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Farm Debt in the CIS

A Multi-Country Study of the Major Causes and Proposed Solutions

Csaba Csaki
Zvi Lerman
Sergey Sotnikov

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Contents

Foreword

Agriculture remains the main source of employment and livelihood for the large rural population of many transition countries, especially among the former Soviet republics. Accordingly, the World Bank continuously monitors the progress of land reform and farm restructuring in the region because of the potential impact of these processes on rural development and poverty alleviation in rural areas.

The World Bank has published a long and growing series of publications on land reform and farm restructuring in the former socialist countries of Europe and Central Asia. The unique features of all these publications is their reliance on first-hand empirical information collected through extensive farm surveys of various rural constituencies, as well as detailed analysis of farm budget information. Farm surveys have been conducted by the World Bank in many countries of the CIS (Russia, Ukraine, Belarus, Moldova, Armenia, Georgia, Turkmenistan, Kazakhstan), and Central and Eastern Europe (Poland, Romania, Bulgaria, Hungary, Albania). Analysis of survey findings enables the World Bank to base its policy dialogue with governments in the region on solid empirical facts, making the Bank's recommendation much more credible and relevant.

This study is the latest addition to the series, which does not focus on only one country. Instead it investigates the complex issue of farm debt across the region, using comparative analysis of country-level information on farm indebtedness, as well as individual farm case studies. I am convinced that the new findings in this study will prove to be a very valuable additional resource to supplement the World Bank's country-specific monitoring work on land reform in the region. We trust that the study will create a basis for useful policy discussions with country governments and supply the many international donors active on the local scene with essential information for the design of their strategic programs.

Kevin Cleaver
Director
Environmentally and Socially Sustainable Rural Development
Europe and Central Asia Region

Abstract

The objective of this study is to support the farm privatization and restructuring process in CIS by presenting a wide range of strategic and tactical options that could be applied to eliminate, or at least reduce, the main factors responsible for the destructive accumulation of debt in large farm enterprises. This objective has accomplished by documenting and analyzing the indebtedness of large-scale farms in five countries of CIS (Belarus, Kazakhstan, Moldova, Russia, and Ukraine) developing appropriate proposals, and initiating a dialogue with the government on the subject of farm debt resolution. The study presents a region-wide analysis of the farm debt problem based on data collected from selected countries in CIS, and develops proposals for the respective countries as well as for the region as a whole.

Preface

This study, sponsored by the World Bank and USAID, presents the results of the multi-country study of farm debt in five CIS countries (Belarus, Kazakhstan, Moldova, Russia and Ukraine). The study provides a comparative analysis of the level and composition of farm debt in these countries, examines the major reasons for farm debt accumulation in the 1990s, evaluates the policy responses to the problem, highlights the major constraints for the resolution of farm debt, and describes the best practices adopted in the region.

The study was prepared in close cooperation with agricultural policy experts from the Agrarian Institute and RosAgroFond in Russia (V. Uzun, N. Shagaida, E. Gataulina, S. Strokov, V. Saraikin, E. Malygina, S. Terentiev, A. Korbut), the Inter-Governmental Committee for Agricultural Policy and the USAID/Word Bank Agricultural Policy Unit in Ukraine (D. Sedik, N. Seperovich, N. Pugachev, I. Chapko, I. Kobuta, V. Noga, V. Zhygadlo), the Ministry of Agriculture and the Institute of Agricultural Economics in Belarus (B. Shapiro, V. Ilchik), the Ministry of Statistics and the Institute of Agricultural Economics in Kazakhstan (M. Sigarev and D. Shaidildinova), and the USAID-sponsored Center for Private Business Reform in Moldova (D. Dumbraveanu, R. Flick, A. Muravschi, S. Shapa, and C. Tanase). David Epshtein from the North-Western Institute of Agricultural Economics in St. Petersburg prepared a supplementary analysis of farm debt in Leningrad Oblast in Russia. Mariusz Safin from the World Bank Resident Mission in Warsaw prepared an overview of farm debt in Central and Eastern Europe. The local counterparts in each country collected a database of major financial indicators for the farm sector and prepared a comprehensive country report on farm debt. The full country reports for Russia, Ukraine, and Moldova are published as separate volumes in the World Bank's Environmentally and Socially Sustainable Development Working Papers series.

The study was managed by Csaba Csaki for the World Bank's Environmentally and Socially Sustainable Development Unit, Europe and Central Asia Region. Zvi Lerman and Sergey Sotnikov developed the methodological framework for the study. The field work and database development were carried out by the local teams in each country. Valuable research assistance with data analysis and report preparation was provided by Pepijn Schreinemachers and Yulia Rabinovich. The study was peer-reviewed by Laura Tuck, Lily Chu, Gershon Feder, and Rodrigo Chaves, whose valuable comments were incorporated in the published version. Editorial support was provided by Alan Zuschlag. The initial findings of the study and the individual country case studies were discussed in a seminar in Chisinau, Moldova on June 12-14, 2000, organized jointly by USAID and the World Bank. Unless otherwise noted, all sources for the tables and figures listed in the report are the authors' own calculations.

Acronyms

CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CIS-5	Belarus, Kazakhstan, Moldova, Russia, Ukraine
CIS-4	Belarus, Moldova, Russia, Ukraine
CPI	Consumer Price Index

Executive Summary

The accumulation of debt in large-scale farm enterprises in CIS is regarded as a major obstacle to successful privatization and restructuring of the agricultural sector. The objective of this study is to support the farm privatization and restructuring process in CIS by presenting a range of strategic and tactical options that could be applied to eliminate, or at least reduce, the main factors responsible for the accumulation of debt in large farm enterprises. This objective has been accomplished by documenting and analyzing the indebtedness of large-scale farms in five CIS countries (Belarus, Kazakhstan, Moldova, Russia, and Ukraine), developing appropriate proposals to deal with farm debt, and initiating a dialogue with the governments on the subject of farm debt resolution. Although based on the analysis of farm debt in selected CIS counties, the analytical approach and the proposals may be appropriate for the region as a whole.

The study was motivated by the concerns that CIS counterparts voice repeatedly in various forums regarding the dire financial situation of the farm sector. In discussions with World Bank representatives and other western experts, officials and economists in CIS stress that the large farm enterprises, which still control most of the agricultural resources in the region, are chronically unprofitable and unable to repay their accumulating debt. It is often claimed by the authorities in Russia and Ukraine, for instance, that 80% of the farm enterprises are "on the verge of bankruptcy" and are unable to function normally because of restraints that the government and other creditors place on their bank accounts and operating assets. Unfortunately, these claims are generally made without adequate quantitative substantiation, and the present study is an attempt to clarify the seriousness of the farm debt situation in CIS by applying standard tools of financial analysis.

The Executive Summary is generally based on aggregated CIS data, while the detailed country-by-country information is presented in the chapters that follow. CIS-5 denotes that the data have been aggregated for all five countries participating in the study (Belarus, Kazakhstan, Moldova, Russia, and Ukraine). CIS-4 denotes aggregation for four countries (Belarus, Moldova, Russia, and Ukraine, excluding Kazakhstan) in cases when the data for Kazakhstan were judged to be substantially less reliable than for the other countries.

Many recommendations in this report are aimed at the government. The term "government" is used in the broadest possible sense: it denotes not only the central government (including both the legislative and the executive branches), but also all levels of sub-national government, down to provincial (oblast) and district (raion) authorities (local councils still do not have enough power in CIS to matter). The changes and reforms advocated in this report cannot be successfully implemented without the full support and cooperation of sub-national levels of government, as the example of recent reforms in Moldova has so strikingly shown.

The Magnitude and Nature of Farm Debt: A Deteriorating Situation

The most significant feature of farm debt in CIS is its steady growth in real (CPI-deflated) terms in recent years. The real debt per farm in the five CIS countries increased by more than 45% between 1994-1998 (**Figure 1**). The total farm debt in the five CIS countries reached nearly $30 billion in 1997, more than double the level of debt in 1994 (**Table 1**). The sharp devaluation of the Russian ruble in 1998 produced a pronounced downward adjustment of the dollar farm debt in Russia, and because of Russia's sheer size this was reflected in a decline of CIS-5 total farm debt in 1998. On a per-farm basis, the average debt in CIS-5 increased from about $200,000 in 1994 to a peak of $500,000 in 1997, thereafter declining to $400,000 in 1998 as a result of the ruble devaluation (**Figure 1**).

Table 1: Total Farm Debt in CIS-5: 1994-98 (US$ '000,000)

	1994	1995	1996	1997	1998
Belarus	320	489	779	734	950
Kazakhstan	1684	1919	2053	1502	1219
Moldova	292	372	525	482	539
Russia	7021	13036	17865	21103	11535
Ukraine	3004	2375	3901	5901	5718
CIS-5	13540	19168	26066	29840	19962

The second significant feature of farm debt in CIS-5 is the shift of the term structure of debt since 1990 toward short-term, current liabilities (**Figure 2**). The old long-term debt, never a major component of farm liabilities during the Soviet period, was completely wiped out by the galloping inflation of the early 1990s, and in the absence of appropriate indexation mechanisms the sources of new long-term lending largely disappeared between 1990 and 1993. The growing farm debt in the region is thus generally new and fairly recent debt, not debt inherited from the Soviet period.

Government and Commercial Suppliers Are the Farms' Main Creditors

All through the 1990s, about half the farm debt came from the government and banks and the other half from supplier credit and wage arrears (**Table 2**).

Table 2: Sources of Farm Debt in CIS-4

	1990	1994	1998
Institutional credit	57	46	50
Commercial banks	39	19	7
Government	18	27	43
Wage arrears	21	22	16
Supplier credit	22	33	35

The exact role of the banks in the early years of the decade is unclear: some of the debt recorded as bank loans (especially long-term loans) may in fact have been government debt channeled through state controlled agricultural banks. During the recent years, when the division

Figure 1: Real Debt per Farm: Index and US Dollars

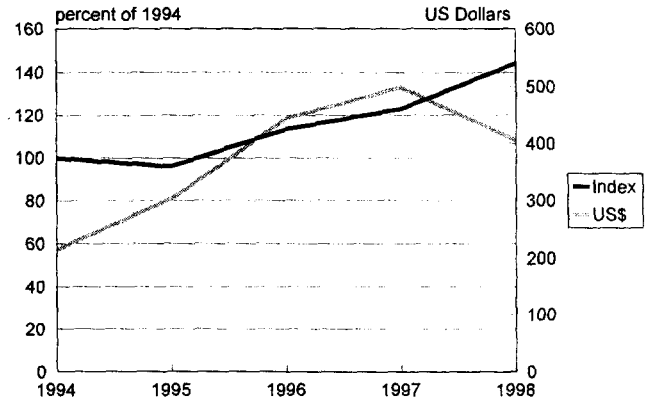
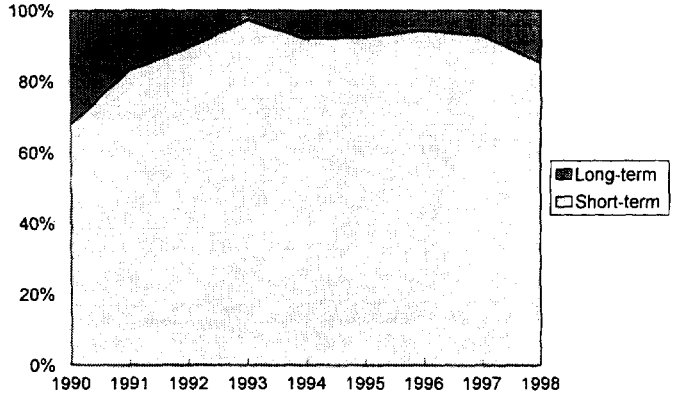


Figure 2: Term Structure of Farm Debt



between commercial banks and the government became much sharper and clearer than in the past, the share of bank lending in farm debt shrank to a minimum, and debt to the government became a dominant component.

Contrary to bank debt, which is usually classified as "active debt" in the sense that it involves active application to the lender, government debt in recent years is mostly "passive debt". These are not formal loans received from the government, but generally accumulations of various arrears in the form of taxes and levies payable or amounts due in unpaid deductions to pension and health insurance funds for farm workers. This component of farm debt is "passive" in the sense that it accumulates automatically, simply as a result of the farms'

failure to make the statutory payments. The government imposes draconian penalties on these arrears, which contribute to the growth of this passive debt component over time, but does not really enforce a strict collection discipline.

Another feature in the development of the sources of farm debt over the last decade is the substantial increase in the share of suppliers' credit, which nearly doubled from about 20% of total debt in the early 1990s to 35% in recent years (**Table 2**). While this may be a sign of progress toward commercial normalization of financial transactions in agriculture, it is explainable, at least in part, by the privatization of formerly state-owned suppliers (including power companies), which were formerly recorded as debt to the government. Contrary to the prevailing impression, wage arrears are not and have never been a significant component of sources of farm credit. Their share of farm debt actually declined over time from slightly more than 20% in the early 1990s to 16% in 1998 as the government and suppliers gained in importance as sources of farm credit.

Overall, farm debt in CIS originates primarily from "passive" or "spontaneous" credit sources, which grow simply because farms do not pay their obligations. These sources include all levels of government (central, provincial, and district), trade credit from suppliers, and to a certain extent also farm workers, who extend involuntary credit to farms through wage arrears. "Active sources" – commercial banks – are of marginal importance accounting for less than 7% of total debt.

Measuring the Burden of Debt at the Farm Level

All three basic ratios measuring the capacity of farms to repay their debt – the ratio of debt to sales, the ratio of debt to current assets (including inventories), and the ratio of debt to liquid current assets (excluding all inventories) – increase over time, which is a definite sign of rising indebtedness (**Table 3**). Yet while the values of the first two ratios are not particularly alarming by world standards, the ratio of debt to liquid current assets rises to stratospheric levels. On average in CIS-4 (Russia, Ukraine, Belarus, and Moldova) this ratio rose from 0.6 in 1990 to over 4 in 1998. This means that the liquid assets, when converted into cash at their full book value, will cover less than 25% of current farm debt. The corresponding ratio for US farms is 1.5, i.e., liquid assets of US farms cover 67% of current debt. Moreover, for US farms all three ratios have remained perfectly steady over the years: there has been no deterioration in the solvency of US farms, while CIS farms have become much less solvent over the decade of transition.

Table 3: Financial Ratios: Averages for CIS-4

	1990	1994	1998
Debt to sales	0.16	0.49	1.20
Debt to current assets	0.28	0.60	0.89
Debt to liquid current assets	0.58	2.27	4.27

There is an apparent contradiction between the ratio of debt to liquid assets, which presents a grim picture of debt repayment capacity, and the ratio of debt to sales, which optimistically suggests that debt can be repaid from just one year of sales revenue. The reason for the contradictory conclusions presented by these two basic ratios is that farm sales in CIS simply do not produce profits, while it is profits that are needed to repay debt.

The proportion of farms reporting losses has increased markedly since 1994, and well over 50% of farm enterprises are unprofitable in recent years (**Figure 3**). Sales revenue is entirely absorbed by wages and other production costs, which add up to 140% of sales. In other words, farms are losing on average almost 40% on each ruble of sales revenue (**Figure 4**). Farm operations do not generate net income that can be used to repay debt, however small.

Declining profits (and increasing losses) appear to be the major technical determinant of debt accumulation in CIS farms. The level of debt increases in inverse proportion to the level of profits: as profits decline and losses grow, the real level of farm debt increases. This result, observed both for the entire farm sector over time and across thousands of farms in one year (1998), is naturally understandable: debt is repaid from

profits, and lack of profitability makes it impossible for farms to repay their debt, inevitably leading to a vicious circle of debt accumulation.

Figure 3: Percentage of Unprofitable Farms: CIS-5

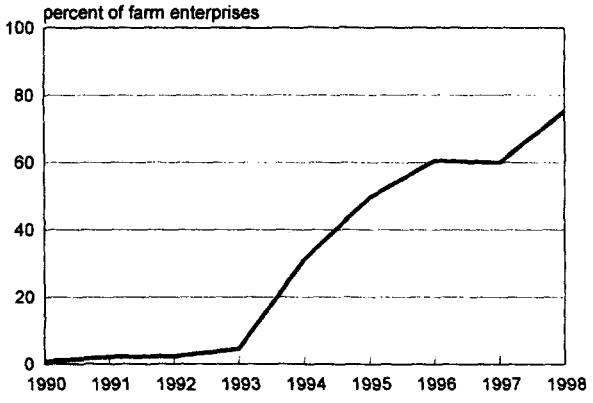
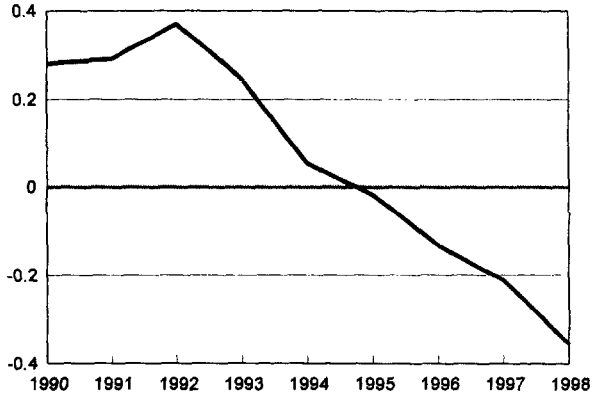


Figure 4: Profit-to-Sales Ratio: CIS-5



Farm Debt is a Significant Burden on the National Economy

In CIS, the traditional way of dealing with accumulation of farm debt has been through periodic rescheduling and forgiveness of overdue obligations. Since the state budget ultimately bears the cost associated with debt writeoffs, this policy is tenable only as long as the level of debt is relatively low. This is no longer the case in CIS countries, where farm debt has risen to levels that are not negligible compared with budget revenue and even GDP.

Figure 5: Farm Debt as a Macroeconomic Burden

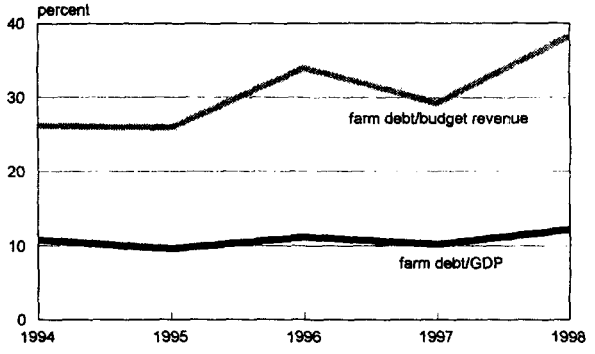


Figure 5 plots the ratio of total farm debt to budget revenue and GDP in CIS-4 for the period 1994-98. Outstanding farm debt in CIS-4 increased from about 25% of budget revenues in 1994 to nearly 40% in 1998. It exceeded 10% of GDP in 1998. Farm debt today constitutes a significant burden on the economy as a whole, and the state budgets in CIS cannot continue to deal with this problem according to traditional prescriptions of periodic debt rescheduling and forgiveness. Despite frequent writeoffs in the past, the amounts involved have become too large for the budget to continue absorbing every three to five years.

Table 4: Farm Debt as a Macroeconomic Burden 1994-98

	1994	1995	1996	1997	1998
Farm debt as % of GDP					
Belarus	7	5	6	5	7
Kazakhstan	14	12	10	7	6
Moldova	22	22	27	22	29
Russia	3	3	4	5	6
Ukraine	8	6	9	12	13
Farm debt as % of budget revenues					
Belarus	14	12	14	12	14
Kazakhstan	78	67	71	51	40
Moldova	64	65	85	61	83
Russia	8	10	13	13	18
Ukraine	19	17	24	31	38

Beyond aggregated tendencies, it is important to stress that different countries face different levels of macro-economic burden associated with the outstanding farm debt. In Moldova, the farm debt reached 29% of GDP and 83% of total budget revenues in 1998 – a much higher burden on the economy than in other CIS countries (**Table 4**). It is therefore not surprising that Moldova is a lead player in developing a debt resolution strategy, as is discussed in the body of the text. Farm debt also appears to have reached the level of a serious a macro-economic problem in Ukraine and Kazakhstan.

Why Debt is Accumulating

Technically, farm debt is growing because of inadequate farm profits. On a substantive level, however, the accumulation of debt is attributable to lax financial discipline made possible by the persistence of soft budget constraints.

In market economies, the allowable level of debt is limited by the risk of bankruptcy. Farms, as all business enterprises, operate under hard budget constraints: if they are unable to generate sufficient profits to repay their financial obligations, they go out of business. In socialist economies, on the other hand, farms operated under soft budget constraints: they always relied on flows of funds from the state to cover their losses and repay their debts.

Janos Kornai, in his classical work on the socialist economic system, characterizes the softness of budget constraints by the commitment of the bureaucracy (i.e., the government in our terminology) not to tolerate persistent loss-making. Soft budget constraints prevail when economic agents believe that they can negotiate various benefits after the fact in case of adverse outcomes (lack of profitability). The feasibility of this vertical negotiation process stems from the paternalistic attitude of the government toward the farm enterprises, which according to Kornai is akin to the attitude that parents show toward financial difficulties of their children, regardless of age. In this conceptual setting, soft budget constraints are not limited to actual allocation of subsidized credits or debt write-offs. They often include an implicit component that arises when the government's does not insist with all strictness on collecting tax arrears or, even more indirectly, signals suppliers or banks not to press too hard for collection of overdue obligations from farms.

The mentality of soft budget constraints continues to persist in CIS countries during transition. Unprofitable farms with steadily rising levels of debt do not go bankrupt. There are no self-limiting risk mechanisms on the amount of accumulated debt. They are able to continue borrowing from suppliers, from the state, and sometimes even from commercial banks, presumably because everybody – the borrowers and the lenders – believe that the government will not let the large farm enterprises go bankrupt and will continue to arrange for periodic bailouts.

Persistence of soft budget constraints makes debt accumulation possible, while lack of profitability makes debt accumulation necessary. Without profits farms do not generate sufficient funds to finance their operations and must resort to borrowing. Lack of profitability in CIS farms can be attributed to a mix of two broad groups of factors: external policy-related factors and internal farm-level factors.

External factors related to government policies – elimination of direct producer support, control of food prices exacerbating the deterioration of terms of trade for agriculture, restrictions on trade in agricultural commodities – certainly have a negative impact on farm profitability and thus lead to accumulation of debt. More important and more fundamental, however, are the internal farm-level factors related to the traditional collective farm structure, which basically has not changed during the decade of farm reorganization in the CIS.

- The farm enterprises have not reduced their size to more manageable dimensions.
- Farm managers are still committed to provide all members with jobs, regardless of cost-efficiency considerations.
- Farm enterprises are obliged to maintain the social infrastructure in the village, including the traditional free support to household plots.

- Farm operations remain largely production oriented, with no overriding emphasis on markets, consumers, and sales: farm managers are still production maximizers, not profit maximizers.
- Member-workers continue to function in a traditional collective environment, without any direct accountability for the results of their effort or their contribution to profits and losses.

All these internal reasons are obstacles to improving the cost-efficiency of farms and necessarily lead to suboptimal profits. As long as CIS farms continue their strategy of formal reorganization, avoiding radical internal restructuring prescribed by market principles, they will not be able to improve their efficiency and profitability.

Yet the governments' attitude and policies in CIS create only modest incentives for the farms to restructure. Persistence of soft budget constraints allows unprofitable farms to continue to exist and does not create any pressure for restructuring and internal reform. While production targets have been largely eliminated, both central and regional governments in CIS countries often set fixed procurement prices and demand preferential deliveries to state organizations instead of purchasing food products through market channels at competitive prices. In return, the governments compensate the farms with soft credits for these loss-making operations, as well as for their special role as caretakers of the social rural infrastructure and providers of lifetime employment to rural population.

Government policies must be changed to eliminate the disincentives that have so far prevented most farms from switching to a genuine market orientation. Specifically, governments should stop imposing loss-making activities on farm enterprises, on the one hand, and cease allocating soft credits, on the other. Banks should stop lending to non-creditworthy farms in anticipation of write-offs and bailouts. Farms, in turn, must respond to these changes in the economic and political environment by , the farms reorganizing and restructuring for greater cost efficiency and higher productivity. This is what farms in market economies normally do to remain profitable in a changing world, and this is the lesson that CEE farms successfully adapted to their transition in the 1990s. The combination of external and internal changes – introduction of hard budget constraints and restructuring for cost-efficient operation – will provide the ultimate solution to improving profits and reducing the burden of debt.

Unsuccessful Attempts to Stop Farm Debt Accumulation

CIS governments have tried a wide range of policy instruments to address the issue of farm debt. These instruments include:

a) Price support and input subsidies
b) Subsidized government credit and commodity credit
c) Debt write-offs
d) Debt rescheduling
e) Inter-enterprise offsets and barter transactions to settle claims
f) Financial rehabilitation through farm reorganization
g) Bankruptcy and liquidation

The cross-country analysis indicates that these instruments have been applied in an inconsistent, ad hoc manner. Nor have they addressed the two major roots of farm indebtedness, namely the lack of profitability associated with insufficient restructuring of the inherited farm structure and the persistence of soft budget constraints linked with continued government intervention in farm operations. It is not surprising therefore, that these instruments have not produced any real relief.

The Debt Problem and Its Farm-Level Impacts

The farm debt problem in CIS is not a problem of the magnitude of debt, as the accumulated liabilities are not excessively large compared to the asset base of farm enterprises. The debt problem is associated mainly with the farms' inability to repay their debt because of inadequate profitability. Farm enterprises in CIS

suffer from a debt overhang relative to their cashflows, not relative to their assets.

Inability to service the current debt is highly disruptive to normal operation, as it forces creditors – both government agencies and commercial organizations – to impose various restraints on the defaulting farms. Farm enterprises are thus exposed to conflicting and confusing signals: on the one hand, they are given access to soft credits through government policies (explicit or implicit) and the lenient attitude of the banks predicated on these policies; on the other hand, they are harassed by collection efforts, which often look quite arbitrary and may take highly aggressive forms. This situation inevitably encourages the farms to shift to barter operations, and thus contributes to demonetization of their activities and further exacerbates their inability to repay the outstanding debt.

The unresolved debt problem is also an obstacle to effective privatization and restructuring of farm enterprises. First, asset shares are distributed to individual members net of liabilities, and individuals may be hesitant to leave the farm enterprise in favor of private farming as long as their entitlement to assets is shrouded in uncertainty and lack of transparency because of outstanding debt. Second, and perhaps much more importantly, outside creditors generally refuse to distinguish between the original debtor farm and any new farms created in the process of restructuring. They regard these new farm structures as responsible with their assets and cashflows for the debt of the original farm enterprises, even if there is no strict legal justification for this attitude. They may accordingly refuse to do business with the new farms as long as the old debt remains outstanding, thus severely hampering the prospects for profitable operation after genuine restructuring.

What Can be Done to Resolve the Farm Debt Problem

Accumulation of farm debt is caused by two sets of factors: external factors related to government policies that produce a non-conducive economic environment for farm operation, and internal factors related to farm organization and structure that lead to low productivity and growing losses. Effective resolution of farm debt requires governments to address both sets of factors. Only then can they decide to invoke bankruptcy, which is the standard market tool for dealing with highly indebted insolvent farms.

Why not traditional court-driven bankruptcy proceedings?

In market economies, unprofitable farms that are unable to repay their liabilities are declared bankrupt by a court of law and go into liquidation. Perhaps the most obvious option for resolving farm debt would be to follow the practice of market economies and the experiences of some countries in Central Eastern Europe. Insolvent farms would be declared bankrupt and go into liquidation, clearing the stage through debt restructuring for the creation of new financially viable units. This is how insolvent farms are treated in mature market economies, and how the more successful transition countries, such as Hungary, have dealt with the resolution of farm debt problems since the beginning of transition. Indeed, many experts recommend following this path in the CIS countries as well. All CIS countries have bankruptcy laws that in principle can impose liquidation of insolvent farms with the objective of satisfying the creditors' claims (at least partially).

However, the present study and certain experiences in other parts of the world suggest that the traditional court-driven bankruptcy procedures may not offer a desired solution given the specific circumstances in the CIS. First, a very large number of farms (in some countries more than 50%) are technically bankrupt in the sense that they report losses and cannot repay any debt from current cashflows. A strict approach to bankruptcy would require initiating court proceedings in a volume that is simply not practicable given the fragile administrative and judicial structures in CIS. There are no effective bankruptcy courts, and very few bankruptcy cases have actually been tried to completion in any of the CIS countries.

Second, the experience in the few farm bankruptcy cases launched in CIS indicates that the lack of potential buyers for farm assets is another obstacle to formal court-driven procedures. In CEE, subsidized credit schemes were offered by the governments to support the purchase of farm assets in the process of liquidation. Such schemes do not exist in CIS, and the rural population suffers from a severe shortage of capital. The absence of potential buyers would be a significant constraint in a mass bankruptcy and liquidation of insolvent farm enterprises.

Third, mass bankruptcy and liquidation of farm enterprises will affect the very large rural population in CIS, which is basically dependent for its livelihood on these farm enterprises, however unprofitable. By satisfying the claims of the creditors, the traditional bankruptcy procedures are likely to cause irreparable social damage to the rural population, thus producing a politically untenable situation in the transition countries, which still have no alternative employment opportunities for their farmers and peasants. This danger is particularly acute because of the unclear standing of collectively shared land in bankruptcy proceedings: courts may decide to auction off not only buildings, tractors, and livestock, but also farmland, leaving the rural families without any sources of income.

If an industrial enterprise goes bankrupt, the employees lose their work place; if a farm enterprise goes bankrupt, the rural population loses its livelihood and the entire village community may be destroyed. Since this effect will be multiplied by tens of thousands of villages that are dependent on failing farm enterprises, the process may spell the destruction of the entire rural sector. In the end of the day, when politicians, social scientists, and even economists have to weigh the interests of creditors – businesses or government – against the interests of a large rural population, the balance naturally tilts in favor of the rural population. It can be argued that the creditors were lending to the farm enterprises in the expectation of making a profit, and if they have miscalculated, they should bear at least part of the responsibility. Since courts would not necessarily be guided by such considerations, this is another argument against imposing traditional bankruptcy proceedings on CIS farms.

General principles for resolution of farm debt problem

Given the actual conditions in CIS, the optimal approach to resolving the farm debt problem should include a set of actions that address both macro- and micro-level factors.

- Creation of an incentive system and a macro-policy framework for agriculture that allows efficient agricultural producers to make profits and to invest.
- A one-time process of expedited debt settlement conditioned on genuine internal restructuring and privatization of the farms participating in the debt-settlement program.
- Creation of necessary economic conditions for the recovery of the restructured farms emerging from the debt-settlement procedure.
- Introduction of hard budget constraints forcing the farms to operate under strict financial discipline.
- Reorientation of the banking sector to lending on strict creditworthiness principles.
- Implementation of a working bankruptcy system to prevent accumulation of new debt in farms created through the process of restructuring and debt settlement.

The unique feature of this general program is the integration of debt resolution (handled as an out-of-court managed process) with internal restructuring of farms and a shift to hard budget constraints. Experience shows that if debt is written off while the farm organization remains unchanged, the result has never prevented re-accumulation of new debt. In parallel with treating the outstanding debt, it is essential to implement a genuine restructuring of the farms based on market principles with the goal of improving productivity and profitability. Without addressing basic ownership and management problems, including the development of realistic business plans, debt restructuring programs have very little value. We recommend starting the process of

restructuring with the allocation of physically identified land parcels with ownership titles to individuals.

Implementable framework for out-of-court debt settlement and farm restructuring

Instead of invoking blanket bankruptcy procedures, we recommend an approach that implements a one-time comprehensive out-of-court debt settlement linked with farm restructuring and introduction of hard budget constraints. Such a process has been recently implemented in Moldova. It is still too early to judge the long-term impacts of the process, but it has certainly met with initial success: the outstanding farm debt was practically liquidated within one year, in part by transfer of assets and in part by offsets between the government and commercial creditors; the rural population was not deprived of its rights to land, livestock, and farm machinery; and the former collective farms were restructured into new debt-free entities based on private ownership of land and assets.

The Moldovan experience is an example of an integrated approach to managed out-of-court settlement of farm debt. The more general features of this approach could be applied also in other countries in the region. Following is a brief characterization of these general features.

- The major objective of the one-time managed intervention is to create new farm entities that are free of past debt burden and have the potential to become economically viable. The goal is not reorganization of existing enterprises, but actual creation of new entities compatible with market principles of operation.

- The decision to launch the debt settlement process in each farm enterprise and the choice of the form of the new entity is left to farm members. The decision-making process is supported by sufficient information outlining in detail all implications and alternatives, informing the members of the basic market principles of farm organization and management.

- The debt settlement process is managed by a debt-settlement committee appointed by a national body and consisting of local and outside experts. The committee announces the start of the process and collects the claims from the creditors.

- The outstanding debt is settled primarily from the assets of the farm enterprise. Land remains outside the debt settlement procedure. The non-land assets are divided into three groups: (a) machinery and livestock, which are earmarked for distribution to farm members and are exempt from the debt-settlement process; (b) inventories, cash, receivables, other current assets, and all production fixed assets (i.e., storage, farm buildings, processing facilities, etc., excluding housing and social infrastructure), which are used for settling the debt of commercial creditors; (c) social assets and non-privatized housing, which are used for settling the debt to the government and to payroll.

- The full settlement of debt to commercial suppliers is an integral part of the process. All assets under lien are automatically transferred to the entitled creditor. The residual farm assets, excluding the portion distributed to farm members and used for settlement of wage arrears and government debt, are offered to the creditors up to the limit of the debt. The unsettled debt, if any, is taken over by the budget and used as a future tax credit for the suppliers or in the form of long-term bonds.

- The debt settlement process is implemented with the full support of the government, and the budget acts as a last resort to reach a full settlement of all residual amounts remaining after the farm assets are exhausted. Usually, this is not a serious constraint, as in most cases farm assets are more than sufficient to satisfy all obligations.

- The process ends with the full liquidation of the old entity, without any legal successor, and registration of new entities by the former farm members.

The process should have a definite completion date for each farm (four-five months duration), and the overall time frame for the entire project nationally also should be set in advance. A core group of experts should be assembled to work on the preparation of detailed procedures and manuals, and to travel across the country with the objective of training local forces and supervising the implementation.

Pre-conditions for success of debt-settlement program

Certain conditions are essential for successful implementation of such a framework:

- Legal framework for land ownership and titling is in place;
- Procedures for farm privatization have been adopted;
- There is political consensus for a complete and comprehensive approach to farm privatization and farm debt settlement;
- The task is of manageable size and the technical implementation is feasible (e.g., adequate donor support is available).

The specific implementation of the debt-settlement program will naturally vary from country to country, but the general principles adopted in Moldova appear to be valid and workable for all CIS countries. The larger countries, such as Russia and Ukraine, may prefer to adopt a regional approach, first implementing the debt-settlement program in the most progressive regions. The experiences of this approached can be extended to a national program at a later stage.

1

Introduction: Objectives and Methodology

The process of land reform and farm restructuring has been under way for almost a decade in the former socialist economies of Europe and Central Asia. While significant progress has been achieved in most Central and Eastern European (CEE) countries, the process has not resulted so far in noticeable efficiency and productivity improvements in the Commonwealth of Independent States (CIS). The World Bank has carried out a series of studies that monitor the progress in land reform and farm restructuring and identify the critical issues for the success of future reforms. These studies and the actual experiences of the transition countries have highlighted the accumulation of debt in farm enterprises as one of the most important constraints that prevents meaningful privatization and restructuring of existing large farms, obstructs their normal day-to-day operation, and thus impedes progress toward higher productivity and efficiency.

Large-scale farm enterprises in CIS are increasingly unable to repay their debt, which is growing over time in both dollar and real terms. Researchers and experts in both CIS and Western Europe repeatedly stress that large farms in Russia and Ukraine are "on the verge of bankruptcy". Frequent defaults trigger administrative restraints on farm bank accounts and sporadic seizure of farm assets by creditors. This is highly disruptive to normal operation of financially strapped farms and encourages a shift from monetary to barter transactions in an attempt to conceal some assets from creditors. The atmosphere of general default, with the uncertainty surrounding the disposition of assets, is also an obstacle to the restructuring of existing farms into new, potentially more efficient, private entities. Yet the insolvent farms are not forced into bankruptcy and continue to survive by virtue of various soft credit facilities and government bailout programs.

The aggravating problem of farm debt, combined with the continuing decline in agricultural production and farm incomes in CIS, calls for an urgent solution. Traditional interventionist measures by CIS governments, including periodic debt forgiveness and debt rescheduling, have had a very limited success. Most governments are justifiably concerned about the short-lived, transient effect of these actions and their negative long-term impact on producer incentives. Moreover, CIS governments no longer have the financial resources needed to continue with the traditional policy of periodic write-offs and bailouts.

In CEE countries, farm debt inherited from the socialist era was a significant issue during the early phases of transition. The problem of insolvent farms was quickly resolved in CEE by elimination of soft budget constraints and adoption of strict bankruptcy procedures. Bankruptcy is also proposed by some experts as a tool for the resolution of farm debt in the CIS countries. Here, however, the magnitude of the problem is much greater than in CEE, and standard court-driven bankruptcy procedures, like those implemented in CEE countries, do not seem to be feasible for CIS. The main reasons against straightforward application of court-driven bankruptcy mechanisms in CIS include missing or non-functioning institutions and inadequate judicial frameworks. Another serious obstacle to the implementation of standard bankruptcy proceedings is the lack of clearly defined property rights in former collective farms, which still largely rely on joint shared ownership of land and assets without unambiguously distinguishing between corporate and individual property. Finally, the potential social damage to the large rural population makes a mass bankruptcy process politically untenable in CIS countries.

Since traditional bailout remedies have been unable to stop continued debt accumulation and court-driven bankruptcy proceedings are judged to be inappropriate given the scale of the farm debt problem in CIS, alternative approaches must be devised to comprehensive debt settlement. These approaches ultimately must include a carefully managed out-of-court liquidation program. Old insolvent farms must be liquidated, giving way to new debt-free genuinely privatized farms that will be forced to operate under a strict financial discipline. The introduction of hard budget constraints for the restructured farms will require a radical change in government policy toward agriculture and will imply initiation of strict bankruptcy proceedings for farms that fail to achieve financial health and continue to accumulate new debt after restructuring. Genuine debt restructuring thus requires strong political resolve at the level of government and parliament.

Objectives

The objective of this study was to support the farm privatization and restructuring process in CIS by presenting governments with a range of strategic and tactical options that could be applied to eliminate or at least reduce the main factors responsible for the destructive accumulation of debt in large farm enterprises. This objective has been accomplished by documenting and analyzing the indebtedness of large-scale farms in five CIS countries – Belarus, Kazakhstan, Moldova, Russia, and Ukraine – that account for 87% of agricultural product, 85% of agricultural land, and 70% of rural population in CIS. and developing proposals for debt resolution. The study will be used to open a dialogue with governments in the region on the subject of farm debt and its resolution.

The study presents a region-wide analysis of farm debt based on data collected from five CIS countries and develops proposals that are relevant for the region as a whole. The study undertook four specific tasks:

1. Assessing the historical development and the current level of indebtedness in large farm enterprises in the CIS, including a description of the outstanding amount of debt, its composition, and possible macro-economic consequences of the farm debt overhang.

2. Analyzing the underlying factors responsible for the accumulation of farm debt in CIS.

3. Collecting information on debt resolution measures and efforts that have been applied by governments in both CIS and CEE, examining the actual impact of these measures on agriculture, and identifying the "best practices" implemented across the region.

4. Developing country-specific and region-wide proposals and recommendations for the settlement of farm-enterprise debt in CIS.

Methodology

The regional farm debt study is based on five individual country studies for Belarus, Kazakhstan, Moldova, Russia, and Ukraine. Each country study consists of four empirical components: (a) a database of financial information relating to farm debt (including farm-level and national data); (b) a database of relevant legislative information; (c) a database of measures implemented to treat farm debt; (d) case studies of the debt situation in three-four farm enterprises based on structured interviews with managers and other stakeholders.

The quantitative financial information was obtained from the consolidated financial reports – balance sheets and profit-and-loss statements – that the statistical organs of each country provided for its agricultural sector. The study also examined World Bank and IMF reports on farm restructuring and the general enterprise debt problem in CIS. Debt-related reports and studies by international donor organizations and domestic institutions in CIS were collected and analyzed. In addition to the five CIS countries, a special review of the experiences with the farm debt problem in CEE countries has been prepared.

Overall, the present study used the following sources: (a) information about the development of

farm restructuring in CIS; (b) the experience of other regions and other sectors with debt settlement; (c) country-level quantitative data and descriptive information; and (d) farm-level case studies. Financial ratio analysis was the main analytical tool applied to evaluate the debt situation of farm enterprises in CIS and to assess their ability to repay the debt.

The five countries selected for this study represent the bulk of the rural population and agriculture in CIS. At the same time, they provide a varied cross-section of different policies and approaches to farm reorganization and debt restructuring. The comparative cross-country approach based on CIS and CEE practices has allowed us to highlight country-specific features, some of which might be transformed into a workable list of recommendations for the region as a whole.

Data Sources, Quality, and Limitations

One of the major goals of this study is to provide a quantitative assessment of the farm debt, its level, structure, and evolution through the 1990s in five CIS countries (Belarus, Kazakhstan, Moldova, Russia, and Ukraine). To accomplish this goal, we collected the consolidated financial reports of the agricultural sector for each country for the period 1990-1998. The financial reports included the balance sheets and the profit and loss statements consolidated for all large farm enterprises reporting their financial results to statistical authorities. The data covered farm enterprises only, as private farmers and household plot owners do not routinely report financial data to statistical organs. The basic financial data were supplemented with information on farm numbers, land, and labor. State Statistical Committees in each country were the primary source of all quantitative information.

The consolidated financial reports of the agricultural sector in most CIS countries are generally prepared according to standard principles established back in the Soviet era. This ensures fundamental comparability of the financial data across countries despite the transition from rubles to national currencies since independence. Other modifications adopted by the countries during the 1990s actually improve the cross-country comparability, as they are mostly directed toward better implementation of international accounting standards in CIS. To exploit the benefits of comparability, standard table templates were prepared and distributed to the participating countries for data collection and data entry.

The present analysis suffers from the well-known weaknesses that affect every study based on financial reports, even in market economies. These weaknesses primarily include reliance on cost-based data instead of true market values, use of nominal (and not real) values, and the danger of under-reporting, over-reporting, or otherwise concealing information from the outside user. Yet, despite these acknowledged weaknesses, financial reports are universally accepted for analytical (and of course other) purposes all over the world, as they provide the best possible data based on fairly standard and comparable principles

The quality of financial data in CIS is of course lower than in Western countries. First, the institution of external audit does not exist for financial reports of farm enterprises. The correctness of financial reports depends on the integrity of the farm accountants, which is enforced to a certain extent by very detailed and strict professional instructions. Second, the data collection system in CIS is under severe financial constraints, and as a result the coverage and the quality of the data are deteriorating. Before the reforms, all farm enterprises were required by law to send their financial reports to regional authorities, which then checked and consolidated the farm-level data according to established standards. The CIS countries continue to implement this system for their farm enterprises, but the reporting requirements have been relaxed with the general disappearance of central controls. The extreme example is Kazakhstan, where in some regions the collection of statistical and financial data has been abolished by the decision of regional authorities (akims). The number of reporting farms in Kazakhstan has been declining over time, and the consolidated financial reports in this country have become less representative of the agricultural sector.

The reported value of fixed assets – always a problematic issue in accounting – differs in two important respects from the prevailing Western practice. These include the omission of land from the farm balance sheet and periodic indexation of farm fixed assets.

The fact that the value of land is not shown on the farm balance sheet in CIS is a carryover from the Soviet era, when all land was owned by the state. Although today land is privately owned, the property rights remain ambiguous: it is not clear if jointly shared land is the property of individuals or the property of the farm enterprise. This ambiguity, combined with the virtual absence of market valuation of land, has discouraged the attempts to show land on the farm balance sheet. This may severely understate the total farm assets, as in the US the value of land is the single largest component in the farm balance sheet (about 50% of total farm assets, according to USDA).

The practice of periodically adjusting the value of fixed assets to inflation (indexation) is an outgrowth of the galloping inflation that affected all the CIS countries in the 1990s. As in other countries in the world where asset indexation is practiced, this adjustment usually leads to overvaluation of fixed assets compared to any reasonable market value. There can be no reliable estimates of this overvaluation in the absence of functioning markets for farm assets, but work by international and local experts in Russia, Ukraine, and Moldova suggests that overvaluation may range from a few tens of percent to several times the market value. As a result, the fixed assets (and the correspondingly adjusted equity component) dominate the farm balance sheet in CIS to a totally unrealistic extent, which is unprecedented in international experience.

Because of the two difficulties with the fixed assets in farm balance sheets, the standard ratios of debt to total assets had be to ignored in this analysis. Instead, the analysis focused on current assets, which are not affected by these distortions to the same extent, and current flows (sales and profits) as the basic indicators for calculating indebtedness and repayment capacity.

Another weakness of farm financial data concerns the profit calculation. Three technical factors act to depress the reported profit. Overvalued assets produce higher depreciation charges. The traditional responsibility of farm enterprises for rural social infrastructure mandates the inclusion of social expenditures in farm costs. The special relationship between the farm enterprise and the employee household plots leads to transfer of inputs and services at below-market prices or sometimes free of charge. There are no reliable data and furthermore no accepted methodology for calculating the combined effect of these three "cost-increasing" factors. The estimates published by researchers and international experts vary between wide limits (e.g., between 15% and 50% of total costs) and are highly tentative. Correct estimation of these cost distortions is essential if we seek to compare the level of profits in CIS farm enterprises with the level of profits in market economies, where farms are free from these distortions. The impact of cost distortions is less relevant for our immediate task of tracking the financial performance of CIS farms over time, as it is reasonable to assume that the systematic effect of all these factors generally remained the same during the 1990s.

Despite these caveats, financial reports are the only source of data that can be used to analyze farm debt in CIS in a regional perspective. In the future, the quality of financial data should be improved to provide a less distorted picture of the financial situation of farm enterprises. Meanwhile, we have no choice but to use the available data, bearing the various caveats in mind and always remembering that the difficulties with farm financial statements in CIS are basically similar to those in market economies, but only larger.

Structure of the Report

The chapters that follow present a comparative cross-country analysis of the farm-debt data collected by the counterparts in Belarus, Kazakhstan, Moldova, Russia, and Ukraine. First, we review the history, current level, and composition of farm debt in CIS. Then we examine the major reasons for farm debt accumulation, including macro-economic policy reasons and internal, farm-level reasons. This is followed by a discussion of the implications of farm debt for the rural population and an overview of specific country initiatives for the resolution of farm debt. The last chapter summarizes the findings of the study and incorporates some experiences from CEE countries. Details of the unique approach to farm debt resolution implemented in Moldova are presented in Appendix C at the end of the study. Appendix B is a collection of statistical tables with full country data for 1994 and 1998 collected for the present study. Appendix A is an annex of tables relating to the main text: it tabulates the CPI and exchange rate data used for calculations in Chapter 2; provides quantitative details of farm case studies in Belarus, Kazakhstan, and Russia discussed in Chapter 4; and presents a graphical overview of policy instruments used for farm debt resolution by each of the five CIS countries in this study (as discussed in Chapter 5).

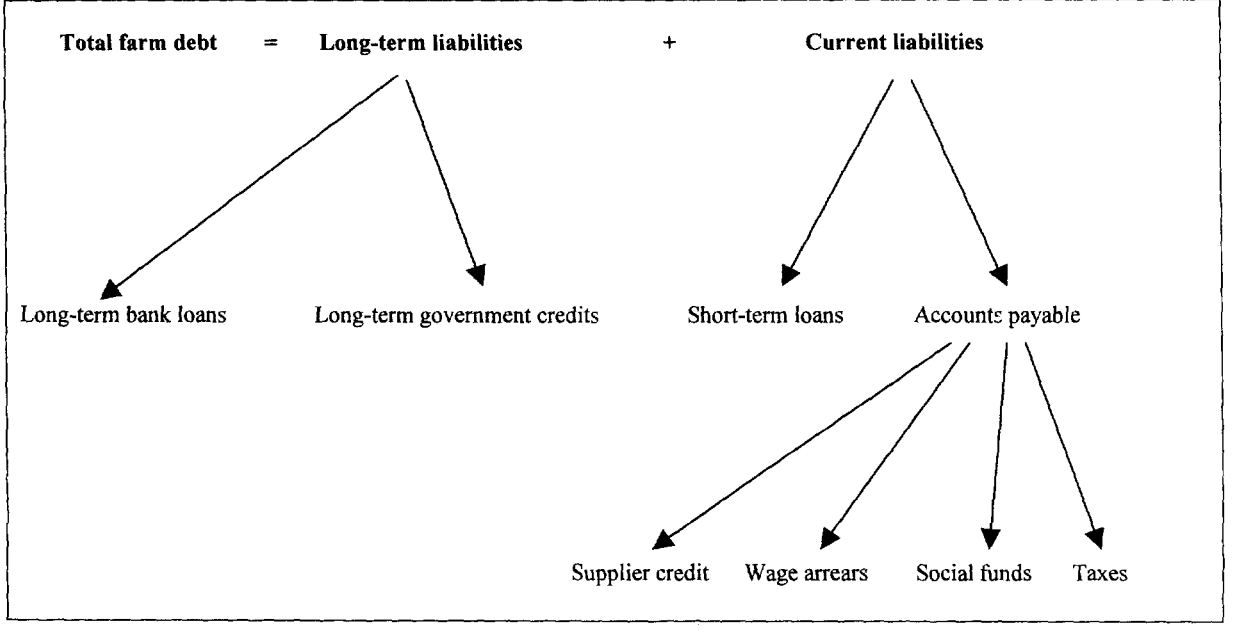
2

Overview of Farm Debt in CIS: History, Current Level, and Composition

Debt is an essential component of the financing mix of any business entity, be it a manufacturer, a service corporation, or a farm. Without access to debt, the organization is limited to activities that can be financed only from internally generated cash flows (or sale of equity – a costly and relatively complicated transaction). This would be a severe constraint on day-to-day operations and on growth prospects, and all business organizations resort to external financing in the form of debt to alleviate this constraint. In what follows, we focus on farm debt, although virtually in all respects the debt of agricultural producers is governed by the same principles as the debt of any business organization. Moreover, the same general principles of debt management apply in both market and transition economies.

However useful, debt is a risky financing instrument, because borrowing always involves a contractual obligation to repay after an agreed period. In this sense, debt constitutes a liability or an obligation, and these three terms are used synonymously. In market economies, if the borrower is unable to repay the amounts falling due, the borrower is considered in default of a contractual obligation and may be subjected to bankruptcy proceedings that lead to liquidation. The ability to repay the debt is thus an inseparable component of any debt management decision.

Figure 2.1: Composition of Total Farm Debt



We usually distinguish between two components of debt financing. One component can be characterized as "intentional borrowing," when the farm turns to banks or other formal lenders to raise debt. The other component is "spontaneous borrowing," which arises in the course of conducting normal business operations. Spontaneous borrowing, often called working-capital financing (or accounts payable, to use a technical accounting term), includes primarily supplier credit for purchase of inputs and other inventories, accrued amounts due for utilities or government taxes, and payroll arrears.

Alongside this classification into "intentional" and "spontaneous" borrowing, debt is also classified by repayment term, i.e., the length of time to agreed repayment. Short-term debt has to be repaid within the current year, while long-term debt has to be repaid after a period longer than 12 months. "Intentional borrowing" is done for short or long term (i.e., for periods of less than one year or more than one year), depending on availability and expected uses. "Spontaneous borrowing" is typically short-term, with repayment expected within 30 to 90 days. In the balance sheet, long-term debt is usually in the form of loans from banks or the government, representing part of "intentional borrowing." Short-term debt, designated by the accounting term current liabilities, consists of short-term bank loans and accounts payable. The former are the remaining part of "intentional borrowing," while the latter represent the "spontaneous" component of debt.

Figure 2.1 visualizes the components of total farm debt. Total farm debt is defined as the sum of long-term liabilities plus current liabilities, and it is often called total liabilities. The farm debt data analyzed in this chapter are derived from the consolidated financial statements of all collective, corporate, and state farms in each country. In this sense, they represent the aggregated debt of the agricultural sector in each country.

This chapter examines the growth of farm debt over time and the structure of debt by sources and repayment terms in five CIS countries. It analyzes the standard financial ratios with the objective of determining the financial situation and the repayment capacity of the farm sector in these countries.

Changes in the Level of Farm Debt

Farm balance sheets report debt in current values in domestic currency. The CIS countries have different domestic currencies – hrivna in Ukraine, lei in Moldova, tenge in Kazakhstan, ruble in Russia, and Belarusian ruble in Belarus (which is different from the Russian ruble). This makes direct cross-country comparisons impossible. Moreover, reported current values are affected by inflation, and this complicates comparisons over time within each country.

Two techniques were applied to make financial data comparable across countries and over time. First, the relevant components in the agricultural sector's balance sheet and income statement were converted to US dollars using the prevailing exchange rates to bring the absolute values for each country to a common currency. Second, the same components were also deflated by the consumer price index (CPI) of the respective countries to obtain real, inflation-adjusted values. The exchange rates and the CPI value used in this study are given in the annex at the end of the chapter.

Neither the CPI nor the dollar exchange rate is a perfect deflator for financial analysis. The CPI does not fully allow for the changes in various components of farm debt, yet it is the best and most universally reliable measure of inflation available for practical purposes. Exchange rates in CIS during transition have been subject to high volatility (especially in Russia and Kazakhstan) or strict government controls (in Belarus). All CIS countries experienced a long period of real exchange rate appreciation during most of the 1990s. This trend reversed abruptly with the sharp devaluation of the Russian ruble in September 1998, and the effects of this event quickly spread across the region. Yearly averages were accordingly used for exchange rates to smooth short-run fluctuations.

The changes in farm debt over time are shown in **Figures 2.2** and **2.3**. **Figure 2.2** plots the farm

debt in US dollars for the period 1990-98. Although debt is converted to nominal US dollars, the dollar is a useful yardstick for assessing the magnitude of debt over time and across countries in a single currency because of its stability relative to the various national currencies in CIS. **Figure 2.3** plots the change in real farm debt between 1994-98. In this graph, the real farm debt is calculated by deflating the domestic currency values by CPI, and the real debt series are then expressed in percent of 1994 to ensure comparability across countries with different domestic currencies. The real debt graph shows growth, not level of debt across countries

Figure 2.2: Changes in Farm Debt (million dollars)

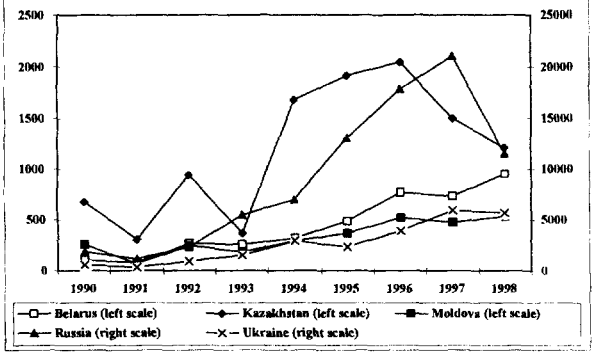
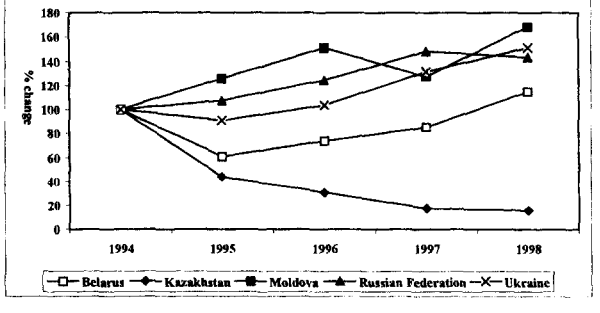


Figure 2.3: Changes in Real Value of Total Debt per Farm



Both views of farm debt over time – in nominal US dollars (**Figure 2.2**) and in real index numbers (**Figure 2.3**) – show significant accumulation of debt during the 1990s.

The total farm debt for the five CIS countries reached nearly $30 billion in 1997, more than double the dollar level of debt in 1994 (**Table 2.1**). Because of its sheer size, Russia accounts for the lion's share of total farm debt in CIS: 70% of the five-country debt in 1997. It is followed by Ukraine (20%), Kazakhstan (5%), and Moldova and Belarus (2% each). The sharp devaluation of the Russian ruble in 1998 produced a pronounced downward adjustment of the dollar farm debt in Russia. Because of Russia's relative size this was reflected in a decline of CIS-5 total farm debt in 1998, although the dollar debt in the other four CIS countries did not show a consistent decrease.

Table 2.1: Major Indicators of Farm Debt, 1994-98

	1994	1995	1996	1997	1998
A. Total farm debt in US$ (US$ '000,000)					
Belarus	320	489	779	734	950
Kazakhstan	1684	1919	2053	1502	1219
Moldova	292	372	525	482	539
Russia	7021	13036	17865	21103	11535
Ukraine	3004	2375	3901	5901	5718
CIS-5	13540	19168	26066	29840	19962
B. Changes in real (CPI-deflated) farm debt					
Belarus	100	59	71	81	107
Kazakhstan	100	40	34	24	19
Moldova	100	126	150	128	157
Russia	100	104	121	143	141
Ukraine	100	77	87	116	134
C. Farm debt as % of gross agricultural product					
Belarus	26	23	26	23	29
Kazakhstan	88	116	99	79	160
Moldova	74	67	88	73	99
Russia	37	49	47	63	84
Ukraine	37	30	44	68	93
D. Farm debt as % of GDP					
Belarus	7	5	6	5	7
Kazakhstan	14	12	10	7	6
Moldova	22	22	27	22	29
Russia	3	3	4	5	6
Ukraine	8	6	9	12	13
E. Farm debt as % of budget revenues					
Belarus	14	12	14	12	14
Kazakhstan	78	67	71	51	40
Moldova	64	65	85	61	83
Russia	8	10	13	13	18
Ukraine	19	17	24	31	38

Allowing for the impacts of the 1998 devaluation, the farm debt expressed in US dollars increased by nearly 50% between 1994-98 (**Table 2.1, panel A**). This aggregate value conceals considerable variability across countries: the dollar farm debt changed in this period by 200% in Belarus, by 90% in Ukraine and Moldova, and by more than 60% in Russia. The real (CPI-deflated) farm debt rose between 1994-98 by 57% in Moldova, 41% in Russia, and 34% in Ukraine (**Table 2.1, panel B**). The increase in real farm debt for Belarus was much less significant (only 7% during the same period). Kazakhstan is the only country in the study that shows a substantial decline both in real farm debt and in dollar debt between 1994-98. This appears to be due to generally low reliability of the financial data for Kazakhstan agriculture, where the number of farms and the data collection procedures changed significantly during transition.

In general, the increase in dollar debt between 1994-98 was larger than the increase in real CPI-adjusted debt (**Figure 2.4**). This provides an indirect indication of the strong overvaluation of domestic currencies in CIS during the 1990s. The gap is particularly large for Belarus due to persistent government intervention in the exchange rate of the Belarusian ruble.

The pattern of increases in farm-level debt (i.e., debt per farm enterprise) between 1994-98 is on the whole similar to the pattern of growth in total country-level debt shown in **Figures 2.2** and **2.3**. This is so because the number of farms in each country remained relatively constant, and the per-farm debt generally tracks the total farm debt. The average debt per farm in 1998 was about $400 thousand, with little variability across countries (**Table 2.2**).

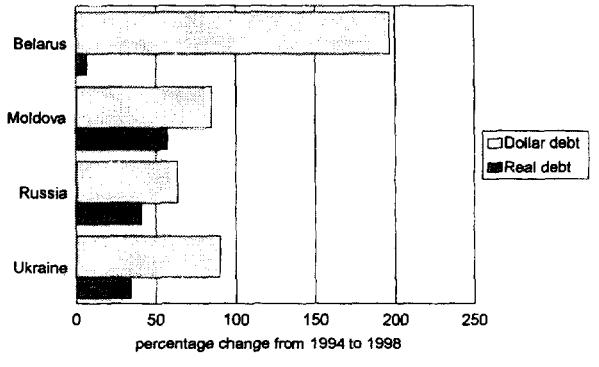
Table 2.2: Average Debt Per Farm, 1994-98 (US$ '000)

	1994	1995	1996	1997	1998
Debt per farm enterprise (US$ '000)					
Belarus	108	169	272	262	345
Kazakhstan	706	843	709	428	394
Moldova	281	359	507	461	386
Russia	253	482	663	787	421
Ukraine	218	203	335	486	465

The Burden of Farm Debt for the Economy

Can agriculture repay its accumulated debt? Or will the governments need to intervene in the near future with massive debt write-off programs at the expense of the taxpayer? The output produced by the agricultural sector is the main source of repayment capacity. **Table 2.1 (panel C)** shows that the ratio of farm debt to gross agricultural product increased significantly for all CIS countries (except Belarus). The level of farm debt in 1998 is practically equal to the annual agricultural product, up from about 50% of product in 1994. One full year's agricultural product is thus needed to repay the sectoral debt. In the US, farm debt is less than 40% of output, and this ratio has remained constant over time. The increasing trend and the actual level of farm debt relative to agricultural product in CIS seem to suggest that debt repayment from resources generated by the sector itself may be problematic.

Figure 2.4: Percentage Change in Farm Debt in CIS: 1994-98



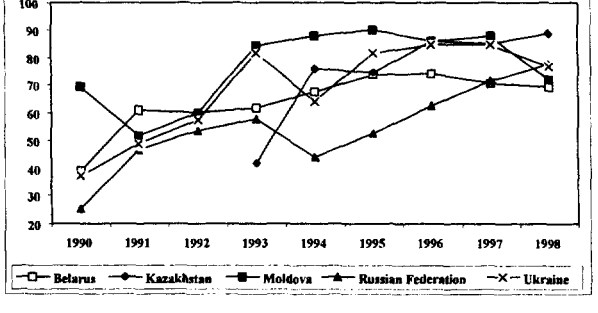
Another indication of an increasing burden of farm debt in CIS is provided by the ratio of farm debt to GDP (**Table 2.1, panel D**). The share of farm debt in GDP increased between 1994-98 for all countries (except Kazakhstan). Moldova had by far the highest share of debt in GDP (20%-30% of GDP all through the 1990s), because of the importance of the agricultural sector to its economy. Analysis of accounts receivable, i.e., amounts owed to farm enterprises, shows that they are very small relative to GDP (of the order of 1%-3% for most countries) and do not offset a significant proportion of the outstanding farm debt.

The burden of farm debt on the government budget is expressed in **Table 2.1** by the ratio of farm debt to budget revenues. This ratio is a measure of the share of budget revenue that would have to be expended if the government decided to assume full responsibility for outstanding farm debt and to write off all liabilities without any contribution from agricultural producers. In Russia and Belarus, farm debt does not appear to be a major public-finance problem. In these two countries, 18% and 14% of budget revenues, respectively, would be sufficient to pay off the entire debt of the agricultural sector. The situation is less favorable for Kazakhstan and Ukraine. These countries would need to allocate almost 40% of budget revenues to achieve the same goal. In case of Moldova, the potential burden of farm debt on public finance is much higher: more than 80% of budget revenues would be required to pay off the entire debt of agricultural producers. These macroeconomic implications of farm debt accumulation may be used as an indicator of the urgency of farm debt resolution for a particular country. The magnitude of the problem in Moldova in 1998 probably explains why this country assumed a lead role in developing a comprehensive debt-settlement program in 1999-2000.

Structure of Farm Debt

Accounts payable constitute the largest component of farm debt (70%-80%) in all CIS countries (**Table 2.3**). The share of accounts payable in total debt generally showed an upward trend over time (**Figure 2.5**).

Figure 2.5: Share of Accounts Payable in Total Debt



Loans, both short-term and long-term, are a relatively small residual component of total farm debt. Farms do not intentionally borrow by applying to financial institutions. Farm debt in CIS is predominantly of the "spontaneous" or "involuntary" variety that arises in the normal course of doing business.

Despite the smallness of the loan component, a definite change in the term structure of loans was observed between 1994-98. While long-term debt had been virtually wiped out by inflation by 1993, short-term debt began to be converted into long-term debt as a result of government debt rescheduling policies after 1994. Debt rescheduling was intended to postpone the repayment of loans that were falling due while the farms suffered from a liquidity and profitability crisis.

Table 2.3: Structure of Farm Debt (percent of total debt)

	1994	1995	1996	1997	1998
A. Accounts payable					
Belarus	67	74	74	71	69
Kazakhstan	76	75	86	85	88
Moldova	88	90	86	88	72
Russia	44	52	62	72	78
Ukraine	64	82	85	85	77
B. Short-term loans					
Belarus	28	24	24	26	17
Kazakhstan	22	7	4	3	3
Moldova	9	5	8	5	4
Russia	23	16	16	12	9
Ukraine	33	14	13	6	3
C. Long-term debt					
Belarus	5	2	2	3	13
Kazakhstan	2	18	10	12	9
Moldova	1	4	4	5	17
Russia	25	22	16	13	11
Ukraine	1	2	1	7	18

The main creditors comprising the accounts payable of agricultural producers in CIS are the government, input and energy suppliers, and the payroll (**Table 2.4**). Farms are liable to both central and local government mainly for unpaid taxes, overdue contributions to unemployment and social security funds, and workers' medical

insurance. Suppliers of various organizational forms (state-managed, parastatal, and private companies) have claims on farms for prior deliveries of farm inputs and energy. Member-workers of farm enterprises are represented as creditors on account of unpaid wages.

Table 2.4: Structure of Accounts Payable (%)

	1994	1995	1996	1997	1998
A. Government, total (social funds and taxes, B+C)					
Belarus	8	13	21	17	16
Kazakhstan	25	17	26	34	34
Moldova	29	43	47	39	45
Russia	24	34	42	47	52
Ukraine	25	29	34	37	30
B. Social funds					
Belarus	5	8	10	7	5
Kazakhstan	13	12	14	15	20
Moldova	15	17	17	16	18
Russia	15	22	30	34	40
Ukraine	10	16	21	23	17
C. Taxes					
Belarus	3	5	11	10	11
Kazakhstan	12	5	12	19	15
Moldova	14	26	31	23	27
Russia	9	13	12	13	12
Ukraine	14	14	13	14	13
D. Suppliers					
Belarus	48	53	55	60	65
Kazakhstan	57	58	51	47	47
Moldova	42	34	34	41	41
Russia	48	46	41	38	35
Ukraine	38	42	38	36	39
E. Wage arrears					
Belarus	14	14	8	8	8
Kazakhstan	11	11	12	12	10
Moldova	12	10	8	10	10
Russia	16	12	11	9	8
Ukraine	13	12	13	15	17

The government's role as a creditor of agricultural producers is increasing over time for all countries (**Table 2.4**). In Russia and Moldova, the government is the major creditor of farm enterprises, with 50% of accounts payable representing government debt. In Ukraine and Kazakhstan, government debt is 30% of accounts payable. By allowing farms to accumulate unpaid taxes and social contributions, the government effectively transfers to agriculture financial resources that are used in lieu of commercial and bank credits.

Supplier credit contributes roughly the same share of accounts payable as debt to the government (**Table 2.4**). This is an important and stable source of working capital, which has remained at a level of 40%-50% of accounts payable since 1994. Such levels of supplier credit are not abnormal in market economies, provided farms can repay this credit within the agreed period of 30-90 days. Unfortunately, the share of overdue payables and receivables (debt to other firms and debt of other firms to agricultural producers) has been increasing (see the section on overdue debt below).

The share of wage arrears in accounts payable is generally low (**Table 2.4**). Workers provided about 10% of total credit through accounts payable, and their role decreased over time. Ukraine in an exception, with wage arrears rising to 17% of accounts payable in 1998. Overdue wages thus do not appear to be a major problem in most countries (see also **Chapter 4**).

Overdue Debt

Debt accumulation is a normal business practice if the firm is growing and is able to repay its obligations in both the short and the long run. Increasing debt levels in a stagnating or shrinking firm (and such are the farm enterprises in CIS) is generally an unhealthy sign. Moreover, if debt is not repaid on time and becomes overdue, this is usually a symptom of a serious management problem that may ultimately lead to insolvency and bankruptcy.

Table 2.5 shows that the share of overdue payables increased for all countries between 1994-98. The sharpest increases were observed in Kazakhstan (from 44% of accounts payable in 1994 to 87% in 1998) and in Russia (from 34% to 56%, respectively), but the levels of past-due

accounts in Moldova and Ukraine were also quite high by all accepted standards.

Another symptom of lax and irresponsible payment discipline in CIS is the high share of accounts receivable not collected on time. Accounts receivable of one enterprise are accounts payable of another enterprise, and a high proportion of overdue receivables in some enterprises automatically translates into a high proportion of overdue payables in other enterprises. Moreover, failure to collect the accounts receivable leaves the enterprise without sufficient funds for repaying its accounts payable. This interlinked effect is clearly observed in the first two panels of **Table 2.5**, where the increase in the share of accounts receivable is seen to be positively correlated with the increase in the share of accounts payable.

Table 2.5: Overdue Accounts Payable and Accounts Receivable

	1994	1995	1996	1997	1998
A. Overdue accounts payable as % of total payables					
Belarus	7	5	6	5	7
Kazakhstan	44	76	87	89	87
Moldova	25	10	6	11	36
Russia	34	36	49	52	56
Ukraine	26	26	27	26	30
B. Overdue accounts receivable as % of total receivables					
Kazakhstan	33	63	64	62	82
Russia	12	26	29	32	34
Ukraine	23	33	36	40	42

Effects of Debt Accumulation on Investment

The volume of agricultural investment declined in most countries between 1994-98 (**Table 2.6**). This is probably attributable to lack of profitable investment opportunities in a generally declining economy. Yet farm enterprises in 1998 obviously faced more severe borrowing constraints than in 1994. The share of investments financed with borrowed resources declined sharply in Russia, Ukraine, and Kazakhstan. This is not necessarily an indication that farm enterprises have reached a level of debt that restricts their ability to borrow. After all, most borrowed funds derive from non-budgetary government sources rather than commercial and bank credit (**Table 2.6**). Yet when credit is primarily needed to meet working capital requirements, the atmosphere is not conducive to investment borrowing.

Table 2.6: Major Sources of Investment in Agriculture (% of total investment)

1994	Bel	Kaz	Rus	Ukr
Investment (mln. US$)	122	149	2493	873
Total investment	100	100	100	100
Own financial resources	64	93	65	65
Depreciation	33	27	52	9
Borrowing, total	36	7	35	35
Bank credits	0	0	0	0
Other enterprise debt	9	0	14	1
Non-budget funds	20	0	19	22
Other	4	0	1	0
1998	Bel	Kaz	Rus	Ukr
Investment (mln. US$)	375	12	1997	820
Total investment	100	100	100	100
Own financial resources	55	98	94	76
Depreciation	42	52	62	69
Borrowing, total	45	1	6	24
Bank credits	0	0	0	0
Other enterprise debt	28	0	1	0
Non-budget funds	8	0	3	21
Other	2	0	0	0

Major Indicators of Farm Solvency

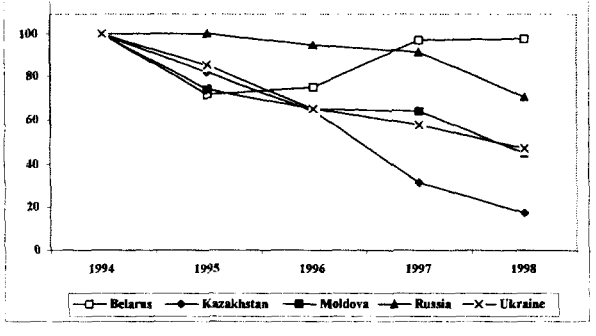
The fact that farm debt is increasing over time does not necessarily imply that the financial situation of farm enterprises is deteriorating. If farms have adequate debt repayment capacity, debt accumulation does not present a problem, but rather is a sign of expanding business. In CIS, however, increasing debt levels are not associated with the need to finance growth. Farm debt is increasing while the volume of operations is actually contracting. **Figure 2.6** shows the change in real (CPI-deflated) sales per farm between 1994-98. There is a clear downward trend in farm sales during these years. The decline in sales in

Figure 2.6 should be compared with the increase in real farm debt in **Figure 2.3** to appreciate the gravity of the situation (the time series in both graphs were derived by the same methodology).

Asset-based debt repayment measures

In market economies, the financial health of a firm is evaluated by various financial ratios based on the information reported in the firm's balance sheet and the income statement. A popular criterion is the ratio of total liabilities (total debt) to total assets, which shows the ability of the firm to cover the debt by liquidating all its assets. The higher this ratio, the less likely it is that liquidation of assets will enable the firm to repay its entire debt.

Figure 2.6: Changes in Real (defalted by CPI) Sales per Farm (1994=100)



In CIS countries, the ratio of debt to total assets is not very useful due to difficulties with valuation of assets in general, and fixed assets in particular. Because of high inflation rates, the fixed assets are revalued, but the revaluation is based on administratively prescribed "adjustment" coefficients, and not true market values. This leads to strong upward biases in fixed asset values in the balance sheet. Anecdotal evidence suggests that the "adjusted" balance-sheet value of fixed assets may be 2-3 times higher than a realistic market price (TACIS, *Farm Insolvency in Russia: Identified Problems and Possible Solutions*, Project RF27, Brussels, August 1999). Moreover, the revaluation is carried out repeatedly, but not systematically every year, and the time lags introduce further distortions in the time series of asset values. Finally, the farm balance sheet in CIS excludes agricultural land, which results in a strong downward bias in the value of fixed assets. As a result of these factors, the fixed asset component of the farm balance sheet in CIS is highly unreliable, and should not be used for evaluating the indebtedness and repayment capacity of farms.

In practice, instead of planning for the repayment of liabilities through liquidation of all assets, including the dubiously valued and highly illiquid fixed assets, it is more appropriate to focus on liquid assets as the source of funds for debt repayment. The ability of a farm to pay off its debt from relatively liquid assets is usually analyzed by financial ratios based on current assets (excluding the fixed asset component of the balance sheet).

The ratio of liabilities to current assets is used to assess the capacity of a farm to cover its debt from current assets. One of the major components of current assets are inventories, which include inputs, stores of products ready for sale, and unfinished production (e.g., crops in the field). Inventories have to be sold and realized before they become cash, and they are much less liquid than other components of current assets, such as cash and accounts receivable. A more stringent measure of the farms' capacity to repay its debt is therefore the ratio of liabilities to current financial assets, i.e., the most liquid components of current assets excluding all inventories.

Repayment of debt from current assets does not necessarily imply liquidation of the farm, as repayment from fixed assets would. Current assets are converted into cash and replenished in the course of the farm's daily operations, and in this way they are expected to provide a steady flow of funds for repayment of obligations. This process does not assume any drastic asset restructuring.

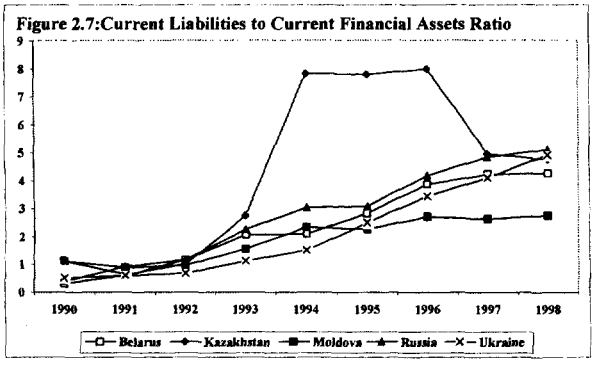
For the liabilities in the numerator of both ratios based on current assets we can put either total debt or current liabilities only. The alternative calculations produce conceptually different ratios – the former measures the sufficiency of current assets for the repayment of total liabilities, while the latter only measures their sufficiency for the repayment of current

liabilities, a subset of total debt. Yet the difference between the two ratios for CIS countries is not very pronounced, because current liabilities (primarily accounts payable) represent the bulk of farm debt in CIS (see **Table 2.3**).

Various ratios of liabilities to current assets are calculated in **Table 2.7**. These ratios have one feature in common: they increased between 1994-98 for all five CIS countries. This essentially means that farm debt grew faster than farm current assets, and the ability of farms to repay their liabilities from current assets deteriorated over time.

Up to 1995, farm current assets in all countries (except Kazakhstan) were sufficient to cover not only the current liabilities but actually the total debt of farm enterprises (**Table 2.7, panels B, C**). The situation had changed radically by 1998: farm current assets were no longer sufficient to repay the total farm debt in most CIS countries, and even the ratio of current liabilities to current assets generally exceeded 1.

Figure 2.7:Current Liabilities to Current Financial Assets Ratio



The deteriorating indebtedness of CIS farms is strikingly illustrated by the ratio of current liabilities to current financial assets, i.e., current assets excluding inventories (**Table 2.7, panel D**). This ratio more than doubled from an average of about 2 in 1994 to about 5 in 1998, and the long-term increase since 1990 was even greater (**Figure 2.7**). The most liquid component of current assets used to be sufficient to cover one half of the current liabilities, or even more. In 1998, it covered only 20%.

Table 2.7: Asset-Based Financial Ratios for the Average Farm Enterprise, 1994-98

	1994	1995	1996	1997	1998
A. Current liabilities/Total assets					
Belarus	0.02	0.09	0.07	0.07	0.11
Kazakhstan	0.44	0.44	0.48	0.50	0.59
Moldova	0.14	0.19	0.18	0.14	0.20
Russia	0.14	0.09	0.07	0.10	0.15
Ukraine	0.39	0.16	0.08	0.11	0.13
B. Total debt/Current assets					
Belarus	0.31	0.44	0.47	0.43	0.45
Kazakhstan	**1.27**	**1.39**	**1.39**	1.62	2.18
Moldova	0.85	0.88	1.11	1.09	1.42
Russia	0.93	0.82	0.86	0.99	1.22
Ukraine	0.57	0.48	0.65	0.85	1.09
C. Current liabilities/Current assets					
Belarus	0.29	0.43	0.46	0.42	0.39
Kazakhstan	**2.16**	**1.84**	**1.89**	1.56	1.98
Moldova	0.84	0.84	1.07	1.04	1.18
Russia	0.70	0.64	0.72	0.86	1.09
Ukraine	0.57	0.47	0.65	0.79	0.89
D. Current liabilities/Current financial assets					
Belarus	2.13	2.83	3.87	4.23	4.30
Kazakhstan	7.84	7.79	7.99	4.97	4.74
Moldova	2.37	2.27	2.73	2.65	2.77
Russia	3.06	3.08	4.19	4.83	5.10
Ukraine	1.52	2.51	3.44	4.12	4.91
E. Accounts receivable/Accounts payable					
Belarus	0.53	0.42	0.29	0.27	0.23
Kazakhstan	0.28	0.22	0.19	0.22	0.21
Moldova	0.45	0.44	0.36	0.35	0.39
Russia	0.40	0.35	0.24	0.18	0.15
Ukraine	0.87	0.41	0.29	0.22	0.18

Table 2.7 also presents the ratio of accounts receivable to accounts payable for the agricultural sector in the five CIS countries (**panel E**). The widening gap between receivables and payables during 1994-98 in all countries indicates that the obligations of agriculture to other sectors of the economy, to the government, and to workers are growing faster than the amounts owed to agriculture by marketers, processors, and other buyers of farm products. Receivables offset a relatively small portion of payables: 15%-20% in

most countries (with a surprisingly robust 40% in Moldova).

Cash-flow based debt repayment measures

The ratios presented in **Table 2.7** focus on the "liquidation" approach to debt repayment. They assess the sufficiency of the stock of farm assets for the repayment of farm debt. An alternative approach focuses on cash flows generated from farm sales as a source of repayment capacity. **Table 2.8** presents several financial ratios of increasing stringency that measure the ability of farms to service debt from their cash flows.

Table 2.8: Cash-Flow Based Financial Ratios for the Average Farm Enterprise, 1994-98

	1994	1995	1996	1997	1998
A. Farm debt/farm sales ratio					
Belarus	0.35	0.30	0.35	0.31	0.42
Kazakhstan	1.50	1.38	1.26	1.42	2.37
Moldova	0.83	0.83	1.14	0.98	1.83
Russia	0.81	0.87	1.07	1.32	1.65
Ukraine	0.55	0.58	0.87	1.25	1.75
B. Farm debt/profit ratio					
Belarus	3.38	2.46	3.99	3.67	16.33
Kazakhstan	-19.32	-7.19	-5.75	-4.79	-4.46
Moldova	6.52	-0.65	-12.64	-5.30	-3.83
Russia	-6.21	-27.67	-3.43	-3.73	-4.50
Ukraine	1.76	5.80	-6.78	-4.43	-4.68
C. (profit + annual depreciation)/total debt					
Belarus	0.51	0.84	0.51	0.74	0.37
Kazakhstan	-0.05	-0.17	-0.08	-0.15	-0.17
Moldova	0.16	-0.01	-0.04	-0.02	-0.12
Russia	0.19	0.30	0.14	0.00	-0.05
Ukraine	0.65	0.35	0.08	-0.05	-0.11

The simplest cash-flow measure is the ratio of total debt to sales, which assumes (somewhat unrealistically) that all sales proceeds are available for repayment of liabilities. The debt to sales ratio grew rapidly over time (**Table 2.8, panel A**). In 1994-95, it took less than one year of sales to liquidate the entire outstanding debt. In 1998, on the other hand, it took between 1.5 and 2 years of sales to repay the farm debt for most countries (except Belarus).

It is naturally net profits, and not gross sales, that provide residual cash flows for debt repayment. Unfortunately, the debt to profit ratio (**Table 2.8, panel B**) was negative for all countries (except Belarus) since 1994, because the agricultural sectors in CIS consistently reported losses each year during this period. This essentially means that farms did not generate profits that could be used to repay any debt, however small. In Belarus, the only country reporting positive farm profits, the ratio of debt to profit in 1998 was so high (16.3 times the profits) as to make debt repayment from profits inconceivable

Adjusting the reported profit for depreciation (which is a non-cash expense originally subtracted from sales revenues to calculate the net profit), we significantly reduce the level of losses. Yet depreciation is insufficient to produce positive net cash flows for debt repayment: the ratio of farm debt to profit adjusted for depreciation remained generally negative in 1998 (**Table 2.8, panel C**).

Net Debt and Repayment with Social Assets

Total farm debt is a measure of obligations that farms have toward outside entities. Yet outside entities also owe money to farms, usually for farm products. The obligations of outside entities appear in current assets in the form of accounts receivable. Any drastic repayment strategy would naturally first collect the amounts owing from outsiders in accounts receivable and then sell the inventories for cash. If the realized value of current assets is not sufficient to cover the total debt, additional solutions will need to be found.

Net farm debt is calculated by subtracting the current assets from total debt. **Table 2.9 (panel A)** shows that up to 1995-96 net farm debt was negative: current assets exceeded total farm debt. In 1998, however, full liquidation of current assets was no longer sufficient to cover the farm debt in all countries (except Belarus). The net debt calculations are equivalent to the ratio of debt to current assets in **Table 2.7**: if the ratio of debt to current assets is greater than 1, the net debt is positive.

Table 2.9: Net Debt Position of the Average Farm Enterprise, 1994-98

	1994	1995	1996	1997	1998
A. (Total debt - Current Assets)/Total debt					
Belarus	-2.25	-1.30	-1.13	-1.32	-1.21
Kazakhstan	0.21	0.28	0.28	0.38	0.54
Moldova	-0.17	-0.14	0.10	0.08	0.30
Russia	-0.08	-0.22	-0.16	-0.01	0.18
Ukraine	-0.74	-1.09	-0.54	-0.18	0.08
B. (Total debt - Current Assets - Social Assets)/Total debt					
Belarus	-6.64	-3.13	-3.61	-3.88	-2.34
Kazakhstan	0.00	0.16	0.18	0.30	0.46
Moldova	-0.17	-0.14	-0.82	0.08	0.30
Russia	-0.09	-0.19	-0.24	-0.20	-0.14
Ukraine	-0.82	-1.63	-2.22	-1.13	-0.66

In our analysis of solvency and repayment capacity we consistently focused on current assets, ignoring the farm fixed assets because of their illiquidity and uncertain value. One well-defined component of fixed assets occupies a special place in the rural sector. This is the component of social assets and social infrastructure, which for traditional reasons is carried on the farm balance sheet. Properly speaking, social assets are the responsibility of the government and should be transferred by the farms to local authorities. The farms, in return, should be credited with the value of the social assets transferred to the municipality, and these credits can be used to partially offset and reduce the outstanding farm debt.

If social assets were included alongside current assets in the calculation of net debt, agricultural producers in Russia and Ukraine would be able to pay back their entire debt (**Table 2.9, panel B**). Such procedure of total debt settlement does not seem to be sufficient for the average farm in Moldova and Kazakhstan, where additional asset components need to be factored into the debt resolution program.

3

Major Reasons for Farm Debt Accumulation

Technically, farm enterprises accumulate debt because they do not generate enough profits for repayment of liabilities. More substantively, farms accumulate debt because their creditors are willing to continue extending credit – mainly in the form of spontaneous or involuntary credit (from suppliers and the government), but also as intentional lending (from banks). We start this chapter with a discussion of soft budget constraints as a factor in farm debt accumulation and lack of profitability. We then analyze in detail the policies and internal organizational factors that are directly responsible for lack of farm profitability, and thus indirectly contribute to accumulation of farm debt in CIS.

The Damaging Impact of Soft Budget Constraints

As noted in **Chapter 2**, business entities borrow as a matter of course to the extent that their internally generated funds are insufficient to meet all financing needs. Debt is typically repaid from profits, but corporations do not strive to repay all their debt. Instead, corporations have a long-term target level of debt, which they maintain by balancing debt repayment from profits with new borrowing. Empirical evidence shows that corporations in market economies carefully watch their so-called target capital structure, as expressed by the level of debt on the balance sheet. If new borrowing exceeds repayment of outstanding debt, the result is debt accumulation, which leads to deviation from the target capital structure and immediately shows in the increase of debt-related financial ratios, such as liabilities to assets or liabilities to sales.

Debt accumulation in market economies is limited by both the borrower and the lender. Corporations self-limit the amount of borrowing due to the risk of bankruptcy: if the level of debt deviates too much from the accepted prudent standards, the corporation may be unable to meet its repayment obligations as they fall due and will eventually face bankruptcy, which is a painful process for shareholders, managers, and workers alike. Banks limit corporate borrowing, because it is generally impossible to recover the full amount of the loans from a failing corporation that goes into bankruptcy, even if these loans are originally fully secured and collateralized. The bank itself usually does not face bankruptcy when one of its normal clients goes bankrupt, but no financial institution likes to report bad loans and collateral losses to its shareholders. Unsecured creditors – mainly suppliers – are even more cautious than banks in extending credit to corporations: they do not watch the telltale financial ratios, and instead they simply stop new deliveries (i.e., stop "lending") when current repayment schedules are not met by the corporation.

The self-imposed restrictions on borrowing (by corporations) and lending (by financial institutions and commercial creditors) constitute the mechanism of hard budget constraints, which is essentially driven by the tangible risks that bankruptcy involves for all parties. Since corporations in market economies operate under hard budget constraints, debt accumulation is limited. Since debt accumulation is limited, corporations have to pay attention to their profitability, which is the only guarantee against inadvertently reaching the borrowing limit and risking bankruptcy.

The opposite of hard budget constraints is known as soft budget constraints. This term characterizes an environment in which debt is not limited and borrowers enjoy relatively unrestricted access to credit. Soft budget constraints emerge when corporations can default on their liabilities, i.e., delay or stop repayments, without facing a tangible risk of bankruptcy. In

both theory and practice, the elimination of the risk of bankruptcy essentially implies that an outside guarantor takes over the corporate liabilities in case of default. Normally, this outside guarantor is the government, which bails out the failing corporation by its policies.

The bailout erases the liabilities in default, reduces the level of accumulated debt, and effectively gives the corporation a new lease on life by setting the clock back to the pre-default situation. In addition to these direct, explicit effects, the mere possibility of a bailout by the government creates strong psychological pressures on the creditors to continue lending: there is no motivation for creditors to stop dealing with the corporation if it is implied or understood that the government will step in and cover the obligations in a crunch.

All socialist economies in the Soviet era were characterized by pervasive soft budget constraints. This is a typical feature of central planning, when on the one hand the corporations are told what (and how) to produce, and on the other hand all their input needs (including money) are supplied from the center. One of the items on the agenda of transition from plan to market accordingly stipulated elimination of soft budget constraints and introduction of hard budget constraints. Since soft budget constraints typically go together with "cost-plus" accounting, which removes all incentives for improving cost efficiency and increasing profitability, the transition to hard budget constraints was expected to accomplish a shift to realistically higher profits in addition to stopping debt accumulation.

Unfortunately, the transition from soft to hard budget constraints is one of the most neglected items of the reform agenda, especially in CIS. Formally, central planning has been eliminated in all CIS countries (except Belarus). Yet one of the central goals of agricultural policy in CIS remains the "stabilization of farm production." Since the governments in the major CIS countries adhere to the traditional view that the large farm enterprises are the backbone of agriculture (a view which, incidentally, is no longer supported by empirical evidence), this goal naturally requires ensuring supply of inputs for production, or more generally sustaining a sufficient flow of funds to agricultural enterprises. The CIS governments continue to do their utmost to ensure that the financial state of farm enterprises does not interfere with the goal of stabilizing production. The governments pursue the interests of production in a very similar way to that done in the Soviet economy, making various adjustments to "normalize" the financial state of farm enterprises as needed.

CIS governments generally implement policies that support large farms irrespectively of their financial state. These policies include debt relief in the form of periodic write-offs, tax deferments, and debt rescheduling. They also include various input supply schemes in which the financing arrangements are driven by production considerations instead of profitability and creditworthiness. The various government policies are discussed in detail in **Chapter 5**. Here it suffices to state that these policies are typical of an environment with soft budget constraints, breeding the same lax financial discipline that characterized socialist farms in the pre-reform era.

The negative behavioral effects of soft budget constraints are further reinforced by the virtually total lack of working bankruptcy institutions for farms in CIS, especially in Russia, Ukraine, and Belarus. Farms are offered "credit as needed" without facing the penalty of bankruptcy for irresponsible financial behavior. This inevitably leads to debt accumulation and deprives farm managers of the main incentive for achieving profitability, i.e., generating enough funds for timely and orderly repayment of liabilities.

It may be constructive to conclude this discussion of the impact of soft budget constraints with an illustration (admittedly anecdotal, but otherwise very meaningful) from Ukraine. One farm manager in Odessa oblast in southern Ukraine sympathetically described the fate of another farm manager who had made the mistake of paying off his tax debts only to find that that debt was written off for other farms in the country shortly afterwards. The lesson of such debt relief is clear. Many farm managers interviewed for this study stated their confidence that the government

would soon write off their debt obligations. In such an atmosphere it is difficult to see why farms should make strenuous efforts to pay back debt it it is eventually to be forgiven anyway. The financial policies of CIS governments have had the effect of convincing farm managers that they need only wait and debt forgiveness will be forthcoming. This attitude provides a natural behavioral explanation for the accumulation of debt and lack of profitability in farm enterprises that operate under soft budget constraints.

The Impact of Macroeconomic and Policy Factors

Two major sets of factors explain the dramatic decline in farm profitability in CIS during the 1990s. The first group of factors is related to changes in the macroeconomic environment caused by the transition to a market economy. The second set is associated with the failure of farm managers to restructure the farms in response to the changing economic environment.

The profitability of any enterprise in a centrally planned system could be assured by adjusting the prices and quantities of outputs and inputs used in production. Price support and input subsidies were accordingly the main policy instruments that governments used before 1990 to maintain a sufficient level of profitability and thus reduce debt accumulation. Price liberalization in the early 1990s precluded the use of price controls as a method of delivering subsidies to agricultural producers. Input subsidies also declined in importance due to lack of tax revenues to finance them. Instead, government credits at subsidized interest rate began to be used as a form of producer support, but the volume of subsidized credits to agriculture also shrank over time for budgetary reasons. The combination of lower government support with inability or unwillingness of farm mangers to adjust to market conditions has resulted in lack of profitability, which in turn has led to accumulation of debt. Debt writeoffs remained as the major instrument to combat debt accumulation, and this in itself carried a substantial indirect subsidy component to farm enterprises.

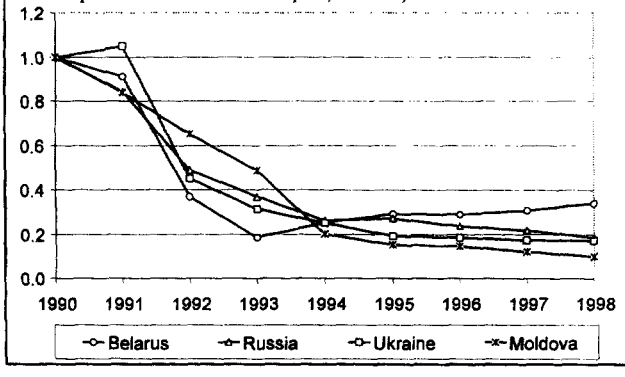
The macroeconomic changes triggered by the transition to market affected the terms of trade for agriculture, the real exchange rate, and the level of budget resources available for producer support. We now proceed to discuss the impact of these factors on the ability of agricultural producers to generate profits and pay back loans.

Changes in Terms of Trade. Price disparity (higher rate of growth of farm input prices compared to farm output prices), or deteriorating terms of trade for agriculture, is commonly regarded by agricultural economists in CIS as the most important factor responsible for the declines in profitability and accumulation of debt in the 1990s. In mature market economies, deterioration of terms of trade for agriculture is a natural, long-run trend connected with differences in factor productivities between agriculture and the rest of the economy. In CIS, terms of trade deteriorated in the early 1990s because price liberalization produced a much greater upward adjustment of the deeply distorted industrial prices (prices of farm inputs) than food prices. Deterioration of terms of trade with farm input suppliers leads to lower profit margins if the agricultural production technology (input use) is unchanged. Agricultural producers in CIS countries do not have the financial resources for radical improvement of the production technology, but producers can adapt to changes in terms of trade by adjusting their input use patterns, i.e., by changing the structure of their internal operations.

The pattern of change in terms of trade in CIS (**Figure 3.1**) reflects the abrupt initial adjustment in relative prices for agricultural producers in 1990-93. The main reason for a sudden change of such magnitude was the accumulation of relative price distortions over years in the Soviet era. In 1990, a tractor was worth 32 tons of wheat in the USSR and 243 tons in the USA, a ton of fertilizer was worth 0.2 tons of wheat in the USSR and 1.5 tons of wheat in the USA, and a ton of diesel fuel was worth 0.7 and 2.2 tons of wheat in the USSR and the USA, respectively. The need for major adjustment in relative prices had become obvious by 1992, when prices of manufactured goods were liberalized in Russia. Despite the resistance of agricultural

interests, prices had been liberalized by the mid-1990s in all CIS countries (except Belarus).

Figure 3.1: Terms of Trade in Agriculture
(Index of prices received by agricultural producers to prices of manufactured inputs, 1990=1)

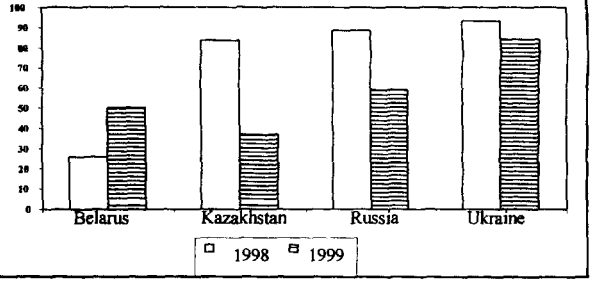


The initial sharp adjustment of relative prices reduced the terms of trade index in CIS to about 20% of its 1990 level. The terms of trade for agriculture stabilized after 1993 (**Figure 3.1**), but the relative prices received by agriculture producers remain far from their pre-reform level. The current relative prices of inputs and outputs are close to world levels, and any attempt at price correction for the purpose of restoring price parity between agriculture and other sectors, which is often advocated in CIS as a solution to the interlinked problems of low farm profitability and farm debt accumulation, will create new price distortions and lead to unrealistically high levels of government expenditure on agricultural support programs.

Real Exchange Rate Appreciation. During the 1990s, the real exchange rates appreciated for all transition economies, but at a different pace[1]. In Central and Eastern Europe, real appreciation of the national currencies occurred in the first two-three years of transition, and the real exchange rates remained relatively stable after 1994. In the CIS countries, real exchange rate appreciation continued until 1998. Between 1995-98, the national currencies of Russia, Ukraine, Belarus, and Kazakhstan appreciated in real terms by 100%, 60%, 40%, and 30%, respectively. The appreciation of national currencies in CIS has led to a decline in both domestic and international competitiveness of local agricultural producers. Foreign competition has increased and revenue-generating opportunities in domestic markets have shrunk.

The negative impact of overvalued national currency on farm profitability is illustrated by the outcomes of the 1998 devaluation of the Russian ruble, which produced a ripple effect among other national currencies in CIS. In 1998, the real exchange rate of the Russian ruble was halved, the Ukrainian hrivna depreciated by more than 60%, and the Kazakhstan tenge lost 15% of its value. Devaluation of national currency usually encourages consumers to substitute domestically produced commodities for imports. There is some evidence that new domestic marketing opportunities are opening for agricultural producers in CIS. Following the devaluation of the ruble, the percentage of profitable farms in Russia increased from 12% in 1998 to 41% in 1999, despite bad weather conditions. A similar change in farm profitability was observed in Kazakhstan, where the domestic currency was also allowed to adjust to equilibrium (**Figure 3.2**).

Figure 3.2: Share of Unprofitable Farms in Total Number of Farms



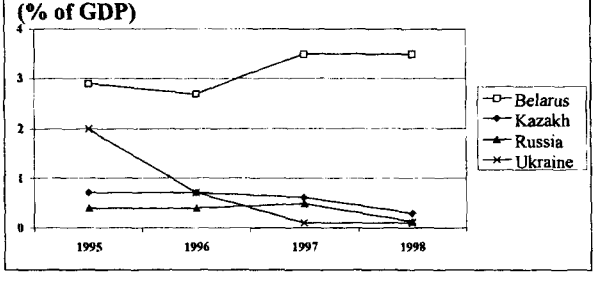
In Ukraine, the effect of devaluation on the number of unprofitable farms was much less pronounced, apparently because of significant deficiencies in many other agricultural policies. In Belarus, on the other hand, the number of

[1] The discussion is based on data from the following IMF reports: *Republic of Belarus: Recent Economic Developments*, IMF Staff Country Report No. 99/143, Nov. 1999 (Fig. 10, p. 35); *Republic of Kazakhstan: Selected Issues and Statistical Appendix*, IMF Staff Country Report No. 99/29, March 2000 (Fig. 23, p. 75); *Russian Federation--Recent Economic Developments*, IMF Staff Country Report No. 99/100, Sept. 1999 (Fig. 5, p. 14); *Ukraine: Recent Economic Developments*, IMF Staff Country Report No. 99/42, May 1999 (Fig. 11 p. 51).

unprofitable farms actually increased in 1999, because the Belarusian ruble remains heavily overvalued and the government insists on introducing new price controls instead of liberalizing the economy.

Lower Level of Producer Support. The goals of macroeconomic stabilization prompted reduction of government subsidies, price supports, and producer grants[2]. Direct price and product subsidies were mostly abolished already during the early years of reform, with obvious negative impacts on farm profitability. Subsidized government credit became the major form of producer support, but eventually the inflationary effects of subsidized credit programs brought about severe cuts in the amount of new government credit available to agriculture. As a percent of GDP declined in all countries, except Belarus (**Figure 3.3**).

Figure 3.3: Government Expenditures on Agriculture (% of GDP)



The cuts in direct and indirect government support came at a time when the banking sector focused its attention almost entirely on investment in high-yield government bonds and practically abandoned lending to the real economy. These changes in fiscal policy forced farm enterprises to look for alternative sources of credit to finance working capital, and they began to resort in an increasing degree to commercial credit and arrears to the government (see **Chapter 2**).

Government Intervention. Simultaneously with the decline in the level of support to agriculture from the central government budget in the 1990s, the authority to make agricultural policy decisions, including setting producer subsidies, has shifted from to regional governments. Regional governments in Russia are currently responsible for more than half the subsidies to agricultural producers. In Ukraine, the regional governments have recently been entrusted with the authority to collect the debt of farm enterprises to the state. These developments endow regional governments with leverage for enforcing their own priorities in agriculture and strengthen their role in agricultural policymaking. While central governments have abandoned direct intervention in farm production, regional governments continue to influence production and marketing decisions of farm managers through administrative trade restrictions, state orders, and de-facto planning of the herd size. Pressures for regional self-sufficiency and the goal of maintaining full employment in the region force farm enterprises to continue the production of unprofitable commodities and drive them deeper into losses.

Government intervention not only affects profitability, but also contributes directly to debt accumulation and thus sets the stage for future writeoffs. The penalties for overdue taxes and deductions to non-budgetary funds (social security, unemployment, health insurance) are draconian. In Russia, these penalties are 0.3% of the overdue amount per day (1% before 1996). Penalties for deductions to social funds continue to be assessed on a daily basis even if the farm has not paid the wages due to lack of liquidity. As a result, the share of penalties in total overdue debt is up to 30% for social security payments and up to 50% for payments to other non-budgetary funds. The penalty component of farm debt requires periodic attention as part of debt relief measures.

A common way of dealing with overdue taxes and social deductions in CIS involves blocking or freezing of bank accounts almost immediately when a farm misses its payments to the government. All moneys subsequently paid into the blocked account are automatically used in settlement of farm liabilities for taxes or social funds. Banks are thus forced to act as tax collectors for the government. These measures naturally encourage farms to shift to various

[2] For a detailed analysis of fiscal policy issues see the IMF reports listed in footnote 1.

barter or in-kind transactions in an attempt to avoid the banking system. They also motivate a variety of opaque transactions that involve flows of inputs and products between farm enterprises and household plots without generating any cash. High penalties for tax arrears and administrative arrest of bank accounts certainly contribute to the demonetization of farm transactions, which reduce the cashflows available to farms and thus lead to a vicious circle of debt accumulation.

The Impact of Farm-Level Factors

Farm profitability, and with it the ability for debt repayment, have been hit hard by the macroeconomic and policy changes during transition. In a market environment, farms would respond to such changes by adjusting their product mix and their cost structure so as to restore profitability and continue normal operation. In transition economies, farms were expected to undergo deep internal restructuring, replacing the command economy attributes of their operations with market-oriented attributes. Such restructuring would improve the efficiency and productivity of former socialist farms and enable them to cope successfully with the changes in the macroeconomic and policy environment.

So far, farm enterprises in CIS have largely failed to restructure in line with market principles. They remain unmanageably large, controlling (with very low efficiency) thousands of hectares of land and employing hundreds of workers. They continue to be committed to a policy of lifetime employment and do not adjust their labor force in response to changing costs. They continue to maintain unprofitable activities in their product mix. They continue to focus on production instead of marketing objectives, and follow inherently wasteful "cost-plus" accounting instead of profit-oriented accounting. They remain responsible for maintaining the rural social infrastructure and for supporting the production on their employee household plots.

The persistence of these traditional command-economy features is attributable largely to pressures applied by regional governments, which continue to view the large farm enterprises as a guarantor of food self-sufficiency and full rural employment. The political-economic view of regional governments is that large farm enterprises must survive with government support, and this view naturally eliminates most of the incentives for managers to restructure their farms. It is easier to live in harmony with regional authorities by doing what is expected and required rather than risk conflict and friction by adopting an independent strategy for internal restructuring.

The failure of farm enterprises to restructure their operations in response to changes in the macroeconomic environment accelerated the general decline in the ability of farms to generate profits. The number of non-profitable farms increased dramatically during the 1990s (**Figure 3.4**), and almost 90% of all farms in Russia, Moldova and Kazakhstan were unprofitable in 1998. Unwillingness or inability to change the cost structure and the product mix led to the unpleasant situation whereby, after 1994-95, each unit of sales generated losses, which furthermore grew over time (**Figure 3.5**).

Figure 3.4: Percentage of Unprofitable Farm Enterprises

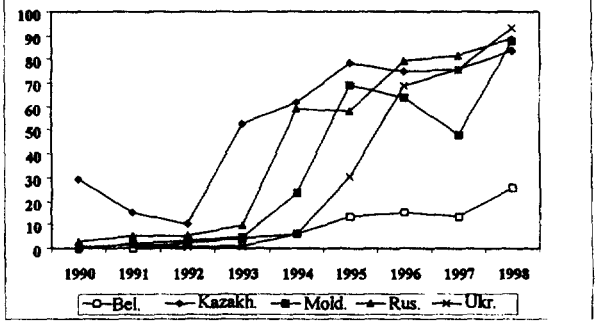


Figure 3.5: Profits-to-Sales-Ratio

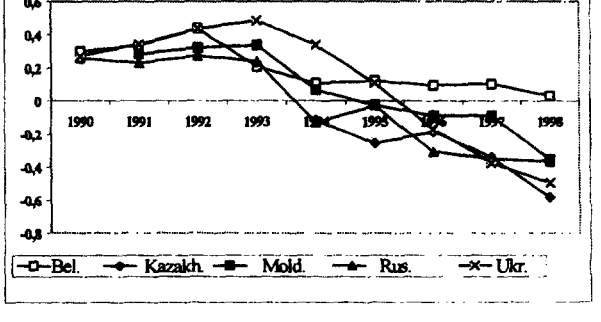


Table 3.1 shows the factors underlying low or negative profitability of the farming sector in CIS.

- The share of output sold in total gross output is declining. This implies that less cash revenue is generated per unit of production and more of the output is used for internal needs, consumption, and possibly barter.
- The efficiency with which assets are employed to generate sales (the sales-to-current assets ratio in **Table 3.1**) is declining over time for Russia, Moldova, and Ukraine.
- Beginning from 1996, the value of sales was not enough to cover current liabilities of the average farm in all countries, except in Belarus.
- Since 1995-96, cost of goods sold exceeded sales revenue, and each additional unit of sales generated only increasing losses in all CIS countries (except Belarus, but even here the profit rate in 1998 was a negligible 3% of sales).

Table 3.1 Major indicators of sales performance and debt

	1994	1995	1996	1997	1998
Sales in percent of gross agricultural output					
Belarus	72	76	75	74	70
Kazakhstan	59	84	79	61	71
Moldova	89	80	78	75	54
Russia	46	56	44	48	51
Ukraine	67	51	51	54	53
Sales-to-current assets					
Belarus	0.87	1.45	1.36	1.39	1.08
Kazakhstan	0.84	1.00	1.11	1.14	0.92
Moldova	1.02	1.05	0.98	1.12	0.78
Russia	1.14	0.94	0.80	0.75	0.74
Ukraine	1.68	1.01	0.92	0.84	0.76
Cost of goods sold per unit of sales					
Belarus	0.90	0.88	0.91	0.92	0.97
Kazakhstan	1.08	1.19	1.22	1.30	1.53
Moldova	0.89	1.03	1.09	1.09	1.19
Russia	1.13	1.03	1.30	1.34	1.36
Ukraine	0.54	0.78	1.00	1.13	1.25
Labor cost per unit of sales					
Belarus	0.21	0.27	0.26	0.21	0.25
Kazakhstan	0.36	0.29	0.25	0.31	0.34
Moldova	0.44	0.38	0.35	0.29	0.33
Russia	0.55	0.36	0.38	0.37	0.35
Ukraine	0.34	0.35	0.41	0.45	0.47

- Labor costs per unit of sales are generally declining. This, however, is primarily a reflection of the faster increase in the cost of industrially manufactured inputs, and not the result of a decreasing labor force.

The attitude toward livestock production is an example of the farms' failure to adjust their product mix toward more profitable commodities. While crop production has been generally profitable, livestock production has been unprofitable since 1992 (**Figure 3.6**). Yet agricultural producers in Belarus, Russia, and Ukraine have not made any significant adjustments toward reducing the share of non-profitable commodities in their product mix (**Figure 3.7**). Losses from livestock production are offset with profits from crop production by a traditional mechanism of internal cross-subsidization, which is encouraged by local policies emphasizing preservation of the livestock herd.

Figure 3.6: The Ratio of Profit/Loss in Livestock Production to Total Sales

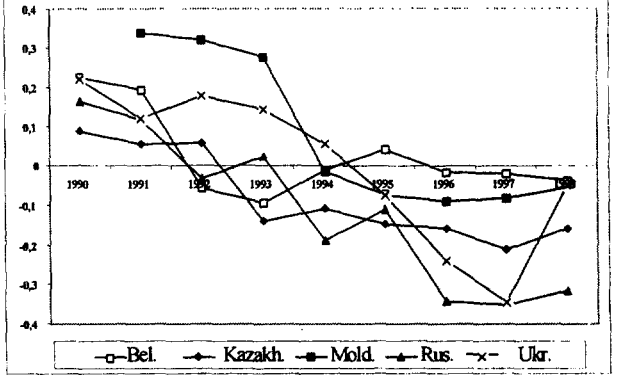
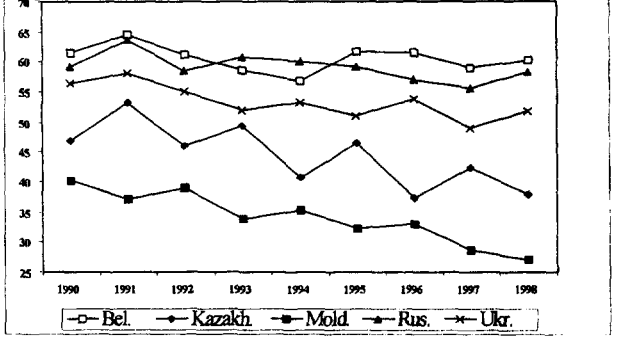


Figure 3.7: Share of Costs in Livestock Production in Total Costs



Two additional factors inherited from the command economy are generally regarded as effectively reducing the level of farm profits. These factors are maintenance of rural social infrastructure and support of the production activity of household plots. Expenditures on social infrastructure are included into production costs of typical farm enterprise and may lead to lower

profitability. The decision to transfer the responsibility for social assets to local governments was made in most CIS countries in the mid-1990s. These decisions have not been implemented, however, due to insufficient budgets in local communities. On the other hand, the compensation that farms receive from the central government for social infrastructure maintenance has decreased. In Russia, only 10% of the actual expenses on provision of social services is reimbursed from the budget. There are no reliable estimates of the share of social infrastructure costs in total farm costs. The problem is probably less serious than is generally believed, because the overall level of social expenditures is declining over time (see **Chapter 4**).

There has always been a traditional symbiosis between the farm enterprise and the household plots of its employees. To this day, farm managers provide a range of support services to household plots, which include use of farm machinery and provision of farm inputs, such as animal feed, seeds, fertilizer, and fuel. Farm managers often assume the responsibility for collecting, trucking, and selling the products from household plots, be it milk, meat, vegetables, or grain. These services are provided at subsidized prices, or sometimes even free of charge, which obviously has a negative effect on the profitability of the farm enterprise. Yet these services must continue to be extended in the present environment, as without them a large segment of the rural population would be unable to survive.

As with the cost of social services, there has been no serious research to determine the cost of support services to household services that farm enterprises absorb. It would be interesting to try to construct a "consolidated" profit-and-loss statement of a farm enterprise with the household plots of its employees. Such a profit-and-loss statement may turn out to be much healthier looking than the profit-and-loss statement of the farm enterprise alone. It could be argued that the relationship between the farm enterprise and the household plots is a case of spontaneous "privatization" of the resources of the farm enterprises. The household plots reap the profits, while the farm enterprise is left with the losses.

Regardless of actual costs, farms' responsibility for social infrastructure and for support services to household plots is a clear example of inherited features that should have disappeared in the process of genuine farm restructuring. These features persist because of political and social pressures, and in principle their impact on farm performance, profitability, and debt accumulation should not be ignored.

4

Social Implications of Farm Debt

The social implications of farm debt for the rural population should be considered on two levels. The first, immediate level concerns the ability of indebted farm enterprises to continue fulfilling their obligations toward their employees and the rest of the rural population. These obligations include payment of salaries, as well as provision of social services and maintenance of social infrastructure, which traditionally has been the responsibility of the local farm enterprise in each village. The second, more indirect level concerns the rights of the rural population in any procedure that attempts to liquidate and restructure the indebted farms, be it formal court-driven bankruptcy or any out-of-court debt settlement program.

This chapter starts with an examination of the direct impacts of farm debt on the welfare of the rural population and continues with some thoughts on their rights during liquidation and restructuring. The chapter ends with a summary of farm-level interviews in four of the five countries participating in this study.

The Impact of Farm Debt Accumulation on Wages and Social Deductions

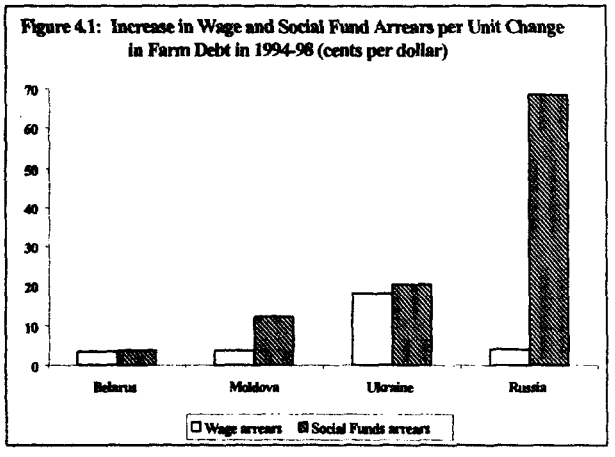
Wage arrears are a relatively minor component of farm debt, reaching about 10% of total short-term liabilities (accounts payable) of farm enterprises (see **Table 2.4**). This measure, however, does not reflect the importance of wage arrears importance for individuals who are forced by the farm enterprise to wait for the monthly salaries. An appropriate indicator of the burden of delayed wages for employees is the number of days that their expected wages are in arrears (**Table 4.1**). This indicator, calculated as the ratio of the volume of wage arrears to the daily payroll or wage expense, has reached alarming levels in Moldova and Ukraine. In these two countries, farm enterprises are respectively 4 and 7 months behind with salary payments to their employees. In Kazakhstan, farm employees go unpaid "only" for 2 months. In Russia and Belarus wage arrears are at a level of about one month, but the situation in Russia shows a serious deterioration: from about one week in 1994 to nearly four weeks in 1998.

Table 4.1. Number of Days that Wages are in Arrears

	1994	1995	1996	1997	1998
Belarus	58	41	28	30	33
Kazakhstan	147	123	119	91	64
Moldova	84	76	87	98	124
Russia	6	10	13	19	24
Ukraine	7	8	122	170	232

The growth in farm debt has led to increased inability of farm management to pay wages to their workers on time and in full. Although wage arrears have remained relatively constant as a share of accounts payable since 1994, the overall increase of farm debt has naturally pushed their absolute value up. In most CIS countries participating in this study, wave arrears have reached absolute levels that are certainly uncomfortable for the employees.

The real increase in wage arrears has been accompanied by an increase in arrears to social funds, which include deductions on behalf of employees to social security, medical insurance, and the unemployment fund. In Moldova and Ukraine, every dollar increase in farm debt between 1994-98 added 10-20 cents to arrears in social deductions (**Figure 4.1**). In Russia, every dollar increase in farm debt resulted in an increase of as much as 70 cents in arrears to social funds in this period.



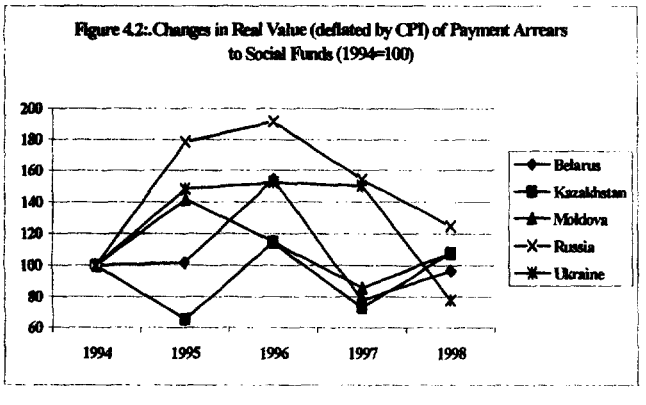
The main increase in the real value of arrears to social funds occurred between 1994-96 (**Figure 4.2**). By 1998, the situation was under control in most countries in the sense that the real level of arrears to social funds had returned to the 1994 level. Both the increase and the subsequent decrease in social fund arrears were largely the result of government policies. The process started because farms allowed themselves to build up arrears to social funds (and wage arrears) as part of the overall accumulation of debt. The governments responded to this component of debt accumulation by imposing draconian daily penalties, which drove the real value of social fund arrears up by 50% or more. When it became clear in 1996 that the farm enterprises would never be able to repay the arrears with the penalties, the governments rescheduled the arrears and waived most of the penalties. A semblance of normalcy was restored to the system at the cost of completely destroying the managers' incentives to keep social fund arrears under control in the future (not to mention the immediate fiscal cost to the budget).

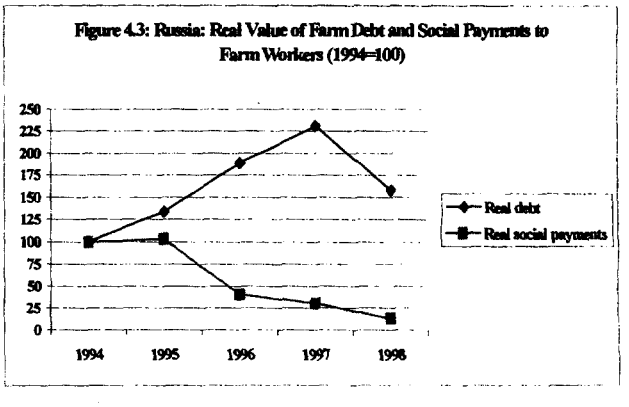
Table 4.2 presents some data on the efficiency of collection of taxes and social deductions from farm enterprises. The collection efficiency for social deductions in 1998 reached a healthy 90% in Moldova and Belarus, but was very low in Ukraine, Russia, and Kazakhstan. The low compliance with the legally required social deductions also explains the increase in the level of arrears to social funds in these countries. Arrears of farm enterprises to social funds do not jeopardize the cash flows to individuals in the short run, but they certainly endanger the viability of the national system of social payments in the longer run.

Table 4.2: Collection Efficiency from Farm Enterprises: Actual Collection of Taxes and Social Deductions in Percent of Assessed Obligations

	Social deductions		Taxes	
	1994	1998	1994	1998
Belarus	81	91	83	91
Kazakhstan	50	17	48	53
Moldova	32	94	36	84
Russia	65	30	99	28
Ukraine	62	39	79	54

Increasing wage arrears and low compliance with social deductions are just one symptom of a generally decreasing attention to the social sphere. While farm enterprises are fighting for physical survival against a background of declining production, lack of profits, and accumulating debt, they are forced to reduce the level of social benefits and services to their employees and the rest of the rural population. Data for Russia show that real expenditures of farm enterprises on social services are negatively correlated with changes in





real farm debt (**Figure 4.3**). The real value of farm debt in Russia almost doubled between 1994-98, while social expenditures declined by 80%.

A different view of the negative correlation between the level of debt and the expenditure on social services and benefits in Russia is presented in **Figure 4.4**. Here, the farm-level social expenditures are expressed as the ratio of the total cost of social services and benefits borne by the farm enterprise to its wage bill. This ratio in effect shows how much social services provided by the farm enterprises add to the wages of the average worker. The relative benefits that farm members derive from farm-provided social services decline over time as the level of debt increases. A similar pattern of declining social benefits is observed also for Ukraine and Belarus (**Figure 4.5**). Incidentally, this pattern suggests that the social expenditures of farm enterprises cannot be held responsible in any measurable degree for the accumulation of farm debt, although in principle they of course act to lower farm profits.

Figure 4.4: Russia: Farm Debt (in billion U.S. dollars, right scale) Compared to Share of Social Payments in Farm Wages (per cent, left scale)

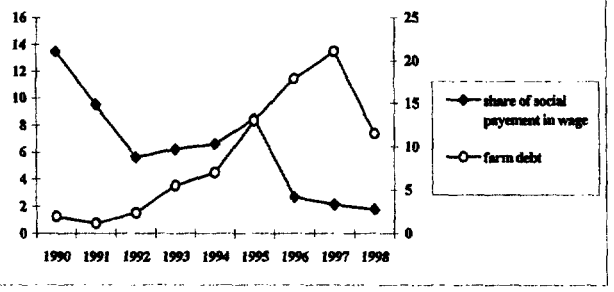
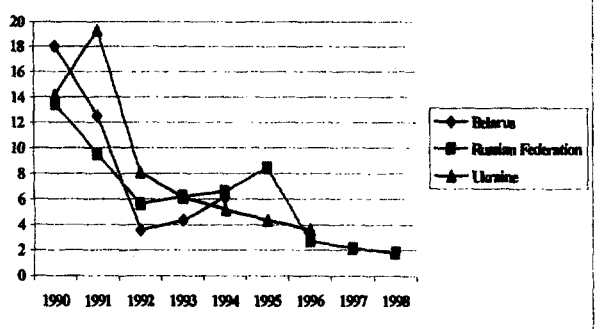
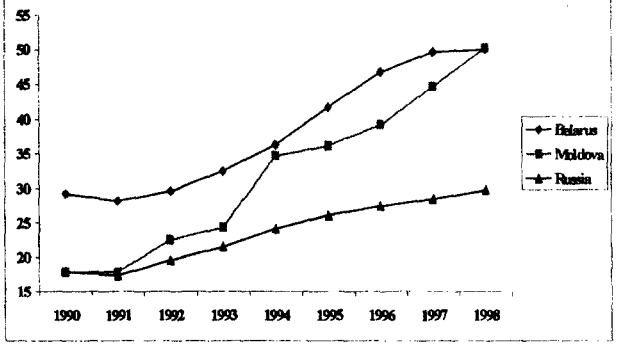


Figure 4.5: Social Payments as % of Farm Wages Paid



The decline in resources available for social services and benefits on the farm level has naturally led to a decrease in the number of workers employed by the farm enterprise in social services. As a result, the number of farm workers "served" by one "social worker" increased sharply between 1990-98 (**Figure 4.6**). This is a positive effect from the point of view of overall productivity of labor in farm enterprises, which has been always advocated by market-oriented experts. Yet we have to realize that the rural population is now enjoying a much lower level of social services and benefits than in the past.

Figure 4.6: Number of Farm Workers per Social Worker on the Farm



Legal Rights and Liabilities of Farm Members in the Context of the Farm Debt Problem

The legal framework for land reform and farm restructuring in CIS designates the members of the former collective farm as the owners of land and other farm assets. These resources are distributed to individuals in the form of shares, which entitle them to fractional ownership in accordance with clear allocation rules. Since land does not have a balance sheet value in CIS, it is allocated to farm members regardless of the outstanding debt of the farm enterprise. Non-land assets, on the other hand, are assigned to individual shares net of outstanding debt. In those relatively infrequent cases when the accumulated debt of the farm enterprise exceeds its total assets, members do not get any asset shares, but they are still entitled to share ownership of land. In the majority of cases, individuals receive both land and asset shares, although their entitlement to

assets may be severely reduced by the outstanding farm debt.

The effect of farm debt on the entitlement to productive assets deters individuals from taking advantage of the opportunity to exit the collective and establish an independent private farm. The asset share that remains net of farm debt may simply be insufficient for starting a new operation outside the collectivist framework. In addition to this physical factor, there is a psychological deterrent associated with the uncertainty regarding protection from potential claims by creditors of the former collective farm. Commercial creditors do not necessarily distinguish between the large farm enterprise, which is the legal debtor, and the new private farms or other entities carved out with net assets. There is no legal way for the commercial creditors to seize the assets of an independent private farmer in repayment of farm enterprise debt, but there is the danger that the former collective farm member will be tainted as uncreditworthy by association. As a result, commercial suppliers may refuse to deliver inputs and services on credit to the new private farmers, just as they refuse credit to the defaulting farm enterprise that the private farmers have left. This is naturally a serious impediment to normal operation of independent farmers.

Because of these and many other factors, the individual shareowners do not withdraw their shares of land and assets from the farm enterprise and leave the resources in joint use, under the corporate management of the farm enterprise. The property rights to land and assets that remain in joint use of the farm enterprise are extremely opaque and uncertain. There is absolutely no guarantee that these assets will not be seized by creditors, even though legally they are private property of individuals, and are not owned by the farm enterprise. When bailiffs arrive with a court order to seize a tractor or a cow, they do not inspect the legal ownership of each asset as recorded in some sort of a share register in the manager's office: they usually seize the tractor or the cow as if it were the property of the indebted farm enterprise.

The case of Kazakhstan provides an extreme illustration of the dangers to which the rural population is exposed by the indebtedness of farm enterprises in the absence of clear property rights in land and assets. In Kazakhstan, the land and asset shares distributed to individuals become part of the asset pool available for liquidation when a farm enterprise goes into bankruptcy. Moreover, the members of a production cooperative (a former collective farm) bear unlimited liability for the debts of the farm enterprise. The list of personal property protected from bankruptcy proceedings in a farm enterprise includes the house, one cow, one horse, and a limited list of essential personal belongings. To avoid being stripped of all property in farm bankruptcy proceedings, individuals can take their land and asset shares out of the production cooperative and lease them to a limited liability partnership, where leased assets are not subject to bankruptcy sale. Although originally recommended in good faith by local experts, this option has been hopelessly abused in Kazakhstan by unscrupulous farm managers, who register a limited liability partnership, entice cooperative members to lease their land and asset shares to the new entity (which effectively means to the manager personally), and then exploit their inexperience to cheat them out of their legal rights and dispossess them of all property by a combination of real and imaginary threats.

While Kazakhstan is certainly an extreme case without a parallel in CIS, it is an example of how the rural population can be affected by farm debt and impending bankruptcy proceedings as long as the property rights of the members in farm enterprises are not explicitly protected. The only way to ensure protection of individual property rights is by withdrawing the assets in physical form from the farm enterprise for individual use or by issuing legally binding and universally recognized title documents to individual shareowners (as is the current practice in Moldova).

The experience in Kazakhstan and less extreme lessons from other CIS countries strongly suggest that any debt settlement program must ensure, at the ground level, the basic rights of the rural population to land and other assets in farm enterprises. It should be recognized that the farm assets were accumulated over the years by the

labor and efforts of the members and that farm debt, in turn, was accumulated due to the incompetence of the management and the irresponsible policies of the government. The attempts to resolve the debt overhang from the past should not penalize the farm members. Their entitlement to a share of land and productive assets must remain inviolate and outside any bankruptcy proceedings. Deviation from this fundamental prescription will inevitably lead to a social disaster, which will probably prove to be much more expensive than any alternative debt settlement program.

Evidence of the Social Impact of Farm Debt from Farm-Level Interviews

The national-level statistical data used in this study were supplemented with a limited number of farm-level case studies. Several farms representing various levels of indebtedness were selected by the counterparts in each country, and farm managers were then interviewed with the purpose of identifying the major factors responsible for farm debt accumulation. This section summarizes the results of these interviews with respect to the social consequences of the farm debt problem.

Belarus. Three farm enterprises were chosen from the same district (Goretsky raion, Mogilev oblast) for case studies. Although the three farms operated under similar natural conditions, they had different levels of debt: low (Gory), medium (Goretsky), and high (Pogodina). **Table A4.1** in **Appendix A** presents the responses of the managers to questions about social conditions on their farms.

The farms with high and medium debt levels (Pogodina and Goretsky) reported arrears to the social funds, which were increasing over time. for these farms. The high-debt farm (Pogodina) also reported wages three months in arrears. The low-debt farm (Gory) farm did not have any social deduction or wage arrears, and paid all wages in cash. The share of wages paid in kind increased with the level of indebtedness: 5% in the medium-debt farm and 20% in the high-debt farm. Higher debt levels obviously lead to cash shortages and force managers to resort to payment of wages in kind. There appears to be a negative correlation between the practice of using farm products to pay wages in kind and the practice of selling farm products to the members: the two courses of action seem to be mutually complementary. There is no clear pattern concerning the effect of farm debt on managers' labor policy: neither the low-debt nor the high-debt farm has plans to change its labor force in the near future.

Kazakhstan. Five farms were interviewed, three in the northern part of the country and two in the south. One farm was characterized as having a low level of debt, one as a medium-debt farm, and three as high-debt farms. The results of the interviews with the farm managers are summarized in **Table A4.2 (Appendix A)**.

All farms irrespective of the level of debt had arrears to social funds. The low-debt farm was the only one that had managed to reduce the level of its liabilities to social funds; in all other farms, the level of social fund arrears increased over time. The low-debt farm was also the only one without wage arrears. In high-debt farms, wages had not been paid for 5-6 months. Farms with low and medium levels of debt manage to pay higher wages than the most indebted farms. There is no clear relationship between the level of debt and the share of wages paid in kind, although the farm with the lowest level of debt also reported the lowest level of in-kind wages. Curiously, all farms participating in the study expected increases of 10%-15% in their labor force in the near future.

Russia. Six farms were surveyed in three oblasts: in central Moscow and Orel in the center and Rostov in the south. Of the six farms, two had low levels of debt, one a medium level of debt, and three a high level of debt. The results are summarized in **Table A4.3 (Appendix A)**.

Most farms had arrears to social funds and the share of these arrears in total debt reached 30%-65%, presumably because of the high component of penalties added daily to accounts in arrears. The high-debt farms reported wage arrears (and also payment of wages in kind), whereas the low-debt farms paid their workers on time. Managers of low- and medium-debt farms are planning to

cut the labor force by half in the next five years. No comparable information was reported by the high-debt farms.

Ukraine. The interviews covered 15 farms in five oblasts across the country. The farms were subdivided into two categories: seven profitable farms and eight unprofitable farms. Although the value of current liabilities was practically the same in farms of both groups, the structure of debt was different. Profitable farms had lower liabilities to social funds (18% of accounts payable for profitable farms compared with 14% for unprofitable farms). Almost two-thirds of unprofitable farms reported that the tax and social fund debt had increased in the last five years, while more than two-thirds of profitable enterprise reported that this debt component had declined.

Profitable farms had lower wage arrears (4% of total debt compared with 14% for unprofitable farms). Only two of seven profitable farms had not paid wages for two months. For three-quarters of unprofitable farms wage arrears increased in the last few years; 75% had arrears of more that two months, of which 25% had arrears of more than a year. Profitable enterprises were more likely to pay their workers in cash than in kind: the profitable farms paid at least 75% of wages in cash. Among the unprofitable farms, at least two-thirds of the wages were paid in kind.

Maintaining full employment is still a major goal for many farm managers in Ukraine. Almost two-thirds of managers (57% of profitable farms and 63% of unprofitable farms) report job preservation as a reason for continuing to produce unprofitable commodities. Ukrainian managers are very conservative in their evaluation of possible solutions for the farm debt problem. None of the managers of unprofitable farms considered the use of land as collateral or the introduction of strict bankruptcy procedures as desirable solutions. Support for these radical measures was also very weak among the managers of profitable farms: only 29% indicated that land should be used as collateral, and only 12% favored application of bankruptcy procedures.

Overall, the results of the case studies suggest that farms with lower level of debt usually do not have wage and tax arrears. These farms pay their workers on time and mostly in cash. There is no clear pattern of future labor-force decisions among farms with different levels of debt. The results of the case studies are not generalizable because of the very small sample size. Yet the impact of farm debt on social conditions emerging from the case studies is consistent with the previous conclusions obtained from the analysis of aggregate data.

5

Country Initiatives for Resolution of Farm Debt

Under central planning, before 1991, farm debt was treated as a purely technical matter of redistributing financial resources between agriculture and the rest of the economy. This approach made sense, because enterprises did not have financial independence: the state controlled the supply of inputs, production, and sales in all enterprises, acting as creditor and debtor at the same time. Mutual offsets between state-controlled enterprises in agriculture and other sectors were the most common form of debt settlement. Procurement prices were adjusted periodically in an effort to ensure a certain level of reported profitability. Remaining losses were erased by paying farms extra subsidies to compensate for so-called unfavorable natural conditions. Centralized investment funds were channeled to non-profitable farms to improve their capital assets in an attempt to increase profitability. Chronically non-profitable collective farms were often transformed into state farms and granted extra support through infusion of equity capital and state-financed investments. State-directed changes in managerial personnel to improve farm performance were also common. However, these measures generally failed to increase profits and reduce debt accumulation, and the government periodically (every five years or so) resorted to debt write-offs for farm enterprises.

Most of these direct state interventions and subsidies have been abolished or significantly reduced since 1991 in CIS (with the except ion of Belarus). Yet policymakers in CIS continue to advocate similar measures as a way of resolving the current farm debt problem. Some local governments propose to convert non-profitable farm enterprises into farms in municipal ownership, which is equivalent to the former practice of converting non-profitable collective farms into state farms. The goal of farm enterprise managers remains production at all costs. Many managers are still convinced that high costs, low profits, and debt accumulation are caused mainly by unfavorable natural and climatic conditions, not by internal inefficiencies, and that their farms should be subsidized to mitigate these effects. Given past experience, most farm managers still believe that their farm debt eventually will be written off. Increasing the level of government support is the most popular prescription that farm managers suggest for dealing with farm debt.

Major Policy Instruments for Farm Debt Resolution

The policy instruments for dealing with farm debt that governments used in the past and continue using today fall into three broad categories: profitability-enhancing options, debt-elimination options, and reorganization options. The menu of major options includes

a) Price support and input subsidies
b) Subsidized government credit and commodity credit
c) Debt write-offs
d) Debt rescheduling
e) Inter-enterprise offsets and barter transactions to settle claims
f) Financial rehabilitation through farm reorganization
g) Bankruptcy and liquidation

The first five instruments on this list (a to e) are inherited from the Soviet era. They were traditionally practiced in the centralized command economy and, despite their acknowledged failure in the past, remained an active part of the policy menu during the transition. Farm reorganization as a tool of financial rehabilitation (item f) was also practiced in various forms in the pre-transition period, when non-profitable collectives were converted into state farms or merged with

relatively profitable entities. Today farm reorganization has much broader implications given the new organizational options in agriculture. Only the last item on the list – bankruptcy and liquidation – is a completely new option: it is based on recent laws and procedures that introduced previously unrecognized concepts into the legal vocabulary of CIS countries.

The relative importance of the various policy instruments has been changing in the course of transition. **Tables A5.1-A.5.5** in **Appendix A** provide detailed information about types of policy instruments that have been used to deal with farm debt in each country since 1992. Subsidies and price support measures, which were the basic instruments for maintaining farm profitability in the centralized market economy, have been declining in importance over time, mostly due to lack of budget resources to sustain agricultural support programs at pre-reform levels. Subsidized government credit had been used as an indirect instrument of delivering producer subsidies during the early and the mid-1990s, but its importance declined at the end of the decade, also due to lack of budget resources.

In the second half of the 1990s, farm debt had reached a level that was judged to be unsustainable and required positive action. Continued reliance on traditional instruments, including debt write-offs, inter-enterprise offsets, and barter transactions to settle mutual claims, had been ineffective. The attention of policymakers accordingly shifted to various forms of farm reorganization, including mergers with solvent enterprises and financial rehabilitation procedures. A certain readiness to invoke bankruptcy procedures for chronically insolvent farm enterprises began to emerge in the late 1990s.

The shifts in the relative importance of policy instruments that have been applied in the 1990s to deal with farm debt shows a progression from reliance on profit-enhancing measures (in the form of price support, input subsidies, tax breaks, cheap credits) at the beginning of the transition, to debt write-offs, inter-enterprise offsets, and debt rescheduling schemes in the mid-1990s, and finally to the recognition that the source of the debt problem is organizational: the collective organization of production in farm enterprises does not encourage financial responsibility and is inherently inefficient, leading to low profits and debt accumulation.

Each of the five countries participating in this study used different sets of instruments at particular points in time, but nowhere in the menu of policy options do we find a prescription for hard budget constraints. Yet international experience clearly shows that hard budget constraints imposing a strict financial discipline are the one key factor that can effectively reduce debt accumulation by restricting access to credit and forcing the farms to restructure for greater efficiency and productivity in the interest of survival.

Table 5.1: Relative Importance of Policy Instruments Used for Farm Debt Resolution in 1999 (ranking on a scale from 0 - not used to 5 - highly important)

	Price support and input subsidies	Subsidized government and commodity credit	Debt write-offs	Debt rescheduling	Mutual settlements and barter	Farm reorganization in collectivist framework	Bankruptcy
Belarus	5	5	4	4	5	5	1
Kazakhstan	3	2	3	3	4	4	5
Moldova	2	4	4	4	4	1	5
Russia	3	4	3	5	4	4	2
Ukraine	4	4	5	5	5	3	0

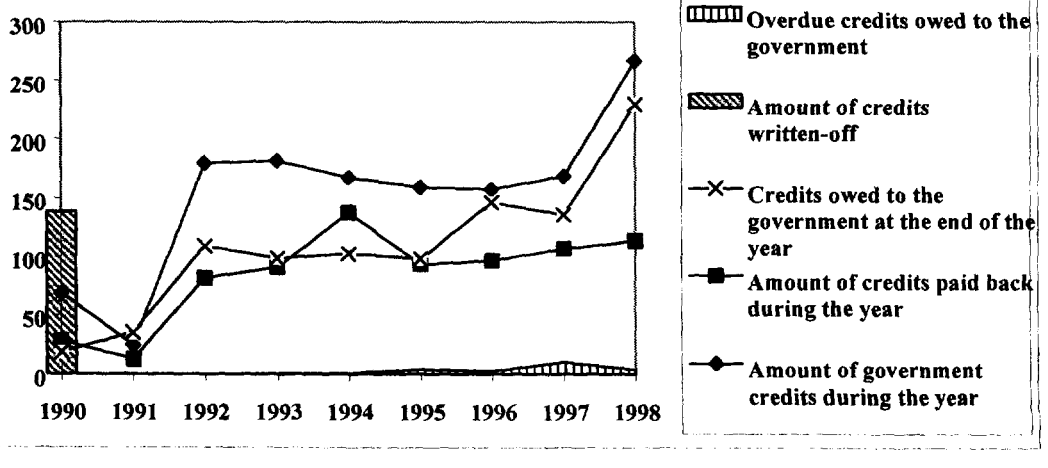
Table 5.1 summarizes the relative importance of the various policy instruments in 1999 in the form of a quantitative ranking. The policy instruments are ranked for 1999 based on the qualitative information in the annex at the end of the chapter. Each instrument is assigned an expert-judgment weight, which is determined from the policy changes described in the World Bank's agricultural policy matrices and the country reports prepared by the counterpart teams for this study. Most countries continue to rely on methods that proved ineffective back in the Soviet period. Thus, in Belarus the main methods for dealing with farm debt are price support and inter-enterprise settlements; in Russia – debt rescheduling; in Ukraine – a mixture of debt write-offs, rescheduling and inter-enterprise settlements. Only Kazakhstan and Moldova resort to radical measures involving bankruptcy and liquidation as an option for dealing with the debt of insolvent farms, although bankruptcy laws are in place in all other countries as well.

Country-by-Country Review of Debt Resolution Measures

Belarus. In 1990, the government wrote off $138 million of agricultural producers' debt (**Figure 5.1**). Throughout the 1990s the level of producer support provided by the government was high enough to ensure accounting profits for most farm enterprises. In addition, administrative methods were used to deal with the accumulation of farm debt. For example, payment arrears between farms and their creditors were offset (cleared) twice a year by the National Bank, which also issued credits for the amount that had not been covered in these offset transactions. The situation changed in 1998, when the relative share of past-due credits increased dramatically (from the equivalent of $136 million to $230 million). The debt repayment problem of 1998 was the result of strict price controls that had been imposed by the Belarus government following the Russian financial crisis. The number of farms reporting losses increased from none in 1990 to 369 in 1997 and 639 in 1998. It was decided to deal with the problem by targeting the population of unprofitable farms with a combination of short-run measures of debt relief and support.

All collective farms were divided into three groups according to their financial status. The first group of enterprises consisted of profitable farms, which were profitable in part because of their better resource base and in part because of better management. The profitable group consisted of 17% of farm enterprises in Belarus. These farms were allowed to keep their identity, and it was believed that their efficiency could be improved by internal reorganization involving the creation of separate production and marketing units. The second group (57% of farm enterprises) included farms that were breaking even. According to Belarus experts, the internal reorganization of these farms had to be supplemented with new investment, which was necessary to make them

Figure 5.1: Belarus - Government Credits to Agriculture (mln. dollars)



profitable. To secure the required investment resources, these farms could merge with other profitable farms or integrate vertically with agribusiness companies.

The third group included the loss-making farms (26% of farm enterprises in 1998). It is impossible to determine if these farms were "chronically" unprofitable due to poor management or due to price controls and trade constraints imposed by government policies. The performance of the unprofitable farms was expected to improve after a government-sponsored program that included postponement of the financial liabilities to the banks and the government for three years and a holiday from land and property taxes for four years. If the unprofitable farms failed to improve their performance despite these measures, they would be liquidated and reorganized into new legal entities (presidential decree of March 1998). The main method of reorganization of insolvent farms proposed by the Belarus government was merger with other profitable farms or with input suppliers and food processors. As an incentive to merge with unprofitable farms, the profitable partners were allowed seven years to pay back the debts and were granted the same tax privileges (presidential decree of January 1999). Raion and oblast authorities have so far identified 249 "chronically" unprofitable farms eligible for participation in this program. The option of breaking up the existing unprofitable farms into smaller and more manageable units is not discussed in Belarus.

The Bankruptcy Law (last amended in June 1993) allows creditors to sue in the courts for debt recovery through the sale of debtor's assets. So far, the Bankruptcy Law has not been applied to agricultural producers.

Kazakhstan. During most of the 1990s the government tried to deal with outstanding farm debt by rescheduling and write-offs. In 1994, the government rescheduled 1.2 billion tenge ($34 million) until 2004. In 1995, the Council of Ministers decided to convert farm debt to state debt by transferring to the State Fund for Financial Support of Agricultural Producers. By this decision, the government accepted de facto that at least part of the outstanding farm debt could not be recovered. Between 1994-97, a total of 53 billion tenge (half the outstanding farm debt) was transferred to the State Fund and 29 billion tenge was written off. Allocation of government credits to agriculture virtually ceased in 1998-99 (**Figure 5.2**), and bankruptcy began to be enforced as the major method of dealing with farm debt.

The Law on Bankruptcy was adopted in January 1997. At the end of the year, in December 1997, the government issued a set of specific recommendations concerning the implementation of bankruptcy procedures in agriculture. Given that 80% of farm enterprises in Kazakhstan were unprofitable, with high levels of debt, reorganization and liquidation of insolvent enterprises was declared a major goal of national agricultural policy.

As in Belarus, all agricultural enterprises in Kazakhstan were divided into three groups according to their financial situation. The first group included farms in a stable financial condition (19 % of all farm enterprises as of December 1997). The second group included loss-making farms with overdue payables, which nevertheless had sufficient liquid assets and could probably recover if proper measures for financial stabilization were implemented by attracting new investors (48% of farm enterprises). The third group included the insolvent farms with debt exceeding total assets (33% of farm enterprises). Farms from the third group were to be declared bankrupt and liquidated. Farms from the second group that failed to recover despite appropriate support measure (including injection of investment funds by new owners) would eventually be reclassified to the third group and also liquidated.

The national program of farm restructuring in Kazakhstan was launched in 1998. Of 1828 enterprises classified as insolvent (the third group), only 378 have been liquidated so far (132 through court procedures and 246 through out-of-court settlement). Bankruptcy papers have been filed for another 1034 farm enterprises, which await court action. The liquidation of insolvent farm enterprises may take different forms: the

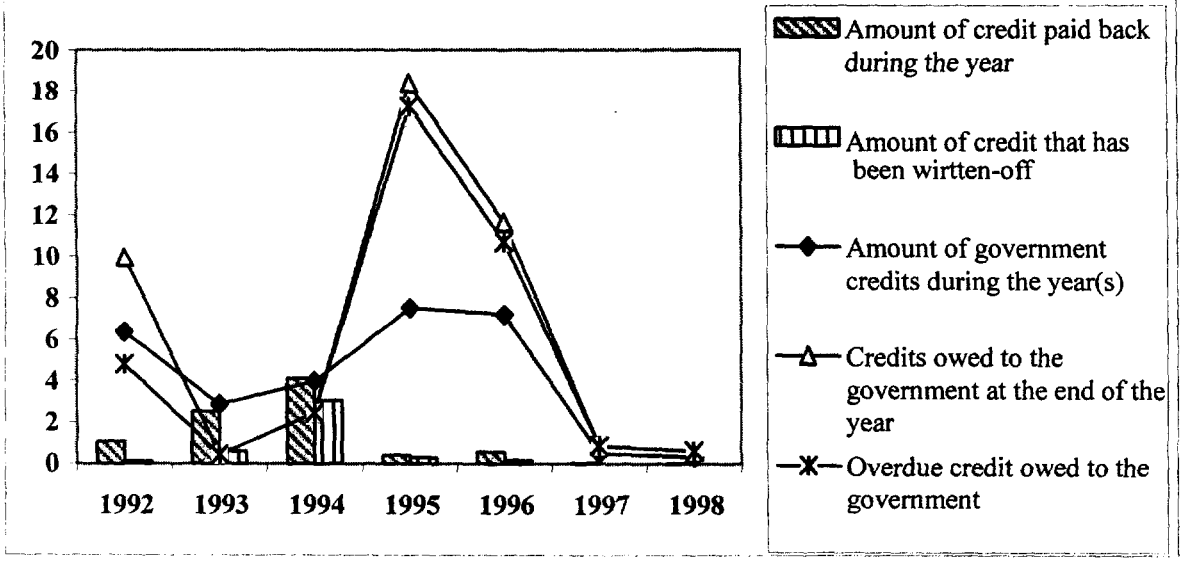
farm may be sold in its entirety to a single buyer, the farm may be sold to the workers' collective, or the farm may be split among several outside investors.

The Civil Code in Kazakhstan imposes a serious asymmetry on member-shareholders in agricultural production cooperatives (about half the farm enterprises in the country) and other legal forms, such as limited liability partnerships and joint stock companies. Cooperative members in Kazakhstan do not enjoy the protection of limited liability: first, their land shares (i.e., individual land use rights) are treated as part of the asset pool available for satisfying the claims of the creditors; second, if the assets of the cooperative (including the asset shares of the individual members) are insufficient to repay the creditors, the members bear subsidiary responsibility for the residual debt with their personal property in proportion to their share in the cooperative. In cases when the subsidiary responsibility of the members is invoked, only the house, one cow, and a limited list of household items are protected from the bankruptcy sale.

These legal provisions may clearly lead to total ruin of large segments of the rural population, leaving them destitute without any land or assets. Agricultural economists in Kazakhstan therefore recommend speedy conversion of agricultural production cooperatives into limited liability partnerships and encourage the members to lease their land shares to the manager of the limited liability partnership, as leased land in a limited liability partnership is apparently not subject to bankruptcy sale. While this approach creates a shelter against loss of individual assets in case of bankruptcy, it clearly puts the weak individuals at the mercy of the strong and experienced lessor, who is typically a former manager of the cooperative with considerable intimidating influence on the residents in his village. These harmful implications of the Civil Code and the bankruptcy law highlight social deficiency of the present legal framework, which must be amended to prevent further damage to the rural population.

Moldova. During the 1990s the government of Moldova periodically implemented debt write-offs for farm enterprises (**Figure 5.2**), but the real volume of farm debt continued to grow. The level of farm debt in Moldova as of January 1999 was 2 billion lei, or more than 25% of GDP. The amount of overdue debt was also increasing over time.

Figure 5.2: Moldova - Government Credits to Agriculture (mln. dollars)



Toward the end of the 1990s, the government realized that the policy of continuing soft budget constraints for large-scale farm enterprises unwilling to adapt to the new market conditions was the major cause of debt accumulation. In 1997, Moldova developed an integrated plan for settlement of farm debt simultaneously with restructuring of farm enterprises. The idea was to eliminate the farm debt overhang from the past and to present the farm members with an opportunity to start new, debt-free farm operations. There was an understanding in Moldova that farm debt had been created not only by farm management and the workers, but also by the actions of the government. The debt settlement program in Moldova carefully evaluated the responsibilities of the main parties (government, management, workers) in creating the debt problem and proposed a scheme for equitable sharing of the burden of debt settlement among them. A detailed description of the National Land Program launched in Moldova in 1997 is given in **Appendix C**.

The debt settlement program in Moldova opts for managed out-of-court resolution instead of traditional court-driven bankruptcy proceedings. The main principles of the managed farm debt settlement procedure implemented under the National Land Program are summarized below.

- The decision to join the debt settlement program is made voluntarily by the general assembly of members of each farm.
- An elected debt settlement committee announces the decision and invites creditors to submit their claims.
- Debt not claimed within one month of the public announcement is written off without recourse.
- The remaining debt is settled with farm assets, including mutual offsets. Secured debt has priority over unsecured debt. Collateralized assets are transferred in full to lien holders.
- Debt to the state (central government, local authorities, social fund) is settled by swapping of social assets.
- Land, livestock, and machinery distributed to individuals in the form of shares are not included in the pool of assets available for satisfying the creditors' claims.
- Debt to private creditors that remains after exhausting the pool of available assets is settled by the government in the form of non-tradable tax credits issued to the unsatisfied creditors.

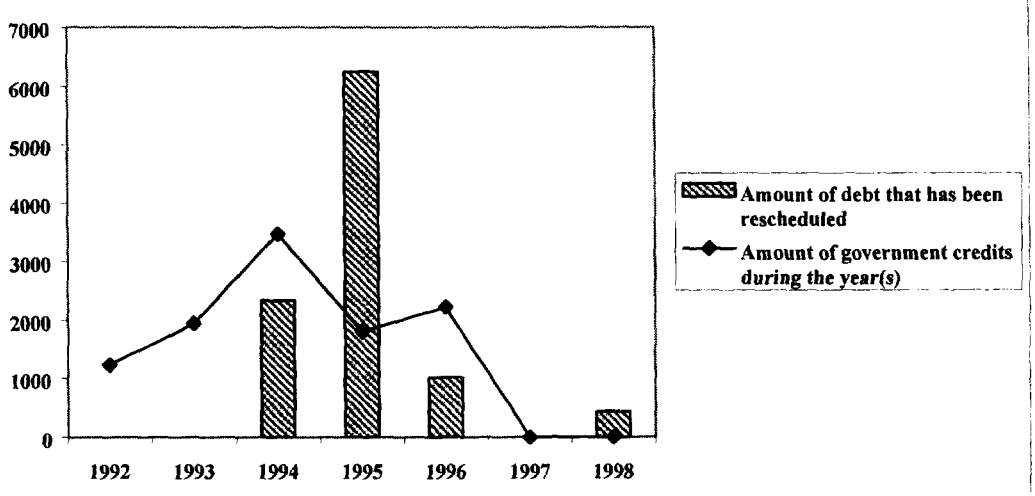
The process ends with final liquidation of the original farm. No legal successor is created. Instead, the former members are encouraged to create new debt-free entities using their land and asset shares that have remained untouched by the liquidation proceedings. The individual property rights are further strengthened and protected by conducting comprehensive land surveying and titling operations simultaneously with the debt settlement program.

The out-of-court procedure is launched if the farm secures the agreement of all creditors. An alternative scheme based on formal court-driven bankruptcy and liquidation can be implemented if no agreement is reached with the creditors.

The Moldova debt settlement model acknowledges that all parties – the government, the management, the workers, and the outside creditors – bear a portion of responsibility for debt accumulation and thus share in the costs and outcomes of the process.

Russia. The policy instruments that were used during the 1990s to deal with farm debt in Russia changed from write-offs and unconditional rescheduling to conditional rescheduling and financial rehabilitation (**Figure 5.3**). Application of the bankruptcy law to agriculture is still very limited.

Figure 5.3: Russia - Government Credits to Agriculture (mln. dollars)



In 1998, the government decided on massive rescheduling of farm debt for five years, with payments to start from January 2000 at an annual interest rate of 5% on outstanding debt. The 1998 rescheduling was conditional on the farms' ability to continue discharging their current obligations in a timely manner. The deferment included 5.7 billion rubles to the federal budget, 10 billion rubles to the pension fund, 2.5 billion rubles to social security, 1.5 billion rubles to medical insurance, and 1.5 billion rubles to unemployment insurance. The social security fund and unemployment insurance wrote off all penalties for previous non-payments. Another 3.5 billion rubles was written off in 1999 as a compensation for regions with unfavorable natural conditions.

One of the weaknesses of the present debt rescheduling schemes in Russia is the lack of coordination between various creditors and suppliers that have the right to block the farms' accounts in case of nonpayment. While relief from government debt ensures that the government will refrain from blocking the farm's account, there is no guarantee that another parastatal – a power utility or a fuel supplier – will not put a new restraint on the farm.

The participation of agricultural producers in debt rescheduling programs in Russia is voluntary, and only few farms decided to take part, presumably because of the compliance conditions attached to the scheme. Bankruptcy is regarded as a viable alternative to debt rescheduling. So far, however, there have been very few applications of the bankruptcy law to farms. The government body in charge of bankruptcy proceedings decided back in 1994 not to engage in farm bankruptcies, concentrating its limited resources on monitoring the financial performance of much larger debtors. As a result of this policy, only 71 of 27,000 farms in Russia were involved in bankruptcy proceedings as of 1999.

The efficiency of the bankruptcy law depends on several criteria:

a) The definition of insolvency;
b) Opportunities for financial rehabilitation
c) The order of priority of creditors' claims on farm assets.

According to the Russian Law on Bankruptcy, any company (not necessarily a farm) can be declared bankrupt if it does not pay its obligations within three months after due date and the level of debt is at least 500 times the minimum wage. The decision of the Arbitration Court is needed to declare a company bankrupt. debtors.

In Russia, the bankruptcy law is biased against the rights of the creditors. The claims of secured creditors are preceded by the claims of bankruptcy administrators (court and administration expenses) and the claims of members and workers (disability and health claims, wage arrears, social payments), while unsecured non-government creditors are at the bottom of the order of priority.

The Russian order of priority is similar to that in Germany, Holland, Hungary, and Poland (**Table 5.2**). In the USA and Czech Republic, on the other hand, secured creditors have the first priority in settling claims.

In addition to the obstacles associated with the relatively low order of priority, creditors are deterred by the high cost of court proceedings and the low probability of being paid even in case of a favorable judgment. The total absence of a system of lien registration in Russia makes collateral and security extremely nebulous concepts. The secured creditor has no control over the collateralizing asset, and assets offered as collateral can and have been sold in the same pool with other assets.

Because of these difficulties and complications, bankruptcy proceedings are seldom invoked for settling debts in Russia. Instead, creditors use the more flexible arbitration courts to get an order allowing them to seize some of the most valuable assets without taking the debtor through full-scale liquidation. The seized assets are then auctioned to cover the debt.

Ukraine. The methods of addressing the farm debt problem in Ukraine have not changed significantly compared to the ones used under the centrally planned system. Write-offs, mutual offsets, debt rescheduling, and acceptance of settlements in kind are the most common instruments of debt relief. Grain is "legal tender" for payments to tax authorities and the pension fund. Electricity arrears have been settled by mutual offsets for the amount that the government owed farms for maintenance and construction in the social sphere. Debt relief measures are important, because the government freely resorts to draconian administrative means of enforcing payments to the budget. If a farm is unable to pay its current tax liability, the farm's bank accounts are blocked and all moneys paid into the blocked accounts are automatically redirected to the tax authorities.

Debt relief is the main policy aimed at alleviating the financial difficulties of former state and collective farms. Debt relief measures include routine (in 1992, 1993, 1997, 1998 and 1999) and unconditional writing off, extension, and restructuring of debt obligations of farms to the government. Interviews with large farm managers indicate that such habitual actions have had the effect of convincing farms that they need only wait and debt forgiveness will be forthcoming. Many farm managers interviewed in the course of the study stated their confidence that the government would soon write off their debt obligations. In such an atmosphere it is difficult to see why farms should make strenuous efforts to pay back debt to the state, if such obligations are to be forgiven anyway.

Table 5.2: The Order of Satisfaction of Creditors' Claims

	Russia	Kazakhstan	USA	Germany, Holland	Hungary	Poland	Czech Republic
Court expenses	1	1	2	1	1	1	1
Administrative expenses	1	1	2	1	1	1	1
Creditors with collateral	3	2	1	2	2	2	1
Other creditors	5	5	3	4	4	4	3
Payment of wages	2	3	2	1	1	1	1
Tax authorities	4	4	2	3	3	1	2
Social funds	4	4	2	3	3	3	2

Source: TACIS, *Farm Insolvency in Russia: Identified Problems and Possible Solutions*, Project RF27, Brussels, August 1999, p. 36.

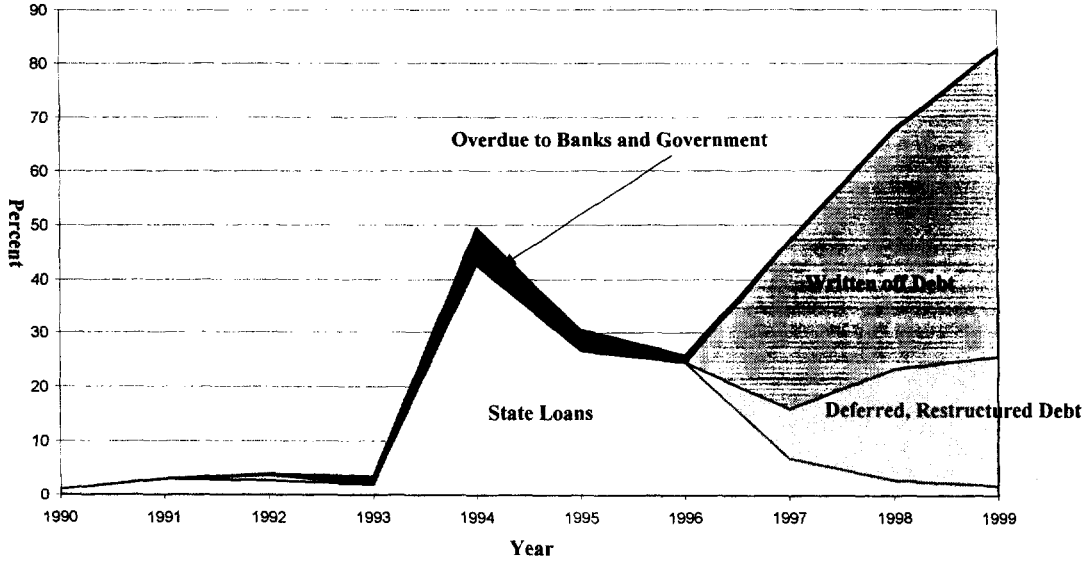
The tradition of debt write-off has continued in 2000. A law passed in March 2000 ordered the write-off of all tax and other government debt for farm enterprises that restructured in accordance with the latest presidential decree of December 1999. The law ordered that tax debt, penalty payment debt, and debt for input purchases (advanced by the government) for processors be written off as well. The law called for additional legislation to write off debt for government credits advanced to agricultural enterprises through processors and procurement organizations.

The significance of debt relief, i.e., written off, deferred, restructured, and overdue debt, compared to total farm debt to the government and banks can be seen in **Figure 5.4**. The portion of total debt affected by relief measures was growing over time, and by 1999 more than 80% of outstanding plus written-off debt fell in this category.

To date, Ukraine does not have effective bankruptcy legislation for agricultural enterprises, and in 1999 a five-year ban on bankruptcy was imposed for large farms. This policy, combined with the absence of land markets due to intentional legislative efforts, has protected Ukrainian large farms from their creditors and effectively prevented their breakup despite severe financial pressures.

The goal of government policy has been the "stabilization of farm production," and the government has done its utmost to ensure that the financial state of agricultural producers does not interfere with fulfillment of these functions. The government approach has been spectacularly unsuccessful in halting the accumulation of debt, raising farm profitability, or halting the decline in production that has been going on since 1990. The government policy has failed, because it is suited for a centrally managed economy where the state has full control over farms, which is no longer the case in Ukraine or anywhere in CIS. All through the 1990s, the traditional policies of write-off, rescheduling, and in-kind payments treated the symptoms rather than the causes of the debt problem. The core reasons for debt accumulation, i.e., the distortion of incentives by soft budget constraints and the inability of farm enterprises to perform as profit-oriented firms, have not been addressed.

Figure 5.4. Cumulative Percent of Farm Debt (plus writeoffs) to Banks and Government that is Overdue, Deferred, Restructured or Written Off, 1990-1999



6

The Problem and a Solution Framework

The main goal of the agricultural transition agenda in both CEE and CIS is to move toward a market-oriented agriculture, while improving productivity and efficiency of resource use. This requires a radical change in farm structure and operation, as the traditional large collective and cooperative farms differ radically from the farms that actually exist in market economies. Hence the persistent emphasis that the international experts are placing, since 1990-91, on the need for deep internal restructuring of farms in the interest of achieving higher productivity and improving the living standards of the rural population.

Viewed in the context of these goals, farm debt is a serious constraint for the implementation of meaningful restructuring and resource privatization in CIS agriculture. First, it prevents the exit of individual farm members from the collective structure, because they are responsible for a portion of the debt and may not be able to borrow on their own through financial institutions to meet the operating needs of their new farms. Second, debt obstructs restructuring of the traditional collective enterprises into new viable entities, because the designated shareowners – the members of the farm enterprise – face uncertainty regarding the net value of the assets they potentially control and the creditworthiness of the new legal entities being created from the collective. Most CIS countries are struggling with the problem of debt overhang in farms. Many of these countries have made attempts to solve the problem. However, the general lack of political will and the prevailing unwillingness to make radical changes in the core of the inherited collective structure have resulted in temporary ad hoc solutions. Instead of treating the underlying causes, these ad hoc measures typically address the symptoms and actually lead to further deterioration of the rural financial situation.

To resolve the farm debt problem effectively, governments need to apply measures that address the non-conducive economic environment of the farms, including the persistence of soft budget constraints, as well as the inherited unproductive internal organization. Effective resolution of the farm debt problem will remove one of the major bottlenecks in the process of agricultural reform.

Nature of Farm Debt and Repayment Capacity

The farm debt situation in the CIS has two characteristic features: first, the real debt of the farm sector has been rising since 1990 (**Figure 6.1**); second, the term structure of debt has shifted almost entirely toward short-term, current liabilities (**Figure 6.2**). The old long-term debt, never a major component of farm liabilities during the Soviet era, was wiped out by the galloping inflation of the early 1990s, and in the absence of appropriate indexation mechanisms the sources of new long-term lending largely disappeared between 1990 and 1993. The growing farm debt in the region is thus generally new and fairly recent debt, not debt inherited from the Soviet period.

Table 6.1: Selected Financial Ratios: Average for CIS-4

	1990	1994	1998
Debt to sales	0.16	0.49	1.20
Debt to total assets	0.10	0.17	0.15
Debt to current assets	0.28	0.60	0.89
Debt to liquid current assets	0.58	2.27	4.27

Local experts and politicians as well as representatives of the international donors always talk about the farm debt problem in CIS. Western scholars usually analyze farm debt and detect potential debt-related problems by calculating various financial ratios based on the balance sheet and the income statement. The standard ratios calculated for the CIS countries in the course of this study certainly reveal a deterioration of financial situation over time as debt levels are seen to increase, but the values obtained for most of these ratios are not dramatically high. Thus the ratio of debt to total assets and even the ratio of debt to current assets are both comfortably less than 1 (**Table 6.1**). This means that, in conventional terms, the CIS farms are not bankrupt at all: they have enough assets (even only current assets) to cover the outstanding debt with a sufficient safety margin. The ratio of debt to sales measuring the ability to repay debt from current revenues is not alarming either (**Table 6.1**): farm debt is of the order of annual sales, which means that one year of sales revenues is sufficient to repay the entire farm debt in CIS. Debt levels of one credit-year are not regarded as catastrophic anywhere in the world. Of course, the numbers in **Table 6.1** are based on sector averages for each country, and do not allow for the distribution of farms over the entire spectrum of ratios. Yet tentative distributional analyses carried out by the counterpart teams indicate that the percentage of farm enterprises with critically high indebtedness levels (measured relative to assets and sales) is on the whole very low.

The situation in the CIS farm sector, however, is not really amenable to the application of standard financial ratios. The rationale behind the ratio of total debt to total assets is that the assets can be liquidated at near their balance sheet value to repay debt. This is a valid assumption in market economies, where fixed assets are usually reported in the balance sheet at their historical value (net of depreciation), which is substantially below the current replacement or market value of the assets. Therefore, even when companies and creditors allow for the fact that during liquidation the assets sell at a deep discount, the realized value of fixed assets makes a substantial contribution to debt repayment. In CIS farms, the fixed assets are periodically revalued upward by indexing to various components of price inflation, and their reported book value appears to be grossly overestimated. In other words, there is no chance that the fixed assets of CIS farms will ever be realized at anywhere near their balance sheet value. As a result, the comfortable debt to assets ratios of CIS farms are totally misleading.

Figure 6.1: Real Debt per Farm: Index and US Dollars

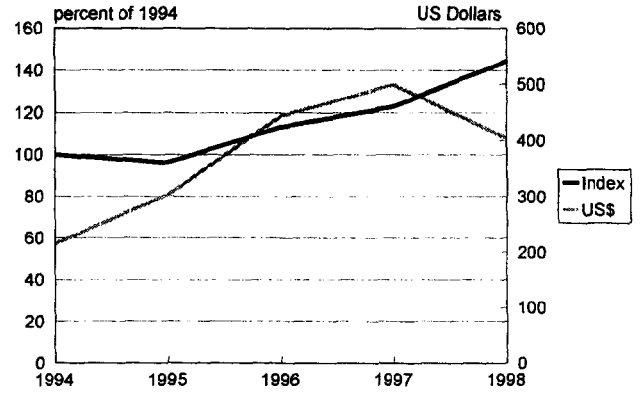
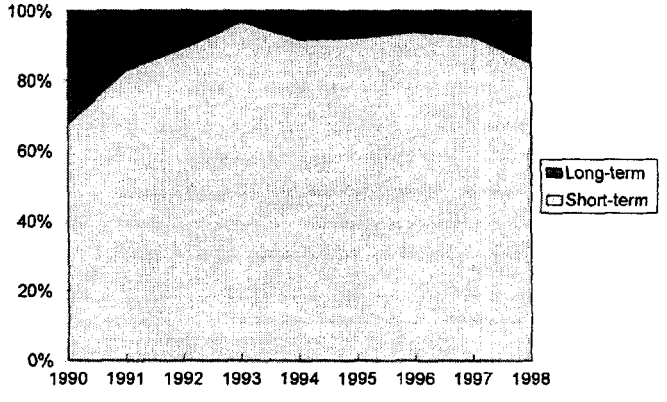
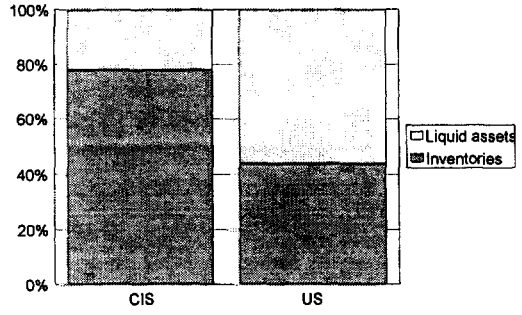


Figure 6.2: Term Structure of Farm Debt



The problem of asset values is especially acute in the CIS, but companies everywhere in the world face problems with estimating the realizable value of their fixed assets for purposes of debt repayment. Therefore, a common practice in the West is to replace total assets in the denominator of the ratio with current assets, which do not include fixed assets. The result is the ratio of debt to current assets, which is a more strict measure of indebtedness. Current assets are usually less than

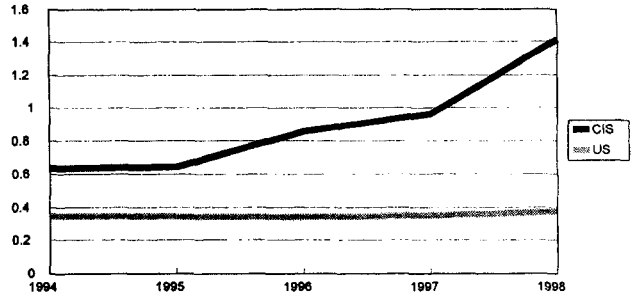
Figure 6.3: Share of Inventories in Current Assets: 1998



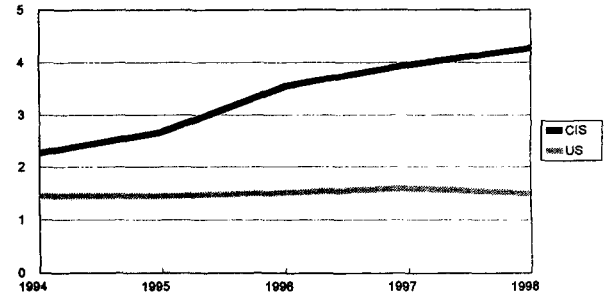
a year old, and their book value is therefore close to their cash value. Current assets are much more liquid than fixed assets, i.e., they are much easier to convert into cash. They consist of accounts receivable, which are practically near-cash (assuming that they can be collected from debtors), and inventories of inputs, raw materials, finished goods, and unfinished work in process, all of which are also assumed relatively easy to sell and convert into cash. In CIS farms, inventories constitute a much larger component of current assets than, for instance, in US farms (**Figure 6.3**). There are suspicions that much of these inventories, whether finished products or old stocks of inputs, are not really saleable, certainly not for their book value, just like fixed assets. It is therefore advisable to measure farm indebtedness in CIS by means of an even more stringent ratio. This so-called quick or acid ratio measures debt only in relation to liquid current assets, i.e., cash and near-cash, excluding the less liquid and potentially unsaleable inventories.

All three basic ratios measuring the capacity of farms to repay their debt – the ratio of debt to sales, the ratio of debt to current assets (including inventories), and the ratio of debt to liquid current assets (excluding all inventories) – increase over time, which is a definite sign of rising indebtedness (**Figure 6.4**). Yet while the values of the first two ratios are not particularly alarming by world standards, the ratio of debt to liquid current assets rises to stratospheric levels. On average in Russia, Ukraine, Belarus, and Moldova this ratio rose from 0.6 in 1990 to over 4 in 1998. This means that the liquid assets, when converted into cash at their full book value, will cover less than 25% of current farm debt. The corresponding ratio for US farms is 1.5, i.e., liquid assets of US farms cover 67% of current debt. Moreover, for US farms all three ratios have remained perfectly steady over the years: there has been no deterioration in the solvency of US farms, while CIS farms have become much less solvent over the decade of transition.

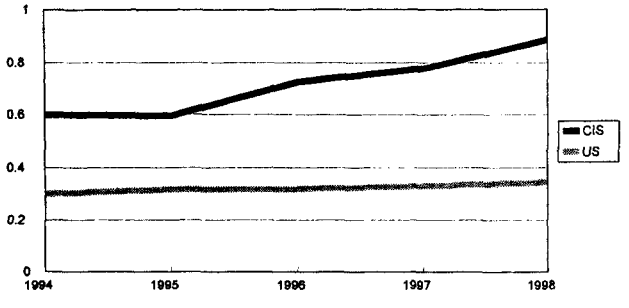
Figure 6.4: Debt to Sales: CIS-4 and US



Debt to Liquid Current Assets: CIS-4 and US



Debt to Current Assets: CIS-4 and US



While all three ratios point to increasing indebtedness, it is particularly the ratio of debt to liquid assets that confirms the existence of a serious problem in CIS farms: farms can only repay a small fraction of their debt from cash and near-cash reserves. To repay the bulk of their

debt, they have to rely on sale of inventories and liquidation of fixed assets, which is a proposition with dubious and uncertain outcomes even in established market economies.

Debt and Profitability

Why is there a contradiction between the ratio of debt to liquid assets, which presents a grim picture of debt repayment capacity, and the ratio of debt to sales, which optimistically suggests that debt can be repaid from just one year of sales revenue? The reason, quite simply, is that farm sales in CIS do not produce profits. The proportion of farms reporting losses has increased markedly since 1994, and well over 50% of farm enterprises are unprofitable in recent years (**Figure 6.5**). Sales revenue is entirely absorbed by wages and other production costs, which add up to 140% of sales. In other words, farms are losing on average almost 40% on each ruble of sales revenue (**Figure 6.6**). Farm operations do not generate net income that can be used to repay debt, however small.

Declining profits (and increasing losses) appear to be the major determinant of debt accumulation in CIS farms. The level of debt increases in inverse proportion to the level of profits: as profits decline and losses grow, the real level of farm debt increases. This result is observed both for the entire farm sector over time and across thousands of farms in one year (1998). So the debt problem is clearly attributable to lack of profitability.

To explain debt accumulation, we thus need to understand the decline in farm profits. There are two broad groups of reasons for the growing losses in CIS farms: internal farm-level reasons, and external policy-related reasons.

The *internal farm-level reasons* are all related to the traditional collective farm structure, which basically has not changed during the decade of farm reorganization in the CIS:

- The farm enterprises have not reduced their size to more manageable dimensions.
- Farm managers are still committed to provide all members with jobs, regardless of cost-efficiency considerations.
- Farm enterprises are obliged to maintain the social infrastructure in the village, including the traditional free support to household plots.
- Farm operations remain largely production oriented, with no overriding emphasis on markets, consumers, and sales: farm managers are still production maximizers, not profit maximizers.
- Member-workers continue to function in a traditional collective environment, without any direct accountability for the results of their effort or their contribution to profits and losses.

Figure 6.5: Percentage of Unprofitable Farms: CIS-5

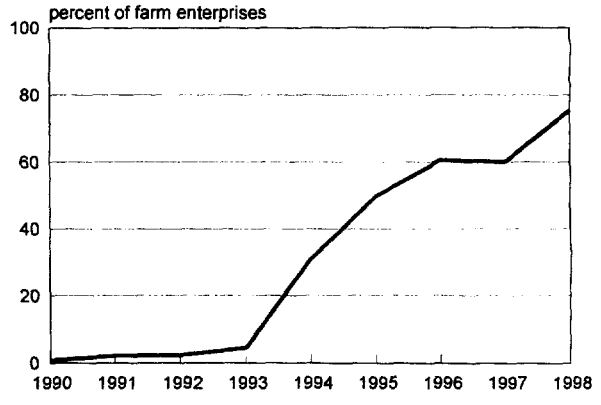
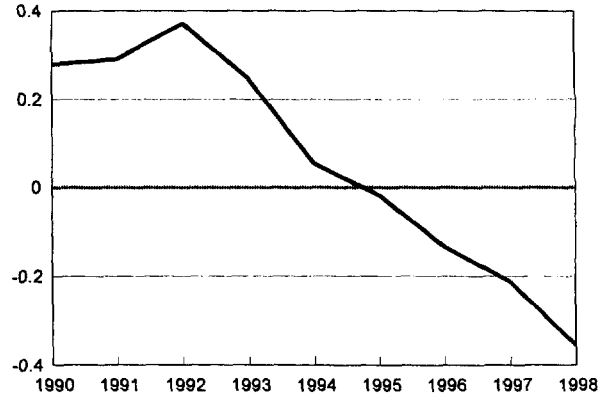


Figure 6.6: Profit-to-Sales Ratio: CIS-5



All these internal reasons are obstacles to improving the cost-efficiency of farms, and necessarily lead to suboptimal profits. As long as CIS farms continue their strategy of formal reorganization, avoiding radical internal restructuring prescribed by market principles, they will not be able to improve their efficiency and profitability.

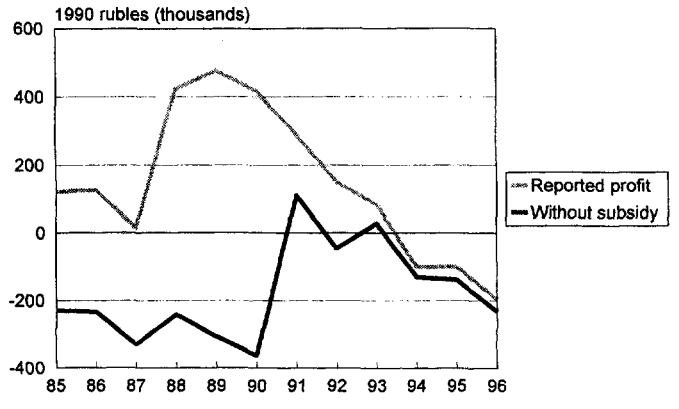
A rough breakeven analysis of farms in two Russian oblasts – Leningrad and Novgorod – has led to instructive results regarding cost efficiency and profitability. In Leningrad farms variable costs are less than prices received, each unit of sales makes a positive contribution, and the farms can switch from losses to profits if they increase the sales volume by a factor of 1.8. In Novgorod farms, on the other hand, variable costs (per unit of sales) are greater than the price received for products sold. This means that the more Novgorod farms produce and sell, the more money they lose. Each unit sold generates an incremental loss. Before attempting to increase their sales, Novgorod farms should look hard at their cost structure and change radically the composition of variable costs to ensure that they become less than the prices received.

Although Leningrad farms in principle can achieve profitability by increasing sales, the target of almost doubling the sales volume is not easy to meet in a generally contracting environment. To be realistically profitable, Leningrad farms should also work to reduce their production costs instead of counting on sales growth. Thus, potential profitability of farms in these two oblasts essentially depends on their ability to become more cost-efficient. Leningrad and Novgorod are probably quite representative of CIS farms in general. The required changes in cost structure of CIS farms are impossible in the traditional collective environment. To change the cost structure with the purpose of improving profitability, the farms must undergo deep internal restructuring and switch to accepted market principles of operations and management. This should include, among other things, willingness to adjust the labor force in response to changing production requirements and operation with strong orientation toward cost efficiency and resource productivity.

External Factors Affecting Profitability: The Impact of Government Policies

In the past, the farms in Leningrad and Novgorod, two typical non-chernozem zone oblasts, were quite profitable. And yet **Figure 6.7** shows that past profitability was merely an illusion. In the past, the government traditionally injected massive subsidies into farm enterprises, which compensated them for low product prices and relatively high costs. Without subsidies, Novgorod farms were losing all through the early 1990s, and their reported profitability was sustained entirely by subsidies. Subsidization of agriculture was a serious burden on the state budget, but this burden was deemed necessary to ensure low food prices for the population. In recent years, however, the economic and political environment has changed, the subsidies have all but disappeared, and without their masking effect the proportion of farms with losses has increased dramatically. The farms are facing an entirely different set of external factors linked with government policies, which have a very strong impact on profitability. Without subsidies, farms are not profitable *given the current production structure and management strategy.*

Figure 6.7: Novgorod: Impact of Subsidies on Profit

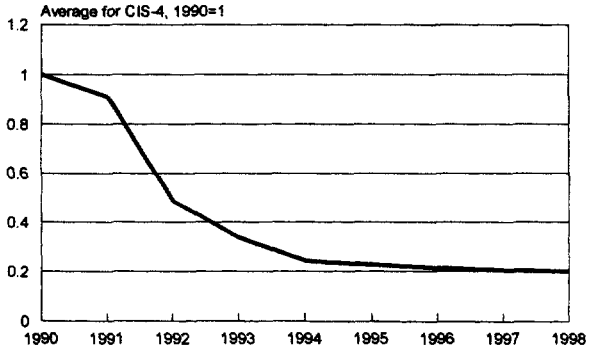


We are not advocating the reinstatement of subsidies. There are many other budgetary injections into agriculture (such as periodic debt writeoffs) that also need to be eliminated. On the contrary, we are arguing that farms must actively respond to reduction in government support by

changing their objectives, by restructuring their operations, by reorganizing and realigning with market principles to achieve greater cost efficiency and eventually return to profitability.

With the elimination of producer subsidies, the main external policy-related factor that has a detrimental effect on farm profits in CIS is the government policy to continue maintaining low food prices for the population. While prices for manufactured commodities, including farm inputs and machinery, have been liberalized and are now at or near world market levels, the prices received by farms were not allowed to rise to the full extent of the gap left by the elimination of producer subsidies. This is reflected in the so-called "price scissors," which correspond to the notion of deteriorating terms of trade for agriculture. In CIS-4 the terms of trade had dropped by 1998 to 0.2 of the 1990 level (**Figure 6.8**). This means that the cost of farm inputs between 1990-98 increased five times more than the prices received by farms for their products.

Figure 6.8: Terms of Trade in Agriculture: Ratio of Prices Received by Producers to Prices Paid for Farm Inputs



Deteriorating terms of trade are a universal phenomenon observed in all market economies. In CIS, the "price scissors" effect is aggravated by government intervention in setting food prices. Elimination of government intervention in food prices will somewhat relieve the problem, but the general trend of deterioration in terms of trend will persist. Farms in market economies respond to deteriorating terms of trade by reducing their costs and increasing the output, i.e., improving their productivity and efficiency. As long as CIS farms fail to improve their productivity, they will continue to suffer from the squeezing effect of the "price scissors," even if the government stops its intervention in food prices.

Although state orders and procurement quotas have been virtually eliminated in the CIS (with the notable exception of Belarus), the central government and local authorities continue to intervene in the sales and marketing decisions of producers through a variety of export restrictions. Many products classified as "strategic" (grain, livestock) are subject to complex export licensing requirements. Not only exports to foreign countries are restricted: local governments often erect administrative barriers to domestic trade flows across provincial borders, arguing that the food needs of the local population must be satisfied before farm products are allowed to be exported to other regions of the country. Trade restrictions of this kind severely constrain the ability of producers to generate revenue and profits from operations.

External factors related to government policies – elimination of direct producer support, control of food prices exacerbating the deterioration of terms of trade for agriculture, restrictions on trade in agricultural commodities – certainly have a negative impact on farm profitability and thus lead accumulation of debt. These policy distortions should be corrected to create a liberal market environment in which producers can operate freely with the goal of maximizing their profits and controlling their debt burden. Yet the ultimate solution to improving profits and thus reducing the burden of debt is basically internal. In response to changes in the economic and political environment, the farms must reorganize and restructure for greater cost efficiency and higher productivity. This is what Western farms do to remain profitable in a changing world.

Soft Budget Constraints are a Disincentive to Restructuring

In market economies, the allowable level of debt is limited by the risk of bankruptcy. Farms, as all business enterprises, operate under hard budget constraints: if they are unable to generate

sufficient profits to repay their financial obligations, they go out of business. In socialist economies, on the other hand, farms operated under soft budget constraints: they always relied on flows of funds from the state to cover their losses and repay their debts.

Janos Kornai, in his classical work on the socialist economic system, characterizes the softness of budget constraints by the commitment of the bureaucracy (i.e., the government in our terminology) not to tolerate persistent loss-making (see, e.g., *The Socialist System: The Polittcal Economy of Communism*, Princeton University Press, 1992). Soft budget constraints prevail when economic agents believe that they can negotiate various benefits after the fact in case of adverse outcomes (lack of profitability). The feasibility of this vertical negotiation process stems from the paternalistic attitude of the government toward the farm enterprises, which according to Kornai is akin to the attitude that parents show toward financial difficulties of their children, regardless of age. In this conceptual setting, soft budget constraints are not limited to actual allocation of subsidized credits or debt write-offs. They often include an implicit component that arises when the government's does not insist with all strictness on collecting tax arrears or, even more indirectly, signals suppliers or banks not to press too hard for collection of overdue obligations from farms.

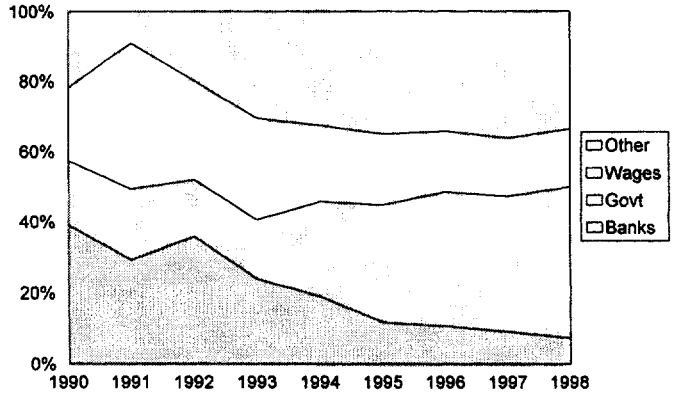
The mentality of soft budget constraints continues to persist in CIS countries during transition. Unprofitable farms with steadily rising levels of debt do not go bankrupt. There are no self-limiting risk mechanisms on the amount of accumulated debt. Loss-making farms are able to continue borrowing from suppliers, from the state, and sometimes even from commercial banks, presumably because everybody – the borrowers and the lenders – believe that the government will not let the large farm enterprises go bankrupt and will continue to arrange for periodic bailouts.

While lack of profitability makes debt accumulation necessary, it is the persistence of soft budget constraints that makes debt accumulation possible. As long as farm enterprises are allowed to operate under soft budget constraints, they will take the path of least resistance – continue accumulating debt – instead of making the hard and painful choices that restructuring involves.

Who Are the Farms' Main Creditors?

All through the 1990s, about half the farm debt came from the government and banks and the other half from supplier credit and wage arrears (**Figure 6.9**). The exact role of the banks in the early years of the decade is unclear: some of the debt recorded as bank loans (especially long-term loans) may in fact have been government debt channeled through state controlled agricultural banks. During the recent years, when the division between commercial banks and the government became much sharper and clearer than in the past, the share of bank lending in farm debt shrank to a minimum, and debt to the government became a dominant component.

Figure 6.9: Sources of Debt: CIS-4



Another clear feature in the development of farm debt over the last decade is the substantial increase in the share of suppliers' credit, which nearly doubled from about 20% of total debt in the early 1990s to 40% in recent years (**Table 6.2**). This may be interpreted as a clear sign of progress toward commercial normalization of financial transactions in agriculture. Wage arrears are not and have never been a significant component of sources of farm credit.

Table 6.2: Sources of Farm Debt: CIS-4

	1990	1994	1998
Institutional credit	57	46	50
Commercial banks	39	19	7
Government	18	27	43
Wage arrears	21	22	16
Supplier credit	22	33	35

Overall, farm debt in CIS originates primarily from "passive" or "spontaneous" credit sources, which grow simply because farms do not pay their obligations. These sources include all levels of government (central, provincial, and district), trade credit from suppliers, and to a certain extent also farm workers, who extend involuntary credit to farms through wage arrears. "Active sources" – commercial banks – are of marginal importance accounting for less than 7% of total debt.

Is Farm Debt Secure?

Farms in the CIS have had no profits in recent years, and they do not generate net cash flows that can be used to repay their debt. If farm debt cannot be repaid from operational earnings, it has to be repaid by liquidation or sale of assets. Overall, the total farm assets are more than sufficient to cover the debt. Even the current assets exceed the farm debt (see **Table 1**). Yet, as we know, the value of assets is highly uncertain when a firm declares liquidation, and it is desirable to see to what extent farm debt can be covered with minimum reliance on the fixed assets.

A certain natural matching may be suggested between different categories of farm assets and different groups of creditors. Thus, we should be able to repay suppliers by selling the inventories, and the banks by converting the liquid assets into actual cash (i.e., collecting accounts receivable, selling off securities and investments, etc.). If these two categories of relatively saleable current assets do not leave surplus cash for further debt reduction, the government can be offered to take over the social fixed assets in repayment of its debt and the workers, as a last resort, can be offered ownership of enterprise housing – another component of fixed assets – in payment of their wage arrears. This will not really compensate the workers for their lost wages, because they anyhow have secure tenant rights in enterprise housing and there is no active market in apartments in rural areas to cash in on their new property. Yet, in a pinch, privatization of housing against wage arrears may be better than nothing for workers.

Table 6.3 shows that in the CIS countries all the main categories of farm debt are securely covered by assets in the matching categories. Thus, the value of inventories exceeds the amounts owed to suppliers by a factor of 2. Liquid assets exceed outstanding bank credit by about a factor of 5. This essentially means that liquid assets cover the entire debt to commercial banks and even part of the debt to suppliers. Social assets are more than sufficient to cover the obligations to both workers and the government. Although at present farms do not generate cash to repay any of their loans, they are not bankrupt in the sense that their current assets (augmented by the non-productive component of fixed assets) are sufficient to cover all outstanding debt with a comfortable margin. Farm debt can be recovered if the assets are saleable or will be accepted in exchange for outstanding debt.

Table 6.3: Coverage of Debt by Assets in CIS-4

	Russia	Ukraine	Moldova	Belarus	Average CIS-4
Inventories/suppliers credit	2.3	2.5	1.3	4.5	2.6
Liquid assets/bank credit	6.9	13.9	4.5	1.8	6.8
Social assets/wages + government debt	2.3	1.1	1.3	2.6	1.8
Enterprise-owned housing/wage arrears	1.3	3.0	NA	NA	NA
Other social assets/government debt	0.9	2.0	NA	NA	NA

We have to repeat the same caveat as before: these are sector averages, and they do not reflect the situation in extreme cases. In some farms, current assets may not be sufficient to cover debt, and combined with lack of profitability this is a sign of severe financial distress, or insolvency. Yet the percentage of such farms is not very high, and on the whole farms can cover their debt with their current assets, which are much more liquid and saleable than buildings and machinery. Drastic debt settlement procedures may be necessary for a relatively small number of farms, and *the main focus should be on enabling farms to regain profitability by market mechanisms.*

The Burden on the Economy

The traditional way in CIS of dealing with accumulation of farm debt has been through periodic rescheduling and forgiveness of overdue obligations. Since the state budget ultimately bears the cost associated with debt write-offs, this policy is tenable only as long as the level of debt is relatively low. This is no longer the case in CIS countries, where farm debt has risen to levels that are not negligible compared with budget revenue and even GDP.

Figure 6.10: Farm debt as % of GDP

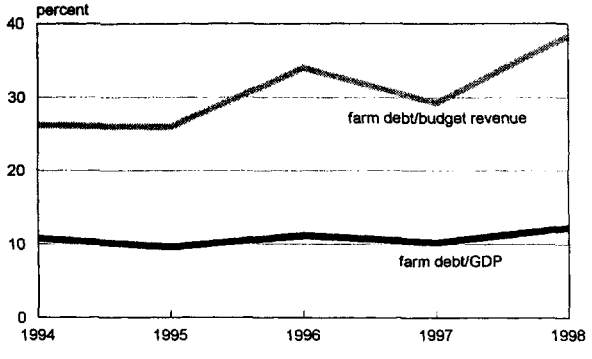


Figure 6.10 plots the ratio of total farm debt to budget revenue and GDP in CIS-4 for the period 1994-98. Outstanding farm debt in CIS-4 increased from about 25% of budget revenues in 1994 to nearly 40% in 1998. It exceeded 10% of GDP in 1998. Farm debt today constitutes a significant burden on the economy as a whole, and the state budgets in CIS cannot continue to deal with this problem according to traditional prescriptions of rescheduling and forgiveness.

Lessons from Central and Eastern Europe[1]

The experience in Central and Eastern Europe (CEE) provides two lessons for CIS. First, relatively straightforward but radical solutions implemented at the early stage of the reform process helped to create a financially viable restructured agricultural sector, which made commercial lending to the sector feasible and even attractive in some cases. Second, consistent application of bankruptcy procedures to privatized farms in the later period, combined with a number of supportive government policy measures and the creation of a relatively undistorted incentive framework for agriculture, helped these countries avoid the accumulation of farm debt above the level acceptable in market economies.

The large-scale farming structures inherited from the pre-reform period carried significant amounts of debt in the early 1990s. A relatively high percentage of these farms were technically bankrupt. In the Baltic states, the hyperinflation helped to create debt-free privatized farms. In Central Europe, with the exception of the Czech Republic, insolvent farms (a relatively small proportion of the total number of farm enterprises) were liquidated and only the land and the assets remaining after bankruptcy sales were distributed among the former workers and members. In the Czech Republic, the historical debt has been carried over since the beginning of the reform period, and debt settlement attempts are just beginning (also mainly through bankruptcy).

The current debt situation in CEE is not alarming. As **Figure 6.11** shows, the real debt in CEE agriculture is generally not rising. In Estonia and Hungary the real debt level remained relatively stable between 1993-98, whereas in the Czech Republic and for Polish corporate farms it actually declined over time. The level of real debt increased significantly only for individual private

[1] This section is based on a review of farm debt in CEE prepared by Mariusz Safin.

farms in Poland and Lithuania (not shown in the figure). However, the initial debt levels for private farms in these two countries were near zero in the early 1990s, and the increase from a very low initial level did not affect the overall indebtedness of the farm sector.

Figure 6.11: Real Farm Debt in CEE

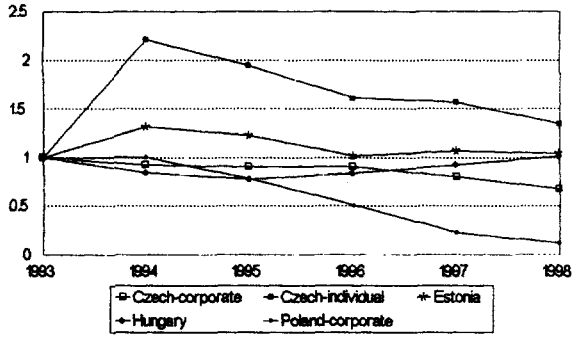
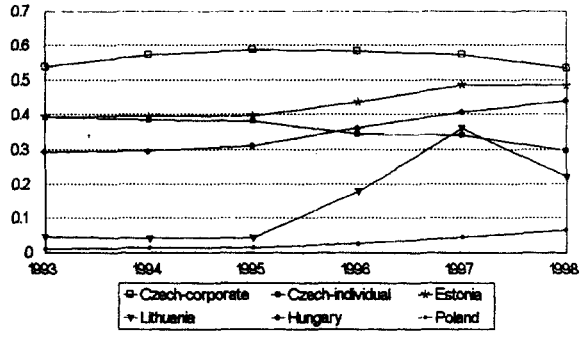


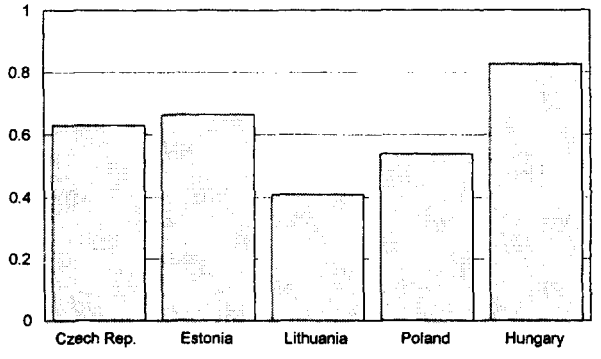
Figure 6.12: Liabilities to Assets Ratio in CEE



Similar conclusions can be drawn from the comparison of liabilities and assets (**Figure 6.12**), and the repayment capacity measured as the ratio of liabilities to current assets (**Figure 6.13**).

A relatively straightforward application of bankruptcy procedures is one of the key reasons for this success in CEE. One must add, however, that governments in each country support farm financing in various forms, including grants, interest rate subsidies, credit guarantees, tax refunds, etc. The amount of support has increased in recent years to compensate for the losses suffered by the farms due to falling commodity prices on international agricultural markets.

Figure 6.13: Liabilities to Current Assets Ratio in CEE - 1998



Sustainable profitability of the sector is the most important condition for maintaining financial solvency of farms. This requires a transparent macroeconomic framework, distortion-free markets, and a restructured agricultural sector that can attract capital and has access to risk management tools. Government intervention in CEE tends to be limited, generally focusing on various grant schemes. Credits and credit guarantees are mainly provided on a commercial basis, supported by an appropriate legal framework for recovering liabilities in case of default. CEE governments, unlike their CIS counterparts, do not engage in debt writeoffs and debt rescheduling for farms. While some of these countries do have direct credit subsidies, these are usually provided in the form of tax rebates to minimize the distortions.

What Can be Done to Resolve the Farm Debt Problem?

The history of farm debt in the CIS countries provides many examples of attempts to resolve the problem of farm debt. These include debt write-offs, moratoria, debt rescheduling and restructuring. It is clear that these attempts have not been successful. They have not stopped the accumulation of debt because they have been treating symptoms, and not the true causes of the problem. The traditional measures have not

changed the macroeconomic and incentive framework around the farms, and they have left the inherited farming and ownership structures intact. The key to the solution of the farm debt problem is improvement of the incentive framework combined with genuine restructuring and privatization of farms. It is only in the context of these external and internal institutional measures that a targeted resolution of farm debt is likely to succeed.

Accumulation of farm debt is caused by two sets of factors: external factors related to government policies that produce a non-conducive economic environment for farm operation, and internal factors related to farm organization and structure that lead to low productivity and growing losses. Effective resolution of farm debt requires governments to address both sets of factors before they can decide to invoke bankruptcy, which is the standard market tool for dealing with highly indebted insolvent farms.

Why Not Traditional Court-Driven Bankruptcy Proceedings?

In market economies, unprofitable farms that are unable to repay their liabilities are declared bankrupt by a court of law and go into liquidation. Perhaps the most obvious option for resolving farm debt would be to follow the practice of market economies and the experiences of some countries in Central Eastern Europe. Insolvent farms would be declared bankrupt and go into liquidation, clearing the stage through debt restructuring for the creation of new financially viable units. This is how insolvent farms are treated in mature market economies, and how the more successful transition countries, such as Hungary, have dealt with the resolution of farm debt problems since the beginning of transition. Indeed, many experts recommend following this path in the CIS countries as well. All CIS countries have bankruptcy laws that in principle can impose liquidation of insolvent farms with the objective of satisfying the creditors' claims (at least partially).

However, the present study and certain experiences in other parts of the world suggest that the traditional court-driven bankruptcy procedures may not offer a desired solution given the specific circumstances in the CIS. First, a very large number of farms (in some countries more than 50%) are technically bankrupt in the sense that they report losses and cannot repay any debt from current cashflows. A strict approach to bankruptcy would require initiating court proceedings in a volume that is simply not practicable given the fragile administrative and judicial structures in CIS. There are no effective bankruptcy courts, and very few bankruptcy cases have actually been tried to completion in any of the CIS countries.

Second, the experience in the few farm bankruptcy cases launched in CIS indicates that the lack of potential buyers for farm assets is another obstacle to formal court-driven procedures. In CEE, subsidized credit schemes were offered by the governments to support the purchase of farm assets in the process of liquidation. Such schemes do not exist in CIS, and the rural population suffers from a severe shortage of capital. The absence of potential buyers would be a significant constraint in a mass bankruptcy and liquidation of insolvent farm enterprises.

Third, mass bankruptcy and liquidation of farm enterprises will affect the very large rural population in CIS, which is basically dependent for its livelihood on these farm enterprises, however unprofitable. By satisfying the claims of the creditors, the traditional bankruptcy procedures are likely to cause irreparable social damage to the rural population, thus producing a politically untenable situation in the transition countries, which still have no alternative employment opportunities for their farmers and peasants. This danger is particularly acute because of the unclear standing of collectively shared land in bankruptcy proceedings: courts may decide to auction off not only buildings, tractors, and livestock, but also farmland, leaving the rural families without any sources of income.

On balance, when politicians, social scientists, and even economists have to weigh the interests of creditors – businesses or government – against the interests of a large rural population, the balance would naturally tilt in favor of the rural population. After all, it could be argued that the

creditors were lending to the farm enterprises in the expectation of making a profit, and if they have miscalculated, they should bear at least part of the responsibility. The rural population, on the other hand, had no say in the debt decisions and should not be penalized. Since courts would not necessarily be guided by such considerations, this is another argument against imposing traditional bankruptcy proceedings on CIS farms.

General Principles for Resolution of Farm Debt Problem

Given the actual conditions in CIS, the optimal approach to resolving the farm debt problem should include a set of actions that address both macro- and micro-level factors.

- Creation of an incentive system and a macro-policy framework for agriculture that allows efficient agricultural producers to make profits and to invest.
- A one-time process of expedited debt settlement conditioned on genuine internal restructuring and privatization of the farms participating in the debt-settlement program.
- Creation of necessary economic conditions for the recovery of the restructured farms emerging from the debt-settlement procedure.
- Introduction of hard budget constraints forcing the farms to operate under strict financial discipline.
- Implementation of a working bankruptcy system that will prevent accumulation of new debt in farms created through the process of restructuring and debt settlement.

The unique feature of this general program is the integration of debt resolution (handled as an out-of-court managed process) with internal restructuring of farms and a shift to hard budget constraints. Experience shows that if debt is written off while the farm organization remains unchanged, the result has never prevented re-accumulation of new debt. In parallel with treating the outstanding debt, it is essential to implement a genuine restructuring of the farms based on market principles with the goal of improving productivity and profitability. Without addressing basic ownership and management problems, including the development of realistic business plans, debt-restructuring programs have very little value. We recommend starting the process of restructuring with the allocation of physically identified land parcels with ownership titles to individuals. The new owners then should be allowed to choose freely the actual farm organization in which they prefer to continue using their land and other resources.

Implementable Framework for Out-of-Court Debt Settlement and Farm Restructuring

Instead of invoking blanket bankruptcy procedures, we recommend an approach that implements a one-time comprehensive out-of-court debt settlement linked with farm restructuring and introduction of hard budget constraints. Such a process has been recently implemented in Moldova. It is still too early to judge the long-term impacts of the process, but it has certainly met with initial success: the outstanding farm debt has been practically liquidated within one year, the rural population has not been deprived of its rights in land, livestock, and farm machinery, and the former collective farms were restructured into new debt-free entities based on private ownership of land and assets.

The Moldovan experience is an example of an integrated approach to managed out-of-court settlement of farm debt. The more general features of this approach could be applied also in other countries in the region. Following is a brief characterization of these general features.

- The major objective of the one-time managed intervention is to create new farm entities that are free of past debt burden and have the potential to become economically viable. The goal is not reorganization of existing enterprises, but actual creation of new entities compatible with market principles of operation.
- The decision to launch the debt-settlement process in each farm enterprise and the choice of the form of the new entity is left to farm members. The decision-making process is

supported by sufficient information outlining in detail all implications and alternatives, informing the members of the basic market principles of farm organization and management.

- The debt-settlement process is managed by a debt-settlement committee, which is appointed by a national body and consists of local and outside experts. The committee announces the start of the process and collects the claims from the creditors.

- The outstanding debt is settled primarily from the assets of the farm enterprise. Land remains outside the debt settlement procedure. The non-land assets are divided into three groups: (a) machinery and livestock, which are earmarked for distribution to farm members and are exempt from the debt-settlement process; (b) inventories, cash, receivables, other current assets, and all production fixed assets (i.e., storage, farm buildings, processing facilities, etc., excluding housing and social infrastructure), which are used for settling the debt of commercial creditors; (c) social assets and non-privatized housing, which are used for settling the debt to the government and to payroll.

- The full settlement of debt to commercial suppliers is an integral part of the process. All assets under lien are automatically transferred to the entitled creditor. The residual farm assets, excluding the portion distributed to farm members and used for settlement of wage arrears and government debt, are offered to the creditors up to the limit of the debt. The unsettled debt, if any, is taken over by the budget and used as a future tax credit for the suppliers or in the form of long-term bonds.

- The debt settlement process is implemented with the full support of the government, and the budget acts as a last resort to reach a full settlement of all residual amounts remaining after the farm assets are exhausted. This is not a serious constraint, as in most cases farm assets are more than sufficient to satisfy all obligations.

- The process ends with the full liquidation of the old entity, without any legal successor, and registration of new entities by the former farm members.

The process should have a definite completion date for each farm (four-five months duration), and the overall time frame for the entire project nationally also should be set in advance. A core group of experts should be assembled to work on the preparation of detailed procedures and manuals, and to travel across the country with the objective of training local forces and supervising the implementation.

Pre-Conditions for Success of Debt-Settlement Program

Certain conditions are essential for successful implementation of such a framework:

- Legal framework for land ownership and titling is in place;
- Procedures for farm privatization have been adopted;
- There is political consensus for a complete and comprehensive approach to farm privatization and farm debt settlement;
- The task is of manageable size and the technical implementation is feasible (e.g., adequate donor support is available).

* * *

The specific implementation of the debt-settlement program will naturally vary from country to country, but the general principles adopted in Moldova appear to be valid and workable for all CIS countries. The larger countries, such as Russia and Ukraine, may prefer to adopt a regional approach, first implementing the debt-settlement program in the most progressive regions. The experiences of this approached can be extended to a national program at a later stage.

The most obvious indicator of success in farm restructuring and debt settlement is the future financial performance of the new restructured farms. The efforts to resolve the debt problem are not finished with the formal elimination of debt. First, the macroeconomic incentive framework and the internal farm organization should both be conducive to potential profitability and viability of farms. Second, soft lending must be abolished and hard budget constraints must be introduced for better financial discipline at the farm level. Future borrowing must be based on strict economic and business principles that use risk and creditworthiness as the main decision criteria. Third, a working bankruptcy system needs to be put in place immediately after restructuring and debt settlement. Bankruptcy procedures need to be consistently and impartially enforced to avoid accumulation of new debt and to facilitate further restructuring toward greater productivity and efficiency in the farming sector. It is only through a combination of such strict organizational and policy measures that the farm sector will be start evolving along a path that excludes the vicious circle of debt restructuring followed by new debt accumulation followed by more debt restructuring.

Appendix A

Annex Tables from the Main Text

Annex to Chapter 2:
Consumer Price Index and Exchange Rate by Country 1994-1998

Table A2.1. CPI used in the calculations (1994=1)

	1995	1996	1997	1998
Belarus	8.1	12.4	20.3	35.0
Kazakhstan	2.8	3.8	4.5	4.8
Moldova	1.1	1.4	1.5	1.6
Russia	3.0	4.4	5.0	6.4
Ukraine	4.8	8.6	10.0	11.0

Source: IMF and own calculations

Table A2.2 Exchange rates – US$ per unit of national currency (yearly average)

	Currency	1994	1995	1996	1997	1998
Belarus	Ruble	3666	11533	13292	26191	46386
Kazakhstan	Tenge	36	61	68	76	79
Moldova	Lei	4.1	4.5	4.6	4.6	5.4
Russia	Ruble	2400	4005	5010	5.8	13.3
Ukraine	Hryvna	317.0	147.3	1.8	1.9	2.5

Source: IMF

Annex to Chapter 4: Results of Farm Case Studies in CIS Countries

Table A4.1: Farm Case Studies in Belarus

Farm name	Gory	Goretsky	Pogodina
Debt burden	Low	Medium	High
Accounts payable as % of sales	5	20	73
Farm has arrears to social fund	No	Yes	Yes
Arrears to social fund increased in recent years	No	Yes	Yes
Barter is used for making payments to social fund	No	No	No
Farm has wage arrears	No	No	Yes (3months)
Change in wage arrears in recent years	None	None	Increased
Percent of wages paid in kind	All cash	5%	20%
Percent of farm output transferred to workers as wage payments	None	5%	15%
Percent of farm's output sold to workers	10%	2%	None
Change in farm employment in the near future	None	Decline by 25%	None

Source: Belarus Institute of Agricultural Economics. Unpublished results of interviews with the managers

Table A4.2: Farm Case Studies in Kazakhstan

Farm type	Production cooperative	Limited liability partnership	Production cooperative	Production cooperative	Production cooperative
Farm name	Stepnoye	Namys	Tzelinny	Temirlan	Badam
Farm location	North	North	North	South	South
Assets/debt	2	1.39	0.76	0.63	0.36
Current assets/current liabilities	1.57	1.0	0.69	0.60	1.16
Debt burden	Low	Medium	High	High	High
Farm has arrears to social fund	Yes	Yes	Yes	Yes	Yes
Change in arrears to social fund in recent years	Decreased	Increased	Increased	Increased	Increased
Barter used for payments to social funds	Yes	Yes	Yes	Yes	Yes
Farm has wage arrears	None	Yes	Yes (6 months)	Yes (5 months)	Yes
Change in wage arrears in recent years	Decreased	Increased	Increased	Increased	Increased
Average wage ('000 tenge, 1998)	70	59	62	9	17
Percent of wages paid in kind	15	58	40	28	40
Percent of farm output transferred to workers as wage payments	15	8	16	30	10
Percent of farm output sold to workers	10	5	9	0	15
Change in farm employment in the near future	Increase 10%	Increase 15%	Increase 10%	Increase 15%	Increase 25%

Source: Kazakhstan Institute of Agricultural Economics. Unpublished results of interviews with the managers.

Table A4.3: Farm Case Studies in Russia

Farm type	Production cooperative	Full liability partnership	Full liability partnership	Joint stock company	Joint stock company	Production cooperative
Farm name	Dzerzhinsky	Iskra	Selivaniha	Borisovo	Margarito vsk	Mir
Farm location (oblast)	Rostov	Orel	Moscow	Moscow	Rostov	Orel
Debt/sales	0.06	0.14	1.05	1.77	2.01	2.40
Current assets/current liabilities	18.5	4.65	1.22	0.89	0.68	0.22
Debt burden	Low	Low	Medium	High	High	High
Farm has arrears to social fund	n.a.	n.a.	Yes	Yes	Yes	Yes
Share of arrears to social fund in debt	n.a.	n.a.	65%	n.a.	28%	53%
Farm has wage arrears	None	None	Yes	Yes	Yes	Yes
Percent of wages paid in kind	n.a.	n.a.	n.a.	n.a.	100%	90%
Change in farm employment in 5 years	Decrease by 50%	Decrease by 50%	Decrease by 50%	n.a.	n.a.	n.a.

Source: Russian Agrarian Institute. Unpublished results of interviews with the managers

Annex to Chapter 5: Overview of Policy Instruments Used for Farm Debt Resolution by CIS Countries 1992-2000

The policy instruments listed in the following tables are based in part on economic criteria (price support, subsidized credit, bankruptcy) and in part on the actual practices observed in CIS (barter, commodity credit, inter-enterprise settlements, etc.). The instruments are divided into four groups: I) policies that affect revenue-generating opportunities for producers by emphasizing prices and marketing arrangements; II) policies that affect the ability of producers to reduce costs; III) policies that provide debt relief; and IV) policies aimed at a long-term solution of the farm debt problem (farm restructuring, bankruptcy).

The policy instruments are classified as "major" and "not major" according to the importance of their use in each country for each year between 1992 and 2000. The classification by importance is based on the agricultural policy matrices available on the World Bank's web site (http://wbln0018.worldbank.org/eca/eca.nsf).

Country reports prepared by the five counterpart teams participating in this study also provided a rich source of information about changing patterns of use of various policy instruments over time.

Table A5.1: Belarus

Legend: + in shaded cells denotes major instrument, – not a major instrument in a particular year

Policy goals and instruments	1992	1993	1994	1995	1996	1997	1998	1999	2000
I. Creation of domestic and external marketing opportunities									
a) State procurement orders	+	+	+	+	+	+	+	+	+
b) Price support	+	+	+	+	+	+	+	+	+
c) Import tariffs and quotas	+	+	+	+	+	+	+	+	+
d) Exchange rate policy	–	–	–	–	–	–	–	–	–
e) Barter agreements with foreign governments	+	+	+	+	+	+	+	+	+
II. Measures to reduce production costs									
a) Input subsidies	+	+	+	+	+	+	+	+	+
b) Direct subsidies for farms that are producing in unfavorable natural conditions	+	+	+	+	+	+	+	+	+
c) Subsidized government credits	–	+	+	+	+	+	+	+	+
d) Commodity credit	–	–	–	+	+	+	+	+	+
e) Tax privileges	+	+	+	+	+	+	+	+	+
III. Debt relief									
a)Write-off and forgiveness of principal	+	–	–	–	–	–	–	–	–
b) Rescheduling and deferment	–	–	–	–	–	–	+	+	+
c) Mutual settlements	+	+	+	+	+	+	+	+	+
d) Revaluation of current assets	–	–	–	–	–	+	+	–	–
e) Write-off of penalties for overdue debt payments	–	–	–	–	–	–	+	+	+
f) Tradable debt financial instruments (bonds, promissory notes)	–	–	–	–	–	–	–	–	–
IV. Farm enterprise restructuring									
a) Merger and reorganization	+	+	+	+	+	+	+	+	+
b) Financial rehabilitation	–	–	–	–	–	–	–	–	+
c) Outside management	–	–	–	–	–	–	–	–	+
d) Bankruptcy and liquidation	–	–	–	–	–	–	–	–	+

Table A5.2: Kazakhstan

Legend: + in shaded cells denotes major instrument, – not a major instrument in a particular year

Policy goals and instruments	1992	1993	1994	1995	1996	1997	1998	1999	2000
I. Creation of domestic and external marketing opportunities									
a) State procurement orders	+	+	+	+	+	+	-	+	+
b) Price support	+	+	+	+	-	-	-	-	-
c) Import tariffs and quotas	+	+	+	+	-	-	-	-	-
d) Exchange rate policy	-	-	-	-	-	-	+	+	+
e) Barter agreements with foreign governments	+	+	+	+	+	+	+	+	+
II. Measures to reduce production costs									
a) Input subsidies	+	+	+	+	-	-	-	-	-
b) Direct subsidies for farms that are producing in unfavorable natural conditions	+	+	+	+	-	-	-	-	-
c) Subsidized government credits	-	+	+	+	+	+	+	+	+
d) Commodity credit	-	-	-	+	+	+	+	+	+
e) Tax privileges	-	-	-	-	-	-	-	-	-
III. Debt relief									
a)Write-off and forgiveness of principal	+	-	+	+	+	+	-	-	-
b) Rescheduling and deferment	-	-	+	+	+	+	-	-	-
c) Mutual settlements	+	+	+	+	+	+	+	+	+
d) Revaluation of current assets	-	-	-	-	-	-	-	-	-
e) Write-off of penalties for overdue debt payments	-	-	-	-	-	-	-	-	-
f) Tradable debt financial instruments (bonds, promissory notes)	-	-	-	-	-	-	-	-	-
IV. Farm enterprise restructuring									
a) Merger and reorganization	+	+	+	+	+	+	-	-	-
b) Financial rehabilitation	-	-	-	-	-	-	+	+	-
c) Outside management	-	-	-	-	-	-	+	+	+
d) Bankruptcy and liquidation	-	-	-	-	-	-	+	+	+

Table A5.3: Moldova

Legend: + in shaded cells denotes major instrument, – not a major instrument in a particular year

Policy goals and instruments	1992	1993	1994	1995	1996	1997	1998	1999	2000
I. Creation of domestic and external marketing opportunities									
a) State procurement orders	+	+	+	+	+	+	-	-	-
b) Price support	+	+	+	+	-	-	-	-	-
c) Import tariffs and quotas	+	+	+	+	+	-	-	-	-
d) Exchange rate policy	-	-	-	-	-	-	+	+	+
e) Barter agreements with foreign governments	+	+	+	+	+	+	+	+	+
II. Measures to reduce production costs									
a) Input subsidies	+	+	+	+	-	-	-	-	-
b) Direct subsidies for farms that are producing in unfavorable natural conditions	+	-	-	-	-	-	-	-	-
c) Subsidized government credits	-	+	+	-	-	-	-	-	-
d) Commodity credit	-	-	-	-	-	-	-	-	-
e) Tax privileges	+	+	+	+	+	+	+	+	+
III. Debt relief									
a) Write-off and forgiveness of principal	+	+	+	+	-	-	-	-	-
b) Rescheduling and deferment	-	-	-	-	-	-	+	+	+
c) Mutual settlements	+	+	+	+	+	+	+	+	+
d) Revaluation of current assets	-	-	-	-	-	-	-	-	-
e) Write-off of penalties for overdue debt payments	-	-	-	-	-	-	-	-	-
f) Tradable debt financial instruments (bonds, promissory notes)	-	-	-	-	-	-	+	+	+
IV. Farm enterprise restructuring									
a) Merger and reorganization	+	+	+	+	+	+	-	-	-
b) Financial rehabilitation	-	-	-	-	-	+	+	+	+
c) Outside management	-	-	-	-	-	+	+	+	+
d) Bankruptcy and liquidation	-	-	-	-	-	-	+	+	+

Table A5.4: Russia

Legend: + in shaded cells denotes major instrument, – not a major instrument in a particular year

Policy goals and instruments	1992	1993	1994	1995	1996	1997	1998	1999	2000
I. Creation of domestic and external marketing opportunities									
a) State procurement orders	+	+	-	-	-	-	-	-	-
b) Price support	-	-	-	-	-	-	-	-	-
c) Import tariffs and quotas	+	-	-	-	-	-	-	-	-
d) Exchange rate policy	-	-	-	-	-	-	+	+	+
e) Barter agreements with foreign governments	+	+	+	+	+	+	+	+	+
II. Measures to reduce production costs									
a) Input subsidies	+	+	+	-	-	-	-	-	-
b) Direct subsidies for farms that are producing in unfavorable natural conditions	+	+	+	-	-	-	-	-	-
c) Subsidized government credits	-	+	+	+	+	+	+	+	+
d) Commodity credit	-	-	-	+	+	-	-	-	-
e) Tax privileges	+	+	+	+	+	-	-	-	-
III. Debt relief									
a) Write-off and forgiveness of principal	+	-	-	+	-	-	+	-	-
b) Rescheduling and deferment	-	-	+	+	+	+	+	+	+
c) Mutual settlements	-	-	+	+	+	+	+	+	+
d) Revaluation of current assets	-	-	-	-	-	-	-	-	-
e) Write-off of penalties for overdue debt payments	-	-	-	-	-	-	-	+	-
f) Tradable debt financial instruments (bonds, promissory notes)	-	-	-	-	-	-	+	-	-
IV. Farm enterprise restructuring									
a) Merger and reorganization	+	+	+	+	+	+	+	+	+
b) Financial rehabilitation	-	-	-	-	-	-	+	+	+
c) Outside management	-	-	-	-	-	-	-	+	+
d) Bankruptcy and liquidation	-	-	-	-	-	-	-	-	+

Table A5.5: Ukraine

Legend: + in shaded cells denotes major instrument, – not a major instrument in a particular year

Policy goals and instruments	1992	1993	1994	1995	1996	1997	1998	1999	2000
I. Creation of domestic and external marketing opportunities									
a) State procurement orders	+	+	+	+	-	-	-	-	-
b) Price support	+	+	+	-	-	-	-	-	-
c) Import tariffs and quotas	+	+	+	+	+	-	-	-	-
d) Exchange rate policy	-	-	-	-	-	-	+	+	+
e) Barter agreements with foreign governments	+	+	+	+	+	+	+	+	+
II. Measures to reduce production costs									
a) Input subsidies	+	+	+	+	+	-	-	-	-
b) Direct subsidies for farms that are producing in unfavorable natural conditions	+	+	+	+	+	-	-	-	-
c) Subsidized government credits	-	+	+	+	+	+	+	+	-
d) Commodity credit	-	+	+	+	+	+	+	+	+
e) Tax privileges	+	+	+	+	+	+	+	+	+
III. Debt relief									
a) Write-off and forgiveness of principal	+	-	-	-	-	+	-	+	+
b) Rescheduling and deferment	-	+	-	-	+	+	+	+	+
c) Mutual settlements	-	-	-	-	+	+	+	+	+
d) Revaluation of current assets	+	-	-	-	-	-	-	-	-
e) Write-off of penalties for overdue debt payments	-	-	-	+	+	-	+	+	+
f) Tradable debt financial instruments (bonds, promissory notes)	-	-	-	-	-	+	-	-	-
IV. Farm enterprise restructuring									
a) Merger and reorganization	+	+	+	+	+	+	+	+	+
b) Financial rehabilitation	-	-	-	-	-	-	-	-	+
c) Outside management	-	-	-	-	-	-	-	-	-
d) Bankruptcy and liquidation	-	-	-	-	-	-	-	-	-

Appendix B

Statistical Tables with Debt-Related Data by Country 1994 and 1998

Table B1: Structure of the consolidated farm balance sheet and structure of accounts payable by country (in percent)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Assets										
I. Fixed assets	91	74	82	77	31	65	53	83	70	85
II. Current assets	8	20	17	20	69	29	30	17	14	15
II.1 Inventories	7	15	11	15	43	26	17	10	11	12
II.2 Financial current assets	1	6	6	4	26	3	12	7	3	3
II.2.1 Accounts receivable	1	5	6	3	22	2	12	7	2	2
III. Other assets	1	6	1	3	0	5	17	0	16	0
Total assets	100	100	100	100	100	100	100	100	100	100
Equity and liabilities										
IV. Equity	97	56	85	82	60	87	36	76	83	84
V. Long-term liabilities	0	0	0	5	0	2	6	4	2	3
V.1 long-term bank loans	0	0	0	1	0	2	2	1	0	0
VI. Current liabilities	2	44	16	14	39	11	59	37	15	13
VI.1 short-term bank loans	1	6	1	4	3	1	1	1	0	0
VI.2 Accounts payable	2	19	13	8	25	9	57	17	13	12
VI.2.1 goods and services	1	11	5	4	10	6	27	7	5	5
VI.2.2 payroll	0	2	2	1	3	1	6	2	1	2
VI.2.3 social funds	0	2	2	1	3	0	11	3	5	2
VI.2.4 taxes	0	2	2	1	4	1	8	5	2	2
VI.2.5 other payables	1	1	2	1	6	1	5	1	1	2
Accounts payable										
Total accounts payable	100	100	100	100	100	100	100	100	100	100
Goods and services	48	57	42	48	38	65	47	41	35	39
Payroll	14	11	12	16	13	8	10	10	8	17
Social funds	5	13	15	15	10	5	20	18	40	17
Taxes	3	12	14	9	14	11	15	27	12	13
Other payables	30	7	18	12	24	11	9	4	5	14

Table B2: Changes in major balance sheet components by country (per-farm data, in US$ '000)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Total assets	**4155**	**3288**	**1924**	**1382**	**549**	**2620**	**798**	**2302**	**2444**	**2914**
Current assets	352	664	330	272	379	763	236	393	345	428
Inventories	16	71	59	17	27	33	31	63	15	25
Financial current assets	49	183	117	62	142	69	99	168	74	77
Accounts receivables	39	179	111	44	121	55	97	156	50	64
Total liabilities	**4155**	**3288**	**1947**	**1382**	**549**	**2620**	**798**	**2688**	**2444**	**2914**
Long-term liabilities	5	14	4	64	2	46	46	93	45	86
Long-term bank loans	5	14	1	11	2	46	19	16	3	1
Current liabilities	104	1436	301	189	215	298	468	420	376	379
Accounts payable	73	638	247	111	139	239	454	400	327	357
For goods and services	35	364	103	54	54	154	213	163	116	140
Payroll	10	70	29	18	18	19	44	41	25	60
Social fund	4	80	37	17	15	13	89	71	130	62
Taxes	2	77	35	10	20	26	66	108	40	46

Table B3: Summary of changes in major per-farm indicators 1994-1998 (ratio 1998/1994 based on per-farm data in US$)

	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Number of enterprises	0.93	1.19	0.93	0.99	0.89
Agricultural land per farm	1.05	0.56	1.07	0.93	1.07
Arable land per farm	1.04	0.57	1.10	0.89	1.08
Total number of employed per farm	0.84	0.36	0.73	0.68	0.76
Employed in agriculture per farm	0.83	0.35	0.75	0.69	0.80
Value of production	2.77	0.85	1.49	0.74	0.84
Value of sales	2.69	0.39	0.90	0.82	0.67
Production costs	2.85	0.35	0.90	0.73	1.38
Total assets	0.63	0.24	1.20	1.77	5.31
Current assets	2.17	0.35	1.19	1.27	1.13
Inventories	2.29	0.28	1.06	1.28	1.48
Financial current assets	1.43	0.54	1.43	1.19	0.54
Accounts receivables	1.43	0.54	1.41	1.14	0.53
Total liabilities	0.63	0.24	1.38	1.77	5.31
Long-term liabilities	9.47	3.21	23.44	0.71	36.53
Long-term bank loans	9.47	1.31	11.47	0.31	0.50
Current liabilities	2.88	0.33	2.83	1.99	1.76
Short-term bank loans	1.25	0.04	0.72	0.13	0.20
Accounts payable	3.27	0.71	1.62	2.94	2.56
For goods and services	4.42	0.58	1.58	2.15	2.62
Payroll	1.85	0.63	1.39	1.39	3.40
Social funds	3.51	1.11	1.91	7.75	4.24
Taxes	10.30	0.86	3.13	4.09	2.34
Total debt (long-term liabilities plus current liabilities)	3.18	0.35	3.10	1.66	2.14
Total net liabilities (total debt minus financial current assets)	4.61	0.33	4.13	1.82	5.14
Total net liabilities adjusted for social assets (total net liabilities minus value of social assets)	0.27	0.34	2.16	-5.11	0.75

Table B4: Structure of consolidated farm profit and loss statement, structure of production costs, and farm product mix by country (in percent)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
I. Structure of profit and loss statement										
Total sales revenue	100	100	100	100	100	100	100	100	100	100
Cost of sold commodities, services etc.	90	108	89	113	54	97	153	119	136	125
Profit from sales of commodities, services etc.	10	-8	11	-13	31	3	-53	-36	-37	-37
Total Profit	11	-12	16	-2	34	3	-58	-47	-39	-50
Profit tax	1	1	1	1	1	0	1	0	0	0
Net profit	10	-12	15	-2	33	3	-59	-48	-50	-66
II. Structure of production costs										
Total production costs	100	100	100	100	100	100	100	100	100	100
Wages	16	21	34	25	30	18	22	26	18	20
Material inputs	79	51	63	49	59	73	59	62	60	61
seeds and seedlings	3	2	4	2	5	4	12	7	6	6
animal feed	28	11	13	19	17	30	14	12	23	19
intermediate farm-produced inputs	2	1	1	2	2	2	1	1	1	6
fertilizer	7	1	1	1	3	7	1	2	2	4
fuel and oil products	12	13	14	6	13	6	12	11	7	9
electricity	5	7	5	4	4	4	4	3	3	3
spare parts	8	5	4	5	7	7	7	4	6	6
payments for custom services	5	10	3	8	8	3	4	2	9	8
Depreciation	5	3	1	13	1	9	12	11	14	12
III. Product mix										
Share of livestock costs in total production costs	0.57	0.41	0.35	0.60	0.53	0.60	0.38	0.27	0.58	0.52

Table B5: Structure of major sources of investment in agriculture by country (in percent)

	1994				1998			
	Belarus	Kazakhstan	Russia	Ukraine	Belarus	Kazakhstan	Russia	Ukraine
Total investment (mln. US$)	122	149	2493	873	375	12	1997	820
Total investment	100	100	100	100	100	100	100	100
Own financial resources, total	64	93	65	65	55	98	94	76
depreciation	33	27	52	9	42	52	62	69
Borrowed capital, total	36	7	35	35	45	1	6	24
bank credits	0	0	0	0	0	0	0	0
other enterprises debt	9	0	14	1	28	0	1	0
non-budgetary funds	20	0	19	22	8	0	3	21
Other	4	0	1	0	2	0	0	0

Table B6: Structure of taxes and social contributions assessed for farm enterprises (in percent of total amount assessed)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Social contributions assessed, total	59.8	23.2	48.4	19.2	26.8	60.7	44.8	31.5	n.a.	40.6
Social security fund	58.7	22.0	0.7	15.2	23.5	59.8	34.9	0.2	n.a.	34.3
Unemployment fund	1.1	0.5	40.7	1.4	0.0	0.9	3.1	28.2	n.a.	2.0
Medical insurance fund	n.a.	0.7	7.0	2.6	3.3	n.a.	4.5	3.1	n.a.	4.3
Taxes assessed, total	40.2	76.8	51.6	80.8	73.2	39.3	55.2	68.5	n.a.	59.4
VAT	6.6	67.0	18.2	75.9	37.1	15.5	35.0	16.4	n.a.	34.0
Excise tax	2.6	1.3	8.1	0.6	1.4	4.8	0.8	7.2	n.a.	0.7
Profit tax	5.5	7.3	14.5	1.4	3.3	2.6	2.4	8.7	n.a.	n.a.
Land tax	3.3	1.0	4.7	1.5	1.0	8.2	2.4	16.8	n.a.	n.a.
Real estate tax	1.5	0.1	1.1	0.0	1.2	1.8	4.8	0.2	n.a.	9.0
Other taxes	20.8	0.1	5.0	1.4	33.5	6.4	9.7	19.2	n.a.	15.7
Total taxes and social contributions	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.	100.0
Additional summary information on contributions/taxes										
Social contributions as % of sales	5.7	3.9	13.0	12.3	9.7	6.9	17.9	11.2	n.a.	13.7
Taxes as % of sales	3.8	12.7	13.9	51.7	26.5	4.5	22.1	24.3	n.a.	20.0
Total social + taxes as % of sales	9.5	16.6	26.9	64.0	36.2	11.4	40.0	35.5	n.a.	33.7

Table B7: Effectiveness of collection of taxes and social contributions in farm enterprises (ratio of collected to assessed taxes, in percent)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Social contributions, total	81	50	32	65	62	91	17	94	30	39
Social security fund	81	50	21	67	65	91	16	100	27	42
Unemployment fund	81	0	27	60	82	66	13	94	48	17
Medical insurance fund		50	59	59	45		19	93	37	17
Taxes, total	83	48	36	99	79	91	53	84	n.a.	54
VAT	81	45	49	100	86	97	47	116	n.a.	63
Excise tax	83	59	22	79	82	95	77	68	n.a.	81
Profit tax	84	61	32	84	88	87	96	90	n.a.	n.a.
Land tax	100	87	36	79	97	77	62	51	n.a.	n.a.
Real estate tax	68	50	38	66	96	84	59	143	n.a.	48
Other taxes	81	14	29	66	70	95	54	88	n.a.	35
Total social contributions and taxes	82	48	34	92	74	91	37	87	29	47

Table B8: Financial ratios by country

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Current liabilities/Total assets	0.02	0.44	0.16	0.14	0.39	0.11	0.59	0.37	0.15	0.13
Total liabilities/Current assets	11.81	4.95	5.90	5.08	1.45	3.43	3.38	6.83	7.09	6.80
Current liabilities/Current assets	0.29	2.16	0.91	0.70	0.57	0.39	1.98	2.16	1.09	0.89
Current liabilities/(Current assets minus Inventories)	2.13	7.84	2.57	3.06	1.52	4.30	4.74	5.07	4.90	4.91
Accounts payable/Accounts receivable	1.89	3.56	2.22	2.51	1.15	4.33	4.68	2.56	6.49	5.60
(Total liabilities - Current assets)/Total liabilities	0.92	0.80	0.83	0.80	0.31	0.71	0.70	0.85	0.86	0.85
(Total liabilities - Current assets- Social assets)/Total liabilities	0.80	0.74	0.82	0.69	0.28	0.56	0.65	0.69	0.65	0.73
(Profit + Annual depreciation)/Total liabilities	0.01	-0.01	0.03	0.06	0.25	0.05	-0.11	-0.04	-0.02	-0.03
Total liabilities/Sales	13.55	5.88	5.78	4.44	1.38	3.17	3.69	8.81	9.59	10.98
Current liabilities/Sales	0.34	2.57	0.89	0.61	0.54	0.36	2.16	2.79	1.47	1.43
Sales/Total assets	0.07	0.17	0.18	0.23	0.73	0.32	0.27	0.13	0.10	0.09
Sales/Current assets	0.87	0.84	1.02	1.14	1.05	1.08	0.92	0.78	0.74	0.62
Profit/Sales	0.10	-0.12	0.15	-0.02	0.33	0.03	-0.59	-0.48	-0.50	-0.66

Table B9: Basic indicators of agricultural sector by country (per farm data, US$ '000)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Value of agricultural output	424	1534	379	679	591	1176	1311	566	501	499
Value of sales	307	559	337	311	398	826	216	305	255	266
Production costs	407	956	435	685	457	1161	334	391	502	632
Total assets	4155	3288	1924	1382	549	2620	796	2302	2444	2914
Current assets	352	664	330	272	379	763	235	393	345	428
Current material assets	303	481	213	210	237	694	137	226	268	351
Financial current assets	49	183	117	62	142	69	98	168	74	77
Accounts receivables	39	179	111	44	121	55	97	156	50	64
Total liabilities	4155	3288	1947	1382	549	2620	796	2688	2444	2914
Long-term liabilities	5	14	4	64	2	46	46	93	45	86
Long-term bank loans	5	14	1	11	2	46	19	16	3	1
Current liabilities	104	1436	301	189	215	298	467	850	376	379
Short-term bank loans	30	189	24	54	15	38	7	18	7	3
Accounts payable	73	638	247	111	139	239	453	400	327	357
For goods and services	35	364	103	54	54	154	213	163	116	140
Payroll	10	70	29	18	18	19	44	41	25	60
Social funds	4	80	37	17	15	13	89	71	130	62
Taxes	2	77	35	10	20	26	66	108	40	46
Net profit	32	-70	50	-7	131	22	-128	-145	-127	-174
Total debt	108	1450	305	253	218	345	513	943	421	465
Total net liabilities	60	1267	188	191	75	275	414	776	347	388
Total net liabilities adjusted for social assets (total net liabilities minus value of social assets)	-416	1090	160	31	59	-114	374	346	-157	44

Table B10: Basic productivity and indebtedness indicators per hectare by country (US$/ha)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Per hectare of agricultural land										
Value of agricultural output	164	171	154	116	254	431	260	214	92	200
Value of sales	118	62	137	53	171	303	43	115	47	106
Net profit	12	-8	20	-1	56	8	-25	-55	-23	-70
Total debt (long-term liabilities plus current liabilities)	42	162	124	43	93	126	102	356	78	187
Total net liabilities (total debt minus financial current assets)	23	141	76	33	32	101	82	293	64	156
Total net liabilities adjusted for social assets (total net liabilities minus value of social assets)	-161	122	65	5	25	-42	74	131	-29	18

Table B11: Basic productivity and indebtedness indicators per worker by country (US$/worker)

	1994					1998				
	Belarus	Kazakhstan	Moldova	Russia	Ukraine	Belarus	Kazakhstan	Moldova	Russia	Ukraine
Per agricultural worker										
Value of agricultural output (in current prices)	1464	2341	737	2505	2022	4843	5628	1503	2707	2241
Value of sales (current prices)	1058	854	655	1148	1362	3404	926	810	1376	1191
Net profit (current prices)	109	-107	98	-27	448	89	-549	-385	-685	-782
Total debt (long-term liabilities plus current liabilities)	374	2213	592	933	744	1420	2200	2506	2273	2088
Total net liabilities (total debt minus financial current assets)	206	1934	365	705	258	1134	1777	2061	1875	1741
Total net liabilities adjusted for social assets (total net liabilities minus value of social assets)	-1437	1663	311	113	202	-468	1606	918	-847	198

Table B12: Major indicators of government credit use and debt restructuring

Belarus	1990	1991	1992	1993	1994	1995	1996	1997	1998
Use of government credits (million ruble)									
Owed to the government at the beginning of the year	3205	1348	2051	21000	265000	375000	1130000	1937000	3550000
Amount of government credits during the year	1293	1435	34603	488000	612000	1829000	2088000	4412000	12374000
Amount of credits paid back during the year	530	732	15668	244000	502000	1074000	1281000	2799000	5265000
Amount of credits written off	2620	-	-	-	-	-	-	-	-
Owed to the government at the end of the year	348	2051	20986	265000	375000	1130000	1937000	3550000	10659000
Overdue credits owed to the government	-	2	13	1000	2000	44000	35000	275000	177000
Share of overdue credits to the government in total	-	0	0	0	1	4	2	8	2
Exchange rate	19	59	193	2696	3666	11533	13292	26191	46386
Use of government credits (million dollars)									
Owed to the government at the beginning of the year	169	23	11	8	72	33	85	74	77
Amount of government credits during the year	68	24	179	181	167	159	157	168	267
Amount of credits paid back during the year	28	12	81	91	137	93	96	107	114
Amount of credits written off	138								
Owed to the government at the end of the year	18	35	109	98	102	98	146	136	230
Overdue credits owed to the government		0	0	0	1	4	3	10	4

Kazakhstan	1992	1993	1994	1995	1996	1997	1998
Use of government credits (million tenge)							
Amount of government credits during the year		2525	4540.9	1114	1184.6	40	0
Amount of credits paid back during the year		0	0	735	1075.2	119.4	40
Restructured until 2004			1221				
Overdue credits owed to the government				379	119.4		
Exchange rate			36	61	68	76	79
Use of government credits (million dollars)							
Amount of government credits during the year			125	18	17	1	0
Amount of credits paid back during the year			0	12	16	2	1
Restructured until 2004			34	0	0	0	0
Overdue credits owed to the government			0	6	2	0	0

Moldova	1992	1993	1994	1995	1996	1997	1998
Use of government credits (1000 lei)							
Owed to the government at the beginning of the year							
Amount of government credits during the year	15576	4666.8	16077.3	2074.2		975.7	213.1
Amount of credit paid back during the year	19949.7	4101.9	16595.3	0		183.7	85.3
Amount of credit written off	10780.2	963.4	12310.9				28.8
Credits owed to the government at the end of the year	2249.8	689.8	9916.2	4146.6		1301.6	301.1
Overdue credit owed to the government	2249.8	689.8	9916.2	4146.6		1188.5	301.1
Share of overdue credit to the government in total	100	100	100				100
Exchange rate	219	1.644	4.06	4.49	4.6	4.62	5.37
Use of government credits (million dollars)							
Amount of government credits during the year	0.071	2.839	3.960	0.462		0.211	0.040
Amount of credit paid back during the year	0.091	2.495	4.088			0.040	0.016
Amount of credit written off	0.049	0.586	3.032				0.005
Credits owed to the government at the end of the year	0.010	0.420	2.442	0.924		0.282	0.056
Overdue credit owed to the government	0.010	0.420	2.442	0.924		0.257	0.056

Russia	1992	1993	1994	1995	1996	1997	1998	1999
Use of government credits (billion rubles)								
Amount of government credits during the year(s)	274.6	1806	8341.5	7200	11100			
Amount of credit paid back during the year								
Amount of credit written off	23 (1990)							
Amount of debt rescheduled			5600	25000	5100		5.7	3.5
Owed to the government at the end of the year								
Overdue credit owed to the government								
Total for credits denominated in dollars in 1992-97								
Exchange rate	223	932	2400	4005	5010	5.76	13.305	20
Use of government credits (million dollars)								
Amount of government credits during the year(s)	1231	1938	3476	1798	2216	0	0	0
Amount of credit paid back during the year	0	0	0	0	0	0	0	0
Amount of credit written off	0	0	0	0	0	0	0	0
Amount of debt rescheduled	0	0	2333	6242	1018	0	428	175
Owed to the government at the end of the year	0	0	0	0	0	0	0	0

Ukraine	1992	1993	1994	1995	1996	1997	1998	1999
Use of government credits (million rubles)								
Amount of government credits during the year(s)			335	211	581	764	1159	1148
Amount of credit paid back during the year						372		
Amount of credit written off	1800					xxx	xxx	741
Amount of debt rescheduled								
Owed to the government at the end of the year								
Overdue credit owed to the government								
Exchange rate	319	9584	317	147.307	1.829	1.862	2.453	3.7265
Use of government credits (million dollars)								
Amount of government credits during the year(s)			1.06	1.43	317.7	410.3	472.5	308.1
Amount of credit paid back during the year						199.8		
Amount of credit written off								198.8
Amount of debt rescheduled								
Owed to the government at the end of the year								

Appendix C

The Moldova Farm Debt Restructuring Program – A Unique Approach[1]

PART I: OVERVIEW

The first land privatization efforts were sanctioned with approval of the Land Code in 1992 and more than 1.2 million people were empowered to own agricultural land. However, there was no significant organized land reform program until 1996 when the Government of Moldova requested – and USAID approved – East-West Management Institute (known in Moldova as the Center for Private Business Reform – CPBR) to privatize a collective farm known as Mayak in Nisporeni. As a result, 1,345 individual land titles were distributed to eligible farm members. The privatization of the Mayak farm and the legalization of private land ownership was a historic step that completely and irrevocably separated the agricultural sector of Moldova from its Soviet past.

Following completion of the Mayak privatization, the Government of the Republic of Moldova with the support of the US Agency for International Development, implemented the "Land" Pilot Project in 72 former collective farms in 31 rayons throughout Moldova starting in 1997. The methodology applied on these farms was entirely based on the existing Moldovan legislation and included:

- actual distribution of all land farmed by the collective farm to entitled farm workers;
- actual distribution of the collective farm's debt-free assets to entitled farm workers; and
- reorganization of the collective farm into other legal forms sanctioned by Moldovan legislation.

CPBR Moldovan technicians developed a methodology and appropriate legal framework and successfully privatized all 72 farms by the spring of 1998, when the National Land Program (NLP) started on all collectively farmed agricultural enterprises throughout Moldova.

Early expectations that the successor enterprises (collective shell) would sell assets left during privatization to pay-off debts, or would settle debts by generating profits from mills, oil presses or other potentially lucrative businesses left in the "shell" did not materialize. In most cases the "shell" continued to accumulate debts and remained "alive" as a legal entity, providing ample opportunities for tax evasion and other types of fraud.

It became clearer during the Pilot Project that the issue of unsettled debts of the collective farms would likely slow down the privatization and reorganization in the entire agricultural sector. Within a relatively short time after starting the NLP, this problem became critical and resulted in several negative impacts:

- complete restructuring and distribution of property was being delayed;
- assets of privatized farms reserved to repay debts were idle and without adequate security, hence their depreciation was accelerating;

[1] This summary is based on the Moldova country study prepared by D. Dumbraveanu, R. Flick, A. Muravschi, S. Shapa, and C. Tanase (see ECSSD Working Paper 27 for the full version). It is intended as a descriptive record of the debt settlement procedure implemented in Moldova and does not necessarily reflect the views and opinions of the World Bank and of the authors of the present report.

- new private farms created during the privatization process were not functioning normally as over 35 thousand dissatisfied collective farm creditors were refusing to deliver supplies and services and in some cases were using informal methods to attempt debt collection.

At the same time there were other emerging issues requiring solution:

- the national budget continued to be faced with the constant and uncontrolled losses of collective farms and which might continue without complete and final liquidation;
- social and community infrastructure was abandoned and continued rapid deterioration;
- significant assets remained on old collective shells which potentially could be used to settle debts or be distributed in a second and final property tender if a way could be found to settle the debts;
- old collective shells containing frozen assets and debts created potential opportunities for fraud.

Therefore in 1998 CPBR launched an exhaustive debt study throughout the country on a sample of 562 collective farms. This debt study, involving a statistically significant number of farms, resulted in national projections concerning farm debt and crystallized resolve to initiate a national debt resolution program fully integrated into the NLP. The study on 562 farms documented that 48 percent (589,679,000 lei) of the total farm debt (1,216,434,000) was owed to government and 52 percent (626,755,000 lei) was owed to private creditors. Eighty one (81) percent of all the debt corresponded to debt principle while 19 percent was attributed to penalties and interest.

But the analysis of the data of 562 farms documented a continual and rapid increase in debts – from 1,217,300,000 lei to 1,498,700,000 lei or 23 percent increase in 1998 alone with no indications that this would cease in subsequent years. In fact, after holding land and property tenders, the old collective farms, with rare exception, ceased their economic activities, but they continue existing *de jure* with all the debts on their books. For this reason, and in full conformity with the law, inactive collective farm shells continued to accrue debts and penalties for the delay in repayment of debts. According to projections based on the amount of debt and fiscal legislation, each month of the post tender period the unsettled debts would increase a total of 16 million lei in debts, penalties, etc. Two thirds of the debt increase would be penalties accrued by the Social Fund for nonpayment of the debts, accumulated in the past.

Based on survey data it was projected that the property of all collective farms would diminish by 0.8 billion lei, or 6 percent during one year due to depreciation, theft, sales of seized assets, uncontrolled distributions, or other unaccounted for losses. Therefore while debts increased exponentially – even though there was little or no economic activity on many collectives – the value of their assets which might eventually be used to repay these debts depreciated or declined. Clearly something had to be done.

After much discussion and debate it was decided that special legislation would be necessary to resolve the debt situation on collective farms participating in the National Land Program. But there was fear of the potential budget impact and concern for the ability to pass comprehensive legislation which would: stimulate the process of creating new enterprises able to work in market conditions based on private land and property; be a one-time process, not to be repeated; be applied only to farms participating in the National Land Program; reasonably defend the interests of the private creditors; and have a "reasonable" burden on the country's budget.

During the development of the Debt Law the following main principles were applied: it had to be a systems approach; it must use of out-of-court liquidation procedures; it must be voluntary; responsibility must be decentralized and distributed to various parties during debt settlement; procedures should be as simple as possible and they must be easy to understand. In addition to the Debt Law, it was decided to amend several other laws which would strengthen the Debt Law and facilitate development of the regulations to the law. The amendments were

included in a separate law, which was examined and approved together with the Debt Law. Such a comprehensive approach was more convenient than separate presentation and approval of the two laws. It spared time and avoided problems – it was not necessary to awaken the "parliament tiger" twice.

The debt settlement procedure begins with a general farm meeting to decide whether to participate in the Debt Program, which must include debt settlement and liquidation. Once this is published by the Property Commission in the *Official Monitor*, the process formally begins. Publishing the farm liquidation intent notifies creditors and obliges them to file claims or have their debts written off; starts a process where any debts owed to the farm are considered immediately due; and initiates a period when farm property cannot be written off, seized or collateralized in any way. Following the official notification, the debt settlement proceeds according to the following steps: 1) Settlement of debts to priority creditors and employees; 2) Historic debt settlement; 3) Settlement of current debts; 4) Settlement by the state of transferred debts; 5) Privatization of property, remaining after debt settlement; 6) Farm liquidation and removal from the State Commercial Registry.

After the Debt Law was passed by the Moldovan Parliament on 13 May 1999, the CPBR decided to form a new unit (Debt Resolution Unit – DRU) to provide assistance to all Government agencies involved in debt resolution and liquidation of collective farms under the provisions of the Debt Law. This was approved and additional financing was provided by USAID.

Following the existing CPBR internal structure, new teams of 3 accountants each were formed within each of the eight CPBR field offices. New staff was also hired to form two Chisinau based teams: the core team and the expert team and the decision was made to add a senior expatriate advisor. The local teams assist the Property Commissions of the farms in preparing legal and accounting documents, and provide consultations on different issues. The core teams ensure the flow of information and provide the link between local teams and Property Commissions on the one hand, and the expert team and state agencies on the other. The expert team, composed of economists, lawyers, and accountants, and support staff provides technical assistance to the government, and represent the farms' interests during the sittings of the Republican Commission – the official body approving acceptance by the government of historical debt and other critical approvals during the debt resolution process. One vital role of this expert team was to assist different government agencies (mainly the Tax Office and the Ministry of Finance, the Social Fund, Registration Chamber by the Ministry of Justice, the State Archive, the Department of Privatization, the National Securities Commission, and others) draft internal regulations and issue circular letters aiming at adjusting existing working procedures to the provisions of the Debt Law, providing clear instructions to local authorities and government representatives on the implementation of the Debt Law, as well as training them in all aspects of the program.

A critical initial task was to assist the Ministry of Finance and the Main Tax Office draft the regulations to the Debt Law. The regulations were designed to provide detailed procedures for debt resolution, completion of privatization and liquidation of collective farms. The regulations also contained the necessary forms for the entire process. Direct participation of our staff in developing the regulations and the forms excluded the need for training staff after these regulations were adopted by the government, and, to a certain degree, simplified the process since the co-authors of the forms were the future implementers. This aspect was critical and only hindsight has confirmed this.

Seminars were organized in all regions and the capital of the country (10 in total). Officials, as well as farms' main creditors, heads of Property Commissions and accountants of farms subject to debt resolution and liquidation participated at these seminars. Speeches given by former collective farm managers who had already benefited from the program (those were primarily from the first 18 farms liquidated) were particularly popular.

Mass farm debt settlement has no precedents in Moldova, and because of this, delays were experienced. The practice of resolving delays of farm debt settlement showed that the main reasons for these delays were *problems of settling current debts, historic debts to banks and transfer of farm portfolio shares.* But these issues were settled, not without tension and disagreement between the Ministry of Finance, the Social Fund and the Main State Tax Office and the NLP executives. In the end, it was necessary to develop and pass an amendment to the Debt Law as well as the corresponding government regulations, promulgated through Government Decisions. The amendments to the Debt Law became effective on June 8, 2000 and since the NLP specialists had already prepared the requisite regulations to this law, these will be immediately promulgated by Government Decision.

The process to amend the Debt Law started in October 1999 with informal discussions between the NLP and the Republican Commission, the Main State Tax Office, and other GOM officials and ministries. It wasn't until April 2000 until the Government accepted the wording of the amendment and it was officially introduced into Parliament.

Notwithstanding the above discussion, the NLP executives and their advisors still are of the opinion that the amendment to the Debt Law was unnecessary, if the bureaucracy would have respected the intent and spirit of the original law.

According to the CPBR work plan approved by the USAID, 888 collective farms should complete all debt resolution stages and be completely privatized and liquidated by August 31, 2000. A snapshot view of the debt component of the National Land Program shows the following results, as of the end of May 2000:

- 765 collective farms published liquidation notices;
- 694 farms' documents were approved by the Republican Commission (decisions on transfer to the state of historical debt and writing-off of remaining unsettled historical debt, if necessary);
- 564 farms repaid all debts (including debts to priority creditors, historic and current debts);
- 539 farms finalized privatization and were liquidated.

For these farms:

- 1,021,865,000 lei (US$1.00 = lei 12.5 approximately) in debt was settled;
- 818,630,000 lei in social assets were transferred to the local government;
- 624,971,000 lei in historical debt was offset with assets;
- 35,265,000 lei in historical debt was written-off as remaining historical state debt.

The average time required for a collective farm to completely settle its debt, distribute its property and liquidate was 122 days, ranging from 32 to 300 days. The efficiency of the debt component of the National Land Program was constantly growing, and reached by the end of May 2000 a **daily** average of:

- 2.3 farm liquidations;
- 4.3 million lei ($345,000) in debts settled.

* * *

As of June 2000, the Debt Program in Moldova is in its final stage. The main goals of the National Land Program, including its debt resolution component will be attained by the end of August 2000, thus finalizing the first phase of agricultural reforms in Moldova – complete privatization and liquidation of all collective and state farms, and creation of new, privately owned farms, free from debt.

After a five year stagnation period between the appearance of the first applicable Moldovan legislation and the implementation of a comprehensive land reform program, completion of the NLP objectives in a relatively short period of time was an ambitious project. Sporadic, ad hoc and superficial privatization was replaced by mass empowerment of people through real privatization of land and property, secured by land and property titles. Although the Law on critical property allowed significant advances in 1999, the indebtedness of collective farms was still a serious impediment for completion of privatization. Solutions were sought to solve the debt problem through an intensive analysis of the financial

situation of farms, the reasons and dynamics of debt accumulation, as well as by testing and analyzing existing procedures for debt settlement.

CPBR did not compromise its basic principles while approaching the farm debt issue. It was decided that farm debt resolution would be carried out within a program, farms would join the program on a volunteer basis, the program would be entirely based on Moldovan legislation, and would have strong built-in incentives. Government support was considered a vital element and the key to success of the program. The program is the tool for implementing legislation that also allows democratic and transparent participation of farms, based on contracts signed with the program. Contracts stipulate the responsibility of all parties involved, describe the process in concrete steps and contain deadlines for each. The role of the CPBR specialists was to provide technical assistance to the government at all levels. The National Land Program enjoyed strong government support and paid great attention to relations with the President, the Parliament and the Government, which broadly advertised its objectives within official circles and mass media. Four Governments were changed during the implementation of the NLP without affecting its progress.

Attractive incentives inserted along the process stimulated a great number of farms to participate, making the program indeed a national program. Only farms that decided by democratic voting to participate in the program and honored their contractual obligations, could fully benefit from all facilities/advantages provided by the program. The incentives included: free land titles, full technical support to farms along the processes, defense of farmer's rights and representing their interests at different instances by well qualified CPBR professionals, the moratorium on accruing penalties and sanctions, an advantageous debt resolution and the possibility to start new businesses without burdensome debts. All these were offered as part of one process, a one time-event with clearly specified limitations in time.

As the program evolved from a pilot project on one collective farm to a national program, comprising the vast majority of farms, it was constantly refining its methodology. Many elements of internal methodology became later parts of laws and regulations providing more opportunities for farms and farmers. The hands-on experience gained by the CPBR specialists was an invaluable assets when participating in drafting legal acts. The popularity of the program grew, a fact witnessed by vivid interest and large participation. The popularity was built on trust, early beneficiaries of the program saw its evolution, and believed in increasing opportunities offered by the program in the future. Trust was also built through the transparency of the processes and intense information campaigns – which were inherent parts of the National Land Program and special concerns of CPBR. The information campaigns aimed at providing a clear understanding of everyone's rights and legal options, deep insight into the benefits offered by the program. The program had pure social and economic reform objectives and managed to avoid any political implications.

The current stage of the implementation of the collective farm debt resolution program allows to infer that the legal framework provided by the Debt Law proved to be workable. The procedures for debt resolution under that law proved to be applicable and succeeded in offering solutions to the great amount of issues and special cases encountered during the settlement of collective farms' debts. More than 800 collective farms will be liquidated during one year of implementation of the debt resolution program in Moldova. The success of that work resides in two major groups of reasons – those related to the legal procedures themselves for debt resolution, and those related to the way these procedures were implemented by the National Land Program.

The major principles of the Debt Law are the following:

- Debt resolution combined with complete privatization and liquidation of collective farms – a complex one-time event offered to participants in a government program on a volunteer basis.
- Relatively simple and inexpensive liquidation which allowed rapid completion.
- State acceptance of farm debts to private creditors and the possibility of settling farm

debts to the state by offsetting with social assets.

- The impact on the budget was not a significant burden.
- Very decentralized process – most decisions are made at the local level.
- The most important decisions are made by a special government body – the Republican Commission, formed by representatives of various Ministries, thus dispersing responsibility.
- Provision of incentives fostering large and active participation of farms.

To a great extent the success of the program is due to the way it was actually implemented. Several important aspects of the implementation are presented below:

- The CPBR staff actually did most of the work, i.e., CPBR implemented the program, not simply advised government.
- Highly professional staff assisted central and local government wherever and whenever possible (cooperation with Government at all levels).
- Strong Government support and political will made the implementation of the program a combined effort between CPBR/USAID and the Moldova Government.
- East West Management Institute (EWMI), a private, non-profit, non-governmental organization actually contributed significant amounts of its own money to ensure maximum flexibility and success. Compare this with other contracts implemented by for-profit firms unwilling to make contributions for the benefit of the program.
- The CPBR staff actively participated in drafting the Law and the Regulations, with an understandable tendency to simplify their future work – actual implementation.
- The internal CPBR infrastructure provided significant local presence of the CPBR staff in the field. Regional offices were staffed with professionals, and were well equipped and supported.
- The project was carried out over a relatively short period.
- The entire effort was carefully planned and monitored. The system of concrete monthly targets for regional offices allowed firm and steady work progress throughout the country.

Although the program is not finished yet it has already brought some results. By liquidating the collective farms it has produced a huge cleansing of bad debts in the agricultural sector. The tax offices are recording greater tax collections – private farmers proved to be more disciplined tax-payers. Banks also registered a decrease in delinquent loans as a result of the disappearance of the collective farms. The program created the necessary premises for the development of land markets and land consolidation, the creation of rural credit associations, and other post-privatization activities.

PART II: THE SOLUTION

This section describes the political and financial discussions, based on which the concept of the Law on restructuring of farms undergoing privatization (hereinafter – Debt Law) was developed, as well as the main principles of this law and the reasons for introducing the respective amendments in other laws, as well as the normative procedure for farm debt settlement.

The Debate: Political Situation and Budget Impact

After the pilot-project became the National "Land" Program, including most farms, it became clear that the main economic barrier in quick implementation of the program was the debt problem. By the beginning of 1999, the total amount of farm debts to various creditors, including the state, was over 2 billion lei and growing. The transfer of those debts to the new enterprises, based on private ownership (peasant farms, limited liability companies, joint-stock companies, etc.), would have put them in difficult conditions from the very beginning. This would have made development of private enterprises in the agricultural sector difficult, if not impossible. As a result, the agricultural reform would have been completely discredited, as it would have not reached the final objective.

Thus, the necessity to develop and adopt a new legal framework and to develop concrete procedures for settling the farm debt problem was raised.

The political situation in the country, at the beginning of 1999, generally favored the successful settlement of the debt problem. There was a parliament majority (the Alliance for Democracy and Reform) that strongly supported the implementation of the agricultural reform. The government backed the idea and was ready to enforce all the measures for the agricultural reform, in accord with the Memorandum singed with the World Bank.

However, several contradictory approaches to solving the agricultural debt problem emerged in the process of developing the respective legislative framework.

The first approach. All the insolvent farms had to initiate bankruptcy procedures, in compliance with the Law on bankruptcy. This position was supported mainly by the experts of the World Bank and the Agency for Restructuring of Agricultural Enterprises. Their main arguments for this approach were:

- in the agricultural sector there are farms functioning effectively and having no debts; general debt forgiveness would put these farms in a unfavorable situation, discouraging them to function effectively;
- bankruptcy procedures would allow the situation in each and every farm to be studied in detail;
- all creditors have the possibility to defend their rights in a court of law;
- the bankruptcy procedure will be stimulated, and this is important for continuous redistribution of resources from ineffective to effective enterprises.

Each of the above mentioned arguments seem logical, however, generally the approach could not be accepted based on the following reasons:

- according to the Moldovan legislation, the bankruptcy procedure requires a lot of time for analysis – approximately one year or longer for each entity;
- it is important to enforce bankruptcy on almost all farms simultaneously, which is practically impossible due to lack of judges with expertise in this sphere;
- a large number of creditors, that form the agricultural infrastructure, supplying it, providing machinery services and processing agricultural products would have gone *bankrupt de facto*, since the enterprises have no liquid assets;
- the provision of credit to the agricultural sector would likely have stopped for a long period of time;
- creation and functioning of new viable farming enterprises would not have been ensured as much of the tools, implements and machinery would have been stripped from the

farms, leaving the newly created private farms without possibilities to work.

The second approach. The debt problem must be settled for all farms, with no exceptions, regardless of the legal form, including the farms not joining the National Land Program. This approach was supported mainly by left-wing parliament representatives. The main arguments were:

- debt settlement only for farms included in the National Land Program is a method of forced destruction of collective farms, which contravenes with the principle of equality for all legal forms.

However, the adoption of such an approach meant reducing efforts to accelerate farm privatization since it would remove a strong incentive for privatization. Furthermore, the NLP is a voluntary program, entered through a democratic process and the second approach was a top-down anti-democratic imposition from central government. By adopting the second approach, the system of ineffective kolkhoz-sovkhoz production would have been kept, and the process of adapting the farm to market conditions would have slowed down. In the meantime, the state must show political will to implement the agricultural reform and stimulate farms that take this path.

The third approach. This approach had few supporters and meant the following. It is necessary to solve the problem of farm debts to the state only. Farm debts to private creditors must be:

i) fully liquidated and attributed to the business risk losses of creditors, or
ii) settled based on separate court actions, filed by each private creditor.

The first approach is completely impractical – it cannot be legally decreed, as it would be a crime against ownership. Voluntary and mass cancellation by creditors of the farm debts is financially unreal and has no precedents.

The second approach assumed the enforcement of the previously analyzed bankruptcy procedure, but only with the participation of selected private creditors. This approach would have complicated and prolonged the debt settlement process.

As a result, after long and arduous discussions within government, with the executives of the National Land Program, within Parliament and its members, and with donors, the following basic principles were established:

- Debt settlement must stimulate the process of creating new enterprises able to work in market conditions and based on privatized land and privatized property.
- Mass debt settlement is a one-time process, which will not be repeated. Upon its completion, the newly created private enterprises will solve the problems of newly gained debts independently, without state assistance, including through court procedures and the application of bankruptcy procedures.
- Settlement of debts will be applied only to farms participating in the National Land Program, which will form the basis for intensive and quick reform of the agricultural sector and will further stimulate the participation in the program.
- The interests of the private creditors must be reasonably defended.
- The burden on the country's budget connected with settlement of farm debts must not be excessive.

There were very important budget questions, which were constantly raised during the analysis of all three approaches: what is the real amount of all farm debts and their structure? What losses will the budget bear as a result of debt settlement to private creditors?

Because the detailed analysis of the financial situation of farms through field work on 562 farms throughout the country , only the forecast of the budget burdens as part of the state assumed responsibility to settle farm debts to private creditors will be discussed in the following paragraphs.

Farm debt to private creditors could be resolved and the farm liquidated if this private debt was ceded to the state and offset against debt the creditors might have with the state. Creditor

debt or payables to the state budget arise to settle excise tax, customs duties, value added taxes, land taxes and payments to the Social Fund, to mention several. But this mechanism would only work if the farm debt to private creditors was equal to or less than the private creditor's debt to the state. What would happen if the private creditor did not owe the state sufficient funds to cover the farm's debt to the private creditor? How would this difference be settled and what impact would this have on the consolidated national budget if the state would settle these amounts?

The following forecast (**Figure A.1**, **Table A.1**) was compiled based on the main principles and procedures being discussed for inclusion in the law.

Based on the survey of 562 farms discussed earlier, it was projected that this "overage" or overhang for all potential farms eligible for joining the National Land Program might amount to between 290 million lei and 365 million lei, or between 58 and 73 million lei per year over a five year period. Amortizing this estimated "overage" or overhang during a five year period would result in a two to three percent budget burden each year, which was judged to be acceptable both politically and financially for the Government and Parliament.

Furthermore, the 290 – 365 million lei projections did not consider that many farms would transfer "excess" social assets when compared with the amount of their actual debts to the state. Likewise, other farms without sufficient social assets would also transfer separate agricultural processing facilities, shares received through the earlier mass privatization of state owned processing industries, and accounts receivables, some of which could be sold, leased or managed to produce future revenue streams for the state.

It should also be mentioned, that experience in Moldova has demonstrated that private enterprises work more efficiently than collective farms (which is the actual purpose of the National Land Program), and honor their liabilities to the budget in a more disciplined manner. Further, it was clear that this qualitative renewal of the tax base in agriculture will make the budget losses due to the Debt Program insignificant.

With these projections, it soon became evident that the aggregate or "net" burden on the consolidated budget would in fact be considerably less than the 58 – 73 million yearly projections mentioned above.

Figure A.1: The Estimated Dynamics of the Budget Impact

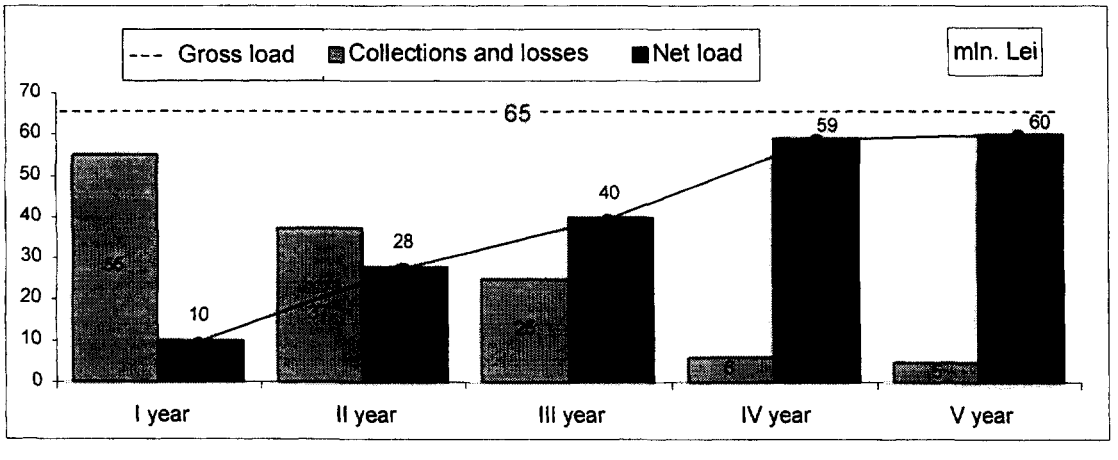


Table A.1: The Estimated Dynamics of the Impact on the Budget

A. *Budget load forecast* (mln. lei)

Index	Year					Total
	I	II	III	IV	V	
Realistic forecast						
1. Repayment of treasury notes	65	65	65	65	65	325
2. Collections	50	32	20	1	0	103
3. Losses of private creditors	5	5	5	5	5	25
4. Net load (1-2-3)	10	28	40	59	60	197
Optimistic forecast						
1. Repayment of treasury notes	58	58	58	58	58	290
2. Collections	60	40	27	1	0	128
3. Losses of private creditors	8	8	8	8	8	40
4. Net load (1-2-3)	-10	10	23	49	50	122
Pessimistic forecast						
1. Repayment of treasury notes	73	73	73	73	73	365
2. Collections	40	25	12	1	0	78
3. Losses of private creditors	2	2	2	2	2	10
4. Net load (1-2-3)	31	46	59	70	71	277

B. *Collections forecast*

Assets	According to balance sheet, mln. lei	%		Total, mln. lei
		sales	price	
Realistic forecast				
1. Industrial units	270	75	35	70
2. Receivables	80	35	95	27
3. Stocks	40	95	15	6
Total	390	x	x	103
Optimistic forecast				
1. Industrial units	270	80	40	86
2. Receivables	80	40	100	32
3. Stocks	40	100	25	10
Total	390	x	x	128
Pessimistic forecast				
1. Industrial units	270	65	30	52
2. Receivables	80	30	90	22
3. Stocks	40	90	10	4
Total	390	x	x	78

Therefore a system of issuing **treasury notes** (tax vouchers) to offset the "overage" or overhang was thought to resolve this issue, and without significant budget impact.

Further discussions and bargaining between Parliament, the Government and National Land Program officials decided that these treasury notes should not be negotiable, should be used to pay any obligation by a private creditor to the consolidated budget, and would be valid only in the designated year(s), not to exceed five years. The forecast of losses to be absorbed by private creditors as a result of the restrictions mentioned above is presented in **Table A.1**.

The forecasts of the budget impact of the selected option of settling farm debts, as well as supporting materials for these forecasts, were presented to the Government and the Parliament. This eliminated unnecessary debates with the opponents and eased defending the Debt Law.

Major Principles and Rationale of the Debt Law

During the development of the Debt Law, the debt settlement concept described in the previous section, and the following main principles were taken into consideration:

- system approach;
- usage of out-of-court liquidation procedures;
- voluntary restructuring;
- responsibility distributed to various parties during debt settlement;
- simplification of procedures to the extent possible and their detailed description in easy to understand regulations.

System approach. The systematic character of the Debt Law is firstly emphasized by the fact that it is oriented towards the achievement of the final objectives of the National Land Program, which are:
(1) land privatization,
(2) property privatization, and
(3) creation of private enterprises free-of-debt.

However, the first versions of the Debt Law focused especially on settling farm debts as the most difficult problem. But when this problem was solved, it became clear that this law must also include:

(i) coordination of debt settlement with the respective privatization processes (for example, debt settlement may begin only after land and critical property privatization, and final property privatization may only be finished after the settlement of all farm debts);

(ii) description of the elements of the methodology of the National Land Program, which were not reflected in other legislative acts (for example, signing agreements with the National Land Program, particularities of finalizing property privatization).

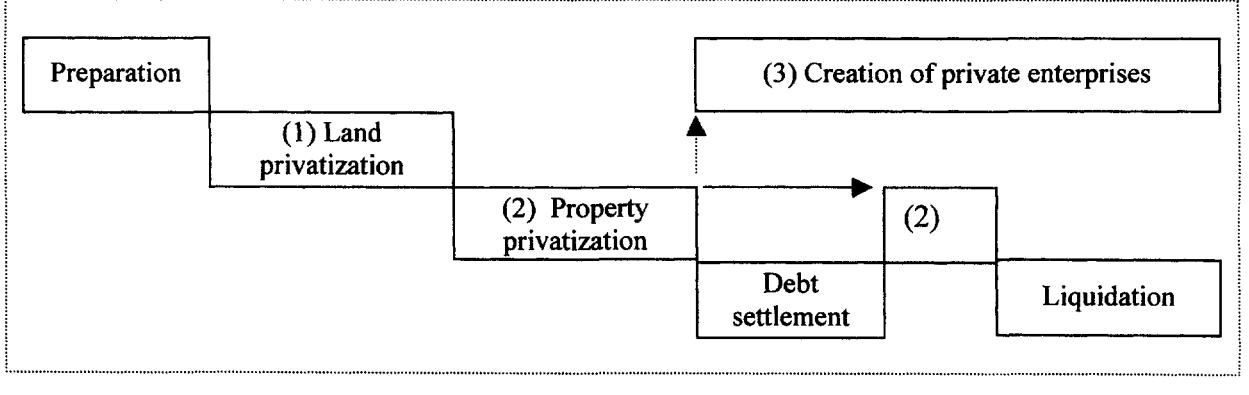
Due to these additions, the draft Debt Law strengthened all the main elements in the methodology of the National Land Program. The whole process conducted by this program was named "restructuring". The stages of this process, including the three main objectives of the National Land Program reflected in it are presented in **Figure A.2**. The legal reflection of this process is included in Art. 2 of the Debt Law.

The farm restructuring process cannot be reduced only to privatization, or debt settlement, or farm restructuring, or only to the creation of private enterprises. This is the uniqueness and main thrust of the Debt Law and its accompanying regulations.

The systematic character of the Debt Law is reflected also in the fact that it regulates a complex series of financial, organizational, and legal issues related to farm debt settlement.

The method of settling farm debts was most difficult, as the farms are insolvent, and the interests of the main restructuring participants (peasants, state budget, local budget and private creditors) are rather contradictory. Thus, the search for a unique and simple schematic for all types of farms to all categories of creditors was not, and could not be successful, i.e., some parties

Figure A.2: Stages of Farm Restructuring



are satisfied some of the time, but it is impossible to satisfy all parties, always. In order to establish a balance of interests for the main farm restructuring participants, their debts and creditors were categorized in classes (**Figure A.3**).

Debts, incurred before 1 January 1999 were considered historic, and debts incurred after that date were considered current (Art. 2 of the Law). This debt classification allowed the development of a compromise between the budgetary interests of the state and financial interests of other farm restructuring participants. The essence of this compromise is the following.

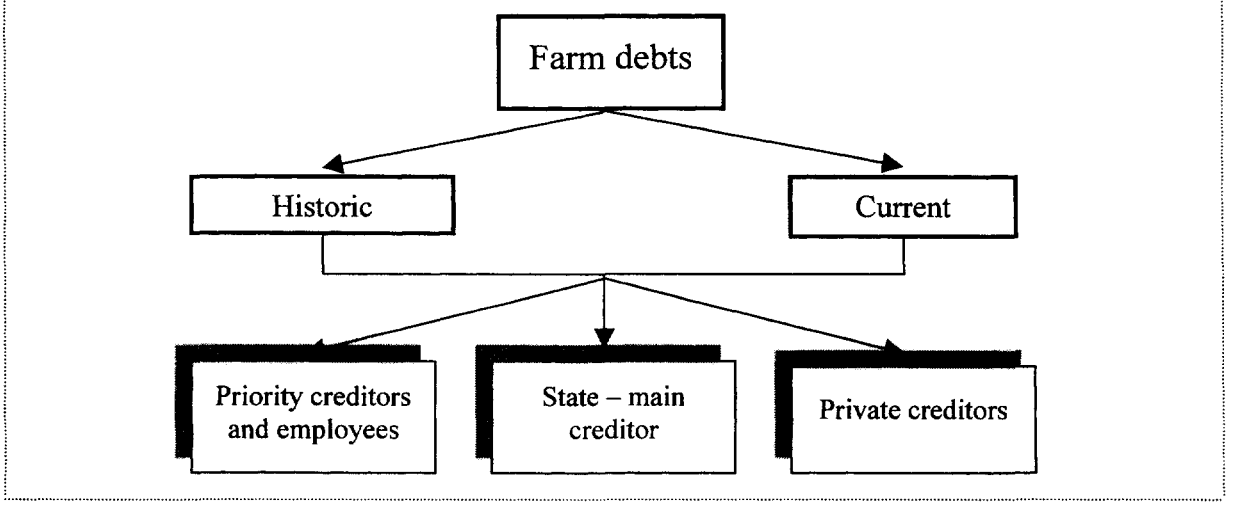
According to the currently functioning budget methodology, historic debts are not considered during the development of the budget for the coming year, in our case – the budget for 1999. Thus, historic debts can be settled according to a preference scheme. On the contrary, contributions of 100% current debt settlement are taken into consideration. Thus, current farm debts to the state must be settled fully. This was the most the Ministry of Finance and the Main State Tax Office would agree to, as their main objective is to ensure real collection of contributions to the budget.

Priority creditors are banks or others whose loans were guaranteed by collateral, as well as *beneficiaries* (individuals to whom the farm is liable for health detriments or families of deceased employees killed as a result of a work-related accident). Debts to priority creditors and farm employees (wage arrears) are settled only on the farm's expense, i.e. in a regular manner.

The schematic of settling historic farm debts to the state and private creditors consists in the following. Because farms are insolvent, their historic debts to private creditors are transferred to the state, of course, with the state's consent (the main purpose of the Republican Commission for Settling Farm Debt – see later). After this dramatic procedure is finished, the state becomes the debtor of the farm's private creditors only to the extent the private creditor is not a debtor to the state.

The state, becoming debtor of private creditors, settles its debts by tax credits. With this view, the state issues **treasury notes** (tax vouchers), a kind of loan certificate from the Ministry of Finance valid for a 5-year period. As these certificates are not securities, they cannot be traded on the securities market. The idea of issuing tradable treasury notes (securities), i.e. cash payments from the budget, was rejected from the very beginning. This is explained simply with the fact that it is absolutely unreal to receive cash from the country's budget in order to pay off the state treasury notes in conditions of chronic and acute budget deficit.

Figure A.3: Classification of Farm Debts and Creditors



The farm settles its historic debts to the state, including historic debts to private creditors transferred to the state. It was decided that this settlement would be done through the same untraditional process – by transferring property to the state, at its book value, in the following order (Art. 15, Debt Law):

a) public assets (schools, hospitals, cultural centers, roads, and other communication means) - into the ownership of mayors' offices or local maintenance organizations, in order to maintain the village social infrastructure;
b) mills and oil mills – into the ownership of mayors' offices, with the view to create municipal enterprises that would satisfy the needs of villagers and contribute to the local budgets;
c) agricultural or crop processing facilities - into mayors' offices administration for their privatization against cash proceeds;
d) portfolio stocks – to the Department of Privatization for their sale against cash proceeds;
e) accounts receivable – to local tax offices for forcible collection, in conformity with the respective tax legislation.

The given list of property is exhaustive. If the listed property is not enough to settle historic farm debts to the state, it was decided that any debts remained would be cancelled.

The main facilities offered to farms by the state are: acceptance by the state of historic farm debts to private creditors, transfer to the state of limited non-cash property as historic debt offset, transfer of this property at its book (not market) value, cancellation of the amount of historic debts remaining unsettled, and exemption of these transaction from taxation.

For organizational purposes, the following principle was adopted: the sooner the prepared reform is conducted, the higher chances to success it has. Thus, the enforcement period of the Debt Law was limited to 1 July 2001. All farms that do not manage by this time will be forced to solve their privatization and debt settlement issues on their own. After the approval of this law, the number of farms joining the National Land Program increased substantially.

Upon completion of the development of the Debt Law, the question of its position in the Moldovan legislation system emerged. The problem was that this draft law included a series of new regulations, which were either not stipulated by the current legislation, or contradicted it. In similar situations in the Republic of Moldova, as well as in some other countries, such a law describes the norms when it has priority to other laws in the same domain. However, in its Decision No. 56 of 26 October 1999, the Constitutional Court of the Republic of Moldova ruled that such priority norms are unconstitutional. The Debt Law was being developed during the same period. Therefore, in order to exclude difficulties in passing and enforcing the Debt Law, amendments for 6 complementary laws were developed (**Table A.2**). These amendments were short and simple, but they created good legal defense for the Debt Law. Indeed, by harmonizing this law with the current legislation, these amendments deprived the opponents of any formal grounds to attack the Law during its development and approval.

All these amendments were included in a separate law, which was examined and approved together with the Debt Law. Such a comprehensive approach was more convenient than separate presentation and approval of the two laws. It spared time and avoided problems – it was not necessary to wake twice the "parliament tiger."

Furthermore, in order to estimate future problems with some other laws, the Debt Law was given organic law status. Respectively, if there are contradictions between this law and ordinary laws, the Debt Law has priority. Such a priority is in absolute compliance with the Moldovan Constitution, which stipulates three types of laws, based on their priority – constitutional, organic, and ordinary.

Table A.2: Short Characteristic of the Amendments to Laws Related to the Debt Law

Amended law	Idea of the amendment	Objective of the amendment
▪ Civil Code	The court has no right to arrest farm critical property	Defend farm critical property from aggressive creditors
▪ Law on entrepreneurship and enterprises	Particularities of agricultural farm liquidation are regulated by the Debt Law	Exclude contradictions (the first Law did not stipulate out-of-court liquidation procedures)
▪ Law on enterprise restructuring	Idem	Idem
▪ Law on State Tax Office	Tax offices must participate in farm debt settlement	Prevent a boycott of tax offices
▪ Law on budget for 1999	The Debt Law determines the particularities of farm relations with the budget	Exclude contradictions (Law on budget for 1999 does not stipulate a special procedure of settling farm debts to the state)
▪ Law on budget of state social insurance for 1999	Idem	Idem

Out-of-court farm liquidation procedure. The Debt Law regulates both settlement of all farm debts and the farm liquidation itself. The following circumstances engender the necessity of liquidating collective farms.

First of all, *kolkhozes* (collectives) and *sovkhozes* (state farms) are economically ineffective in market conditions – 70%-80% of them are actually absolutely bankrupt, i.e. the market value of their assets is smaller than the amount of all debts (see chapter 2). This is why privatization of the agricultural sector of the national economy is absolutely necessary.

Second, after land and critical property privatization, *kolkhozes* and *sovkhozes* do not have enough resources to continue agricultural production.

Third, aggressive creditors are trying to transfer the burden of *kolkhoz* and *sovkhoz* debts to the newly created private enterprises. Leaders of private enterprises, however, sometimes try to refer their enterprises' taxes and expenses to the *kolkhozes* and *sovkhozes*. It is clear that both actions bare a negative character and contradict the tasks of agricultural sector restructuring.

Fourth, only when the farm is being liquidated, is it possible to force its creditors to quickly settle the debt problem, using quite favorable methods, and stop the possibility of continued fraud and tax evasion.

Fifth, *kolkhozes* and *sovkhozes* have been an illegal enterprise form for seven years already. The Law on entrepreneurship and enterprises (adopted in 1992) included a limited list of enterprise legal forms in Moldova. *Kolkhozes* and *sovkhozes* are not included in this list.

Based on professional arguments, any of the reasons given above would be sufficient to reinforce the necessity of collective farm liquidation. However, all these reasons were considered because *kolkhoz* and *sovkhoz* liquidation stirred up criticism from the anti-reform opposition.

The next question was – how quickly can the mass farm liquidation procedure be conducted? Court farm liquidation procedure is rather long, expensive and not always predictable. Besides, the potential of the Moldovan court system was absolutely inadequate to cover mass farm liquidations (see also chapter 2.3).

A normal reaction to the insufficiency of the classical liquidation procedure for insolvent farms was the idea of out-of-court liquidation. The main advantages of this procedure is its relative simplicity. Calendar calculations demonstrated that by using out-of-court procedures the final objectives of the National Land Program could be achieved within reasonable timeframes.

The Debt Law does not include the out-of-court procedure for liquidating insolvent farms as an imperative, but as a possible alternative to the court procedure. This can be explained by the fact that according to the general norms of civil legislation, an insolvent enterprise has only the right to decide on its liquidation, whereas the liquidation method – court or out-of-court – is determined exclusively by the creditors. A different approach would have rudely infringed the creditors' right to ownership.

Creditors exercise their priority right within one month after the farm decides to resolve debt and liquidate and this decision is published in the Official Monitor of the Republic of Moldova. Within this timeframe, just like in other liquidation procedures, creditors file their claims against the farm. In these claims, besides including the amount of farm debts, creditors must mention which farm liquidation procedure they choose – court (bankruptcy procedure) or out-of-court (Art. 8, Debt Law).

However, it is important to take into account that the state, as a creditor, in accord with Art. 8, Debt Law, always chooses the out-of-court farm liquidation procedure. Assuming that approximately 60% of all liquidated farm debts are debts to the state, it becomes clear that the choice of out-of-court farm liquidation is predetermined.

Experience of enforcing this law has shown the following. For three out of four farms, private creditors voted unanimously for out-of-court liquidation procedure. On average, for every farm, only one out of four creditors chooses court liquidation procedure. In the end, the court liquidation procedure did not get many votes as none of the farms that published liquidation notices, in accord with the Debt Law, were obliged by creditors to follow regular bankruptcy procedures.

Thus, the results of mass voting of private creditors, combined in the same document with the classical procedure of forwarding claims to the farms, prove that the overwhelming majority have voted for the out-of-court liquidation procedure. The reason is clear, this procedure is more advantageous for private creditors.

Voluntary restructuring. Another principle of the Debt Law is that, according to this Law, the general meeting of farm members makes the decision on farm liquidation. This refers not only to farm liquidation, but also to land and critical property privatization.

Voluntary participation in restructuring is expressed not only by participants' free communication of their opinions at the farm general meeting, but also in the fact that relations between the National Land Program and the farms are being included in agreements signed with the National Land Program. The basic agreement with the NLP is signed for land and critical property privatization, and for creation of new private enterprises. Only after complete fulfillment of these steps, the additional agreement with the National Land Program for debt settlement, final property privatization and farm liquidation is signed.

Thus, the system of "two agreements," although a little intricate, allows farm participants to decide on farm liquidation, even after all the land and critical property is distributed, and agricultural activity on the old collective is terminated. Experience shows that this choice once again strengthens the signing of the main agreement with the National Land Program, stimulates its fulfillment and creates equal agreement-based relations between the farm and the Debt Program. (Of course, under ideal circumstances, it should be enough to sign one agreement for the whole restructuring process.)

The experience of implementing the Debt Law also proved that approximately 1%-2% of all farms, which had already conducted land and critical property privatization within the National Land Program, did not wish to settle their debts and liquidate, in accord with the Debt Law. These farms did not sign additional agreements with the Program on continuation of restructuring. For example, agricultural production cooperative "Aroma" (Cobusca Nouă village, Anenii Noi raion) chose this path. This cooperative refused to liquidate, because its products have earned

appreciation abroad, and cooperative liquidation would have immediately slowed down the process. The National Land Program respects the free choice of such enterprises.

For Moldova's conditions, the voluntary principle had and still has political meaning as well. It took away the opponents' favorite argument about forced *kolkhoz* and *sovkhoz* liquidation.

Responsibility distribution. According to the forecasted data, within a limited period of time (two years), 1.4 billion lei historic farm debts were to be settled in the restructuring process. Moreover, settlement must also be conducted in an untraditional manner. That is why, a critical question was raised: *who* would make decisions on settling these debts on behalf of the state. From various discussed variants (Parliament, Government, judeţ commissions, etc.) of such a body, a Republican Commission was empowered to settle farm debts to the state (Art. 11, Debt Law).

The Republican Commission for Settling Farm Debt includes representatives of various ministries and departments, participating in the debt settlement process. The main ones are the Ministry of Finance, the Main State Tax Office and the Social Fund.

The Republican Commission, as opposed to the Government or the Parliament, can conduct technical work and quickly make decisions. At the same time, several ministries and departments are responsible for making decisions on settling debts to the state. The Law stipulates two measures of control over the activity of the Republican Commission by the Parliament and the Government:

(i) the Republican Commission publishes monthly in the Official Monitor the main content of its decisions, and
(ii) the Republican Commission submits quarterly reports on its activity to the Government, and the Government submits yearly reports to the Parliament.

The Republican Commission may also settle current issues with the representatives of ministries and departments involved. The Republican Commission's authority is enough to settle issues with ministries and departments, representatives of which were not included into its membership. This hypothesis was proved in the course of activity. Moreover, when in the beginning of 2000 the crisis on settling current farm debts arouse, a second Republican Commission was created. However, the main drawbacks of this commission is the fact that its members are reluctant to undertake responsibilities for unusual issues not fully regulated by the existent legislation.

The principle of delegation of responsibilities is also used at the farm's level during liquidation, which is conducted by the Property Commission. This commission is chaired usually by the farm manager. Farm's chief-accountant, representatives of the territorial office of the Department of Privatization and State Property Administration, and of the Ministry of Agriculture and Processing industry, are also members of the Property Commission.

Critical property privatization proved that these commissions are most efficient. Why? Because their responsibilities are divided among a large group of people, and the commissions are temporary.

Simplification of procedures and their detailed description. Out-of-court farm liquidation is not being organized by the court, but by the Liquidation Commission. In order not to complicate the administration of this procedure, functions of the Liquidation Commission have been transferred to the current farm Property Commissions (Art. 9, Debt Law).

The Law describes in most details the debt settlement procedures. This was necessary because financial tools (cancellation of debts with expired maturity term, debt transfer, debt settlement using non-cash proceeds, treasury tax vouchers, etc.), included in the Debt Law, were not widely used in the country. Besides, any ambiguities in the procedures presenting the least risk for budgetary means, may be used by state officials to slow down the process. Such delays are usually the result of long coordination of

Government decisions and administrative circulars of ministries and departments relating to the implementation of the law, in which officials try to distort the meaning and objectives of the law. These bureaucratic and anti-reform forces cause frustration, but so far they have been unable to stop this reform process.

Thus, the main principles of the Debt Law are a response to concrete problems set for the National Land Program in the beginning of 1999. At the same time, these principles are rather general. In our view, this may facilitate their adoption in other countries facing similar problems under similar macroeconomic and political situations.

Farm Restructuring Steps Under the Debt Law

1. Steps preceding farm liquidation

In-kind Property Share Allocation. The critical property is allocated by the Property Commission to privatization participants, regardless of the farm financial situation and its debts. The property share can be received in-kind by the privatization participant himself or by his proxy representative. In-kind allocation of production facilities and neighboring lots is being done based on the necessity of compact organization of the production process.

Foundation of Private Enterprises. The private enterprise is being founded by persons who were allocated in-kind land shares and property shares from the critical property, or only the land share – within 3 months from the date of receipt of the respective title certificates. The private enterprise can be a peasant farm or another legal form. These enterprises may use, until all debts are settled, based on an agreement, property of the farm undergoing privatization, only if this property is not seized. If the land share holder has alienated or leased out the land, s/he is obligated to submit the respective documents to the mayor's office.

2. Beginning of the farm liquidation procedure

Approval of Farm Liquidation Decision. The farm liquidation procedure begins when the respective decision is made by the general meeting of shareholders, associate members or cooperative members. The Property Commission publishes a notice on farm liquidation in the *Official Monitor*, in accord with the Debt Law. The farm *liquidation notice* states that creditors can file their claims to the farms within one month from the publishing of the notice, and must indicate which farm liquidation procedure (court or out-of-court) they choose. The amount of state-claimed debts is determined based on the extracts from the personal account of the taxpaying farm; all these claims are chosen to be settled through out-of-court procedures. *Priority creditors* and farm employees are not obligated to file claims to the farm; also, they cannot vote for any of the two liquidation procedures. The liquidation procedure (based on the law on bankruptcy or the Debt Law) is chosen on the basis of claims of those creditors, debts to whom are more than 50% of the total of all submitted claims. Claims not filed, or filed after 30 days are written-off as *unsolicited* claims, and their deduction from the farm's balance sheet is authorized in the law. *Expired* debts are cancelled in the same manner (over three years from the date the debt became overdue).

Farm Restructuring upon the Local Council Decision. If it is impossible to hold a farm general meeting because it stopped its production activity or due to other reasons, the farm restructuring and liquidation decision may be made by the local village council, in accord with Law 392-XIV of 13 May 1999.

Creation of a New Property Commission. If the privatization commission ceased its activity or the farm does not conduct any activity, the local council can create a new Property Commission, which is delegated the rights and obligations of the original Property Commission.

Consequences of Publishing the Farm Liquidation Notice are the following:

a) creditors consider that they are being informed and are obligated to file claims;

b) debts are considered redeemable, and the claims are being settled by means of a unique procedure;
c) farm property cannot be written off, seized or collateralized in any other way.

3. Settlement of debts to priority creditors and employees

Debts to Beneficiaries are settled first, by transferring the compensation payments to the creditor, stipulated by law, directly or by capitalizing Social Fund payments. Settlement directly to beneficiaries is done by using cash proceeds or other farm property accepted by the creditor.

Collateralized Debts are settled, using collateralized property, and if this is not enough, the remained debt is settled according to the general procedure.

Debts to Farm Employees for wage arrears are settled according to the method of settling current debts.

4. Historic debt settlement

Compilation of the Creditors' Registry. Based on creditor's claims, the registry of creditors' claims, signed by the chair of the Property Commission and mayor, is compiled; the registry also indicates liquidation method chosen by each creditor. Reconciliation statements are compiled by the Property Commission within one month from the date of publishing the farm liquidation notice, and are submitted to the tax office. The tax office verifies the documents and forwards them to the Republican Commission for examining and decision making.

The Republican Commission for Settling Farm Debt takes decisions on state acceptance of farm's historic debts to private creditors which have not been either time barred or excluded because the creditor failed to respond to the liquidation announcement in the *Official Monitor*. Based on this decision, the Tax Office register the state receipt of historic farm debts to other creditors in the personal accounts of both the farm and its creditors. The decisions of the Republican Commissions are also published in the *Official Monitor*.

Offsetting Farm's Historic Debts to the State. Historic farm debts to the state, formed from primary debt (actual farm debt to the state) and secondary debt (formed as a result of state receipt of historic farm debts to private creditors), are offset with certain categories of property the ownership of which has been ceded to the state in a strict succession in accord with the law.

Property Used for Debt Settlement, Stipulated by Law:
a) public assets - into the ownership of local government;
b) mills and oil mills - into the ownership of local government;
c) agricultural processing facilities - into the administration of local government;
d) portfolio shares – to the Department of Privatization for further privatization;
e) accounts receivable – to local tax offices for forcible collection.

Each latter category of property may be used only upon complete transfer of previous categories, i.e. if the previous category is not sufficient. The debt offset using property is carried out by the territorial tax office, within 5 days from the submission of the transfer bills.

Writing-off of the Historic Debts to the State Remained Unsettled is done only in instances when some part of historical farm debt remains unsettled (unsettled historical debt balance) after transfer to the state of all the farm property defined for that purpose. The respective request is submitted by the chair of the farm Property Commission to the territorial tax office, which forwards it to the Republican Commission for the respective decision.

5. Settlement of current debts

The Sequence of Current Farm Debt Settlement:
a) debts to beneficiaries;
b) debts to employees, which include all unpaid wages;
c) debts to the state;

d) debts to other creditors.

Property Used for Current Debt Settlement, After the Settlement of Priority Debts:

a) cash proceeds;
b) agricultural products;
c) other property, except for seized property or property destined for historic debt settlement.

The Procedure of Current Debt Offset with Property. The property is transferred to creditors, according to the scheme of preferences mentioned above by: (a) direct negotiation; (b) auction organized among creditors of the same level. The creditor is offered a written proposal by the Property Commission, to which a list of property destined for current farm debt settlement is attached. Within 20 days, the creditor must give its agreement to receive the offered property and consider the debt settled or to reject it and cancel the debt. Lack of creditor's answer is considered rejection. The property is proposed at the estimated appraised value established by the Property Commission. In case of differences regarding the value of the proposed property between creditors and the farm undergoing the liquidation process, the respective property evaluation can be conducted by a licensed appraiser.

Settlement by Transfer of Farm Debts:

a) Upon consent of the creditors (frequently farm employees -unpaid wages, farm input suppliers or banks), one or more private enterprises created during the privatization process may accept current debt provided that the collective undergoing debt settlement and liquidation also transfers an equivalent amount/value of property – at estimate or market value – to the new private farm willing to accept current debt.
b) Part of the current debts, including debts to beneficiaries (priority creditors) can be transferred to the enterprise created by local government to own and operate property transferred to the local government (mills, oil presses, agricultural crop processing facilities) in settlement of historic debt, provided that the amount of these debts transferred does not exceed 10 percent of the value of the assets transferred, and the transaction is approved by both the creditor and the local council of government (village council).

6. Settlement by the state of transferred debts

Method of Settling Private Debts Transferred to the State. The state offsets the transferred farm debts to a private creditor within the limits of the creditor's debt to the State.

Treasury Notes (tax vouchers). If the amount of a creditor's debt to the State is less, the difference in favor of the creditor is settled by the Ministry of Finance in equal installments over a 5-year period through tax credits. The state obligations are confirmed by Ministry of Finance treasury notes, in form of annotations in the personal accounts of the enterprise in the Treasury Notes Registry. The Main State Tax Office includes the respective annotation on the transfer of historic farm debts to the state, within one month from the date the Republican Commission made the decision. Ministry of Finance treasury notes cannot be alienated or transferred to third parties, they can only be transferred to the creditor's legal successor.

Terms and Manner of Debt Offset Through Tax Credits. The historical farm's debts to private creditors relinquished to the state are repaid by the Ministry of Finance in equal installments over a five year period through offsetting of all types of payments (taxes and other levies) to the state and local budgets accrued on each creditor (tax credit). Tax credit is applied starting the calendar year following the year of debt transfer. If a creditor's tax payments to the state and local budgets accrued over a five-year period proved to be less than the amount of historical farm debts relinquished by it to the state, the validity period of the treasury notes is not prolonged.

7. Privatization of property remaining after debt settlement

Calculation of Property Shares. The farm Property Commission calculates the property

shares of each privatization participant in the remaining assets on the list of remained property, and ensures its allocation through a second and final property tender.

Transfer of Property Unclaimed by Privatization Participants. Property, in calculated property shares, unclaimed at the end of farm liquidation, is transferred into the economic administration of local government. This procedure is necessary only when a participant or his/her proxy is not present at the final property tender. This property is allocated to its owners within 30 days from the receipt of their requests. The final deadline for submitting requests to receive property is 1 July 2001, after this date, the respective property goes into the ownership of local government. Unsolicited land lots remain under the local governments' administration until they are solicited by the privatization participants. There is no time limit in the applicable legislation.

8. Termination of farm liquidation

Compilation and Authorization of the Liquidation Balance Sheet. Within 10 days from the settlement of all farm debts, the Property Commission prepares the farm's final liquidation balance sheet and submits it for approval to the general meeting; and if it is impossible to hold a general meeting, the balance sheet is approved by the local government. The final liquidation balance sheet, together with other foundation documents, is sent to the territorial tax office, which approves it within 5 days, and returns it to the Property Commission.

Removal of the Farm from the State Commercial Registry. Within 5 days from the receipt of all required documents:

a) the request on farm's removal from the State Commercial Registry;
b) farm's registration certificate (the original);
c) statement confirming complete settlement of debts to the consolidated state budget, issued by the territorial state tax office;
d) statement confirming that the farm closed its bank account(s), issued by the servicing bank(s);
e) foundation documents (original);
f) certificate confirming that the farm's stamps and seals were destroyed, issued by the local police office;
g) copy of the farm liquidation notice published in the Official Monitor of the Republic of Moldova; the State Registration Chamber within the Ministry of Justice removes the farm from the State Commercial Registry, and issues a copy from the registry to the Property Commission of the collective farm.

PART III : IMPLEMENTATION

Internal Structure and Methodology

After the Law on Restructuring of Farms Undergoing Privatization was passed by the Moldovan Parliament on 13 May 1999, the CPBR decided to form a new unit (Debt Resolution Unit – DRU) to provide assistance to all Government agencies involved in debt resolution and liquidation of collective farms under the provisions of the Debt Law, as an integrated part of the National Land Program.

Following the existing CPBR internal structure, new teams of 3 accountants each were formed within each of the eight Farm Privatization and Restructuring Centers (FPRCs). New staff was also hired to form two Chisinau based teams: the core team and the expert team. The **local teams** assist the Property Commissions of the farms in preparing legal and accounting documents, provide consultations on different issues. The **core team** is mainly formed by eight accountants-coordinators assigned to each FPRC. These coordinators are responsible for the organization of the debt resolution work and liquidation of collective farms within their regions in compliance with respective legal procedures and according to internal monthly targets. The core team members ensure the flow of information and provide the link between local teams and Property Commissions on the one hand, and the expert team and state agencies on the other. The **expert team** composed of economists, lawyers and accountants provides technical assistance to the Republican Commission, and represent the farms' interests during the sittings of the Republican Commission. The expert team members also provide consultations to coordinators and local teams, check the correctness of all documents prepared in the field before they are presented to the Main State Tax Office, Ministry of Finance, and the Republican Commission. As work started, another activity of the expert team became vital: assisting different Government agencies (mainly the Tax Office and the Ministry of Finance, the Social Fund, Registration Chamber by the Ministry of Justice, the State Archive, the Department of Privatization, the National Securities Commission, and others) in drafting internal regulations and issuing circular letters aiming at adjusting existing working procedures to the provisions of the Debt Law, providing clear instructions to local authorities and Government representatives on the implementation of the Law, as well as training them through a series of seminars organized during the first 2-3 months of our activity. Thus, more than 170 official documents were prepared on behalf of different Government agencies in the form of letters, circulars, orders, Government regulations, amendments to laws, etc.

The new staff for the Debt Resolution Unit teams was hired in June 1999. It was also decided to add a senior expatriate advisor to the CPBR staff to provide advice and council to the DRU and accept responsibility for meeting the targets. This person arrived in September 1999. The members of the DRU teams were intensively trained by CPBR specialists, explaining the Debt Law and other legal issues involved, announcing the timeframe and the goals of the project, and how to achieve these goals under the Debt Law provisions. The work methodology was developed: the entire process of debt resolution and liquidation of farms was divided in discrete and sequential stages, and the key players in each stage, as well as the flow and sequence of documents to be prepared through the process, were identified and clarified. It was decided that the work progress, stage by stage, on each farm, within each region, would be assessed and monitored by DRU management on a weekly basis to prevent any inconsistencies, possible delays and failures to meet monthly targets.

After the Law on Restructuring of Farms Undergoing Privatization was promulgated by the President and enacted on July 15, 1999, it became possible to plan the activity of DRU in detail. The plan was based on the assumptions that: it takes a farm about 5 months to complete the whole process; between 800-900 farms would join the program; one year would be sufficient to finish the work on all farms. Thus, monthly work plans for one year were elaborated for each FPRC. The work plans contained 10 consequent stages a farm should go through to completely settle its debt and liquidate, and numbers of farms that should complete each stage at the end of each month. In

such a way each local team had sets of tasks to accomplish during each month.

The work plan was the main tool for monitoring and controlling the whole process with the overall objective – completion of privatization and liquidation of 888 farms in compliance with Moldovan legislation by August 31 2000.

First Steps

Assisting the Ministry of Finance and the Main Tax Office in drafting the regulations to the Debt Law, i.e., the Government Decisions required by the Debt Law (*Decision on Republican Commission for Resolution of Farm Debt* (No. 767, of August 9, 1999), and *Decision on State Support in Restructuring of Farms Undergoing Privatization* (No. 854, of Sept. 17, 1999)) was the first important activity of the Debt teams. These two Government Decisions (annex 4) were designed to provide detailed regulations and mechanisms for debt resolution, completion of privatization and liquidation of collective farms. The regulations also contained the necessary forms (documents to be filled in) for the entire process and that fact ensured the smoothness and regularity of the process and excluded any misinterpretations and ambiguity, also making possible later automation of the process. Direct participation of DRU staff in developing the regulations and the forms excluded the need for training staff after these regulations were adopted by the Government, and, to a certain degree, simplified the process since the co-authors of the forms were the future implementers. This aspect was critical and only hindsight has confirmed this.

The last regulation was enacted late in September 1999, thus completing the legislative base for the process of farm restructuring and privatization of the agricultural sector of Moldova. By the end of that month 232 collective farms published their liquidation announcements in the Official Monitor in compliance with Law 392-XIV, whereas 18 farms from all the regions of Moldova settled their debts and distributed the remaining property amongst the participants to privatization, and were liquidated.

The first several dozen farms liquidated during the first months of the DRU activity proved that the Law on Restructuring of Farms Undergoing Privatization was workable, and that the methodology developed and applied by the National Land Program based on the existing legislation was applicable at national level with no reservations whatsoever. Attracting more farms into the process and getting the government at both central and local levels more involved was the next task for the National Land Program.

Following this imperative, 10 seminars were organized in all judets (Moldovan administrative-territorial unit) and the capital of the country. Judet officials (Prefects and Chairmen of Local Councils), Primars (heads of local administration), specialists of various government agencies of central and territorial levels (Department of Privatization and State Property Administration, Ministry of Finance, Tax Office, Customs Department, Social Fund, State Registration Chamber, State Archives, Department of Statistics and Sociological Analyses, Office of Public Prosecutor, law-courts), as well as farms' main creditors, heads of Property Commissions and accountants of farms subject to debt resolution and liquidation participated at these seminars. Speeches given by former collective farm managers who had already benefited from the program (those were primarily from the first 18 farms liquidated) were particularly popular. During the seminars the NLP specialists explained the procedures under the Debt Law, their sequence, the rights and responsibilities of all participants in the process at different stages, etc. The seminars were of great interest to all parties involved judging by the number of questions asked at round tables concluding the seminars. More than 2,500 people attended the seminars. Sets of handouts that included brochures with texts of the Debt Law, Government Decisions and Ministry if Finance orders, specially prepared guidelines for Primars, Social Fund, State Archive and Tax Office employees were distributed to seminar participants.

For transparency reasons, extraordinary sittings of the Republican Commission were held in various judets at the beginning. These field

sittings of the Republican Commission (usually hosted by Judet Prefect – Government local representative) also aimed at getting a better insight into the problems encountered through the process of farm restructuring, speeding up the process, attracting more farms, and solving problems on the spot in the presence of more parties involved. After the sittings, representatives of the Main State Tax Office, members of the Republican Commission organized seminars for local Tax Office employees providing guidelines on the procedures of farm debt settlement, and they also measured the work progress of the local working groups against the provisions of the Government official schedule.

In accord with the Government Decision No. 854 *On state support in restructuring of farms undergoing privatization* the Ministry of Agriculture and Food Processing Industry together with the Ministry of Economy and Reforms created judet working groups including representatives of their territorial divisions for the purpose of timely changing the membership of property commissions and taking ad hoc decisions on any other issues which appear during the fulfillment of the quarterly schedule for transfer to the state of historical debts and their settlement by farms participating in the NLP. In many judets these groups manifested good cooperation with the NLP and understanding of the NLP principles and goals, and proved to be very helpful in removing obstacles in farm restructuring and completion of privatization.

Another important and complicated mission of the DRU was to collaborate with various Government agencies in order to harmonize different working methodologies in use. Conflicts of interests demanded a thorough understanding and cooperation from all parties involved, especially when dealing with financial issues. Due to the complexity of debt settlement procedures, an impressive list of various participants belonging to different Government structures were involved in the process. According to established traditions, and in response to the avalanche of questions asked by the local government, the central government had to issue official explanatory notes in form of circular letters, instructions and orders. The Debt Program specialists assisted different Ministries and Departments in drafting these instructions before they were officially disseminated to the local government. This collaboration of the NLP and central government, especially the Ministry of Finance and the Social Fund, was seldom smooth. Conflicts were caused by the NLP tendency to simplify and expedite the process of debt settlement, whereas the Ministry of Finance and the Tax Office, for example, had the task to "defend" the budget and increase tax collections in cash. Notwithstanding opposing interests, compromises have been always found and the process has never been fully stopped. As a result, more than 30 official letters and orders providing instructions on procedures for farm debt settlement and liquidation have been drafted with the NLP active participation and issued by the central government during the first months. During that time government agencies were establishing internal procedures and were taking certain positions under the provisions of the new law. It was extremely important then for the debt team to be tuned to all decisions taken by all government agencies which required vigilance and prudence. It was vital to react promptly to make sure NLP principles were not misinterpreted or distorted, and that the NLP goals and the time-schedule were not jeopardized.

Major Constraints to Farm Debt Settlement

Mass farm debt settlement has no precedents in Moldova, and because of this, delays were to be expected. Besides, the debt settlement process regulates contradictory interests of its many participants. Data indicates there are approximately 430 creditors per farm, including:

- 400 employees (usually unpaid wages);
- 2 individual beneficiaries or families of deceased to whom the farm is liable for health detriments;
- 2 state bodies (territorial tax office and territorial representative of the Social Fund), which represent the state-creditor;
- 26 private enterprises – creditors.

The circle of public administration agencies that control this process is also large. The delays

encountered are subdivided into delays at the local level and delays at the central level, based on where they are regulated. The reason for such a division is that, in the beginning, settlement of any delays is always initiated at the local level. If that fails, the issues are settled at the central level, in hierarchical order (**Figure A.4**).

The practice of resolving delays of farm debt settlement showed that the main reasons for these delays were *problems of settling current debts, historic debts to banks and transfer of farm portfolio shares.*

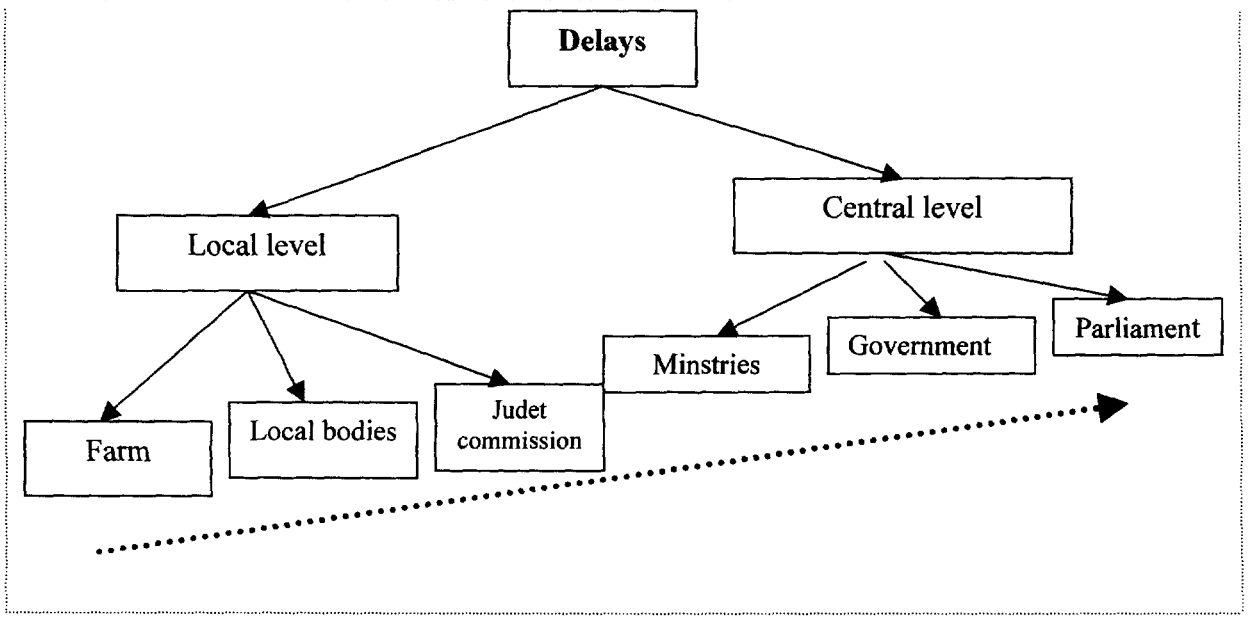
The first two problems are conditioned by the contradiction of interests between the agricultural reform and the national budget. This conflict of interest appears in the same state public administration bodies, which gives them duplicity and instability.

The Current Debt Problem. This problem emerged because the Ministry of Finance, Main State Tax Office and the Social Fund are traditionally the administrators of budgetary inflows. As a result, these bodies are interested in selling farm property to contribute cash to the budget.

On the other hand, being ordinary creditors, according to the Debt Law, these bodies are obligated to receive from the farm real property as debt offset to the state, which is not considered as a budget contribution. Thus, their second role contradicts their first one. Moreover, this second role is unusual for them – often, in the beginning of the debt settlement process, these bodies did not submit their requests to the farms, wrongly considering that they are regulated by the public law even during the farm liquidation process.

The National Land Program insisted that the state be an ordinary creditor with no privileges. As a result, in the course of settling current debts, requirements in Art. 17 of the Debt Law regulate the state as well. This means that the state, like the other creditors, must choose property, within 20 days, from the list offered by the farm after historic debt settlement. Immediately after the receipt of this property, the sate cancels current farm debts at the total appraised value of the property, without waiting for its sale. If the state refuses to receive this property, or does not answer within the established timeframes, current farm debts to the state are canceled.

Figure A.4: The Order of Eliminating Delays Encountered During Farm Debt Settlement



At the end of 1999, after much hesitation, The Ministry of Finance, Main State Tax Office and Social Fund took a firm position regarding the process of settling current farm debts, according to which:

- budgetary interests have priority as opposed to agricultural sector interests;
- tax bodies are not ordinary creditors and they will not be "the division for agricultural property sale."

Based on that, the Ministry of Finance, in accord with the Main State Tax Office, and the Social Fund, but without the agreement of the National Land Program, issued circular No. 10-19-4512 of 20 December 1999 (issued in the last few days of the Sturza Government). This circular allowed settlement of current farm debts to the state, only using cash proceeds. This meant that current farm debts were settled only after the farm sold its property and transferred the received cash to the Tax Office and Social Fund accounts. This procedure would be repeated until all current farm debts to the state are settled completely.

By carrying out this circular, Territorial Tax Offices and representatives of the Social Fund blocked liquidation of a large number of farms, because usually farms do not have liquid property, and the market for used farm property was practically non-existent at this time.

In order to illustrate the negative impact of this circular on the debt settlement process, the National Land Program conducted a study of reasons for delay in this process (November-December 1999 sampling). The results of this study are given in **Table A.3**. As the results show, three of the four delays were caused by government bodies.

Table A.3: Causes of Delays in Debt Resolution

Groundless Delays in Debt Resolution	Delays	%
1. Caused by Government	68	76.4
a. Caused by Tax offices	46	51.7
b. Caused by Social Fund	8	9.0
c. Caused by Primarias	9	10.1
d. Other (BTI, state archives, creditors)	5	5.6
2. Caused by Farm under liquidation	21	23.6
Total	**89**	**100.0**

The delays in settling current farm debts were solved by Government Decision on Completion of the Restructuring of Farms Undergoing Privatization No. 173 of 25 February 2000.

This decision was based on Art. 17 of the Debt Law. At the same time, based on limited possibilities of the tax office to sell the non-cash property transferred to the state, this decision regulated the limited list of this property, which can be transferred to tax offices as current debt settlement. This list includes portfolio shares and farm's accounts receivables. The other categories of non-cash property are transferred into the mayor's offices ownership.

The existent Republican Commission could settle issues connected only to settlement of historic debts to the state. Therefore, another Republican Commission was created for settlement of current debts (hereinafter – second Republican Commission) chaired by the Vice Prime Minister.

As a result of all these measures, the issue on settling current debts was solved and farm liquidation process accelerated considerably.

The Problem of Debts to Banks. This problem appeared because usually banks are priority creditors, as debts to them are secured by collateral. Such debts to banks are settled in a separate manner, stipulated by the Law on collateral, and thus, cannot be transferred to the state. However, beginning with March 2000, the first Republican Commission began to reject state receipt of historic farm debts to banks even in cases when the object of collateral was sold or lost (creditor then becomes an ordinary creditor in accord with the Law on collateral).

The main argument for refusal was the following. If there is a collateral agreement, the bank is a priority creditor until the whole amount of debts is settled. The budget is poor – the banks are rich. Banks write off bad debts and have reserves for such losses, therefore they should write off these farm debts.

The National Land Program standpoint was based on the Law on collateral. In compliance

with Art. 32 and 34 of this Law, the bank stops being a priority creditor and becomes an ordinary creditor, if (i) the object of collateral is sold, but not all debts to bank are settled, (ii) the collateral was lost, or (iii) the creditor and debtor dissolved the collateral agreement. Thus, if historic farm debts to banks are not secured by collateral, such debts must be transferred to the state, and the state should issue tax vouchers to the banks in accord with the Debt Law.

In order to determine the situation on settlement of farm debts to banks, the National Land Program conducted a study of the methods used for settling these debts. The results of this study as of April 2000 are included in **Table A.4**. As the data shows, the main method for settling farm debts to banks is transfer of these debts to private enterprises, created as a result of the privatization process. However, it contradicts directly one of the strategic objectives of the program, which is to create debt-free new farming enterprises.

This conflict of interests was also settled by the Government. Government Decision No. 529 (5 June 2000) included the list of documents to be submitted by the property commission for confirmation of the fact that debts to the bank are not secured by collateral and can be transferred to the state. Thus, this constraint to farm debt settlement was also solved.

Table A.4: Methods of Settlement of Bank Debt

Methods of settlement of farm debts to banks	Total, thou. lei	%
Write-off	3 082	19.4
Repayment without sale of collateral	704	4.4
Sale of collateral and repayment	415	2.6
Transfer of collateral to banks	1 579	9.9
Transfer of debt and collateral to private farms	7 154	45.0
Transfer of historic debt to state	2 952	18.6
Total	**15 886**	**100.0**

Transfer of portfolio shares. The third main reason for delay is transfer of farm portfolio shares for debt settlement. Farms received these shares in 1994 -1996 during the voucher privatization of canning, sugar, wine, dairy enterprises and other factories that processed *kolkhoz* and *sovkhoz* supplied agricultural raw materials.

Delays in transfer of the respective shares to the state or other creditors was caused, first of all, by the fact that after receiving these shares, many *kolkhozes* and *sovkhozes* reorganized by division into cooperatives, limited liability companies, or by merging into joint-stock companies or production cooperatives.

However, the Registry of Shareholders of processing enterprises was not officially informed and did not include respective data on reorganization of shareholder-enterprises in their database. The inevitable problem of registering the successor's ownership title of the shareholder-enterprises due to their reorganization in the privatization process appeared. Difficulties arose because a lot of time had passed since the shares had been registered and certain documents necessary for re-registration of the shares were missing. This was also because several collectives had gone through reorganizations without correcting the share registry.

For example, *kolkhoz* "AAA," possessing portfolio shares, reorganized in 1995 into cooperative "BBB". The latter subdivided in 1998 into LLC "CCC" and LLC "DDD"; each of them were transferred portfolio shares. The problem is that portfolio shares, which are still registered under *kolkhoz* "AAA" in the Registry of Shareholders, must be reregistered under cooperative "BBB," and then reregistered again under LLC "CCC" and LLC "DDD." This reregistration must be conducted in 2000, when cooperative "BBB" has already been liquidated, and many documents are already missing on *kolkhoz* "AAA."

Another issue related to determining the appraised value of shares transferred to the state and the accurate legal compilation of the bills of share transfer. These and other issues concerning the registration of new owners of portfolio shares were solved by means of consultations provided by share registrars and by the National Securities Commission. A circular was issued and sent to share registrars based on the consultations provided by the National Securities Commission.

The Department of Privatization and State Property Administration made a significant contribution in solving these issues. A new team was created within the Debt Resolution Unit handling the transfer of portfolio shares. As a result, the issue of transferring portfolio shares against debt settlement was solved.

Research indicated that the three main reasons of delays in the debt settlement process were connected with contradictions in the respective legislation. They were solved at the level of the National Securities Commission, the Department of Privatization and State Property Administration and at the Government level.

Legislation. In practice, it was demonstrated that complete high Government support is not always sufficient to eliminate all delays. Therefore, it was necessary to amend the Debt Law. The amendments were prepared by the National Land Program in cooperation with the Ministry of Finance and the Main State Tax Office.

Parliament approved the amendments on 27 April, 2000. These amendments were debated in Parliament at the beginning of 2000 in intensive discussions. However, as a result of the successful implementation of the Debt Law from September-December 1999, the amendments to the law were examined and approved in favorable conditions.

The respective amendments can be divided into (i) amendments eliminating instances of artificial increase of current farm debt and (ii) amendments aimed at simplifying the debt settlement procedure.

The first category of amendments were aimed at eliminating the artificial increase of current debt.

For example: some tax inspectors, in use of their rights under the Tax Code, would decide to audit a farm's accounting records and tax declarations corresponding up to the statute of limitations after the announcement of liquidation had been made in the *Monitorul Oficial* but before (or even during) the NLP debt coordinators and FPRC teams began the process of reconciliation and cross verification of the collectives' debts. As a result of these audits practiced in accord with the Tax Code, inspectors would apply penalties, fines and assess taxes due to mistakes (or instances of discovered fraud) in old tax declarations.

As such there were recorded cases where a 50,000 lei current debt to the state would grow exponentially to hundreds of thousands of debt after application of back taxes, fines and penalties on the unpaid amounts as a result of the tax audits after the official liquidation announcement had been published in the *Monitorul Oficial*. The Debt Team referred to this as "piling-on" and viewed this as a government "taking" of private property without proper compensation, i.e., a re-nationalization of assets which heretofore had been owned by the rural people (viz., the farm).

Even if the tax years audited were within the period classified as "historical debt" in the Debt Law, i.e., prior to January 1, 1999, tax inspectors and Ministry of Finance officials insisted these fines and penalties, as well as the original tax amount, should be treated as current debt.

While Debt Program executives and managers never discovered the real reason for this action on the part of tax inspectors and the Main State Tax Office, speculation included ideas such as re-nationalization of the non-land means of generating income in rural Moldova, stripping as much as possible from the farm for the benefit of the central and local government, punishing the new private farmers as through the "stripping" process any additional assets owned by the farm would not be distributed in the second property tender, accruing assets to sell or allocate cheaply to friends or families or other higher government officials, or simply as a misguided effort to create obstacles for the Debt Program so as to block liquidation of the collective shells – which for many individuals had provided an illicit livelihood for decades.

The amendment assisted resolution of the above problems by moving the dates for historical and current debt from December 31, 1999 to December 31, 2000 as well as classifying fines, penalties, unpaid back taxes discovered through

this audit process as historic debts if the audits were performed for years prior to December 31, 2000. Furthermore, the amendment instructed tax authorities that penalties, etc. discovered on farms after the announcement in the *Monitorul Oficial* could NOT be charged. This section of the amendment effectively eliminated the practice of "piling-on" and reduced the current debts by at least 33 percent.

Another major problem that the amendment effectively eliminated regarded the frequent practice of falsely accounting income and expenses of private farms (created through the privatization process but which had not officially registered as a new economic entities) on the accounting records of the old collective, as if the collective had been carrying on this economic activity. In this manner, the old collective appeared for all practical purposes to be engaged in economic activity, however the entrepreneurs were undertaking the economic activity, not the old collective. Tax officials, whether they genuinely didn't know or understand what was happening, or whether they were just too lazy or ill equipped to assess Land, Social Fund, VAT, income tax, customs duties etc., on thousands of new clients, continued to assess these taxes on the old collective, which of course never paid. These unpaid taxes, which really belonged to the newly created private farms, were lumped together initially as either historic or current debt and written off, transferred to the state and offset with property or settled as current debt to the state through transfer of mills, oil presses, etc., etc.

The amendment forced tax officials to assess Land and Social Fund taxes on the new landowners from the end of the month in which the land was distributed at the land tender, and made it easier for tax officials to assess other taxes on these same private farmers.

This discussion raises another issue, i.e., the tax regime against agriculture and private enterprise and the methods utilized by the tax service to collect what they consider due to the state as a result of private economic activities. The current Moldovan tax system and collection methodologies is so heavily weighted against the private business entrepreneur that instead of providing incentives for the creation and success of private business, quite the contrary, it drives private business persons into the gray or shadow economy. For this reason, new farmers created out of the NLP usually do not register their businesses.

This lack of registration complicates matters for the assessment and collection of taxes, e.g., land and Social Fund taxes, since tax officials are unaware of the existence of these new enterprises and private landowners. This has additional repercussions in that taxes that should be assessed against the newly created farmers continue to be wrongly assessed against the old collective shell. The effect is that unpaid tax and Social Fund amounts engender fines, penalties, etc. This just facilitates the "stripping" away by the tax officials of any remaining assets which could possibly be distributed to eligible workers in the second and final property tender prior to reaching a "nil" balance sheet shortly before final liquidation.

Therefore, there is a vicious circle which in the end prejudices the ordinary worker whose rights are being violated (without their knowledge or consent in most cases) by leader farmers, inefficient or corrupt tax officials, and old collective farm accountants and managers. The amendment to the Debt Law tries to resolve some of these issues in favor of the second and final property tender.

Last, the amendment to the Debt Law also fixes an anomaly regarding losses due to exchange rate fluctuations on credit agreements between farms and parastatal suppliers of fuel, fertilizer and other imported chemicals. For whatever reason, many of the agreements between the farms and the parastatal corporations were denominated in the national currency without consideration of possible devaluation. But in 1998 and 1999, the national currency lost about 50 percent of its value vis-à-vis the U.S. dollar. Therefore during debt settlement proceedings, many of these supply agreements were delinquent and were classified as either historic of current debt, depending on the dates when the original deal was made.

The parastatal corporations had apparently borrowed in dollars from the Government of Moldova to import the input supplies for resale to farms. Therefore during debt settlement, these corporations sought desperately to peg their credits to the US dollar-lei exchange rate, thereby inflating the nominal value of the debts enormously. In order to accomplish this several of these corporations resorted to unofficial tactics such as threatening farm managers if they didn't amend the original agreement to include exchange rate differences. In other cases, contracts were falsified outright.

The amendment to the Debt Law attempted to clean-up this issue by not allowing any exchange rate differences to be included as either current or historic debt unless they were mentioned in the original contract. It further stipulated that no exchange rate differences would be accepted unless these were filed and registered prior to the date liquidation was announced in the *Monitorul Oficial.*

The second category of amendments were aimed at simplifying the debt settlement procedure. For example:

- it combined the two Republican Commissions (one for historic debt and another for current debt) into one, simplifying the decision making process and the document flow to/from this state body;
- it suspended the execution of earlier court rulings concerning farm's property during the out-of-court liquidation of the farm, which will greatly simplify the process of property transfer for debt offset;
- it obliged mayor's offices to accept assets transferred to the state as current debt settlement, which will considerably eliminate the delays in the transfers of assets; and
- it regulates the procedure of transferring the documents of the liquidated farm to State Archives and mayor's offices' archives, which will eliminate delays in completing the final farm liquidation procedure, etc.

The amendments to the Debt Law became effective on June 8, 2000 (*Monitorul Oficial* No. 24-26 or June 8, 2000) and since the NLP specialists had already prepared the requisite regulations to this law, these will be immediately promulgated by Government decision shortly after the amendment is published.

The process to amend the Debt Law started in October 1999 with informal discussions between the NLP and the Republican Commission, the Main State Tax Office, and other GOM officials and ministries. It wasn't until April 2000 until the Government accepted the wording of the amendment and it was officially introduced into Parliament. Thus a new stage in debt restructuring will commence on June 8th – and none too soon – as the remaining farms are those which couldn't be liquidated earlier due to problems and more difficult financial situations.

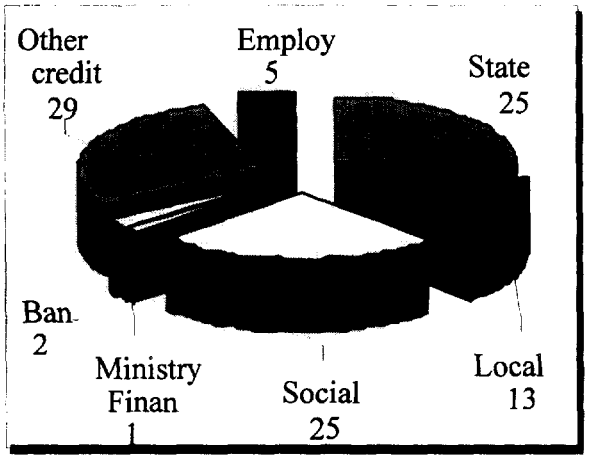
Notwithstanding the above discussion, the NLP executives and their advisors still are of the opinion that the amendment to the Debt Law was unnecessary if the bureaucracy would have respected the intent and spirit of the original law.

Current Status

According to the CPBR work plan approved by the USAID, 888 collective farms should complete all debt resolution stages and be completely privatized and liquidated by August 31, 2000. A snapshot view of the debt component of the National Land Program shows following results, as of the end of May 2000:

- 765 collective farms published liquidation notes in compliance with the Law on Restructuring of Farms Undergoing Privatization (Debt Law);
- 694 farms submitted documents, which were approved by the Republican Commission (there were adopted decisions on transfer to the State of historical debt and writing-off of remaining unsettled historical debt, if necessary);
- 564 farms repaid all debts (including debts to priority creditors, historic and current debts);
- 539 farms finalized privatization and were liquidated.

Figure A.5: The Initial Structure of Debts



For these farms:

- 1,021,865,000 lei in debt was settled;
- 818,630,000 lei in social assets were transferred to the local government;
- 624,971,000 lei in historical debt was offset with assets;
- 35,265,000 lei in historical debt was written-off as remaining historical state debt.

The average time required for a collective farm to completely settle its debt, distribute its property and liquidate was 122 days, ranging from 32 to 300 days. The efficiency of the debt component of the National Land Program was constantly growing, and reached by the end of May 2000 a **daily** average of:

- 2.3 farm liquidations;
- 4.3 million lei ($345,000) in debts settled.

The structure of debts (as of the date of the announcement of liquidation) is shown in **Figure A.5**. The farm debt structure registered in 1998 before distribution of land and critical property (Table increased from 48% to 64% and debt to the private sector decreased from 52% to 36%. Collective farms debts to the state increased mainly as a result of fines and penalties applied to the collectives that lost capacity to repay debts. At the same time, private creditors preferred the newly created private farms to the semi-dead old collectives as business counterparts, has changed significantly in 2000 when the majority of farms had distributed land and critical property, and stopped their main economic activities.

Debts that were written-off as debts with expired statute of limitations (3 years), and unclaimed debts (debts to creditors that failed to forward their claims within one month after the announcement of liquidation) constituted almost 20% of the total amount of farms' debts. The percentage of debts to private creditors that were written-off as unclaimed debts decreased from 20% during first months after the Debt Law was enacted to 15% at the present. The percentage of current debt increased from 3% to 13% during 9 months, and more than 20% of current debt to the state was the result of back taxes, penalties and fines applied by tax inspectors during the process of liquidation.

Historic debts of farms are composed by primary (initial) historic debt to the state, and secondary historic debt (historic farms' debts to private creditors transferred to the state). The ratio of secondary historic debt to the state was 27%. Both primary and secondary debt to the state amounted to 660 million lei at the end of May 2000. More than 839 million in lei at book value were transferred to the state, including social assets (97.5%), mills, oil presses and other processing facilities (1%), portfolio shares (1.4%). Although, on aggregate, the book value of all farms' assets was greater than the amount of their historic debt to the state, 35 million lei in historic debt to the state were written off as unsettled remainder (**Figure A.6**) in cases when farms did not have sufficient assets to transfer to the local government. An overage of social assets worth more than 190 million at book value was voluntarily transferred gratis to the government.

Current and priority debts were settled using various procedures provided by the Debt Law. The preferred method used by farms for settling these categories of debts was different for debts to the state and debts to private creditors (**Table A.5**). Three main procedures were used to settle current debts and debts to priority creditors:

- repayment by cash and/or other assets;

- writing off in case of refusals of creditors to accept any assets or insufficiency of assets;
- debt transfer to private farms that volunteered to accept debts together with an equivalent amount of assets.

Current debts to the state were preferably repaid by cash and/or other assets (68.5%), while private debts were preferably taken over by the newly created private farms, especially debts to the employees of the former collectives (49% and 80%, respectively). These preferences can be explained by the private farms desire to maintain good relations with private creditors – their present and future suppliers, some moral obligations to former employees, and last but not least – the possibility of receiving additional assets before the final distribution of property.

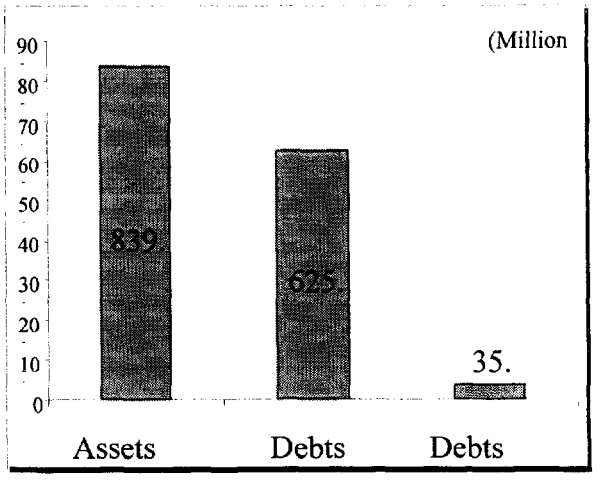
Table A.6 summarizes the results of the CPBR collaboration with government in creating a favorable legal environment for farm debt settlement and farm restructuring, as well as expediting the process and *ad hoc* overcoming different specific issues.

The amount of farms' historic debt to private creditors transferred to the state totaled 65.5 million lei by the end of December 1999. Of this amount of state debts to private creditors:

- 37.8 million lei were settled right after the debt transfer through offsetting of creditors' debts to the state and local budgets;
- 27.7 million lei was deferred and will be repaid by the Ministry of Finance in equal installments during 5 years, i.e., during 2000-2004.

The deferred debt repayments were documented by 233 treasury notes of the Ministry of Finance. The treasury notes are documented for each creditor following the principle "one creditor – one treasury note" and are entered into an electronic registry kept by the Main State Tax Office.

Figure A.6: Offsetting Farm Historic Debt to the State with Assets



Thus, a larger amount (57.7%) of farms' debts to private creditors transferred to the state was settled right after the transfer, and 42.3% was deferred for future repayments through tax credits. As a result, the impact on the consolidated budget generated by debt settlement procedures in 1999, amounted to 5.5 million lei for each budgetary year tax credits were deferred for. The load on the 1999 budget was less than forecasted in the projections made from the 1998 farm debt survey.

By June 2000, the value of treasury notes extinguished by the Main State Tax Office through tax credits amounted to 1,968 thousand lei, or 36% of the amount due for the current year. It can be concluded that the treasury notes, as a special financial tool, elaborated and implemented by the National Land Program proved workable and functional, and the state honors its obligations to private enterprises – former creditors of the liquidated collective farms.

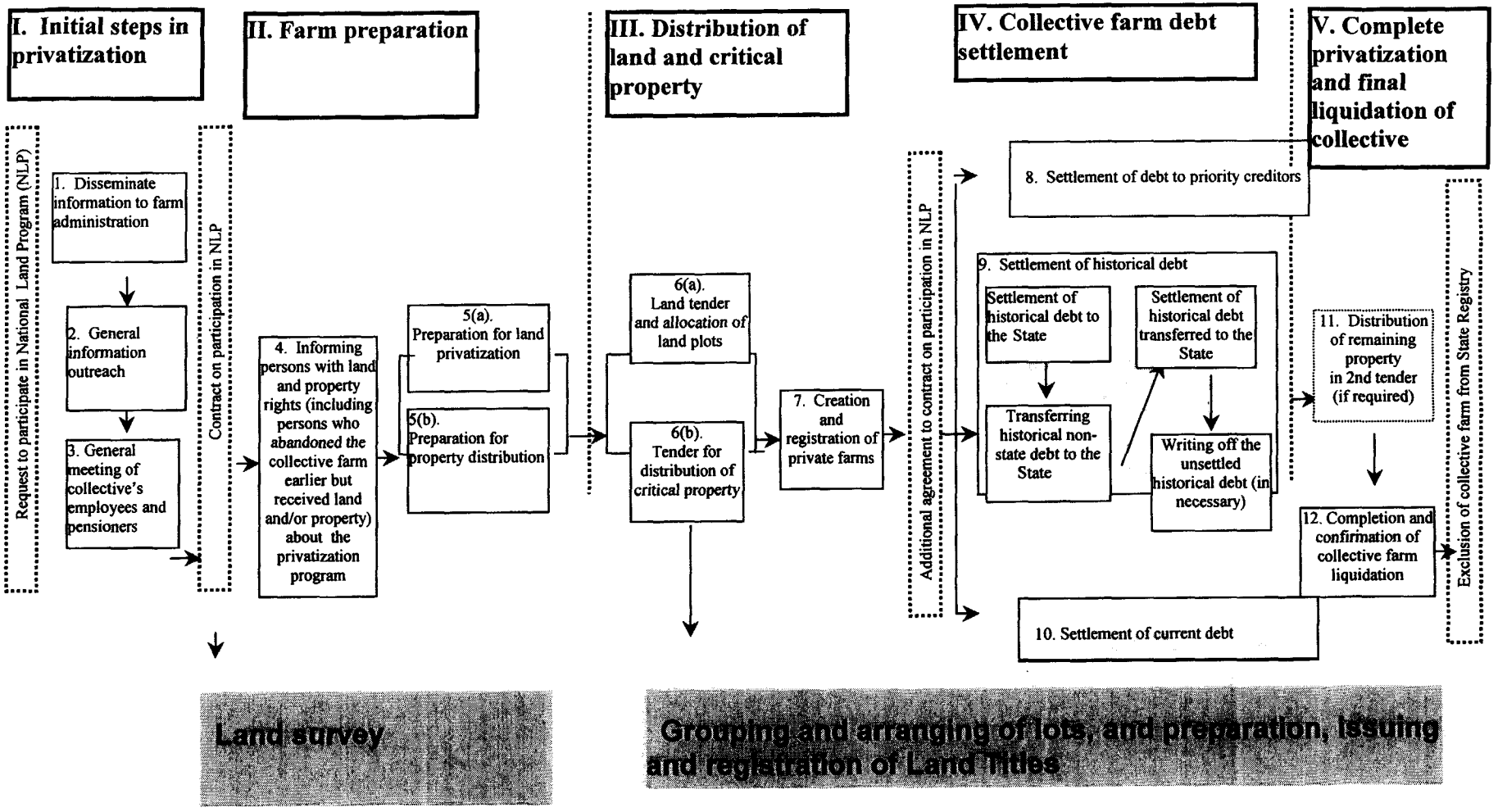
Table A.5: Methods of Settlement for Different Categories of Farm Debt

	Repaid		written-off		transferred	
	thsd. lei	%	thsd. lei	%	thsd. lei	%
Current debt to the state	38 358	68.5%	4 346	7.8%	13 282	23.7%
Current debt to private creditors	13 371	29.3%	11 179	24.5%	21 145	46.3%
Debt to employees	10 525	18.5%	654	1.1%	45 715	80.4%
Debt to banks	7 370	41.4%	762	4.3%	9 682	54.4%
Total	69 624	39.5%	16 941	9.6%	89 824	50.9%

Table A.6: Legal Cooperation with the Government of Moldova

Drafted and enacted	Number
Normative acts	
• Laws	7
• Government Decisions	8
• Orders of various Ministries	5
• Circular letters for local tax and Social Fund offices	22
Subtotal	42
Non-normative acts	
• Letters to the local government	15
• Letters to the General Prosecutor	14
• Letters to various ministries and departments	10
• Letters on releasing farm assets from seizure	52
• Formal answers on behalf of the Republican Commission	39
Subtotal	130
TOTAL	172

National Land Program Methodology



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