de Economii; and (iii) close cooperation among supervisory agencies. In the insurance sector, the focus was on improving the regulatory environment. The key recommendations for the securities markets aimed to consolidate various parts of the stock market and the capital market and stimulate market development. Payment system recommendations focused on improving the payment system infrastructure. In the area of governance and accounting, the recommendations concentrated on the development of the necessary legal framework.

2. **Since 2004, many recommendations provided under the 2004 FSAP have been implemented.** While the privatization of Banca de Economii has been slow, there has been major progress in addressing the issue of ownership structure of banks, including identifying the nature of connections between borrowers and shareholders, and requiring beneficial shareholders to fully disclose their ownership. The authorities should accelerate the privatization of Banca de Economii to private strategic financial investors, which will be important for improving competition in the banking sector. The regulatory framework has recently been improved, but there has been little progress in improving supervision, except in the banking sector. To ensure better oversight of the nonbank financial sector, in the second half of 2007 a new regulator/supervisor, the NCFM, was set up. This institution might be the long-term solution for the supervision of this sector, but at the time of the FSAP its operation was still ineffective, as the institution was grappling with basic issues of overhauling the regulatory framework and ensuring its own financing. The payment systems infrastructure has been strengthened by putting into operation an RTGS system. There were improvements in the legal framework for accounting practices.

II. Financial Sector Risks

A. Macroeconomic Risks and Vulnerabilities

Excessive domestic liquidity

3. **Fuelled by growing inflows of foreign exchange from remittances and foreign direct investment (FDI), a liquidity overhang has persisted, calling for active and consistent monetary policy.** Reluctance to allow more exchange rate appreciation and to raise interest rates could undermine central bank credibility and entrench inflationary expectations. Potential fiscal pressures in the run-up to national elections in 2009 may also add to inflationary pressures. The continued strong growth in credit and broad money suggests that inflation risks are not contained, which might lead to an overall economic slowdown, negatively affecting the growth prospects of the banking system.

Rapid credit growth

4. **The recent rapid expansion in bank credit, if unabated, might give rise to medium-term concerns (Tables 1, 2 and 3).** While this growth is from a very low base, possibly reflecting catch-up growth with no significant sign of carry trade, a continued rapid increase will require careful attention to preempt a deterioration in banks' credit portfolios. The danger is now that the banks' internal risk management systems are not good enough to preempt lending to ultimately unviable projects that would increase nonperforming loan (NPL) ratios in the medium term. The steps the bank supervisors can take to prevent future NPL increases are outlined in other parts of the report, including in the BCP Report on Observance of Standards and Codes. In this context too, it would be useful for the NBM to develop an early warning system that would signal any emerging macroprudential risks to the financial system, as recommended by an earlier IMF technical assistance mission.

Dependence on remittances

5. **Economic growth has been robust in recent years, driven by consumer demand and construction activity that have been stimulated by remittances and, more recently, by growing FDI.** The inflow of remittances, which amounted to 33 percent of GDP in 2006, exerts appreciation pressure on the leu[1] and pumps liquidity into the system, fuelling inflation (13.4 percent at the end of 2007).

6. **While inflows of remittances have been robust and are unlikely to dry up suddenly, they still present risks**. Should economic conditions in Russia and the EU—the two main destinations for Moldovan emigrants—worsen, or enforcement of immigration and labor laws in those countries tightened, the inflow of remittances may slow down considerably. This would put the exchange rate under pressure and diminish the availability of financial resources for the financial sector. It could also increase credit risk, in so far as part of bank lending is based on the borrowers earning/receiving remittances. Based on stress test results (see below), this risk, however, seems to be manageable.

B. Monetary Policy Framework and Liquidity Management

Uncertainties about the framework

7. **With changes to the Law on the National Bank of Moldova (NBM Law), price stability has become the primary objective of monetary policy**. Direct lending to the government was prohibited, while a service agreement based on market principles was signed between the Ministry of Finance (MOF) and the NBM. The authorities have also

[1] The exchange rate classification of the leu is managed floating with no preannounced path for the exchange rate.

Table 1. Moldova: Selected Macroeconomic Indicators, 2004–08 1/

			Prel.	Proj.	
	2004	2005	2006	2007	2008
I. Real sector indicators	(Percent change; unless otherswise indicated)				
Gross domestic product					
Real growth rate	7.4	7.5	4.0	5.0	7.0
Nominal GDP (billions of lei)	32,032	37.7	44.1	51.3	58.8
Nominal GDP (billions of U.S. dollars)	2,598	3.0	3.4	4.2	5.3
Consumer price index (average)	12.5	11.9	12.7	12.6	11.4
Consumer price index (end of period)	12.6	10.1	14.1	13.4	9.0
GDP deflator	8.0	9.3	12.5	10.9	7.1
Average monthly wage (lei)	1,116	1,320	1695	...	...
Average monthly wage (U.S. dollars)	91	105	129	...	...
Saving-investment balance	(In percent of GDP)				
Foreign saving	2.0	10.3	12.0	9.7	10.3
National saving	19.2	14.3	15.9	20.3	20.0
Private	13.6	6.8	7.9	13.1	13.0
Public	5.5	7.5	8.0	7.2	7.0
Gross investment	21.2	24.6	27.9	30.0	30.3
Private	16.2	18.4	20.2	22.3	22.9
Public	5.0	6.2	7.8	7.7	7.5
II. Fiscal Indicators (general government)	(In percent of GDP)				
Primary balance (cash)	2.7	2.6	1.3	0.9	0.7
Overall balance (cash)	0.8	1.3	0.2	-0.3	-0.5
Overall balance (commitments)	0.5	1.3	0.3	-0.6	-0.5
Overall balance (commitments), excluding foreign-financed projects	2.0	2.2	1.1	1.0	0.7
Stock of general government debt	47.2	38.0	34.6	29.2	22.2
III. Financial indicators	(Percent change; unless otherwise indicated)				
Broad money (M3)	37.7	35.0	23.6	39.8	21.5
Velocity (GDP/end-period M3; ratio)	2.7	2.4	2.3	1.9	1.8
Reserve money	39.7	31.8	-7.0	46.4	19.6
Credit to the economy	22.2	35.0	37.8	51.7	22.0
IV. External sector indicators	(In millions of U.S. dollars; unless otherwise indicated)				
Current account balance	-52.9	-307	-404	-410	-552
Current account balance (percent of GDP)	-2.0	-10.3	-12.0	-9.7	-10.3
Remittances and compensation of employees (net)	660	869	1,119	1,548	2,008
Gross official reserves 2/	470	597	775	1,334	1,743
Gross official reserves (months of imports)	2.1	2.2	2.2	3.0	3.2
Exchange rate (MDL/$) period average	12.3	12.6	13.1	12.1	11.0
Exchange rate (MDL/$) end of period	12.5	12.8	13.1	11.3	10.8
Real effective exchange rate, change (percent)	12.8	-1.3	0.0	11.0	16.3
External debt/GDP (percent) 3/	63.8	56.2	57.4	58.8	55.0
Debt service/exports of goods and services (percent)	21.0	16.5	18.7	8.8	11.1
Social indicators, reference year					
Per capita GNI, U.S. dollars: 880 (2005)	Population below poverty line, percent: 30.2 (2005)				
Life expectancy, male, years: 64.9 (2005)	Life expectancy, female, years: 71.9 (2005)				

Sources: Moldovan authorities; and Fund staff estimates.

1/ Data exclude Transnistria.
2/ For 2005, includes the positive effect of reclassification of $43 million.
3/ Includes private and public debt.

Table 2. Moldova: Selected Banking System Indicators, 2003–2007

(In percent)

	2003	2004	2005	2006	2007 1/
Depth of the banking system					
Total banking assets/GDP 2/	38	42	48	52	54
Lending/GDP	22	23	27	31	33
Deposits/GDP	25	30	37	39	40
Concentration 3/					
Equity/Total banking system	41	42	42	40	40
Total assets/Total banking system	51	52	52	48	48
Total loans/Total banking system	50	50	48	46	46
Deposits/Total banking system	56	57	55	51	52
Ownership as a ratio of assets					
State ownership	16	18	19	15	15
Majority foreign owned, *out of which*	35	34	20	23	23
Subsidiaries of foreign banks	5	4	4	12	22
Capital adequacy ratio	32	31	27	28	27
Dollarization					
Foreign currency loans/Total loans	43	42	37	38	40
Foreign currency deposits/Total deposits	46	42	39	49	48

Source: National Bank of Moldova data; and staff calculations.

1/ Data as of June 30, 2007.
2/ For calculating 2007 ratios, the 2006 GDP was used.
3/ For the three largest banks.

developed a plan to securitize, by end-March 2008, the existing stock of nontradable government debt into treasury bills to provide the NBM with a portfolio of marketable securities for open market operations (equal to Moldovan Leu (MDL) 1.8 billion, or 3.6 percent of GDP). Although the new NBM Law clarifies policy objectives, eliminates monetary financing, prohibits the giving of instructions to the NBM, and strengthens legal consultation of the NBM prior to enacting legislation affecting the financial sector, there is still room for improvement in areas such as budgetary autonomy, the provision of legal protection for staff, and safeguards against conflicts of interest.

8. **The NBM still places more emphasis on exchange rate and interest rate stability than called for, given the new inflation focus of monetary policy.** Foreign exchange interventions to offset the trend of exchange rate appreciation and political resistance to any increase the interest rates are inconsistent with the pursuit of the NBM's price stability objective. The NBM's resistance to raising interest rates by a sufficient margin to absorb the liquidity overhang is undermining its credibility.

9. **Although the government has recently boosted the financial position of the NBM with a direct cash injection of MDL 250 million, there is a possibility for future losses, which may require another recapitalization.** In this regard, several operational weaknesses

Table 3. Moldova: Financial Sector Indicators, 2000–June 2007

(End-of-period; in percent, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007 1/
Banking system								
Size								
Number of banks	20	19	16	16	16	16	15	15
Total assets of the banking system (in percent of GDP)	29	31	35	38	42	48	52	54
Credit to nongovernment sector (in percent of GDP)	14	16	19	22	23	27	31	33
Capital adequacy								
Capital adequacy ratio 2/	49	43	36	32	31	27	28	27
Liquidity								
Liquidity ratio 3/	67	60	56	48	51	48	44	45
Asset quality 4/								
Nonperforming loans as a share of total loans	21	10	8	6	7	5	4	4
Nonperforming loans, net of loan loss provisions/Tier 1 capital	15	5	3	2	3	0	-3	-3
Loans under supervision as a share of total loans	30	31	35	35	34	39	41	35
Nonperforming and loans under supervision as a share of total loans	51	41	43	42	41	44	45	39
Profitability								
Return on equity	25	14	17	20	18	15	21	25
Return on assets	7	4	4	4	4	3	3	4
Noninterest income/Total income	39	35	40	38	35	34	31	29
Interest rates								
Domestic currency average lending rate	32	26	19	19	21	17	19	19
Domestic currency average deposit rate	24	18	13	14	16	11	13	15
Interest rate spread, domestic currency	9	8	7	5	6	7	5	4
Foreign currency average lending rate	15	12	12	11	11	11	11	11
Foreign currency average deposit rate	5	3	3	4	5	5	6	6
Interest rate spread, foreign currency	10	9	9	7	6	5	5	5
91-day T-bill (effective nominal yield)	25	8	11	18	7	4	12	12
Foreign currency deposits								
Share of foreign currency deposits in broad money	28	28	31	34	31	30	36	36
Insurance sector								
Number of insurance companies	45	44	49	43	38	32	33	33
Insurance premium as percent of GDP			1	1	1	1	1	…
Capital markets sector								
Market capitalization in percent of GDP	…	…	24	25	17	15	15	…
Market turnover in percent of GDP	…	…	3	3	1	1	1	…

Source: National Bank of Moldova, National Commission on Financial Markets.

1/ June 30, 2007.
2/ Total regulatory capital over total risk-weighted assets.
3/ Liquid assets over total deposits.
4/ Uncertainty regarding the ultimate beneficial owners of banks suggests caution is in order regarding the reliability of this data.

have stemmed from high sterilization costs and revaluation losses associated with the exchange rate appreciation. Any perception by the market that the NBM may deviate from otherwise optimal policy choices to avoid financial losses will undermine its reputation.

10. **In addition to the above, and in spite of the efforts of the NBM to be transparent about the conduct of monetary policy, the market appears uncertain about the central bank's true intentions and objectives.**[2] It is in the NBM's interest to ensure that markets clearly understand the policy framework; otherwise the signaling function of monetary policy will be muted. To counteract inadequate competence in understanding macro-financial linkages in some of commercial banks, the NBM needs to improve its transparency practices and strengthen its communication strategy, including through a "public education campaign" of frequent press releases, public appearances, newspaper articles, and analytical publications. Unfortunately, even with the best efforts, the process of building confidence may take time, especially because not so long ago the NBM's declared and practiced monetary policy diverged substantially.[3]

Challenges in liquidity management

Managing excess liquidity

11. **The main challenges facing the monetary authorities are to manage excess liquidity and improve the interest rate transmission mechanism.** Foreign exchange interventions have not been consistently sterilized. Although somewhat delayed, the recent increases in policy rates and reserve requirements were welcome steps to tame the growing inflation. Markets are segmented and retail lending and deposit rates are disconnected from money market instruments (Figure 1).[4] Lack of competition in the banking system and the shallowness of the market with a limited number of only short-term maturities distort the yield curve, which is the key building block of transmission.

12. **In the short run, the main impediment to transmission is excessive domestic liquidity**. The decision by the government to move the accounts of the National Social Insurance House, the National Health Insurance Company, and territorial budgets from

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[2] For example, commercial banks were caught by surprise when the NBM "unexpectedly" raised its policy rate in September 2007 after keeping it practically unchanged since end-2006. Because of the confusion about the consistency of this policy action with the long-term goals of the central bank, many market participants perceived the move as temporary, despite the statement issued by the NBM that the tightening was a response to rising inflation.

[3] In 2004–2006, the NBM' declared policy goal was controlling inflation, while in reality this goal often clashed with the de facto pegged exchange rate.

[4] Over the past two years, money market rates moved up from around 2 percent to about 13 percent, while retail lending rates have barely changed.

commercial banks to the single treasury account at the NBM by end-2007 eases part of the liquidity pressure.[5] The interest rate pass-through will function if excess liquidity is mopped up and sterilization rates become high enough. This would also help to develop the financial markets, as not all banks would be structurally on the same side of the market.

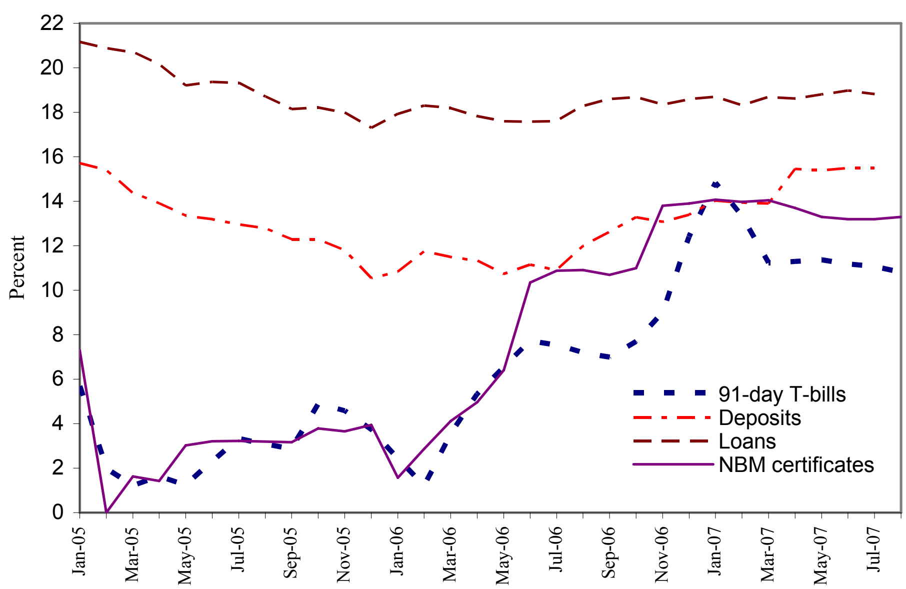
Weak forecasting capacity

13. **Within the operating framework of reserve money targeting, the NBM's capacity to forecast and manage liquidity remains weak.** The NBM lacks proper models of the economy and enough staff to make reliable forecasts. Furthermore, even though coordination between the NBM and the MOF has improved as a result of regular meetings of the joint liquidity management committee, reserve money has continued to exhibit high volatility. This is partly due to inconsistency in the policy framework, which targets quantities (reserve money) by setting prices (interest rates) without having established a clear connection between the two.

Improvement of monetary policy tools

14. **The NBM's arsenal of monetary policy tools has been recently streamlined, but may require further improvement to fit policy needs.** The main liquidity management instrument is the sale of NBM certificates. The NBM uses a so-called "corridor" structure of

Figure 1. Moldova: Interest Rates, January 2005–July 2007



[5] According to information received from the authorities, this shift was accomplished as planned.

policy rates whereby standing facilities of overnight deposits and credits form lower and upper bounds for market rates. The corridor, however, is too wide and its lower limit is too low to provide a floor to the interbank market rate: the overnight deposit rate is set at 2 percent, while seven-day NBM certificates are auctioned at 16 percent. The base rate is set by the NBM as a main policy reference rate. In practice, however, no transactions take place at this rate, which is therefore only used as an upper limit for sterilization operations. Finally, reserve requirements are intended to affect structural demand for money. The effectiveness of instruments could be improved by adopting a sterilization rate as a base rate to remove the ambiguity between the two, and shifting sterilization operations to shorter maturities.

III. Strengths and Vulnerabilities: Institutions and Markets

A. Banks

Overall performance and stability assessment

Implementation of the 2004 FSAP findings

15. **The authorities have achieved some success in addressing the critical banking sector recommendations of the 2004 FSAP.** The critical issues were (i) the government's role in the banking system; (ii) the opaque ownership structure of a relatively large number of banks in the country; and (iii) the absence of reputable strategic investors. Preparatory work for the privatization of the state owned bank has commenced, but at a much slower pace than originally expected and the sale has not been completed yet.[6] To make ownership more transparent, in addition to reducing the threshold definition of significant shareholding,[7] the central bank also stepped up its efforts to collect information on all shareholders. One of the most significant developments in the banking sector has been the investments of reputable strategic investors. In addition to the existing subsidiary of a foreign bank, three new acquisitions occurred in 2006–2007,[8] but still accounting for only slightly more than 20 percent of the total assets.

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[6] This was due to a situation of conflict of interest in the selected evaluation consultant.

[7] The threshold for significant shareholding was reduced to 5 percent from the previous 10 percent. Banks are obliged to submit information on their shareholders exceeding this limit. In case of noncompliance, the NBM limits the operations of the banks that do not support the enforcement of the regulation. In addition, the NBM requires that information be provided on shareholders with holdings between 1-5 percent. This requirement attempts to prevent connected parties from circumventing the regulation by splitting holdings into portions not exceeding 5 percent. In at least one case, the owners sold the shares as a result of an intensified NBM inquiry.

[8] Banca Comerciala Romana, owned by Erste Bank established a Moldovan subsidiary, Veneto Bank purchased Eximbank in 2006, Societe Generale acquired Mobiasbanca in 2007, and Unibank was purchased by an Austrian venture capital fund.

Present challenges

16. **While the banking sector successfully weathered the external shocks of the wine export ban and the rise in gas prices in 2006, vulnerabilities remain.** These vulnerabilities are related to: (i) the remaining uncertainties in the ownership structure despite considerable efforts by the NBM; (ii) dollarization and lending in foreign exchange; and (iii) the NBM's capacity constraints to analyze risks and vulnerabilities.

17. **The process of clarifying the ultimate beneficial owners has not been completed**. Information collection is still ongoing in the case of 30 shareholders of some banks, including the largest, systemically important banks (although the lack of information is more prevalent in the case of banks in the second and third subgroup[9]). This raises concerns not only in relation to large exposures, connected lending, and loan concentration, but also in establishing whether the owner can provide contingency funds in case of a bank run or other stress situations.

18. **Although the government intends to sell its share in the majority state-owned bank, the privatization process came to a halt after the selected evaluation expert had a conflict of interest**. In order to have a more level playing field and increase competition in the banking sector, the privatization process should continue, with the emphasis on selling to a strategic investor.

19. **Foreign strategic investors own slightly more than 20 percent of the banking sector's assets**. The investments of first-tier banks in Moldova are welcome. Nevertheless, while foreign participation has increased, the majority of foreign holdings belong to investors that are not internationally highly-rated financial institutions, with a significant percentage of the owners being residents in offshore centers. While those owners who have more than a 5 percent stake in a bank have been mostly found to be fit and proper, the ability and willingness of such owners to provide know-how and capital or liquidity support is not obvious. The supervisors could continue to exert pressure on the banks to consolidate ownership in individual banks through strategic investors.

20. **In addition, weaknesses in the operational environment are undermining the efficiency of the banking sector.** Uncertainties in policy implementation by the authorities complicate bank operations, and increase costs. Since monetary operations of the NBM are often unpredictable for banks, they tend to keep higher liquidity. The recent increase in the level of required reserves raises the cost of compliance, augmenting existing inefficiencies in the system. These inefficiencies are reflected first of all in very high returns on equity and returns on assets. The margins between deposit and lending rates have decreased recently,

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[9] Subgroups refer to a breakdown of the banking sector by size. Subgroup 1 comprises large banks with total assets over MDL 2 billion (5), Subgroup 2 comprises medium size banks with total assets from MDL 1 billion to MDL 2 billion (6), and Subgroup 3 comprises small banks with total assets up to MDL 1 billion (4).

mainly due to the increase in deposit rates reflecting banks' policy of attracting more deposits to finance an increased loan volume (Table 3). The high profitability of the banking sector may change in the medium term, if banks owned by foreign strategic investors move beyond the "cherry-picking" phase and induce competition in the banking sector.

21. **An outstanding issue already raised by banks during the 2004 FSAP is that they are not allowed to lend in foreign exchange to exporters, but only to importers, while there are no constraints on placing foreign exchange deposits.** Dollarization in Moldova is not outstandingly high compared to other countries in the region and in fact deposit dollarization has not even increased during the last year. Nevertheless, the NBM still has not allowed lending to exporters in foreign exchange, as it is concerned that the potentially higher demand for foreign currency loans could contribute to increased deposit dollarization since banks could increase dollar interest rates to attract more foreign currency deposits. The present situation, however, might pose risks for the banks because importers might not have a natural hedge and thus might face difficulties if the exchange rate of the leu were to depreciate. The NBM also anticipates that monetary policy would be constrained by the increasing ratio of domestic currency lending and deposit. Prudential rules could be adjusted to require the internalization of the risks emanating from the dollarization of banks' balance sheets.[10]

22. **Staff recommends that exporters be allowed to borrow in foreign currency up to the amount of their export revenues.** Limited broadening of the use of foreign currency lending would not result in a significant increase in macroeconomic risk, as the banks' ability to extend foreign currency loans would remain constrained by the prudential rules on the extension of credits and the net open position limits.

23. **Although the NBM has made progress in developing and implementing a basic stress testing toolkit, the lack of capacity to change stress testing scenarios to accommodate newly emerging risk factors, is a vulnerability.** More work is needed to identify additional risk factors and properly assess credit and liquidity risks. The collection of relevant data, such as the level of borrowers' indebtedness, deposit concentration by currency, by type; NPLs by sector or currency; and remittance-based lending and remittance based income data should form the basis of this work. The NBM should examine whether a reorganization is needed to make better use of the research capacity in other departments in developing stress testing models.

Weaknesses indicated by the stress test results

24. **The banking sector stress tests were conducted in coordination with NBM staff**, **using detailed bank-by-bank data as of end-June 2007.** The tests included sensitivity

[10] For example, higher liquidity requirement could be imposed on foreign currency deposits than lei deposits.

analyses of the banking sector's vulnerability to credit, liquidity, interest rate, and exchange rate risks, as well as macroeconomic scenarios involving a combination of shocks. The stress tests were performed at the individual, group, and banking system level and the size of the each shock was chosen based on both historical and hypothetical changes in key risk factors. The results of the stress tests are reported for each banking subgroup and for the banking system as a whole in terms of additional capital and liquidity required to satisfy the minimum regulatory CAR[11] and liquidity ratio.[12]

25. **Overall, the results of the stress tests indicate that the banking system as a whole can withstand credit, liquidity, and macroeconomic shocks (Table 4).[13]** The fundamental reason for this resiliency is the abundant capital cushion in banks, as evidenced by high capital adequacy ratios that insulate the banks from most of the risks. Even if extreme (but still historic) shocks were applied, banks would remain solvent, although three systemically important banks and several smaller banks will become undercapitalized. These banks should be monitored closely with a view to timely supervisory/central banking intervention in case a shock simulated in stress tests occurs (Box 2).

B. Insurance Companies

26. **The insurance sector is underdeveloped both relative to its potential, and compared to neighboring countries**. Several factors contribute to the low insurance penetration, including low per capita income, income distribution (growth of the life sector is heavily dependent on the size of the middle class), low understanding of insurance products, low public confidence in the sector, and lack of necessary prudential regulations and their implementation.

27. **At the same time, the de facto lack of enforcement of strict licensing criteria, including minimum capital levels, has led to the proliferation of insurance companies.** With the exception of motor third party liability (MTPL), all other aspects of the nonlife market and life insurance market are underdeveloped. The underdevelopment of the market

[11] According to NBM regulation, the minimum capital adequacy ratio is 12 percent.

[12] The NBM's Liquidity Principle 2 states a minimum 20 percent ratio of current liquidity to total assets. Current liquidity comprises cash, deposits with the NBM, liquid securities and net bank lending and borrowing.

[13] The mission received from the authorities bank-by-bank data, the reliability of which has been vetted by the supervisors both on-site and off-site.

Table 4. Moldova: Summary of Stress Testing Results

(In percent and MLD millions, unless otherwise specified)

	Total Banking System	Group I Total assets >= MLD 2000 million	Group II : 1000 <= Total assets < MLD 2000 million	Group III Total assets < MLD 1000 million
Total assets as percent of total banking system assets	100	67	22	11
Baseline CAR	27	23	27	59
Credit risk				
Increase in NPLs to 17 percent of total loans				
New CAR	23	18	24	56
Size of impact	903	630	171	90
Additional capital to meet min. CAR	16	16	0	0
Number of institutions falling below minimum requirements	1	1	0	0
Increase in NPLs to 31 percent of total loans1/				
New CAR	17	12	20	53
Size of impact	1,861	1,298	353	186
Additional capital to meet min. CAR	340	336	4	0
Number of institutions falling below minimum requirements	4	3	1	0
Wine industry credit risk 2/				
New CAR	24	19	25	56
Size of impact	628	418	157	52
Number of institutions falling below minimum requirements	0	0	0	0
Liquidity risk 3/				
Baseline liquidity ratio	33	35	30	28
5 percent of total deposits outflow				
New liquidity ratio	31	34	25	23
Size of impact	1,069	367	493	208
Number of institutions falling below minimum requirements	3	0	1	2
14 percent of total deposits outflow				
New liquidity ratio	26	29	20	18
Size of impact	2,751	1,607	796	349
Number of institutions falling below minimum requirements	7	1	2	4
20 percent of total deposits outflow				
New liquidity ratio	19	21	15	12
Size of impact	4,796	3,169	1,111	515
Number of institutions falling below minimum requirements	11	3	3	5
Combination of risks				
Scenario I : Credit risk, interest rate risk and foreign exchange risk 4/				
New CAR	16	9	19	55
Size of impact	2,117	1,509	389	219
Additional capital to meet min. CAR	370	363	7	0
Number of institutions falling below minimum requirements	4	3	1	0
Scenario II: Increase in Gas prices and deterioration in the credit portfolio 5/				
New CAR	21	16	21	56
Size of impact	1,230	835	300	95
Additional capital to meet min. CAR	73	73	0	0
Number of institutions falling below minimum requirements	1	1	0	0
Scenario III: Remittances 6/				
New CAR	19	15	20	55
Size of impact	1,448	991	338	119
Additional capital to meet min. CAR	53	39	10	4
Number of institutions falling below minimum requirements	1	1	0	0

1/ Under this scenario, NPLs increase to 31 percent, the highest level observed during the Russian crisis in 1998-99.
2/ All loans g\ranted to winemakers and related industries are reclassified as nonperforming.
3/ Deposit outflows comprise of individual, corporate and interbank deposits. Asset repricing implies a 20 percent asset repricing on government securities.
4/ A 10 percentage point increase in interest rates combined with an increase in NPLs to 30 percent of total loans and a appreciation of the leu against the U.S. dollar (30 percent).
5/ NPLs shocks were 45 (Energy portfolio) percent, 27 percent (industry and trade portfolio), and 30 percent (consumer) for each loan portfolio.
6/ A 30 percent increase of nonperforming loans in the consumer and real estate portfolios combined with a decline in net income of 10 percent.

Box 2. Stress Tests Results

Credit risk is manageable in case of an increase in nonperforming loans to 17 percent of total loans (levels experienced by some banks in 2004) or 31 percent (as experienced during the Russian crisis in 1998-99). While a number of banks in these scenarios would fall below minimum capital licensing requirements, they would still remain solvent.

Liquidity risk remains a vulnerability for some banks, despite high liquidity ratios and capital buffers. Even in a modest scenario (an outflow of 5 percent of total deposits) three banks fall below minimum liquidity requirements, while in a more extreme scenario of a total deposit outflow of 14 percent seven banks would not reach minimum liquidity requirements.

Plausible macroeconomic scenarios, combining single factor shocks, would lead to several banks falling below the minimum regulatory capital, while still remaining solvent. The scenarios included: (i) combining an increase in interest rates triggered by an increase in global rates, with a deterioration of the credit portfolio, and an appreciation of the leu against the U.S. dollar; (ii) combining the effects of an increase in gas prices and the consequent deterioration of the energy, industry, and consumer portfolios; and (iii) combining an increase to 30 percent of NPLs in the consumer and real estate portfolios with a decline in net income of 10 percent (the scenario aimed at assessing the banking system's vulnerability to remittance-based lending and remittance-based fees).

No significant sensitivity was detected to plausible interest rate, exchange rate (stressing for both appreciation and depreciation), and remittance shocks. In most scenarios, no bank falls under the minimum regulatory capital requirements. In addition, sensitivity in the banking system's net open position to fluctuations in the exchange rate against the U.S. dollar, euro, and Russian ruble is also relatively low.

is commensurate with the low level of technical infrastructure and the lack of protection of policy holders, both of which would be required for the development of sophisticated insurance products.

28. **The insurance industry would benefit from the creation of a nationwide insurance association.** Such a body could enforce discipline in the MTPL market and reach consensus on a new rating system to replace the current tariff. Moreover, it could fulfill the responsibility of bridging the interests of the supervisor and the industry. The establishment of the Actuarial and Policyholder Protection Association is a positive first step toward creating a nationwide insurance association and creating a modicum of protection for policy holders.

C. Financial Markets

Capital market

29. **There is a strong need for building a well structured government bond market by implementing the technical changes outlined below and considering the possibility of**

issuing government bonds even if the financing is not absolutely necessary. As of now, there are very few bonds issued: there have been a few issues in the government bond market with maturities up to two and three years, but the outstanding amount is very small (only MDL 222 million) and there is no secondary market activity in them. There have also been a handful of small corporate bond private placement issues. No other bond types are present in the market. The main Moldovan securities are money market instruments in the form of NBM certificates and MOF Treasury bills (T-bills) with maturities up to one year but with most activity in the shorter 90 days segment. The situation will likely not change with the securitization of government debt owed to the NBM, as those securities will also be short-term and will be used primarily for monetary operations.

30. **The Moldovan equity market still strongly reflects the voucher privatization process and is in an international context tiny and illiquid.** There are around 1,000 companies registered for trading on the exchange but the number of listed companies is only 17. The market should move to a model in which there is a much smaller number of companies that can actually provide a basis for a well-functioning and liquid capital market. The 1,000 nonlisted-but-traded companies should be segmented into relevant groups (e.g., a "candidate list for listing"). The stock exchange should also have clear plans for using the new "Public Interest Entity" concept or the newly adopted Corporate Governance Code as segmenting criteria, which could create a better focus on a relevant subset of the 1,000 companies.

31. **The infrastructure for the equities market is unnecessarily complex and there is a need to simplify it**. Nearly all the securities are dematerialized, but there is no central register of ownership. Instead, this task is handled by 14 registrars. The registrars use information technology (IT) systems to varying degrees and some have established joint IT solutions. The National Securities Depository (NSD) functions as a clearing/settlement and custody organization (with possibility for individual accounts) for the exchange but does not at present have a registrar license and thus does not operate as a "full blown" Central Securities Depository as is now the usual international practice. The NSD system is a "sister system" to the Moldova Stock Exchange (MSE) trading system and the two systems are connected so trades are automatically routed for settlement.

32. **The MSE operates an electronic trading system and the market functions through a daily fixing (auction) so there is no use of the electronic trading system for continuous trading during the trading day.** Also, there are no market maker schemes. The use of the trading system takes place through brokers going to the exchange's computer hall for entering orders, but discussions of introducing trading from the members' own offices has not led to results.[14] The system should be updated.

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[14] MSE states that they would like to have decentralized trading, but that the members will not pay the costs for establishing the needed communication lines.

33. **The money side of the settlement is, contrary to best international practice, not performed over central bank accounts, but uses a commercial bank instead.** Discussions for moving the money settlement to the NBM RTGS payment system have been ongoing for several years and need to be concluded as soon as possible.

D. Payment Systems

34. **Only the RTGS is systemically important and was assessed against the ten Core Principles for Systemically Important Payment Systems developed by the Bank for International Settlements (BIS).** The designated-time net settlement (DNS) was assessed informally against the same standard.[15] Both are fully observant for the majority of the systemically important payment systems core principles. In some cases, a few improvements are still needed, as described in Appendix II, Table 6.

35. **In contrast to the RTGS, other elements of the domestic payment system infrastructure require improvements.** The NBM should do much more to support the development of cashless payment instruments and reduce the related transaction cost. It should view this part of the payment system as falling under its purview. For the domestic foreign exchange market, the NBM should examine the possibility of ensuring the transfer of proceeds of one currency only after it has also received the funds corresponding to the other leg. In the settlement of corporate securities, the settlement bank is supervised by the NBM, but there is no specific supervision of its settlement function.

IV. Strengths and Vulnerabilities: The Financial Policy Framework

A. Governance

36. **Since the time of the 2004 FSAP, progress has been made to improve corporate governance in Moldova, but there is room for further improvement**. Of the 14 corporate governance recommendations in the FSAP, over two-thirds have been fully or partially implemented, particularly those related to the accounting and auditing laws. The Law on Joint Stock Companies should be revised to establish full fiduciary duties for all board members and executive managers; permit only the shareholders' meeting (and not the board of directors) to approve capital increases; and set adequate policies and procedures for approval of large related-party transactions. These changes would facilitate better risk management in financial entities.

37. **Governance in banks has also improved due to expanded NBM regulations, but should be strengthened further.** The NBM's regulations follow the EU Directive on transparency related to ownership and control, but the NBM still can not always enforce the

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[15] This was done in response to the NBM’s request.

rules for the identification of all ultimate shareholders of banks. In addition, the information available to the public includes names of legal entities incorporated in offshore zones, whose ownership is not transparent. The presence of such owners reduces public confidence in the banking sector. The "fit and proper" provisions for significant shareholders also follow EU norms but do not include "suspicion" or "bad reputation" as is used by banking supervisors in some EU member states. Banks should be required to provide additional information to the public, including posting on their websites their full financial statements, the bank charters, and an annual statement of the extent of conformity of their disclosure with the Corporate Governance Code, recently approved by the NCFM.

38. **The accounting and auditing laws have been revised recently and are a powerful step forward in improving corporate governance in Moldova.** The legislation requires the use of International Financial Reporting Standards for all "public interest entities," including listed companies and financial institutions from January 1, 2009. The annual report also requires an annual statement of the extent of disclosure with the Corporate Governance Code.

39. **A functioning central registry where third parties can obtain information on company financial statements (as well as company charters) would improve risk management and build the foundation of strong corporate governance.** If enacted, the new legislation envisages that the National Statistical Bureau will collect company financial statements and make data available to the public. In the mission's view, the Registration Chamber would be a more effective solution: it already has records on all legal entities in Moldova and the software and systems needed.

B. Supervision and Regulation

Banking supervision

40. **The 2004 FSAP reported that Moldova's system of bank supervision and regulations were reasonably comprehensive and, with certain exceptions, adhered to the BCPs then in effect.**[16] There were 19 recommendations suggesting room for further improvement. Almost all the recommendations have been implemented, either through new regulations, more forceful and effective use of existing supervisory powers, or better practices. Legal protection for supervisors, however, is still absent from the NBM Law and the Law on Financial Institutions (LFI).

41. **The conclusion of the present BCP assessment is that bank supervision and regulation remain reasonably comprehensive and, with some exceptions, adhere to the BCPs as revised in October 2006 (Appendix I Table 5).** The remaining most significant

[16] In October 2006 (i.e., two years following the 2004 FSAP), the BCPs were revised. While certain of the original Core Principles underwent minor modification, significant changes were made to those dealing with risk, where a more expansive treatment is now in effect.

weaknesses concern (i) the lack of a formal memorandum of understanding (MOU) and effective cooperation with the NCFM, which would be especially timely taking into account the existence in Moldova of some financial products (like life insurance) that resemble bank products; (ii) lingering problems with extracting full information on owners of some banks; (iii) deficiencies in the areas of large exposure limits and connected lending (related to the lack of full information on some bank owners); and (iv) weaknesses in consolidated supervision that include the lack of power for the NBM supervisors to extend supervision to bank holding companies or banks' sister companies and the necessity to set up communication mechanisms with the respective "home" supervisors of the four Western European banks that have established subsidiaries in Moldova since the 2004 FSAP.

42. **An emerging risk is the possibility that a new law (if implemented unchanged) will limit the NBM's (and other supervisors') current supervisory powers.** The Law on The Core Principles of Regulating Entrepreneurial Activities (the so-called Guillotine Law) standardizes the licensing procedures for the whole economy, without due regard to the special needs of financial sector supervisors. At the time of writing this report, it is not fully clear whether the law is applicable to the financial sector. If it is, the provisions should be changed expeditiously, in line with the PRGF program document (Box 3).

43. **The NBM currently lacks both information and capacity to analyze all aspects of the systemic vulnerabilities in the banking sector.** There is no prudential database for credits extended in foreign exchange to the economy or the borrowers' natural hedge, if any.

Box 3. Provisions of the Law on the Core Principles of Regulating Entrepreneurial Activities

The law was adopted in July 2007 to become effective as of Jan 1, 2008. In late December 2007 amendments to exclude the financial sector from Articles 11 and 17 were passed by Parliament, but have not been enacted since then. According to the law, the following rules would apply to the whole economy: (i) prior court approval of the suspension of licenses; and (ii) suspension of the effectiveness of supervisory measures under judicial review. In addition, several other provisions in the law could negatively affect the activities of the financial sector supervisory/regulatory bodies.

The law would apply to all financial sector supervisors, including the NBM's bank and foreign exchange licensing activity, as well as for any licensing activity of the NCFM. As a consequence, the supervisory powers would be greatly weakened not only because decisions would easily be contested, but also in light of the lengthy juridical processes prevalent in Moldova.

There is no systematically gathered information on domestic and foreign currency deposits for large depositors shown separately by currency. The NBM should develop an efficient and effective means to extract useful supervisory information, particularly regarding large loans and loans to banks' related parties, from its loan database already compiled from on-site and off-site supervision.

44. **The NBM reporting formats should be revised and made consistent with the 2007 Accounting Law.** The NBM has enough time to make these revisions. According to this law, all public interest companies (including banks) will be required to maintain their financial statements in accordance with International Financial Reporting Standards (IFRS) from January 1, 2009.

Unified supervision of nonbank financial institutions

45. **Consolidation of regulatory and supervisory responsibilities under the NCFM is a positive step,[17] but is not complete, as some institutions are not covered.** While the NCFM's responsibility specifically includes securities, insurance, pensions and investment funds, microfinance institutions, and savings and loan associations, the leasing subsector has not been included and this omission needs to be addressed.

46. **The transfer of licensing authority from the Licensing Chamber to the NCFM planned for October 1, 2008, is another important step, which provides an opportunity to review and redefine the licensing process.** The NCFM needs to be well prepared, including issuing or amending existing licensing regulations and having the staff and IT systems necessary for effective execution of this function. The licensing of the savings and loan associations will be a special challenge in light of the large number of such institutions.

47. **The creation of appropriate on-site supervisory capacity and prudential requirements is of particular importance.** On-site supervision was not previously practiced by some supervisors (e.g., the supervisor for insurance or nonbank credit institutions) and the previous regulatory and supervisory authorities did not set specific risk-related or industry-wide standards, other than minimum capital.

48. **The enforcement power of the NCFM should be better defined and strengthened, along the lines applicable to bank supervision.** New laws (or amendments to existing laws) should specifically address NCFM enforcement powers, including powers to license (including suspension or withdrawal thereof), obtain documents, supervise, investigate, impose specific sanctions such as fines, which would applied to all entities under its supervision. As noted above, the present version of the Guillotine Law should be revised.

[17] The authorities have requested World Bank TA to assist them in developing the NCFM.

49. **The NCFM should be provided with sufficient and stable financing.** It is envisaged as a self-financing body that will collect taxes and other payments from financial market participants. The sources of NCFM funding include fees, issuance and trading charges from the securities sector, capital or turnover-based fees of supervised entities, service fees and penalties. Self-financing in shallow and unstable markets, such as those under the NCFM jurisdiction, might not work. It is difficult to predict the volume of transactions or services and almost impossible to make reasonable projections, while the NCFM is likely to have high initial expenses. A realistically high level of self-financing should be encouraged as a matter of principle. However, the necessary level of NCFM funding must be available without putting the institution at risk. As in other countries, if there is a shortfall in the amount to be collected by the NCFM, the state budget should cover the difference to keep the NCFM fully functioning. Once the NCFM is effectively performing its institutional functions, the financial markets stabilize, and their volume increases, state budget support may no longer be needed.

Insurance sector supervision

50. **Insurance supervision problems include weaknesses in the licensing procedure and the lack of proper on-site insurance supervision.** The analysis of the financial information submitted by the companies, which is the first stage of ongoing supervision, is weak and does not provide a good basis to identify potential problems, provide early detection, and promote corrective action before problems become more serious. Off-site surveillance should be complemented by an on-site inspection program. Both the implementation and enforcement of the insurance legal framework need to be strengthened to ensure the soundness of the insurance market and protect policyholders.

51. **Due to the lack of regulations prescribing proper solvency rules and hence the lack of information, the mission was not in a position to analyze the solvency of the sector.** Ensuring the solvency of the sector requires publication and enforcement of prudential regulations based on international best practices as soon as possible. The absence of technical regulations is an important weakness insofar as implementation delays allow companies to be out of conformity with the current law, despite the clause in the insurance law that establishes that technical regulations should be fully in place as of November 2007.

Securities regulation and supervision

52. **The tools and methods for undertaking off-site and on-site supervision should be improved.** To gauge the state if securities supervision, an informal assessment of International Organization of Securities Commissions principles was undertaken (a full assessment was not possible because of ongoing major changes in the legal and regulatory framework). The assessment showed that the use of risk-based methods is at present very weak.

53. **The supervision of securities intermediaries should become risk-based.** Many laws have been adopted in the last half year or are in the pipeline. Rather than over-regulating, the NCFM strategy should now be to switch from very detailed regulations and focus on regulating the key risk areas. Moreover, focus should be on collecting data that will support the development of meaningful risk ratios and early warning signals. Also, calculating sector averages and encouraging self assessments may be a useful strategy.

Payment system oversight

54. **Several steps could be taken to improve the oversight of the payment system.** The NBM as a payment system supervisor performed more poorly in relation to the four Central Bank Responsibilities than the ten Core Principles for Systemically Important Payment Systems. The fulfillment of the four Central Bank Responsibilities will require significant improvements to be rated satisfactorily. The NBM should therefore:

- define minimum measurable requirements that the Automated Interbank Payment System (AIPS) system has to comply with to ensure its safety and efficiency;
- enhance the focus of its oversight;
- extend its oversight over the Securities Settlement System in order to guarantee the integrity of the payment system infrastructure; and
- monitor international payment flows not only from the point of view of balance of payments and anti-money laundering, but also to analyze payment system efficiency, transparency, risks, and consumer protection.

Appendix I. Observance of Financial Sector Standards and Codes: Summary Assessments

This section contains summary assessments of Moldova's adherence to the Basel Core Principles for Effective Banking Supervision and the Basel Core Principles for Systemically Important Payment Systems and Payment System Oversight. The detailed assessments have been undertaken in October 2007 as part of the Joint World Bank/IMF FSAP Update and have served as a basis for the summary assessments.

The assessments have been used to gauge the risks and vulnerabilities as well as the developmental needs of the financial sector. In the areas not yet fully aligned with these international codes, the FSAP team made recommendations to the authorities, who expressed their willingness to implement these suggestions as soon as feasible.

While appreciating the progress achieved in banking supervision, the assessors noted the need for continuing action to obtain transparency on the suitability of banks' significant beneficial shareholders, the ownership structure, and the source of initial capital. The assessors recommended that the Law on the National Bank of Moldova include legal protection for supervisors and that the NBM set up agreement for cooperation with the NCFM. New regulations or the revision of existing ones are still needed in the areas of a capital charge on market risks and anti-money laundering (AML) legislation. Supervisory practices should be developed further in the direction of risk-oriented supervision, by requiring that banks undertake effective analysis of risk and by developing a tool to extract and combine details on large credits. Finally, the NBM should formalize contacts with supervisors of those Western European countries whose banks have a presence in Moldova.

Regarding the payment systems, the assessor focused on the AIPS operated by the NBM that consists of the RTGS (the systemically important payment system element) and the DNS. The assessor found that the RTGS and the DNS systems largely comply with the Core Principles, but there is much less compliance with the additional Supervisory Responsibilities of the Central Bank in Applying the Core Principles. Hence most of the recommendations aim at ensuring that the NBM formulate proper oversight objectives, separate this function from the operational parts, and extend its oversight as a minimum to the Securities Settlement System.

A. Basel Core Principles for Effective Banking Supervision

General

55. **This detailed assessment of Observance with the BCP is the second external comprehensive assessment of the system of banking supervision in Moldova**. The assessment was conducted by Keith Bell, World Bank expert and Walter Zunic, IMF expert in October 2007. The NBM cooperated fully with the assessment team and provided extensive clarification in the form of documents and oral explanations. Their assistance is gratefully acknowledged.

Institutional setting

56. **The Law on the National Bank of Moldova specifies that the NBM, through its Bank Regulation and Supervision Department (BRSD), is responsible for banking supervision in Moldova**. It is the sole authority for carrying out banking supervision for banking institutions licensed under this law. The objective of the NBM is to maintain the financial stability of the banking system with a view to protecting the interests of depositors.

57. **While being overwhelmingly dominant in the financial sector, the banking sector is still relatively small.** The assets of the sector amount to 54 percent of the GDP, while lending represents only 33 percent of GDP (in 2004 these figures amounted to 42 percent and 23 percent, respectively). The relatively low level of financial intermediation is partially due to the early stage of market development and the widespread use of cash in the economy. Despite the continuous growth of deposits in banks indicating the increase of confidence in the banking sector, cash holdings are still prevalent and are supported also by the inflow of remittances through official and nonofficial channels.

58. **The concentration of the banking sector has slightly decreased and compares favorably to its peers.** All 15 banks are universal and have licenses that allow them to compete in almost all areas of operation. Despite recent foreign acquisitions, majority residents owned banks control two third of the banking sector's assets. Foreign participation in the banking sector's assets increased from 49 percent in 2004 to 64 percent in 2006, but a large part of nonresidents own only minority shares in banks. Majority foreign owned banks represent only 23 percent of the sector's total assets. In addition to small stakes in other banks, one of the largest banks, with 15 percent of the banking sector assets, is in majority state ownership. In line with regional trends, banking sector assets and liabilities are highly dollarized.

Main findings

59. **Objectives, independence, powers, transparency, and cooperation (Core Principle (CP) 1)**: The NBM Law and the LFI, supplemented by regulations, recommendations, and internal manuals and guidelines, provide a sound basis for banking supervision. Supervisory independence exists in practice. A reference to legal protection for supervisors, however, is still absent from the NBM Law and the LFI. An information-sharing mechanism has been established by the exchange of letters between the NBM and the newly created NCFM. However, no formal MOU has been put in place and the issue of effective cooperation remains unaddressed. A deficiency noted in the 2004 FSAP—the participation of the Ministers of Economy and Finance at meetings of NBM's Council, where decisions of the BRSD are discussed—has not been addressed in the recent amendments of the NBM Law, but it is unclear how frequently this occurs. A Collaboration Agreement between the NBM and the Center for Combating Economic Crime and Corruption (CCECC) was signed in June 2005 and remains in effect.

60. **Licensing and structure (CPs 2–5)**: The infrastructure and the process of licensing are adequate, and previously reported deficiencies in identifying bank shareholders below the significant interest threshold have been largely eliminated. In 2005, the threshold definition of "significant interest" (i.e., beneficial interest) was reduced, as recommended in the 2004 FSAP, to 5 percent from 10 percent of a bank's equity or voting rights and the NBM has strived to obtain all necessary information on the shareholders of all active banks with reasonable success. "Fit and proper" provisions of the legislation now approximate the EU

standard. However, in one case the NBM has still not been able to extract information on holders of 27 percent of the shares of a licensed bank, and in some other cases only incomplete information was obtained.

61. **Prudential regulation and requirements (CPs 6–18):** The essential elements for effective ongoing prudential regulation and supervision are in place, albeit with deficiencies in the areas of large exposure limits and connected lending (see comments on incomplete information on owners). An important remedial supervisory power of the NBM, however, is in jeopardy. The so-called "Guillotine Law" will limit the NBM's current powers. While the NBM will still be able to restrict a bank's operations, its action will almost immediately be made subject to court review. The rules and regulations regarding capital adequacy generally conform to the Basel Capital Accord of 1988, but do not include a capital charge for market risk, except for foreign exchange risk. Although banks' trading portfolios are relatively small and their CARs well in excess of the 12 percent required minimum, a capital charge on market risk should be considered. In case of credit risk, the lack of information on some shareholders' identities obstructs the analysis to determine the extent of banks' exposures to closely related borrowers. The current assessment recognizes that the NBM has undertaken significant efforts to address weaknesses highlighted in the 2004 BCPs assessment in the area of country risk, market risk, liquidity risk, operational risk, and interest rate management.

62. **Methods of ongoing supervision (CPs 19–21):** Supervision is carried out through a combination of offsite surveillance and full and limited-scope on-site monitoring. The NBM conducts comprehensive annual on-site inspections of all banks and, when warranted, performs limited-scope on-site inspections to detect and analyze specific problems. In addition, the off-site unit reviews periodic financial information submitted by banks and performs financial analyses of individual banks and of the banking system. The NBM should develop an efficient and effective means to extract useful supervisory information, particularly regarding large loans and loans to banks' related parties, from its loan database already compiled from on-site and off-site supervision. In the context of consolidated supervision, while banks currently have a very limited number of subsidiaries, more explicit powers are needed to allow the NBM to extend supervision to bank holding companies or banks' sister companies. Further, with the enactment of the 2007 Accounting Law, all public interest companies (including banks) will be required to maintain their financial statements in accordance with IFRS from January 1, 2009. This will require promptly reworking NBM reporting formats.

63. **Accounting and disclosure (CP 22):** The 2007 Accounting Law represents a major change for financial reporting and auditing practices in Moldova, particularly for the banks and will, upon implementation, largely align practice with that currently in effect in the countries of the EU. As part of the implementation process, it would be useful for the NBM to undertake formal discussions with both external auditors and with the banks themselves, in order that implementation proceeds smoothly. As a start, the NBM should consider revision of its own reporting formats to accommodate reporting under IFRS.

64. **Remedial measures (CP 23):** The LFI provides the NBM a broad range of remedial powers to which it can have recourse at its discretion and there is evidence that such powers are used. Nevertheless, as mentioned earlier, if the "Guillotine Law" comes into effect unchanged, certain of these powers of the supervisor will be curtailed.

65. **Consolidated cross-border supervision (CPs 24–25):** The NBM now has full authority to supervise domestic banks' foreign subsidiaries. There are currently no foreign subsidiaries of Moldovan banks. However, considering the expansion of trade with the EU, this could change. In order to provide a basis for consolidated supervision, should Moldovan banks establish subsidiaries elsewhere, the NBM has exchanged letters enabling exchange of supervisory information with regulators in Belarus, Kazakhstan, Romania, and Russia. Foreign banking institutions are subject to similar regulatory requirements applicable to all other banks operating in Moldova. In this regard, the NBM should consider setting up communication mechanisms with the respective "home" supervisors of the four western European banks that have established subsidiaries in Moldova since the 2004 FSAP.

Main recommendations

Table 5. Recommended Actions to Improve Compliance with the Basel Core Principles for Effective Banking Supervision

Reference Principle	Recommended Action
1 Objectives, independence, powers, transparency, and cooperation	• CP 1(2): Ensure that publication of the BRSD's objectives is matched with a subsequent report measuring performance against them. • CP 1(2): Separate the budget of the BRSD from the overall budget of the NBM. • CP 1(4): Amend the "Guillotine Law" to preserve the NBM's powers to suspend a bank's activities without requirement for immediate review of the action by the court (see CP 23, below). • CP 1(5): Amend the NBM Law to include legal protection for supervisors. • CP 1(6): Set up an agreement for cooperation between the NBM and the NCFM (i.e. above and beyond the exchange of reports).
3. Licensing criteria	• Continue aggressive action to obtain transparency on suitability of banks' significant, beneficial shareholders, the ownership structure and the source of initial capital.
4. Ownership	• See above.
6. Capital adequacy	• Begin revision of reporting formats to accommodate implementation of IFRS consolidated accounting in 2009. • Implement a capital charge for market risk. • Require pre-payment dividend notification to the NBM.
7. Risk management process	• Ensure all banks upgrade their risk management policies and processes.

Reference Principle	Recommended Action
8. Credit risk	• The NBM's on-site inspectors should ensure that banks undertake effective analysis of risk under currently valid, alternative stress test scenarios (see also CP 14). • The NBM should facilitate that the banking industry establish a Credit Registry—to be financed by, owned by and operated solely by financial institutions—and that it is operational without delay.
9. Problem assets, provisions, and reserves	• Consider implementing greater detail by "time buckets" for delinquency reporting (i.e. 30, 60, 90+ days) rather than the 30-60 and 60+days now in effect. • Determine impact of banks' required implementation of IFRS and particularly use of International Accounting Standards 36 "Impairment of Assets".
10. Large exposure limits	• Increase yield from currently available prudential reporting by developing a tool (to be used by both on-site and off-site supervision) to extract and combine detail on large credits (see also CP 20). • Continue aggressive action to have banks ascertain links between borrowers and shareholders. Absence of this information obstructs the analysis to determine the extent of banks' exposures to closely related borrowers. • Recommend that the internal control unit of each bank establish limits covering both deposits accepted (i.e. the "wholesale"/ "retail" deposit liabilities mix) and "due from" deposits.
11. Exposures to related parties	See CP 10 (items 1 and 2).
12. Country and transfer risk	• Ensure accurate implementation of the new NBM recommendation covering off-balance sheet exposures in foreign currency.
13. Market risks	• Continue to promote adequate policies and practices for risk management and encourage banks to perform effective stress testing covering significant risks. • Implement a capital charge on market risk (see CP 6, item 2).
14. Liquidity risk	• The NBM's on-site inspectors should ensure that banks undertake effective analysis of risk under currently valid, alternative stress test scenarios (see also CP 8).
18. Abuse of financial services	• Revise the NBM's existing "Recommendations"/ "Regulations" to reflect amended AML legislation. • Banks should have in place a system that ensures that customers using exchange facilities at more than one branch on the same day in exchanging foreign currency below US$5,000 equivalent are properly identified in order to ensure their transactions do not exceed the legal daily limit for exchanging foreign currency.

Reference Principle	Recommended Action
19. Supervisory approach	• The NBM should introduce an early warning system to enhance its ability to respond in a timely and effective manner to potentially disruptive capital movements. All pertinent areas of the NBM should contribute information for the successful implementation of this system. • Require banks to notify BRSD promptly of substantive change in overall condition or of any materially adverse change (including breach of legal or statutory requirements).
20. Supervisory techniques	• Increase yield from currently available prudential reporting by developing a tool (to be used by both on-site and off-site supervision) to extract and combine details on large credits (see CP 10, item 1).
22. Accounting and disclosure	• Issue "Recommendations"/"Regulations" for implementation of consolidated accounting requirements in 2009 (see CP 6, item 1). • Begin revision of reporting formats to accommodate implementation of IFRS consolidated accounting in 2009 (see CP 6, item 1).
23. Supervisors' corrective and remedial powers	• Amend the "Guillotine Law" to preserve the NBM's powers to suspend a bank's activities without requirement for immediate review of the action by the court (see CP 1(4), above). • Consider revision of statute to provide for "early remedial action" regime with defined thresholds.
24. Consolidated supervision	• Revise statute to provide capacity to conduct consolidated supervision. • The BRSD already requires and reviews financial statements—and a "large exposures" report—of any legal entities in which a bank has a proprietary interest of 25 per cent or more (i.e., "downward"). This should be extended to making periodic analysis of the financial condition of a bank's parent or controlling owner and of any significant "sister" companies (i.e., "upward" and "sideways").
25. Home-host relationships	• The NBM should formalize contacts with supervisors of those western European countries whose banks have a presence in RM.

Authorities' response to the assessment

66. **The authorities are in broad agreement with the BCP assessment and are determined to further improve the legal framework for banking and its supervision, and the supervisory methods**. They also expressed their appreciation that the assessors noted the progress that took place in the area of bank supervision. Similarly to the comments given by them to the 2004 FSAP, they have noted that the budget requirements for bank

supervision are fully met from the operating budget of the NBM and it would be inconvenient to determine a budget for the supervisors outside the aggregate. They disagreed with the recommendation that the NBM should ensure the setting up a credit registry by the banks (CP 8), contending that this is the tasks for the banking system and not its supervisor.

Appendix II. Assessment of Basel Core Principles for Systemically Important Payment Systems and Payment System Oversight

General

67. **The assessment of the Moldovan payment and settlement system was performed as part of the FSAP for Moldova.**[18] The main objective of the assessment was to determine the level of observance with the BIS Committee on Payment and Settlement Systems (CPSS) Core Principles for Systemically Important Payment Systems (CPSIPS), and to suggest areas where further reforms may be appropriate. The staff of the NBM and other institutions cooperated fully with the mission and provided all the necessary clarifications and documents.

68. **The assessment was focused on the AIPS operated by the NBM.** The AIPS has two main components: The RTGS for large value and time critical payments, and the DNS system for low value payments. In general, the RTGS system accounts for about 5 percent of transactions and 85–90 percent of the total amount. Nevertheless, the NBM requested that compliance be assessed for both the RTGS and the DNS system (the latter informally).

Payment settlement system infrastructure

69. **While banks provide most of the payment services to the general public, the NBM plays the principal role in establishing regulations and basic rules governing the functioning of the AIPS.** According to the NBM Law, the NBM may organize settlement facilities for interbank obligations and is responsible for overseeing payment systems to ensure their efficiency. The AIPS operates only in domestic currency. Foreign exchange transactions are based on SWIFT and correspondent relations.

70. **According to the Moldovan regulations, all domestic interbank payments must be carried out through the AIPS.** In addition to the NBM, there are 17 participants in the AIPS, including 15 commercial banks, the Treasury of the MOF, and the Tiraspol Settlement Centre. Each payment system participant has a current account at the NBM. Commercial banks may open and use direct correspondent accounts with each other in local currency only for the settlement of payment cards and securities market transactions.

71. **Cash is still the major payment instrument in Moldova, particularly for payments among individuals**. In recent years, banks have introduced more advanced payment instruments, such as internet banking and payment card schemes. Currently,

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[18] The assessment was conducted by Mr. Alexander Shishlov, Head of Payment System Development Department, Kazakhstan Interbank Settlement Centre of the National Bank of Kazakhstan.

12 commercial banks issue payment cards of international brands (VISA and MasterCard), which are used mostly for cash withdrawals from automated teller machines. Credit transfers are the major payment instruments among legal entities. Checks are not used in the payment system.

Main findings regarding systemically important payments systems

72. **Legal Foundation (CP 1):** The payment system legal framework in Moldova is complete and comprehensive. The NBM Law stipulates that the NBM may assist banks in organizing facilities for clearing and settlement of interbank payments, issue rules and regulations, and oversee the payments system to achieve its efficient and reliable functioning. The LFI includes the basis for opening banks, branches, their liquidation and licensing. The electronic digital signatures have legal validity according to the Law on Electronic Documents and Digital Signatures. The Law on Insolvency allows only the NBM to initiate bank insolvency procedures, followed by the revocation of the banking license. Hence the zero-hour rule is not applicable. Furthermore, the Civil Code of Moldova includes general definitions of netting arrangements. In addition to these laws, the necessary implementation regulations are also in place.

73. **Understanding and management of risks (CPs 2–3):** The AIPS has clear rules and procedures for the clearing and settlement of payment instructions. These are properly documented and are available to all participants of the system. The rules and procedures clearly describe the responsibility of all participants and the financial risks to which they may be exposed and how the various risks are monitored and managed. The large value payment system RTGS is designed as a pure real time gross settlement system. Participants therefore are not exposed to any credit risks. Moreover, participants have access to real time information regarding their balances at the NBM, their payments, and queues. In the DNS system, to limit the credit risk exposure, a payment value must not exceed MDL 50,000. The queuing system in the RTGS offers multiple options to the participants so that they are able to arrange their payments in a way that best solves their liquidity problems. Moreover, current compulsory reserve requirements stand at 15 percent for bank liabilities in both local and foreign currencies and these may be used for settlement purposes during the operational day. The AIPS is monitored by the NBM and participants in real time. Participants are clearly informed of the risks and the consequences of a default.

74. **Settlement (CPs 4–6):** Finality in the AIPS is technically and legally achieved. The RTGS provides a real-time settlement, while in the DNS there are two settlement sessions with T+0 finality. As for the timely completion of daily settlements, in the RTGS netting mechanisms are not used. In the DNS, the following measures are available: (i) mandatory financial acceptance criteria, which should be met before the payment acquires a status "accepted for settlement" (this approach guarantees the full coverage of debit position by liquidity in the RTGS); (ii) the NBM intraday collateralized overdrafts; (iii) limitation of maximum payment value (MDL 50 000); and (iv) twice a day settlement.

75. **Security and operational reliability, and contingency arrangements (CP 7):** A full back-up processing is located outside the main building and there are rules for emergency situations, as well as a Business Continuity Plan. The Business Continuity Plan arrangements are tested annually or on ad hoc basis if changes were made. The payment center and the back-up are linked via fiber-optic channel and data replication is organized in hot mode. Moreover, the NBM established special requirements for the organization of the working place in banks, which are subject to close oversight by the NBM.

76. **Efficiency and practicality of the system (CP 8):** In general terms the AIPS is efficient. The system operates with modern payment instruments (i.e., electronic credit transfers) and its architecture allows for fully electronic straight through processing for both interbank payments as well as for payments on behalf of third parties. The efficiency of the RTGS is supported by a real time access to the information about balances and payments and the queuing mechanism, allowing participants to efficiently manage their payments in queues, where first-in-first-out principle, prioritization, and cancellation are applicable. However, the DNS queue management is limited to message cancellation initiated by participants during the collection period. Prioritization and the first-in-first-out principle are not applicable. Moreover, the operational day schedule for the DNS looks inefficient, as the second session ends at 8 pm and there is no time left for the submission of rejected payments for execution with the same value date to the RTGS as customer payments cannot be accepted any longer.

77. **Criteria for participation (CP 9):** Participation criteria are fair, objective, and publicly available.

78. **Governance of the payment system (CP 10):** The NBM has made reasonable progress in developing its oversight capacity in the payment system area, but further improvements are needed, especially in defining the objectives of the oversight and establishing a measurable set of criteria for assessing oversight.

Table 6. Recommended Actions to Improve Adherence to the Core Principles for Systemically Important Payment Systems by the Real Time Gross Settlement and Designated-Time Net Settlement

Reference Principle	Recommended Action
3. Management of risks	• Prices in the RTGS and the DNS are fixed during the day. According to statistics provided by the NBM, the volume of payments in AIPS is unequally distributed during the day, sharply rising from 12 pm until the end of the day. Considering the steady growth of the volume of payments in AIPS, a new price incentive scheme should be applied by the NBM to smooth the payment flow and attract liquidity early in the day.

Reference Principle	Recommended Action
7. Security and operational reliability	• Business continuity plan tests should involve payment system participants to ensure adequate reaction from their side in case of emergency.
8. Efficiency and practicality of the system	• The NBM has to improve the adherence of the DNS queue management procedures to best international practices. Moreover, those procedures must be transparent for the DNS participants. Specifically, by conducting the second settlement in the DNS earlier during the operational day participants would have a chance to settle rejected payments in the same value date in the RTGS.
10. Governance of the payment system	• In order to guarantee the proper operations of the system, the NBM should have well defined oversight objectives, continue to further develop and implement a clear oversight concept, and establish a set of measurable minimum requirements. • The Oversight Division should have a direct reporting line with a higher authority (e.g., the vice governor responsible for payment systems) to ensure full separation of operations from the oversight. • The NBM should define minimum measurable requirements that the AIPS system has to comply with to ensure its safety and efficiency and change the focus of its oversight.

Central bank's responsibilities

Reference Principle	Recommended Action
Responsibility A	• Oversight function should be more clearly separated from the operational function. A clear set of minimum requirements for the AIPS should be defined to ensure its safety and efficiency. • The scope of oversight should be extended to the securities settlement systems and to the retail area (card systems, remittances). • The NBM should prepare a White paper on payment system oversight in the country to redefine the oversight role and discuss the outcomes to the relevant stakeholders in the financial community.

Reference Principle	Recommended Action
Responsibility C	• In order to guarantee the integrity of the payment system infrastructure, the NBM should, at a minimum, extend its oversight over the Securities Settlement System. • The NBM oversight powers should also apply to payment systems operating outside the central bank. Hence, it is necessary to start developing the specific arrangements, tools, and the cooperative framework for the oversight of all systems in the country. • The NBM should also monitor cross-border flows and the systems/service providers that support them. In this regard, it is suggested that the focus on international remittance be broadened from the traditional areas of balance of payments and money laundering to include payment system issues, in particular issues related to efficiency, transparency, risks, and consumer protection (see the CPSS-World Bank's General Principles for International Remittance Services).
Responsibility D	• A structured cooperative body, such as a National Payments Systems Council, should be created to discuss issues related to further development of the payment infrastructure in Moldova, the systems' safety and efficiency, oversight aspects, etc. • Cooperation with other authorities—and mutual responsibilities, for example in securities settlement area—should be formalized in a MOU.

Authorities' response to the assessment

79. **The authorities were in broad agreement with the CPSIPS assessment**. They noted, however, that because the DNS cannot be considered systemically important and its requirements may be different from the RTGS, the implementation of a queue management system similar to the RTGS is not desirable.