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**AGRICULTURAL CREDIT PROBLEMS AND POLICIES  
DURING THE TRANSITION TO A MARKET ECONOMY  
IN CENTRAL AND EASTERN EUROPE**

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**ABSTRACT**

*This paper assesses the problems of financing Central and Eastern European agriculture during the present transitional period and what the role of government is in this process. Initially the paper looks at why credit markets work imperfectly, even in well developed market economies, focusing on the problems related to asymmetric information, adverse selection, moral hazard, credit rationing, the choice of optimal debt instrument and why initial wealth matters. It shows why these and related problems may cause transaction costs to high enough so that credit rationing and high interest rates are rational and efficient responses by lenders to the imperfect information problems of the agricultural sector. Then a series of specific, transition-related issues are discussed which have worsened these problems within the Central and Eastern European agricultural sector. This leads to a discussion of the potential roles for governments in solving these issues, specifically the use of credit subsidies, loan guarantees and specialised agricultural lending institutions. Finally, the paper reviews the actual government intervention which have occurred within the Central and Eastern European countries.*

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# **Agricultural Credit Problems and Policies during the Transition to a Market Economy in Central and Eastern Europe**

## **1. Introduction**

As a result of economic reforms in Central and Eastern Europe (CEE) new structures in agriculture are emerging. The changes of agriculture together with macroeconomic uncertainty have created difficulties in the normal process of financing agricultural activity. At the same time the banking sector is undergoing a major transformation, and so credit markets are underdeveloped, inhibiting the effectiveness of monetary, credit and trade policies (Calvo and Frenkel, 1991).

The problems in the credit market for agriculture stem from both demand and supply forces. Table 1 illustrates these problems based upon a 1993 survey by Euroconsult (1995) in five CEE countries. The majority of both private farmers and large scale farm managers indicated that problem in accessing credit were mainly due to- “high interest rates” in all these countries. These high interest rates reflect both transition and structural problems with CEE agriculture. Lack of collateral, low profitability and macroeconomic uncertainty makes banks view the agricultural sector as a high risk consumer. Expected declining profitability and macroeconomic uncertainty are discouraging borrowing at high nominal interest rates. Immediate plans of farmers are uncertain because of the lack of working capital. There is also the long-term problem of ensuring adequate funds to facilitate structural adjustment and to enable farmers to apply effective technologies.

In this paper we assess the problems of financing CEE agriculture during the transition and what the role of government is in this process. We first discuss why credit markets work imperfectly even in well developed market economies, leading to widespread government intervention in this sector. Then we discuss additional credit market problems that emerge during transition of CEE agriculture. Afterwards we discuss the potential role for governments and review actual government intervention in CEE countries.

## **2. Imperfections of Agricultural Credit Markets**

Credit and risk markets in the most well-developed market economies work imperfectly, largely due to imperfect and costly information. Problems of imperfect information and incomplete risk markets are particularly important in agriculture. Agricultural production incorporates time lags inherent in biological processes, and is subject to the random influence of weather, diseases and pests. Producers can trade away some price risk on futures markets, but farmers are typically at an information disadvantage relative to larger trading companies. Even in the most developed economies, farmers make relatively little use of futures markets. While informational asymmetries limit the ability to insure against price risk, yield risk cannot be fully covered without attenuating incentives. In general, the ability of farmers to share risk is extremely limited (Newbery and Stiglitz, 1981; Stiglitz, 1993).

Economists have increasingly recognised that financial (credit, capital) markets are not like ordinary markets for conventional goods and services. Participants within financial markets are solely concerned with the valuation and pricing of financial contracts. These

financial contracts can be viewed as the monetisation of promises, the exchange of cash in the present for a promise of future reciprocity. Value is thus placed upon these financial contracts by the prices they receive, when traded within the market by buyers and sellers.

Credit markets create value through the use of loans, which entail an exchange of current cash (or goods) for a *promise* to pay cash (or goods) in the future. The promise is often supplemented with additional restrictions and covenants which determine the rights and behaviour of the parties. However, the promise is sometimes broken by the borrower. Recognition of this state of imperfect (asymmetric) information causes lenders to have to screen different loan applications to determine who is more likely to repay; lenders also have to monitor the use of funds to ensure that they are used to increase the likelihood of repayment (Von Pischke, 1991; Dowd, 1992).

As a result of these informational imperfections, credit markets often do not seem to function well. Credit markets are often characterised by credit rationing, meaning that some individuals or groups cannot obtain loans at any interest rate. For example, farmers in some regions or in some time periods may have only limited or no access to credit, even if some of them might propose good investments to the financial institutions (or lenders in general).

To understand why credit rationing occurs remember the aim of the lender is to maximise his expected profits. Thus lenders will only raise interest rates if they lead to increased expected profits. Yet expected profits are not only dependent upon interest payments but also the probability of default. Increased interest rates will lead to higher promised returns, but may also increase the probability of default. If the latter is large enough it can lead to decreased expected profits. Thus it is often in the best interests of the banks, not to raise interest rates, but to limit the amount of available credit (Stiglitz and Weiss, 1981; de Meza and Webb, 1992; Dowd, 1992; Stiglitz, 1993; 1994).

Two further problems of markets with asymmetric information are adverse selection and moral hazard. Related to this is the importance of a borrower's wealth in determining the size of investment and the contractual instrument used. Adverse selection occurs in financial markets when potential borrowers who are the most likely to produce an undesirable (adverse) outcome (i.e. the bad credit risks) are the ones who most actively seek loans, and are therefore most likely to be selected, as lenders may not know the borrower or only many of his characteristics. Since adverse selection makes it more likely that loans might be made to bad credit risks, lenders may decide not to allocate any loans even though there are good credit risks in the marketplace. The access to credit is rationed, thus the credit allocation process is no longer efficient within the market. As a result even agricultural producers with economically viable ('good') projects may not obtain the loans they need to invest for a particular activity (Stiglitz and Weiss, 1981; Myers and Majluf, 1984; de Meza and Webb, 1987; 1992; Stiglitz, 1994).

Moral hazard in financial markets occurs when the lender is subjected to the hazard that the borrower has an incentive to engage in activities that are undesirable from the lender's point of view. If the borrower does not have enough incentives to manage as well as possible the capital resources for particular purposes, or may change the purpose for which a loan is granted, this may lead to an increase in the risk of the borrower's ability to repay the loan. These are respectively called the moral hazards of the *choice of effort* and *choice of purpose*.

Depending on the lender's capability to monitor the borrower's activities, credit rationing may result (Harris and Raviv, 1979; Dowd, 1992; Stiglitz, 1994).

Initial firm wealth matters, as it affects the type of contractual arrangements that prevail (Stiglitz, 1993). In a world with full information it can be shown that the allocation of investment funds is independent of the distribution of wealth (Modigliani-Miller Theorem) and fully state contingent Arrow-Debreu securities characterise contractual relationships. However, under imperfect information (contrary to the Modigliani-Miller Theorem) financial structure matters, as does the range of financial instruments available (Stiglitz, 1988; 1994).

There is now a substantial body of microeconomic literature supporting the proposition that the cost of external financing is expensive and changes in internal finance can have allocation efficiency effects on investment, especially when applied to small growing enterprises (Meyer and Kuh, 1957; Tybout, 1983; 1984; Myers, 1984). Under asymmetric information, firms which place their wealth at risk, increase the confidence of lenders in their abilities and efforts (thereby lowering the cost of external finance) and reduce the amount of external financing required. Thus shocks to a firm's endowments can have adverse effects on investment. Additionally, a limited range of financial instruments may be desirable as they may affect the incentives of the borrower (Townsend, 1979) or reduce the cost of monitoring to the lender (Myers and Majluf, 1984; de Meza and Webb, 1987).

An important intertemporal issue is short-term versus long-term debt. Borrowers usually prefer longer-term debt contracts due to the liquidity (insurance) effects they implicitly provide. The use of short-term debt contracts confronts them with risks of credit rationing, increased interest rates and further transaction costs. However, the lenders willingness to provide long-term contracts depends directly on the durability and suitability of the underlying assets and collateral (Hart and Moore, 1994). The use of short-term debt provides the lender with the opportunity to observe the borrower, thereby minimising the adverse project selection problem, before the renewal of the debt contract. Short-term debt enables a borrower with private information about the project to signal the 'good' information to the lender, and at the same time, it exposes a borrower with 'bad' information by forcing them to reveal their risk to the lender (Dowd, 1992). Additionally, the use of short-term funds increases the lenders liquidity and reduces agency problems. Having to continually return for credit restricts the borrowers ability to slack off or otherwise benefit through diversion of excess funds (Jensen, 1986; Hart and Moore, 1993). The continual rolling over and renewal of debt also forces the borrower to provide the lender with additional useful information, reducing many of the asymmetric information problems discussed above (Chang, 1990). Thus the optimal debt maturity structure is a trade-off between many conflicting factors and agency costs, with even 'good' borrowers tending towards longer contracts due to liquid constraints and transaction costs (Dowd, 1992).

Some of these supposed imperfections reflect real economic costs. Credit rationing and high interest rates may not be due to exploitation by banks and money lenders, but instead may be a rational and efficient response to the information problems that are inherent to agricultural credit markets. High interest rates may reflect high default rates or high costs associated with screening and monitoring loans. At the same time, information imperfection generally gives rise to imperfect competition, so that there may be some scope for lenders to exploit borrowers.

Limited credit and high interest rates often appear as an impediment to agricultural development, inhibiting the acquisition of capital necessary for modern agriculture. The problems of adverse selection, moral hazard and other market imperfections may cause the effective transaction costs to be so high, as to limit trade in or lead to the demise of those markets (see Akerlof, 1970; Greenwald 1986; Stiglitz, 1982; 1994; Dowd, 1992). It is the perception of this seemingly market failure that often results in pressure for government intervention.

### **3. Agricultural Credit Markets during Transition**

Agricultural credit markets in well-developed and functioning market economies work imperfectly. In addition, a series of specific, transition-related, problems have worsened the problems of financing the Central and Eastern European agricultural economy since 1989 (Petranov and Roussinov, 1994). This section attempts to expand on a number of these issues, providing examples where appropriate.

#### ***The concept of credit under central planning***

The concept, nature and role of "credit" is quite different in a planned economy verses a market economy. In a market economy, the main monetary policy instrument is the control of the total money supply, leaving the allocation of credit inside the economy largely to independent financial institutions which base their lending policies on assessments of risk and financial returns. In centrally planned economies the main monetary policy instrument was credit allocation. A financial plan ensured the realisation of physical targets, as expressed in the state plan. The plan specified quotas for working capital, long term loans for financing investment and public money holdings. Credit was provided through the central bank to farmers for these investments, typically with a negative real interest rate, not based on merit and often used as a way to support unsuccessful enterprises (McKinnon 1990; Blejer and Sagari, 1991; Calomiris, 1993).

One could even argue that under the centrally planned system, credit was less a monetary than an accounting instrument. This different role of credit is a factor in explaining agricultural producers' strong insistence on preferential credits, i.e. credit at low interest rates: why does one need to pay for using an 'accounting mechanism'? Therefore, addressing the 'credit issue' includes, besides the economic allocation problems, also a psychological/educational factor in explaining the role of credit in an economy, and that the use of credit has a price, i.e. the interest rate. Presently, many private farmers and farm managers are having difficult recognising this, as can be seen by the responses in Tables 1.

Similarly, the attitude towards trading and marketing is very different under both systems. While marketing and trading are considered vital elements of a well functioning market system, traders ("speculators") are often blamed for increasing prices and reaping profits on the back of "producers" without producing anything for the economy<sup>1</sup>.

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<sup>1</sup> For a historical review of the public attitude towards and the "respectability" of moneylenders and bankers, see Galbraith (1987).

### ***Reform of the banking system***

Simultaneously with the other reforms, the financial institutions in CEE countries are undergoing a major reform. While under central planning most of the banks were mere branches of one bank, with very little independent decision-making, the restructuring of the banking system creates a system of (increasingly) independent banks. However, the politicians still wish to use these banks, as they previously did under the old system, primarily as a distribution system for government transfers through special credit quotas and pass-through loans subsidies. Policies of this form have often crippled the systems ability to allocate capital to non-favoured borrowers and serverly retarded its capital allocative efficiencies (Fry, 1988; Calomiris, 1993; Borish et al, 1995). The problem within these economies is not the level of savings or a lack of suitable financial institutions, however the allocation of these savings and financial resources to inefficient uses due to inappropriate incentives. In many cases the economy's financial resources are allocated via a political agenda, rather than economic criteria. This leads to bureaucratic corruption and inefficient use of resources in political rent seeking (Gelb, 1989).

Accumulated bad debts, from during the period of centrally planned economies, have created problems in two directions: they have firstly caused a rationing of the supply of credit, and secondly, hampered the speed of privatisation and land restitution. As long as this problem is not solved, a well defined system of property rights and incentives, necessary for efficient decision making and investments will not develop. Many CEE countries have tried to rectify this problem by providing debt rescheduling and new loans at subsidised interest rates, often zero, for previous "old" debts e.g. Romania. This is just correcting the symptoms, not the cause, which is an initial wealth problem exaggerated by the allocation of inappropriate debts from the previous system. A partial or complete right-off of pre-reform debts will likely be required to correct this problem. It should however be done in partnership with the commercial lending organisations, or else there is likely to be a credibility problem. Where all parties negotiate a fair and equitable right-off of a portion of these bad debts returning the enterprise to long-term economic viability or liquidation if acceptable terms can not be reached. This will also ensure that only those economically viable farmers will receive assistance. This approach has been successfully used in market economies going through transitional reforms, e.g. New Zealand's debt right-off program in the late eighties after removal of agricultural supports in 1984.

Credit supply in the system is further limited, because of the decline of the economy during the transition. The CEE countries can not generate enough sources of capital needed as a basis for development of their economies. Those resources that are available are being moved to the sectors that are providing the greatest risk/return trade-off, presently not agriculture. Reduced international financing in addition has hampered the speed of the reform.

Additional problems for efficient operation of the intermediary institutions are due to a lack of experience and skills of banking officials. The market mechanism requires a different approach for the evaluation of loan applications. Hence bankers need to be educated in the use of credit scoring models and other advanced techniques. For the agricultural sector, bankers need additional knowledge relevant to the cash flows in the sector. As an example of the level of difficult these institutions are facing, D'browski and Jamrozik (1997) point out

that the Polish Bank of Food Economy has experienced a 70% rate of staff turnover in the past two years.

### ***Lack of clear property rights and incomplete land reform***

In most CEE countries land reform is still incomplete. In other words land is not fully tradable and this inhibits the creation of a land market and the possibility for the use of land as collateral. Agricultural credit supply is limited due to this reason in comparison with a well developed market structure. Legislation typically prevents the pledging of assets when they are under the process of privatisation and restitution. As long as property rights are not fully restored on all kind of assets, there will be a demand for government guarantees for the loans.

The Romanian experience provides a clear example of many of the problems related to land reform. The majority of the legislation required for the privatisation and structural adjustment of the agricultural sector were passed during 1991. The land law passed in 1990 was one of the earliest and resulted in the immediate break up of 3700 collective farms. However, due to a number of factors land reform has not advanced much since then. By the end of 1993, 93% of agricultural land was privately "owned", 3.4 million individuals on 5.4 million hectares and 22375 private agricultural associations on 3.8 million hectares. There still remained major problems due to the government not having assigned final land titles to owners, large fragmentation of land with the average size being 2 hectares (legal upper limit is ten hectares) and 50 % of the land was owned by people outside of the agricultural sector. The formation of family associations to some degree has helped overcome the fragmentation problem resulting from land reform. However without clear ownership rights, neither land or rental markets have been able to develop. This has caused producers to have difficulties in providing and valuing collateral for loans, thus hampering the level of private investment in agriculture and retarding the development of the capital markets. The government in a effort to help facilitate the use of land as collateral for commercial credit provided ownership vouchers and tenure documents as a substitute for land titles. Two years later, in 1996, land reform had still not advanced substantially, the Romanian government was only at the stage of assigning of ownership titles. Official statistics show that only approximately 50 % of land owners had received official titles. Agricultural producers were still having difficult meeting the commercial lending requirements, even given government guarantees. In 1995/96 the Romanian government provided guarantees for Lei 558.6 billion in credit, however only Lei 169.6 billion was disbursed by ROMCEREAL and SEMROM. Most of this was to state owned enterprises (CCET 1994; 1995; 1996; National Bank of Romania, 1997).

### ***Problems with collateralisation of the loans***

Farmers have to give long-term assets as collateral for short-term loans. Banks typically require residential property in urban areas, because the market for real estate in rural areas is thin and they will not be able to sell the property when the borrower defaults. In several CEE countries, banks often refuse agricultural land as collateral even when property rights are fully restored, because of the absence of a land market, or because land prices are too low. E.g. in Bulgaria, bankers accept about 80% of the market value of fixed assets in



urban areas and 60% in rural areas as collateral. This increases the required capital for loan collateral (Rizov, 1996).

To avoid higher risk and uncertainty during the transition period, banks further require a very high level of collateral. One important reason for such a high collateralization of loans is the high rate of inflation and the variation of the asset's value given as collateral. In Bulgaria and Hungary, the amount of the request for loan collateral may be anywhere from 150% to 180% of the total loan amount (Szabó, 1997). Additionally, it can be seen that there is a general unwillingness of farmers to secure loans with land as collateral (see Table 2).

### ***Increased transaction costs for monitoring and screening loans***

Costs for monitoring and screening loans are higher during the transition in comparison with a relatively stable market structure. The continuous reorganisation of agricultural enterprise structures and difficulties for monitoring agricultural operations makes agriculture an unattractive sector for investing from the banker's point of view. The lack of a well developed accounting system leads to a low level of information and creates difficulties for monitoring loans. Thus there has been a concerted effort by many of the CEE countries to provide increased public funding to projects related to agricultural information system development, extension services, professional and vocational training, taxation systems and the preparation of business plans (CCET, 1996; National Bank of Romania, 1997; Szabó, 1997). These initiatives are aimed at reducing many of the asymmetric information problems which face lenders and minimising the transactions costs for both contracting parties, without interfering with the actual market allocation mechanisms.

### ***Indebtedness of the producers***

The agricultural sector accumulated large bad debts. Most of them are inherited by state farms that are still operating or temporary organisational structures that are running former collective farms. During the period of the centrally planned economy, the credit supply for agriculture was organised through national banking systems. Credit worthiness of the borrowers was estimated on the basis of cash flow requirements without pledging of loans. Because of the lack of property rights and responsibilities for the decisions which were taken, the state wrote off unrepaid loans. This reduced incentives for better management and made the difference unclear between credit and subsidies. Indebtedness inhibits the provision of new loans and the process of land restitution and restoration of property rights.

### ***Depressed farm income***

Farmers have difficulties to sell their products due to a stagnation of the domestic markets and the collapse of the former CMEA trading system. The trade relationships with the European Union and EFTA are at a low level of development and expectations for future developments are uncertain. Farm incomes have fallen in all CEE countries as input prices have increased much stronger than output prices. See Figure 1 for an example of the evolution of upstream and downstream prices in Poland's agri-food sector.

Another important factor which can influence the level of the farm income is the monopsonistic power of the wholesale firms. They often purchase the products but postpone payments. The payments are not adjusted for inflation between the time when the products have been delivered and when producers are paid. A number of CCEC governments have had to establish special credit programs and funds to help alleviate this problem. These programmes typically purchasing the outstanding debts and pay a percentage of their value back to the agricultural producers, e.g. the Czech Republic does this through the Support and Guarantee Fund for Farmer and Forestry (Horcicová, 1997).

### ***Producer price index and inflation level***

In general, the increase of the agricultural product prices is lower than the general price index. While real interest rates may be negative compared to the CPI-index in some CEE countries in some years, the interest rate has - with some exceptions - been positive in comparison with the agricultural producer's price index. In addition, high nominal inflation causes uncertainty, which is worsened for agricultural producers in some CEE countries by uncertainty about future government policies.

## **4. The Role of the Government in Agricultural Credit Markets**

The transition to a market economy in agriculture involves not only a withering away of the state, but a fundamental redefinition of its role. The role of government is, however, not always clear. For instance, capital market imperfections give rise to a demand for government intervention, but government is not necessarily at an informational advantage relative to private lenders (Stiglitz, 1994).

Governments often intervene in agricultural credit markets, e.g. by providing guarantees to banks for loans, by setting up credit institutions special for agriculture and by subsidizing credit to agricultural producers. Is this a response to a market failure, or to pressure from those in the agricultural sector for hidden subsidies ? Stiglitz (1993, p. 33) argues that "[t]here is a growing consensus that if the government goes where the private market fails to tread, it should do so only cautiously and with safeguards. The government faces the same (and sometimes worse) information problems; it is no better a screener of loan applications, and no better monitor. Worse still, it often faces political pressures."

There is an extensive literature looking at government intervention in agricultural credit markets. Much of the initial efforts, based on the empirical and theoretical research following the evaluation studies of large scale (often World Bank supported) rural credit programs in the 1960s and 1970s, were done by, among others, Dale Adams and John Von Pischke (see e.g. Von Pischke et al. (1983); Adams et al. (1984); Adams and Fitchett (1992). Excellent non-technical summaries of their insights are Von Pischke (1991) and Fry (1988). See also Karp and Stefanou (1994)).

This section reviews a number of the basic economic arguments on the most frequently used government interventions in agricultural credit markets and draws your attention to critical issues related to the CEEC transitional economies. Specifically looking at the

following programs; credit subsidies, government loan guarantees and specialised agricultural credit institutions.

From a pragmatic perspective, it is important to keep in mind following criteria as the discussion develops:

- Do the policies solve the problems in the short run?
- Do they induce market distortion?
- If so, how large are these distortion and do they affect allocative efficiencies and incentives?
- Do the policies address the symptoms or the causes of the problem?
- (How) can they be targeted?
- Are they consistent with the development of a long run viable and efficient rural financial system?

### ***Credit Subsidies***

Providing credit at "preferential interest rates" to agricultural producers makes credit cheaper for them. As such they are input (credit) subsidies. The main disadvantages of such programs are:

- the subsidies are paid for by the government. It will therefore tend to increase the budget deficit or induce increased government borrowing, which will have a negative impact on inflation and nominal interest rates. (This effect is directly related with the impact of the program, i.e. the total amount of subsidies.) As the main reason for their initiation is high nominal interest rates, this effect is counterproductive. To hide this effect the government may decide to move it off budget by making an agency provide the subsidy, however the long-run effect is the same e.g. Romania where the task was passed on to the National Bank of Romania (see discussion below).
- the funds could be used for investment in public goods or infrastructure, stimulating long-term development of the agricultural sector;
- the study of agricultural policies shows that short term crisis interventions and "temporary" programs have the tendency to become permanent programs. This is because (a) they create expectations on the part of the producers (and possibly also other groups) that they will be continued or repeated under certain circumstances and (b) they tend to create their own constituency and for political-economic reasons it is difficult to remove them afterwards (c) they get incorporated in prices

for less mobile production factors (e.g. land values), raising production costs for new producers and therefore demand for the continuation of the programs;

- they have a negative effect on the development of alternative sources of agricultural credit (such as credit from up- and downstream industries), because those alternative sources face uneven competition from the subsidised credits;
- they tend to give the wrong signals to the reforming enterprises. Economic adjustments that eventually will have to be made might be postponed, making their implementation later on even more difficult. For example, if preferential credit is given to structures that are to be reformed and restructured, they might reduce the incentives for those organisations to proceed with the reforms, and thereby have an adverse impact on the reform process<sup>2</sup>;
- as credit is fungible, credit intended for agriculture may flow to other, more profitable activities<sup>3</sup>;
- unless the problem of collateral is addressed as well, credit subsidies will have little effect on the rationing problem. For example: the 1992 credit subsidy program in Bulgaria had little effect as the banks continued to refuse to lend to agriculture, because they could not obtain sufficient collateral. Then, the government obliged the banks to accept future crop output (backed by crop insurance) as a collateral. In case of default the law specified the sharing of collateral risk between banks and government. When the banks were still reluctant, the government included a regulation that would penalise bank managers for obstructing loans to agriculture;
- Dependent upon the allocation procedure employed, credit subsidies might induce (opportunities for) corruption.

Besides the obvious subsidy effect for agricultural producers, the main argument in favour of credit subsidies is that -- if the collateral problem is addressed as well -- the fall in agricultural production and disruption "below a long-run equilibrium" may be mitigated or reversed (because of the special conditions of transition). Additionally, discussions with local specialists suggest that some countries see credit subsidies also as a way of supporting agriculture without getting in conflict with their GATT agreements, as might be the case when they would use price supports<sup>4</sup>. A third argument is that, as state enterprises and production structures under liquidation or restructuring typically care less about repaying loans (as their debts are often regularly cancelled) their demand for credit may have a crowding out effect on private farmers or enterprises facing hard budget constraints. In this way the latter face unfair competition from the former on the demand side of the credit market. Credit subsidies may mitigate this effect.

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<sup>2</sup> See Swinnen (1994) for a discussion of this effect in Bulgarian agriculture

<sup>3</sup> See Von Pischke and Adams (1980) for a full discussion of this with examples from Africa, Asia and Latin America

<sup>4</sup> See Tangermann and Josling for a discussion of CEEC price policies and GATT agreements

If governments decide to pursue credit subsidies as an answer to the financing problems during transition, some constraints are to be recommended :

- develop a credible mechanism to limit the duration of the program,
- target the program to the post-reform enterprises,
- restrict the amount of subsidies,
- use commercial financial institutions for channelling the subsidies to reduce administration costs and ensure that the funds go to economically viable enterprises,
- devise simple rules (reduce opportunities for government discretion in allocating subsidies -- avoid opportunities for corruption),
- individuals receiving assistance should be able to demonstrate that the loan will be used for the intended purpose.

### ***Government Loan Guarantees***

Given the acute problems of collateral in CEE agricultural finance, many CEE governments have set up loan guarantee programs. Partial loan guarantee programs are common in Western agriculture. They are typically used to support medium and long term investment in farms by guaranteeing a large share of the loan (e.g. the loan is backed for 10% by a collateral provided by the farmer, 20% by the banks and 70% by the government). In case of default this is the order in which payments to cover the bad loan are collected: the idea is to keep the appropriate incentives for both the farmer to repay the loan and for the banks to monitor the application. Typically, such programs are not used for working capital.

In general, government guarantees soften the budget constraints for lending institutions and therefore for the borrowers. This problem might be less acute in a situation of Western agriculture where monitoring is strong, the banking system is well developed and loan guarantees are centrally managed (an argument to the contrary is the 1980s farm debt crisis in the USA). However, under an emerging banking structure, with many different production structures, some under current restructuring or even liquidation, the danger is much more acute that these guarantees (especially for working capital) will induce more bad loans. The incentive for those structures to repay the loan is now even less than before.

In addition, it negatively affects the development of a viable rural financial system as it (a) discriminates against alternative credit sources; (b) might reduce the incentives for banks to monitor and analyse loans; and (c) when the guarantees are limited might induce lobbying and crowding out effects.

In conclusion, while the guarantee programs might provide some solution for the problem of collateral for medium and long run investment programs, they may not solve the short run financing problem, besides their negative impacts as discussed here. In any

case, in setting up such loan guarantee programs, it is important to prevent as much as possible the diminution of incentives for the agents involved. Therefore, one should be careful to ensure that the borrower has to provide the first part of the collateral and is forced to repay as much as possible in case of default. The bank has to take its share of the risk in order to stimulate the bank to monitor and screen the loans sufficiently. Furthermore, the program should allow several banks to participate, in order to induce competition. Finally, the government should limit its involvement to setting general simple and transparent rules, and should not be allowed to interfere with specific applications or actual loan decisions.

### ***Creation of Specialised Agricultural Credit Institutions***

Specialised agricultural credit institutions are widespread in Western European countries (e.g. Credit Agricole, Raiffeisen-institutions, Rabobank etc.). Many have developed into large banks from rural credit co-operatives. However, the effect of developing similar specialist institutions in CEE countries may be very limited in the short run, especially for resolving the present agricultural financing problems.

Specialised credit institutions for agriculture can be found in many different forms; credit co-operatives, state owned agricultural funds, mutual or development funds. These various institutions have many different characteristics affecting their efficiency, many of which are specific to their individual situation. Many operate under special co-operative, anti-trust and tax laws. A number are also provided with an implicit government guarantee allowing them access to cheap credit from the money markets (e.g. the US Farm Credit System through the Farm Credit Funding Corporation). However, they have some important advantages and disadvantages in common.

The most important advantages from the creation of specialised agricultural credit institutions are lower transaction, monitoring and verification costs through greater specialist knowledge of relevant agricultural activities. The idea is that this specialist knowledge reduces the asymmetric information problems, and with it, the adverse selection and moral hazard problems, thereby reducing rationing, and stimulating lending to agriculture. The major disadvantage of these institutions are their higher portfolio risk due to their specialisation, which puts them at great risk if there is a down turn in the sector, e.g. many member associations within the US Farm Credit System during the 1980's farm debt crisis. Thus, most of the Western European "agricultural" financial institutions have extensively developed and diversified their activities outside of the agricultural sector, contributing to the success of these banks by spreading risks of their lending portfolio (e.g. Rabobank). Others have been privatised and merged with other commercial banks thus providing the same portfolio diversification opportunities (e.g. the privatisation of the Rural Bank of New Zealand and then later merger with the National Bank of New Zealand). For this reason and given the high risks and uncertainties in CEE agriculture, existing commercial banks with a diversified portfolio may be more efficient financial institutions for rural credit.

Another issue is that the development of such a system takes quite some time to become operational. Therefore, it will not be a solution for a short run problem. Neither

will it resolve the problems related to incomplete property rights. Finally, if the agricultural credit institution is put *under government control*, this is inconsistent with the ongoing reform and privatisation of the public sector. It will have a negative impact on the development of a commercial rural financial system in the long run. It reduces the competitive position of commercially viable private banks and informal credit suppliers, as they cannot compete with the cheap credit which is likely to be channelled through this bank.

## **5. Agricultural Credit Policies during Transition**

### ***General Observations***

An overview of government assistance in CEE countries shows that they have all introduced many different forms of government intervention into the credit markets. These range from complete debt right-off's to credit guarantees. The specific form that these interventions have taken within each of these countries, have been greatly affected by their respective general macroeconomic situation, the institutional framework of the financial systems, and stage of property rights reforms and privatisation. In the following sub-section we discuss each of the countries policies in-depth, but firstly these are the main observation to be drawn:

- Most CEE countries are now providing some form of government guarantee program (see Table 3 and the next section), in hope that these may stimulate the availability of credit to the sector.
- All of the countries have generally been increasing their levels of agricultural credit subsidies (Figure 2). This is especially true for Poland and the Czech Republic which have seen marked increases during 1994 and 1995. This may be due to both countries having seen large increases to gross fixed investment, direct foreign investment and stabilisation of inflation during those years, thus making it politically necessary to provide support to the agricultural sector<sup>5</sup>.
- A number of the countries have specialist agricultural banks and funds. These have generally been privatised and been allowed to diversify their loans portfolios into other sectors of the economy. Many governments still use these banks as their primary means of allocating short term subsidised credit, but have begun changing this policy with the introduction of guarantees being channelled through the whole commercial banking sector.

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<sup>5</sup> The per cent change in gross fixed investment in Czech Republic was -7.7, 17.3, 16.1, and 14.5 for 1993 - 1996 respectively, (OECD, 1996) and in the Poland was 9.2 and 18.5 for 1994 and 1995, respectively (OECD, 1996). For a discussion of the Bulgarian anomaly in 1992 see Swinnen (1994).

## *Country Specific Policies<sup>6</sup>*

Let us now consider the CEE countries policies in more detail:

Under the centrally planned economy, **Bulgaria** collective farms accumulated large amounts of unrepaid loans. For example two billion leva (US\$ 54 million) of bad debts were transferred into state debt at the end of 1993. Arguments for this reduction were that this 2 billion related to the pre-reform situation of indebtedness of the collectives, ran as state-owned farms. As interest rate payments were not included in the transformation of debts, they accumulated after the beginning of the transition period. The Bulgarian Parliament rejected to transform the new bad loans, accumulated by collective farms under liquidation. Structural reforms of the agricultural sector started at the end of 1989, installing liquidation councils as a temporary measure, but they continued to operate on the basis of unclear property rights and continued to collect bad loans during the transition. The same problem will arise in the future if collective farms under liquidation continue to operate. Although the old bad debts were written off, new unrepaid debts amounted to around US\$ 46 million.

Additionally, the Bulgarian government began subsidising agricultural credit was begun in 1992 and it continues this policy today. Autumn sowing for the 1994-1995 crop year was supported by two commercial banks: the United Bulgarian Bank and the Balkanbank<sup>7</sup>. Target groups are both private producers and "new" co-operatives. The credit subsidies are 1/2 of the Bulgarian Central Bank interest rate plus a three points margin. Loans are only for seeds, fertilisers and fuel. The OECD estimates that credit subsidies amounted to 875 million leva (USD 13.1 million) in 1995. Credit subsidies are to be reduced following a contract between the Bulgarian Government and the World Bank for US\$ 50 million. The basic request in the contract is the reduction of the loan subsidies. Instead of providing a subsidy of 2/3 of the basic interest rate for 1994, subsidies have to be reduced to 1/2 of the basic interest rate for 1995. The required reduction for 1996 is 1/3 of the basic interest rate. The total budget payments for credit subsidies for both 1995 and 1996 must not exceed leva 1.5 billion. At the beginning of 1997, the interest rate for farmers have to be on a commercial basis.

At the beginning of 1993 the government established the Agriculture Credit Centre (ACC) as a specialised credit institution to operate in the agricultural sector to prevent decapitalisation of the sector and provide medium-term and long-term capital for agricultural machinery and buildings. The main shareholder is the Agency for Foreign Aid. Credits are only given to private farmers and "new" co-operatives. Until

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<sup>6</sup> The information in this section was collected from the OECD Centre for Co-operation with the Economies in Transition reports on "Agricultural Policies, Markets and Trade in the Central and Eastern European Countires, the New Independent States, Mongolia and China" for 1993, 1994, 1995 and 1996, the OECD Centre for Co-operation with the Economies in Transition report series on the "Review of Agricultural Policies" for each of the specific countries, selected breifing papers from the meetings of the OECD Ad Hoc Expert Group on East/West Economic Relations in Agriculture, and the EC DG VI (1995) report series "Agricultural Situation and Prospects in the Central and Eastern European Countires" for each of the specific countires, unless otherwise indicated.

<sup>7</sup> Balkanbank is the official distributor for the Agricultural Credit Center in Bulgaria.



1994, the ACC has four loan disbursements. In the beginning the ACC provided loans with a maximum maturity of 7 years with a fixed interest rate whose principal was adjusted to exchange rate changes. The interest rate risk was transferred to an exchange rate risk. Petranov and Roussinov (1994) were of the opinion that the ACC would face problems in the future due to linkages with exchange rates, its small scale of operations and minimal number of branches. After the dramatic depreciation of the Bulgarian leva in the beginning of 1994 of about 100 per cent, the ACC was forced to change the rules for the loan disbursement. Instead of a relation of the loan principal to foreign currency and a constant interest rate, it is now related to the interest rate risk. Changes that were introduced, include credit subsidies of 2/3 from the Central Bank loan interest rate. The last disbursement of credit sources from the ACC for the livestock sector is US\$ 600,000. Loans are not exceed 250,000 leva (US\$ 4,000) per approved loan application. Maturity is between one and four years. The interest rate will be 1/3 of the Central Bank basic interest rate for refinancing commercial banks (Petranov and Roussinov, 1994).

International experts sponsored by the PHARE programme have also worked on a project for the creation of agricultural mutual societies. The establishment of these societies will support the development of specialised agricultural lending for Bulgarian farmers.

In the **Czech Republic** the State Fund for Market Regulation (SFMR) was created in the first stage of the reform. The purpose of this fund is to support the agricultural sector during the transition period, mainly for oversupplied products. The governments attempt during the period 1990-1993 to subsidise investment projects of new farmers has not been efficient because of the state bureaucracy. In 1994, the Czech government created the Support and Guarantee Fund for Farmers and Forestry (SGFFF) to assist farmer's with access to short-term loans to finance seasonal and operating capital requirements and longer-term loans to finance capital investment in machinery and equipment. This is accomplished by providing guarantees to commercial banks for loans they make to farmers and by subsidising part of the interest due on these loans. The SGFFF was initially allocated CZK 2.65 billion as seed capital out of the total agricultural budget of CZK 5.1 billion in 1994, then future government allocation have been made of CZK 2.299 billion, CZK 2.9 billion and CZK 3.8 billion respectively for 1995, 1996 and 1997. Another source of funding for the SGFFF is a portfolio of shares from food enterprises which were privatised in the first wave of voucher privatisation (Horcicova, 1997).

The Fund provides support to farmers through collateral guarantees for loans that have already been accepted by a commercial bank. These guarantees range from 50% for loans with maturates under 2 years up to 85% for loans with maturates over 5 years. Additionally, the SGFFF also provides interest rate subsidies on these loans and earlier credits granted in 1992 and 1993. In 1994 and 1995 it provided a subsidy of 10 percentage points of commercial interest rate. This subsidy is reviewed quarterly by the SGFFF Board of Director and the client must pay a minimum of 1% p.a. on the principal (Horcicova, 1997). Through the use of these guarantees and commercial banks as the allocation mechanism, the Czech government aims to reduce the incentives for farmers to apply to the state subsidies and encouraging them to take more responsibility

for their economic affairs. Since initial formation, the SGFFF has mediated credit to the agricultural sector of approximately CZK 6.2 bil. and CZK 11 bil. for 1994 and 1995 respectively.

The adverse financial situation in agriculture not only affected producers, but also many downstream industries, causing substantial delays in payment for produce. These delays provided the downstream processors with the equivalent to an interest free loan and greatly affected the producers cashflow and financial situation. To help alleviate this situation the SGFFF began covering outstanding debt owed to agricultural producers by downstream industries, it now has the ability to buy these debts and pay 60% to 80% of the value of the debt to the agricultural producer (Horcicova, 1997).

The state owned farms within the agriculture sector created many new bad debts during the initial transitional period and at the beginning of 1994, almost all of the state farms which had obtained government guarantees for their loans could not repay them. Hence, the Czech Republic's Land Fund had to come up with more than CZK 1 billion for the state farm arrears.

The use of input suppliers as an alternative source for credit to agriculture is limited because many of unpaid debts, mainly from state farms. There are about 0.5 billion CZK of unrepaid loans from farmers to the Union of Agricultural Suppliers and Purchasers. Future crops as collateral for these loans have less value than payments required by input suppliers. A good example of the management results based on different ownership is a comparison between losses in the private, co-operative and state sector. The picture for the sectors is as follows: the losses in the state sector amount up to CZK 8500 per hectare, CZK 1 051 per hectare in the co-operative sector, CZK 561 per hectare in private farm companies and CZK 157 per hectare in private farms.

Credit subsidies have been available for the **Hungarian farmers** since the beginning of the reform. One of the governments early responses during the reforms was the formation of the Hungarian Agricultural Development Fund (ADF) in 1992. Its goal is to facilitate the ownership, structure and organisational transformation of agriculture and forestry and is funded through state budgetary allocations and transfers from the revenues of the state privatisation fund. The ADF is targeted at small and medium farms with 60 or less employees providing subsidies or grants for investment in production activities and farm infrastructure. There are two programs; 1) for production assets, farmers receive either a 50 % subsidy on Development Fund loans which bare zero interest and a seven year maturity or a 50 % interest subsidy on bank loans, and 2) for infrasturctural projects (buildings and improvements), they receive a 40 % development grant. Due to the collateral requirements for approximately 30% of the loan (up to Ft 500 000) from the farmers who applied for preferential credits, the ADF could not successfully supply loans for most of the agricultural producers. In 1993, only Ft 1.1 billion of the Ft 4 billion available in the fund were allocated. Thus in early 1994 the government amended the ADF's allocation rules and increased funding to Ft 12 billions. Due to these changes the number of applicants substantial increased from total of 1600 in 1993 to 18,000 - 20,000 by the end of July 1994. This increase can be traced to the 1994 removal of the requirements for the borrowers to obtain any commercial bank financing for the project and the increase of government's share of the total

investment costs from 50 % to 80 %, thus reducing the implied contribution of the borrower from 30 % to 20 %. This exposed the government to increased risks in two way. Firstly, it increases the overall size of government capital invested in the project, and secondly, it induces stronger moral hazard problems among borrowers as they now have less capital at risk if the projects fail.

Government intervention continued through a separate effort to stimulate investment with the creation of the Rural Credit Guarantee Foundation (RCGF) in 1991. This fund was established with Ft 900 million from the government, Ft 100 million from the 5 local commercial banks and international donor assistance (ECU 10 million from the PHARE programme). The foundation's aim is improve agricultural enterprises access to bank credit through providing a 50 % guarantee of the loan principle and the first years interest expense. Between 1991 and 1993, the RCGF saw the amount of loan guarantees increase from Ft 90 million to Ft 4.3 billion. This increase was directly related to loans granted by the Reorganisation Fund of Agrobuisness, with these loans representing 12 % of guarantees in 1991 to approximately 60 % in 1993.

During August 1993 and June 1994 the European Bank for Reconstruction and Development provided Hungarian Agriculture with a USD 103 million aid package to promote restructuring through granting loans to small and medium-sized agricultural enterprises. Additionally, in 1994, the government launched a short-term credit subsidy programme with a 10 percent interest subsidy for the purchase of inputs and cereal production for upto Ft 14000 per hectare, backed by a 70 % government guarantee. They also provided additional programmes to further assist farmers with drought affected crops, for the purchase of inputs, cereal production and the formation of non-profit agricultural insurance societies to cover production risks.

Another important assistance from PHARE to the Hungarian farmers is support in the development of rural banking by the integration and modernisation of the savings co-operatives. Presently there exists 257 savings co-operative with 1800 branches countrywide. These institutions have succeeded in collecting savings in rural areas but so far have been unable to mobilise these funds back to agriculture due to its low profitability and high risk relative to other investments. However these cooperatives are still financially weak (Szabo, 1997). Additionally, two new institutions have been set up to improve financing to exporters; the Hungarian Exim Bank is authorised to grant loans and bank guarantees and the Export Credit Insurance Company to provide coverage for political and trade risk.

In principle, the credit guarantee schemes in Hungary have become a successful way to finance investments that are financial viable yet undercollateralised, but it is to soon to fully analyse their results. They seem to be well managed, given their present default rates of 1 % for the RCGF and 2 to 3 % for the other government guarantee schemes (Szabó, 1997). However, these guarantee programs still are too small to make a sizeable impact. There does however seem to be a problem with the credit subsidy programs as they are presently operating, as they do not seem to be reaching their target group, especially small private farmers. Small farmers are often not eligible for the subsidy, and more generally, for the loan due to the absence of appropriate security. Due to this commercial banks have found a loophole and have begun lending to

“integrators”, firms providing inputs and supplies or purchasing produce from these small farmers and cooperatives (Szabó, 1997). These firms are certainly in a better position to evaluate the creditworthiness of the farmers and thus provide financing to them. But the question remains would they provide this financial support without the subsidy? Also is this credit subsidy for getting transferred onto the target group? The Hungarian government needs to re-evaluate these programs to decide if these programs are designed to help reduce the transaction costs of integrators providing finance to small farmers or actually provide a direct subsidy to small farmers. If it is the latter a change in the funding allocation rules is need.

The **Polish** government has provided credit subsidies for Polish farmers since before the beginning of the transition period. Prior to 1989, credit was distributed through the fully state controlled banking system in accordance to a State central plan. For agriculture and the food sector this was done through the cooperative state-owned Bank for Food Economy (BFE). This bank traditionally acted as the central union for the regional cooperative banks. However in 1989 the banking sector was reformed, allowing all banks to operate in all sectors, credit ceilings were removed, interest rate policy was gradually liberalised and the BFE ceased to serve as the central union for the co-operative banks, however most co-operative banks signed association agreements with the BFE. During the period 1990 to 1993 preferential credit became an important way of reducing farmers input costs. Credit subsidies increased from 845 million zloty in 1990 to 1.5 trillion zloty in 1993, with approximately 24% of agri-food sector debt overdue, about 48% of this short-term working capital credits, only 28 % in investment credits and private farm indebtedness had climbed to 637 billion zloty, over 2.5 times the 1992 level. Banks now considered farmers high risk clients and the collateral they requested become sufficiently onerous that farmers reduced requests for preferential credit, even given the favourable interest rates. Thus the following programmes were initiate to help relieve this problem.

In 1992, the Agricultural Restructuring and Debt Rescheduling Fund (ARDRF) was created to provide preferential credit for debt rescheduling in the agri-food sector, where a increasing number of private farmers were under severe financial difficulty or distress. The fund purchased the old debts from the previous creditors and reissued new loans under preferred conditions with 5% interest p.a., 7 year maturity and an initial 12 month deferred payment period. It also provide structural adjustment loans for farm and food processing modernisation programmes on the same terms, except for 20% interest p.a.. In June 1993 the activities of the ARDRF were suspended, due to irregularities in its administration. Existing commitments where meet, but no new loans were made. Thus in January 1994, to encourage investments and structural support within the agricultural and rural sectors, the Government established the Agency for Restructurization and Modernisation of Agriculture (ARMA). This agency also took over the responsibilities of the ARDRF. However, in comparison to the fund, ARMA operates its credit programmes through the commercial banking system, with the banks providing the system for evaluation of suitable investment projects and the disbursement of the preferential credit at fixed interest rates.

The agency presently provides assistance in the form of subsidies for interest payments on investment and working capital loans, guarantees for repayment of bank

credit and loans, co-financing of infrastructural projects for rural areas, and subsidies for activities related vocational training, professional development, educational, advisory and information services related to the agri-food sector. These are provided through 22 different programs, with the major budget allocations being USD 190 million for interest subsidies (up from USD 100 million in 1995), USD 113 for training, extension and information services (up from USD 14 million in 1995) and USD 19 million credit subsidies for the purchase of agricultural products (up from USD 13 million in 1995). Between the establishment of the Agency and the end of September 1996 with the assistance of the co-operating banks, they have provided USD 1.1 billion of credit (93149 loans) including USD 565 million (42123 loans) in the first three quarters of 1996. The present terms for these loans are for agriculture upto an amount of USD 185 thousand per farm with a maximum guarantee of 80 % or for the food processing and agricultural services sector upto USD 742 thousand per enterprise with a maximum guarantee of 70 %. The terms for these loans are for a maximum maturity of 8 years, a 50% interest rate subsidy on the commercial bank lending rate and with the possibility to delay payments for one year.

In 1994, the Bank for Food Economy was transformed into a joint stock company with the passing of the Act on Rural Banking Restructuring and hopefully fully privatised within 5 years. This act also formed 9 regional co-operative banks (RCB) out of the previous co-operative banking system, which would all be supervised by the central co-operative bank, the Bank for Food Economy. The local co-operative banks which join the BFE's new structure will receive restructuring bonds in exchange for their outstanding bad loans and a tax holiday if they wish to recapitalise. However even given these changes, the BFE still has a number of problems, including a weak financial position, difficulty in loan recovery (50% of the outstanding loans in the food sector are problematic), high staff turnover (70% in past two years) and lack of clear strategic direction. Thus the Polish government still faces a number of issues, inparticular how to reduce its level of intervention in rural financial markets and move to a more supportive and supervisory role as the transformation process continues with the view of asession to the European Union.

The **Slovak Republic** presently provides credit support to agriculture through three channels; 1) two State Funds which either provide loans with lower interest rates and/or credit guarantees, 2) subsidised interest rates on "old basket" credit, and 3) guarantees for "green" loans (credit) by the Slovak Guarantee Bank (SGB). Presently, there are two state supported funds which are providing credit, subsidies and guarantees to agriculture; 1) the State Fund for the Protection and Enhancement of Agriculture Land and 2) the State Support Fund for Agriculture and Food Industry (SSFAF).

The State Fund for the Protection and Improvement of Agriculture Land was established in 1992, mainly to support investments in land improvement, especially irrigation and soil quality. In 1995 it advanced credits of SKK 300 million to agricultural enterprises. The State Support Fund for Agriculture and Food Industry was established with Act 40 of 1994 and started operating in September of 1994 . The role of the SSFAF is to support long-term investments in agriculture and the food industry, and stimulate the development of a land market by providing credit through either its own lending schemes (at subsidised interest rates) and guarantees for loans from

commercial banks. Currently, the fund is providing support through the following programs; loans for business plans that resolve the top priority structural and regional changes in agriculture (currently the enterprises are required to contribute capital equal at least 30 % of the budgeted cost and receive favourable interest rates of between 5 - 7% p.a. on the loans), guarantees on commercial bank loans where borrowers are having difficulty in providing enough collateral, and special loans for the purchase of land (Chrastinova, 1996; Serences, 1996).

The SSFAF is financed from a number of sources, including the privatisation of state farms, the liquidation of state enterprises, loan instalments and the state budget. In 1994 the fund had SKK 806 million capital available, of which it dispensed SKK 250 million with SKK 175 being in the form of credit guarantees for 36 farming enterprises. For 1995, the SSFAF disbursed 71% of its available capital (SKK 1,597 million), of which SKK 810 million were for loans and SKK 335 million in the form of guarantees. The Polnobank (Agricultural Bank) administers all of the SSFAF funds and sets down the criteria under which farmers become eligible for support (Chrastinova, 1996; Posa, 1996). On 1 July 1996 both of these funds became independent organisations, prior to this they were part of the Ministry of Agriculture.

The “old basket” debts (presently approximately SKK 4.8 billion) are credits that have been provided to agricultural enterprises to finance permanent turnover inventory (since 1990) and investments (since 1992). Enterprises have usually accounted for these debts as cost items and the few that do not have them on their books are mostly newly established. These debts can be as high as SKK 15 to 40 million per enterprise. The Slovak government provided SKK 89.3 million in 1994, SKK 217 million in 1995, and an estimated SKK 110 million in 1996 to subsidise and redeem interest due on these “old basket” loans. The breakdown in 1995 was SKK 81 million for permanent turnover inventory and SKK 136 million for investments.

In 1993 the Slovak government allocated some SKK 12 million for the development of a system of green loans for agricultural production activities. Thus, the Slovak Guarantee Bank was established to provide credit guarantees on short-term loans for seasonal requirement and agricultural crop insurance. These guarantees are for enterprises suffering from a temporary lack of funds, but are seen to be economically viable in the loan run (Serences, 1996). The bank will share the risk of default up to 80% of the loan principal amount. In 1994 SGB issued guarantees covering SKK 412 million of short-term loans (Chrastinova, 1996).

The Polnobank<sup>8</sup>, in 1994, began providing short term “green” loans (credits) to meet demand for operating finance by primary agricultural producers and processors. These could initially be used for single purpose financing of seasonal activities (i.e. the purchase of seeds, fertiliser, agrochemical and fuel) by producers, however lately the scope of lending has widened to include processors and producers who need capital for insurance premium payments (Chrastinova, 1996). Polnobank provides green credits up to a maximum of 50% of the projected crop sales for farmers and 30% of the purchase price for contracted commodities for processors. The volume of green loans

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<sup>8</sup> Polnobank is the official distributor for the Slovak Guarantee Bank of these green loans.

was approximately SKK 1.4 billion in 1994 (Chrastinova, 1996). In 1995 Polnobank provided SKK 511.7 million in “green” loans, with SKK 249.6 guaranteed by SGB.

The **Romanian** government began extending subsidised credit to agricultural producers with the passing of Law no. 18/1991, “the Land Law”, which laid the foundation for the development of the private sector of agriculture and the breaking-up of the “kolkhoz” type agricultural co-operatives. Initially, the Romanian government with National Bank of Romanian (NBR) introduced various preferential loan programmes, channelled through commercial banks (usually the Agricultural Bank), for agricultural producers. The interest rate charged on these loans varied according to the purpose, with most producers being charged approximately 15%, the sum of the NBR preferential rate plus the commercial bank margin. The credit provided was worth 50 billion lei, 80 billion lei, 144 billion lei and 320 billion lei, respectively in 1991, 1992, 1993 and 1994. In 1994, real interest rates were negative, with nominal interest rates to agricultural producers ranging between 15% and 95%, while commercial market rates were in the 100 to 105%. Agricultural producers received short-term credit at annual interest rate of 15% - 60%, with medium and long-term credit being available at annual interest rate of 70% - 95%.

Due to the NBR lending at these preferential rates to agriculture producers and channelling them through the commercial banks subject to a margin control. The NBR reduced its interest income and profits, thus also reducing state budget revenues. This process simultaneously reduces the governments budgetary expenditures, thereby decreasing transparency, and with it the visible role and cost of the public sector support. Thus in 1994 the government introduced new mechanisms designed to increase transparency within the process by which agriculture was subsidised and reduce distortions. The commercial banks were now charged commercial banks the average cost of the funds, they could then charge a margin upto 5 % on the funds, and borrowers were provided with a 60% interest rate subsidy paid explicitly out of the state budget. However, to compensate banks for their reduce margin (spread) on this type of lending, the state provided guarantees for credit to private farmers intermediated through state integrators. All short term credit subsidies are entirely distributed through integrators (e.g. ROMCEREAL and SEMROM). This mechanism has been continuously refined during the prosueing period.

Even with this large amount of support being provided for the development of the private sector, the state sector remains the main recipient. The Agricultural Bank lent 85% of its short-term credit and 73% of its medium and long-term credit to the state sector and the remainder to the private sector. This is likely due to a combination of incomplete land reform, with still 50% of land titles to be issued as of 1996, and a general negative attitude of Romanian farmers to borrowing. In a World Bank survey of private farmers (Euroconsult, 1995), 65.9% of Romanian farmers indicated that they did not wish to borrow credit and 66.2% were unwilling to provide Land as collateral.

In 1994, the Guarantee Fund for Rural Credit was established with the assistance of a ECU 9 million contribution from the European Union under the PHARE program. The shareholders are four commercial banks; Agricultural Bank, Romanian Commercial Bank, Romanian Bank for Development and Bankcoop. The fund provides guarantees

only for loans provided by these banks and are only for medium and long-term loans to the private sector. The fund guarantees upto 60% of the loan value plus interest.

Presently many of these agricultural loans provided under government mandated programmes are now not performing. This is especially true with the passing of a law in 1996 which provides defaulting borrowers with unrestricted access to fresh loans and for rescheduling of bad debts in 1997 and 1998. Hence, to the extent that the government does not honour its guarantees with respect to these non performing loans, the recognition of these losses is just being delayed to a future budgetary period.

### ***General Credit Policy Effects***

From the previous analysis, we can draw some general conclusions:

- credit subsidies have not stimulated an increase in credit supply unless the collateral problem was addressed as well;
- indebtedness has increased in agriculture, inducing more (instead of less) government involvement;
- once implemented, the programs have been repeated or expanded (e.g. Polish credit subsidies have increased from 2.4% of the agricultural budget in 1989 to 29.3% in 1995);
- in many instances downstream debt problems within the processing chain have placed an undue burden on farmers cashflows due to late payment for product. This has required governments to provide special funds for credit relief, however they still have not solved the cause, lax regulation of downstream industries and complicated bankruptcy procedures.
- while some government interventions may be consistent with the guidelines for pragmatic policy intervention as discussed above, other policies (e.g. the Romanian case) appear little less than massive producer subsidisation programs. Those are likely to be counterproductive given the high inflation levels.

## **6. Some Concluding Remarks**

Agricultural credit markets work imperfectly even in countries with a developed market economy and government intervention in the market is widespread. CEE agricultural reform and the simultaneous restructuring of the banking sector creates additional problems for financing agriculture. For most banks, financing agriculture is a high risk activity because of low profitability in the sector, high nominal inflation, problems with collateral because of uncertain property rights and ineffective land markets, and the lack of well established relationships between them and new producers.



Stiglitz (1993) argues that the state has a potentially positive role to play in the agricultural economy, but the activities of the governments in developed economies' agriculture frequently reduce rather than augment general welfare. He further suggested that our understanding of the economic and political forces that have given rise to the inefficient agricultural policies in the West may enable the economies in transition to design a more rational economic system. However, the previous analysis suggests that political and economic forces have induced the CEE governments to select and implement policies during transition that are similar to the ones that exist in Western agricultural credit markets.<sup>9</sup>

While one should be pragmatic in evaluating these policies, given the large problems, one should also be careful in promoting government programs which are presented as "temporary measures", but which may conflict with the longer term objective of promoting a sustainable and efficient rural financial system. The study of the history of agricultural policies learns that many existing distortionary agricultural policies in OECD countries have been implemented initially as "temporary measures" to overcome a specific (time-limited) problem. If we have learned anything, it is that agricultural programs tend to create their own constituency and tend to persist long afterwards, because for political economy reasons they are very hard to remove once they have been implemented. This suggests that one can expect the CEE agricultural credit programs to remain.

Finally, it should be stressed that many of the credit programs focus on symptoms rather than on solving the primary causes of the problems. This, in general, is not a good policy. Part of the agricultural credit problems are caused by high inflation, uncertain property rights, ineffective land markets, low profitability in farming, and high transaction costs in financial intermediation. Therefore, optimal government policy should be to address the causes of the problems by reducing the budget deficit and cautious monetary policies, speeding up the land reform and privatisation process, by developing regulations and institutions for a land market to develop, by creating the environment for a private agriculture to function and by investing in rural infrastructure and agricultural research, and by creating the environment for the development of commercial rural financial institutions to develop. To the extent that the government credit programs are inconsistent with this, they will have a perverse effect on solving the agricultural credit problem.

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<sup>9</sup> The political economy rationale behind these developments has been discussed more extensively in the case of price and trade policies by Swinnen (1993).

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**Table 1: Private Farmers and Farm Managers Attitudes towards Credit  
(in percentage of respondents)**

<b>A). Private farmers access to borrowing</b>					
	<b>Albania</b>	<b>Bulgaria</b>	<b>Hungary</b>	<b>Poland</b>	<b>Romania</b>
<b>Good Access</b>	20.0	16.0	15.0	8.2	19.0
<b>No, interest too high</b>	67.5	80.7	81.2	86.1	76.0
<b>No, access limited</b>	11.3	1.7	3.1	3.8	4.5
<b>Answer missing</b>	1.3	1.7	0.7	1.9	0.6
<b>B). Farm managers access to borrowing</b>					
	<b>Albania</b>	<b>Bulgaria</b>	<b>Hungary</b>	<b>Poland</b>	<b>Romania</b>
<b>Good Access</b>	7.7	30.0	34.6	18.2	36.6
<b>No, interest too high</b>	92.3	56.7	65.4	72.7	57.8
<b>No, access limited</b>	-	10.0	-	9.1	5.6
<b>Answer missing</b>	-	3.3	-	-	-
<b>C). Private farmers attitudes towards borrowing at market rates</b>					
	<b>Albania</b>	<b>Bulgaria</b>	<b>Hungary</b>	<b>Poland</b>	<b>Romania</b>
<b>Yes</b>	12.1	7.3	8.4	8.7	15.1
<b>No</b>	65.4	31.2	77.7	42.8	65.4
<b>May be</b>	20.4	59.8	13.2	13.0	17.6
<b>No answer</b>	2.1	1.7	0.7	35.6	2.0

**Source: Survey of households of private farmers and farm managers,  
Euroconsult (1995)**

**Table 2: Willingness of private farmers to use own land as collateral for a loan  
(in percentages)**

	<b>Albania</b>	<b>Bulgaria</b>	<b>Hungary</b>	<b>Poland</b>	<b>Romania</b>
<b>Yes</b>	19.6	40.5	16.0	14.4	26.0
<b>No</b>	61.7	42.5	70.0	66.4	66.2
<b>Undecided</b>	18.3	13.6	12.2	17.3	7.8
<b>No answer</b>	0.4	3.3	1.7	1.9	-

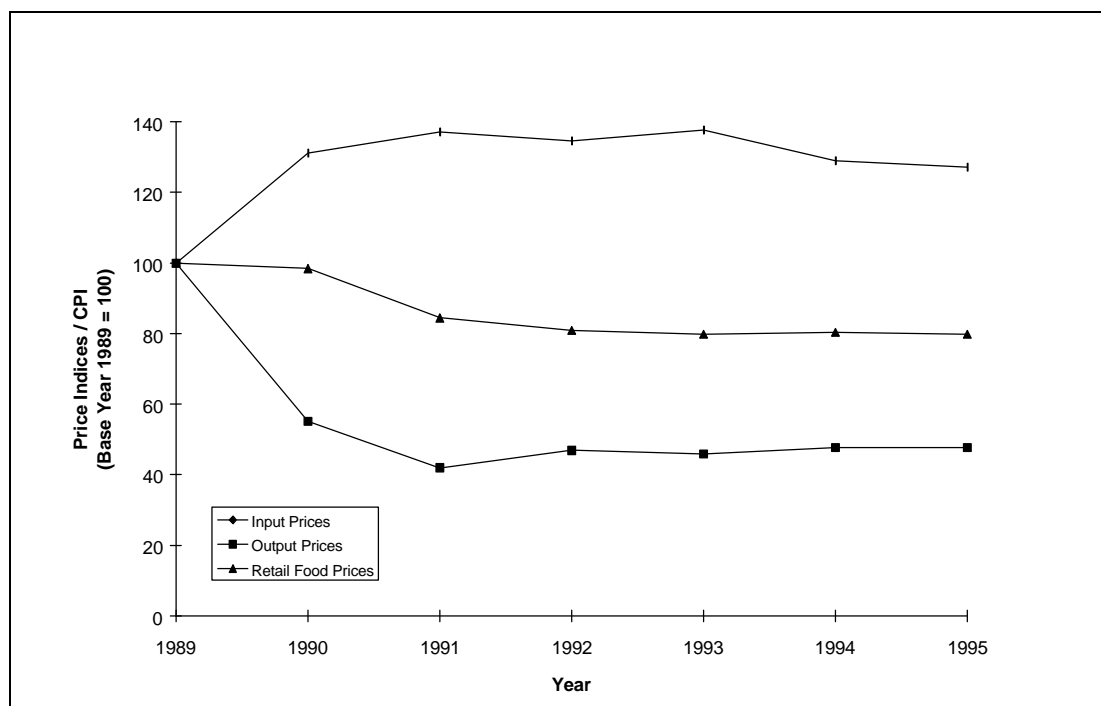
**Source: Survey of households of private farmers, Euroconsult (1995)**

**Table 3: Credit Guarantee Programs**

<b>Country</b>	<b>Program Name</b>	<b>Established</b>	<b>Details</b>	<b>Guarentee Level</b>
Bulgeria	n/a			
Czech Republic	Support and Guarantee Fund for Farmers and Forestry (SGFFF)	1994	- provides short and long term guarentees thru commercial banks	upto 50% short-term upto 80% long-term
Hungary	Rural Credit Guarantee Fund (RCGF)	1991	- provides short and long term guarantees to agricultural enterprises	upto 50% of principle plus first year interest
Poland	Agency for Restructuring and Modernisation of Agriculture (ARMA)	1994	- provides guarantees to both farmers and food processors	upto 80% for farmers upto 70% for food processors
Romania	Guarantee Fund for Rural Credit	1994	- provides guarantees on medium and long term loans to farmers through commercial banks	upto 60% of loan value plus interest
Slovak Republic	Slovak Guarantee Bank	-	- provides guarantees for short-term 'green' credit thru Polnobank for both farmers and downstream processors	upto 80%
Slovak Republic	State Support Fund for Agriculture and Food Industry	1994	- provides both guarantees and special loan programs to farmers and food processors	upto 70% of project expenses

Source: CCET, Agricultural Policies, Markets and Trade in Transition Economies; Monitoring and Evaluation Reports

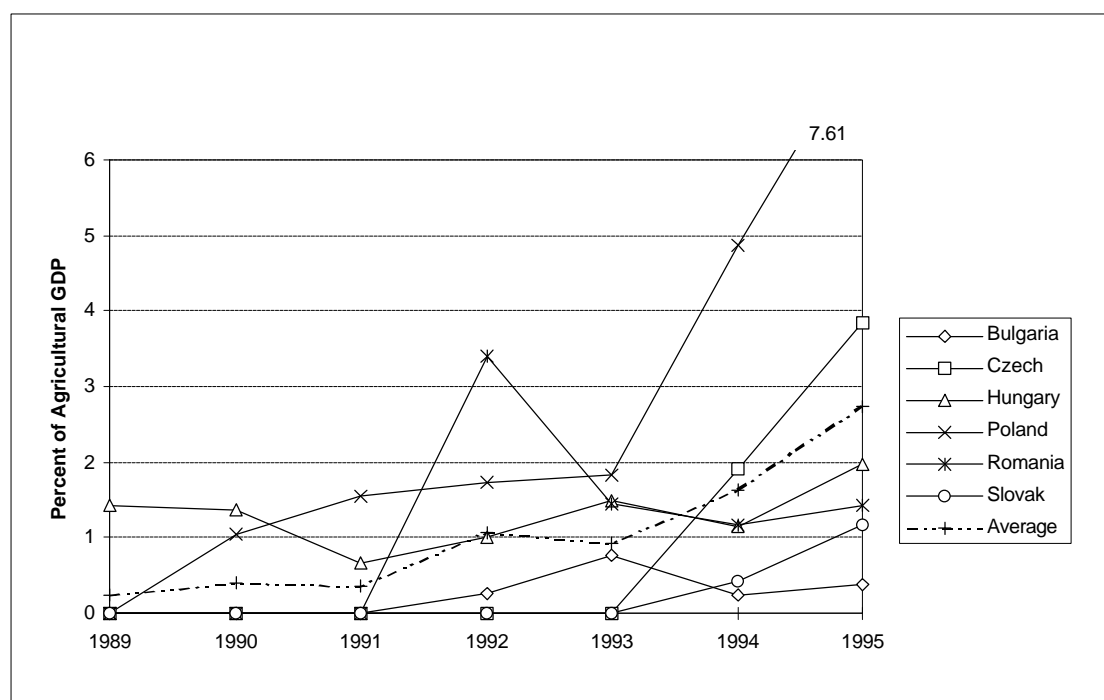
**Figure 1: Price Relationships in Poland**



Source: OECD (1996)



**Figure 2: Evolution of Agricultural Credit Subsidies in CEE countries, 1989-95**



Source: OECD, DG IV, National Banks and Statistical Offices of CEE countries