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Agricultural Transformation and Implications for the Rural Financial System in Romania*

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Abstract

Within the context of Romania's macroeconomic and agricultural transformation, this paper analyses the rural financial system and subsequently discusses its relevance for efficiently transforming the agricultural sector in Romania. Empirical evidence from a 1997 survey in the county of Timis in Romania will support the theoretical debate. We suggest financial innovations to strengthen the cost-efficiency of the rural financial system in Romania. A more cost-efficient rural financial system will reduce market access constraints for formerly unattractive market segments such as small private farmers. Since more than 80% of the arable land in Romania is in the hands of 2.8 million private farmers with average farm sizes of 2.2 hectares, access to the rural financial system would greatly reduce the capital constraints of the agricultural sector and contribute to the necessary transformation of the present farming system.

JEL classification: E20, E44, P34

Introduction

The reform of the financial market in the formerly centrally planned economies of Central and Eastern Europe (CEE) and the former Soviet Union is of fundamental importance to these regions' economic transition. In particular, the transformation of the agricultural sector requires a functioning rural financial system. Moreover, the integration of the transition countries into the world economy makes an efficient domestic financial market all the more pertinent (World Bank, 1996).

The level of financial deepening is a measure of the effectiveness and efficiency of a formal financial market. It indicates the range and diversity of financial instruments and organizations to which the domestic clientele may have access. Indicators of financial deepening may be defined along three broad lines. These are the (1) the monetization of the economy, (2) the density of formal financial organizations (number per 10,000 persons), and (3) the quantity, variety, quality and efficiency of the financial services.

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The “deeper” the financial system, the larger its potential contribution to the economic development in all sectors. Nevertheless, even with a widespread and dense financial infrastructure offering a well developed range of financial services, there may be demand side based access constraints which can hamper economic development. For the small-scale private agricultural sector, such demand side based access constraints consist, of e.g. lacking credit collateral due to unclear land ownership.

Within the context of Romania’s macroeconomic and agricultural transformation, this paper analyses the rural financial system in the context of necessary reforms regarding Romania’s farming system. Since more than 80% of the arable land in Romania is in the hands of 2.8 million private farmers with an average farm size of 2.2 hectares, access to the rural financial system would greatly reduce the capital constraints of the agricultural sector and, thus, contribute to a competitive transformation of the present farming system.

Agricultural Transformation during Transition

Following the pattern of growth in most CEE-countries after the 1989/90 reforms, Romania’s GDP in the early years of transition showed a decline, peaking in 1991 with -12.9%. Positive growth restarted in 1993. In 1995 and 1996 the Romanian GDP had grown by 6.1 % and 4.1% p.a., respectively. The estimated GDP growth in 1997, however, is again negative (EBRD, 1997). Despite some positive economic developments, restructuring and privatization „are Romania’s only chance to avoid the economic situation confronting Bulgaria today“ (Embassy of Romania, 1997b).

Changes in the agricultural sector

Throughout the CEE, privatization is given top priority. In Romania, for example, the decision to privatize agriculture was immediately taken after the revolution of 1989. Beside privatization, the restructuring of farm enterprises was considered crucial for an efficient agricultural transformation. The agricultural sector in Romania currently comprises the following types of farm enterprises:

- state farms that were converted into so-called commercial companies (according to the Law on the Restructuring of State-Owned Companies 15/1990);
- farmer associations with legal status and family associations without legal status that own property rights on the land operated. Associations without legal status seem to be a transitional phenomenon towards farming associations, or individual private farming;
- individual private farms whose new owners decided to cultivate their land individually (in addition to the mountain farmers who where neither collectivized nor pressured into cooperatives).

Private farm enterprises cultivate 86% of the arable land and contribute around 80% to the agricultural production of Romania. The majority of the private Romanian farmers (2.8 million) is faced with a small average farm size of 2.2 ha, as to date, the land market has not developed sufficiently (see Table 2.1). Furthermore, existing legislation inhibits private farmers from owning more than 50 ha and renting more than 200 ha. Land owners are required by law to hold their land under cultivation, otherwise it will be expropriated after two years. The Land Law 18/1991 had reconstituted the property rights relatively quickly, but the distribution of legal land titles was slower than expected, with only 40% of the small private farmers having a legal title (Heidhues 1995; Toderiu 1997).

Table 2.1 Agricultural land distribution and average farm sizes in Romania

	Romania			Timis county
	'000 ha	% area	∅ farm in ha	∅ farm in ha
State farms	1,758.4	13.4	2,743.2	2,895.9
Private farmer associations	1,732.6	13.2	436.1	571.8
Family associations	1,595.9	12.1	100.3	81.8
Private individual farmers	8,052.7	61.3	2.2	2.4

Source: Toderiu (1997)

In 1996, the labor force comprises around 11.3 million Romanians. Of this around 28% are employed in agricultural production or related enterprises. About 40% of the private farmers will go into retirement within the next five years, however, qualified successors are rare. Overall, agriculture's share of employment has increased since 1989 for the following reasons: (1) the agricultural sector is assuming the role of an employment buffer, and (2) the voluntary return of workers of rural origin (Euroconsult, 1995).

Until 1996, Romanian farmers were required to contract their production to economic agents qualified by the state, i.e. State "integrators" or intermediaries. The proportion of the total harvest which had to be contracted at controlled prices depended on the product grown: It was 40% for bread quality wheat and seed wheat and 90% for seed maize. The state farms which normally contract with integrators have maintained their fertilizer input at 70% of the pre-transition level, while total consumption in 1993 declined to 28% of the 1989 levels. Thus, as concerns access to input and output marketing structures, the former state farms enjoy *de facto* competitive advantages. To some degree this competitive advantage also applies to producer associations, but not to private individual farms.

The competitive disadvantages of the small private farmers with respect to the realization of farming system adaptation through investments and access to the input and output markets result mainly from capital constraints. These capital constraints could be eased through a more efficient and accessible rural financial system.

Agricultural finance

During the period 1993-1996, Government mandated lending was the predominant agricultural finance mechanism in Romania.[45] The administration used a variety of funds and credit delivery mechanisms to provide the agricultural sector with low cost credit, where principal as well as interest rates were subsidized. The main source of funds were the: (1)

[45] The following paragraphs draw on Tesliuc (1996).

state budget, (2) National Bank of Romania (NBR), (3) Private Ownership Fund (POF)[46] proceeds, and (4) deposits in commercial banks (Tesliuc, 1996).

This Government mandated lending at preferential interest rates includes a clear fiscal subsidy. It can, in fact, be considered a quasi fiscal transfer (QFT) because the Government used the financial market to channel implicit, non-budgeted, non-transparent state subsidies to the agricultural sector. These subsidies in form of the QFT have had a distortive impact on resource allocation, enterprise efficiency and macroeconomic performance (Davis and Hare, 1997). On average, the QFT accounted for 0.8% of GDP from 1993 to 1996, rising from 0.5% in 1993 to 1.5% in 1996, thus it was a heavy burden on the state budget.

The hypothesis behind the subsidized lending programs was that capital is the scarce production factor in agriculture. The intention was to raise agricultural production through capital investments and thus reach higher productivity. The low-cost credit programs, however, led to the adverse selection phenomenon, namely that the beneficiaries of these cheap funds were a special class of borrowers, notably unprofitable state-owned farms, large-scale borrowers, and clients with strong lobbying powers and close ties to the banking system. The aim to raise agricultural production, preferably in the private agricultural sector, was not attained (Perotti and Carare, 1996). Instead, the massive QFT went to the state owned agricultural enterprises (more than 80%). Private farmers received on average about 20% of the transfers over the period of 1993 to 1996 (see Table 2.2). Small private farmers received just 2% of the agricultural credit funds administered by Romania's state-owned agricultural sector bank, the Banca Agricola (BA), which has been allocating about 90% of all agricultural credit in Romania.

Table 2.2 Quasi fiscal transfers to state-owned and private agricultural enterprises

Year	Total	State		Private	
	Bln. LEI	Bln. LEI	%	Bln. LEI	%
1993	107.5	66.9	62.3	40.5	37.7
1994	221.1	175.0	79.2	46.0	20.8
1995	499.2	454.2	91.0	45.0	9.0
1996	1,753.7	1447.0	82.5	306.7	17.5

Source: Tesliuc (1996)

If we consider both, the QFT through the Romanian lending programs mentioned above, and the direct State subsidies to agriculture, the volume of transfers to agriculture accounted for 2 to 4% of GDP and 11 to 21% of gross value added in agriculture, from 1993 to 1996 (see Table 2.3). The effect of public spending on agriculture has mainly been to sustain

[46] Romania's privatization program involved two main components: the "free distribution" of 30% of the shares in all the enterprises scheduled to be privatized, and the "subsequent sale of shares" of the remaining 70% held by the state. 30% in each company are distributed to one of five POFs, state-created intermediaries technically owned by all adult Romanian citizens through the "Certificates of Ownership" (vouchers) issued to them by the state. 70% retained by the state are held in the POF, which are to be sold within seven years due to the Privatisation Law (1991).

inefficiency and block structural changes in Romania's state-owned agricultural enterprises. The incidence of public spending on private agriculture has remained small.

Table 2.3 Total support for Romanian agriculture 1994 – 1996

	1994	1995	1996
Direct agricultural subsidies in billion Lei, current prices	835.0	1,388.3	2,357.3
QFT, in billion Lei, current prices	221.1	499.2	1,753.7
Total agricultural subsidies, incl. QFT, in billion Lei, current prices	1,056.1	1,887.5	4,111.0
QFT in % of gross value added in agriculture	2.3	3.5	8.9
QFT in % of GDP	0.4	0.7	1.6
Total agricultural subsidies in % of gross value added in agriculture	10.8	13.3	21.0
Total agricultural subsidies in % of GDP	2.1	2.6	3.7

Source: Excerpt from Davis and Hare (1997), Table 2.

Romania's Financial Market before and after Liberalization[47]

This section compares Romania's financial market before and after liberalization in general, and in the context of specialized intermediaries for agriculture.

During central planning, a single bank carried out the functions of both, central and commercial banking. The monobank system was typically supplemented by specialized banks, including a national savings bank, a foreign exchange bank, and an agricultural development bank. These banks had little capital and neither selected investments nor monitored them. They provided rudimentary and generally limited services to their customers. The Government absorbed all risk and did not monitor any of the financial intermediaries. At the outset of the transformation, the monobank system has been dismantled and the former specialized banks now operate as universal commercial banks (Davis and Hare, 1997; Giassemi, 1997). Accordingly, during the CPE era, the Romanian formal financial market comprised the following state owned banks:

- Agriculture and Food Industry Bank, now called Banca Agricola (BA), responsible for the agricultural and agroindustries sector;
- Investment Bank, now called the Romanian Development Bank (RDB), responsible for the state owned enterprise (SOE) sector;
- Romanian Bank for Foreign Trade also known as Bancorex (RBFT), responsible for financing trade;
- National Bank of Romania (NBR) as monobank (central bank).

The NBR performed a number of quasi-commercial banking functions. It collected deposits of both, SOEs and cooperatives, whilst making short-term direct loans mainly to SOEs for working capital. Real interest rates were maintained at a very low level. SOEs had no

[47] This section draws on Davis and Hare (1997).

incentive to repay loans because future credit was independent of past repayment and no mechanisms were in place to enforce credit contracts. Under all post 1948 administrations, the NBR was obliged by Government to finance the agricultural sector. A two tiered banking system was formally established in March 1991, although it had been in operation since December 1990. It restricted the NBR to the traditional functions of a central bank and transferred the commercial functions of NBR to the newly created Romanian Commercial Bank (RCB). The licensing of new banks became possible.

Romania's banking sector currently comprises of five primarily state owned banks, they comprise BA, RDB, RBFT, RCB, and the Savings House (CEC) that comprised exactly 2200 banking outlets in August 1997. These banks demonstrate a number of weaknesses that are associated with the fact that they had previously played no genuine intermediary function: significant amounts of bad debts, lack of skills and often poor management, and little loan portfolio diversification (Davis and Hare, 1997; Giassemi, 1997).

In early 1997, the NBR reported 20 licensed banks, respectively 21 if CEC is included (NBR, 1997a; Pantazescu, 1997). Since January 1997, CEC has been registered in the banking register of the NBR, although it has not yet received a formal banking license. Banca Albina, that was originally funded in 1872 as a commercial bank for agriculture, closed during the socialist era, reopened in January 1996 and plans again to engage in rural investments. Nevertheless, the major universal bank addressing the agricultural sector is BA. It was established in 1948 and transformed into a joint stock company in 1990. Government and the five POFs hold 57% and 26% of the share capital of the bank respectively. There are no other shareholders in excess of 2% of the capital. During 1996, around 80% of Lei 4,000 billion were pumped in the agricultural sector, largely out of money creation of NBR. This has been the prime cause of inflationary pressures within the economy. Only 2% of the loans allocated to agriculture by BA went to small private farmers, the remainders to state owned agricultural producers and the food processing industry (Davis and Hare, 1997; Heidhues 1995).

In addition, there exist 842 savings and credit cooperatives (SCCs) that have survived the socialist era. Their savings mobilization and credit extension capabilities are limited. Also, an efficient market integration through its union, CreditCoop, is not yet given. Nevertheless, about 8 % of the rural credit portfolio is extended by SCCs to primarily small private rural enterprises (Davis and Hare, 1997).

Rural Financial Deepening in Romania

The efficiency and effectiveness of a formal financial market can be described by financial deepening indicators such as (1) the monetization of the economy, (2) the number of formal financial organizations, and (3) the quantity and quality of financial services. In the following, these indicators are applied to Romania's rural financial system.

Monetarization of the economy

The monetarization of the economy at the macro level measured by M2/GDP[48] is a helpful indicator of the financial depth of an economy and of the financial market's efficiency in

[48] M2 comprises currency in circulation plus demand, time, and savings deposits in banks.

mobilizing funds to foster growth in the real economic sector. The indicator M2/GDP shows that Romania's financial depth is far less than what would reasonably be expected for countries with a similar of GDP (see Table 4.1). The negative real deposit interest rate that prevailed until 1997 provided little incentive to save in the domestic financial system. The tendency was to retain financial savings either as foreign exchange, or to invest them in real assets.

In order to attract savings, NBR raised the auction rate for banks to 266.7 % in March 1997 which reduced currency in circulation significantly by April 1997. The inter-bank interest rate increased subsequently to 123.1 % (March) and the time deposit rate for non-bank clients rose above 100 %. In May 1997, the Governor of the NBR declared that since February 1997 the population had deposited between US-$ 200-500 million in the Romanian financial market (Embassy of Romania, 1997a). Among them were many members of SCC who withdrew their cooperative savings and deposited them as time deposits in commercial banks. If this period of high interest rates had continued, the deterioration of the SCC's liability side through dis-saving could have had severe consequences on the sustainability of many SCCs.

Table 4.1 Economic and monetary indicators

	1993	1994	1995	1996
GDP/capita in US-$	1,159	1,324	1,573	1,437
GDP growth in % at constant prices	1.5	3.9	7.1	4.1
Average exchange rate (Lei/US-$)	760	1,655	2,033	2.752
M2 in % of GDP	9.1	21.5	25.4	28.9
Percentage change of M^2	141.0	138.1	71.6	60.0
Inflation rate in % (annual average)	256.0	139.0	32.3	39.0
Average lombard rate in % p.a.	115.0	192.5	96.6	90.0
Average discount rate in % pa.	70.0	65.9	39.9	35.0
Average auction rate in % p.a.	101.7	124.8	81.6	52.7
Inter-bank rate in % p.a.	61.5	92.9	48,6	55.3
Lending rate (1 year) in % p.a. (annual average)	129.0	83.0	59.0	71.0
Deposit rate (1 year) in % p.a. (annual average)	52.0	62.0	38.0	47.0

Source EBRD (1997) and NBR (1996 and 1997b)

Financial density in rural areas

In 1996, around 11.3 million of the 21.7 million Romanians were in the labor force. About 28% of the labor force is employed in agriculture. NBR estimates that there are 135 rural sub-branches and 146 rural agencies of banks. The total number of sub-branches and agencies is 921 (for a detailed description of the urban-rural outlet distribution per licensed bank see Schrieder and Heidhues, 1997). The 281 rural banking outlets operate in locations with a population smaller than 10,000 persons. Relating the number of rural banking outlets to the labor force employed in agriculture, this would account to roughly 1.3 financial intermediaries per 10,000 persons employed in agriculture. This is above Romania's overall financial density of 1.2 banking outlets per 10,000 persons in the labor force. Based on this indicator, one can state that the rural financial system in terms of banking outlets is comparatively well developed, although there exist vast regional differences. More than 70% of all rural banking outlets are currently operated by state-owned banks. These banks are up for privatization within the next few years. Thus, one can expect that many of the unprofitable rural banking outlets will be closed soon.

Nevertheless, although their contribution to the rural finance market up to 1997 was below 10%, it has to be kept in mind that SCCs are not included in the above calculation. Davis and Hare (1997) point out that with greater financial market liberalization, BPST and CEC can be expected to become a major player in rural finance.

Quality, variety, and efficiency of financial services

The participation or non-participation of small private enterprises in the formal financial market is determined by both, latent and active variables. A latent variable would be the decision of a potential investor to refrain from approaching a financial intermediary because of the assumption that he will not obtain the desired service.

Active variables determining a potential investor's decision to participate in the financial market may be assigned to three levels: (1) the investor's characteristics, (2) financial market's characteristics, and the (3) complementary institutions' characteristics. In the following, these characteristics are evaluated with particular emphasis on the agricultural sector as potential investor and the rural financial system.

Investor. Personal and business characteristics of a potential investor influence not only the lenders' decision to engage in a contractual arrangement but also the investors' decision to participate in the financial market. Empirical research has shown that a low level of education can act as a financial market entry barrier due to the complexity of financial transactions (Schrieder, 1996). Also, only 40% of the small private farmers in Romania have a legal document demonstrating their land property rights. Lacking such documents, potential borrowers may consider it useless to approach a financial institute. Moreover, it appears that even land property certificates are not accepted as loan security, since there exists no functioning land market. The only collateral accepted by commercial banks are newly-built, insured buildings. Romanian banks ought to consider alternative collateral schemes, e.g., as in Croatia and Poland where banks are permitted to use assets such as stocks and equipment as security, similar to pawnbrokers (World Bank, 1996). Also, particularly farmers seeking external finance may estimate their capacity to repay a loan as risky, facing insecure market prices for their agricultural produce. The three Cs of a debtor: character, collateral and the capacity to repay based on personal and business characteristics summarize a potential investor's decision to forward a financial demand towards a financial intermediary.

In 1993, a survey in five CEE-countries found that private farmers' perception of their access to the formal credit market was very negative. In Romania, 80% considered access in some form or the other as limited (Euroconsult, 1995). Due to historical events, potential investors may also be suspicious of certain organizational forms of financial intermediaries. This applies to some extent to the SCC which have often been misused as tools of Government propaganda.

Figure 4.1 depicts latent and active credit demand as well as credit rationing in the formal rural financial system of Timis/Romania due to factors related to the three Cs. The decision tree presented below, as well as the other initial results of the analysis, are based on a 1997 survey of 65 small private farms. The extent of latent credit demand and the supply-constrained credit demand is surprisingly high, given the density of financial intermediaries in the rural areas of Romania.

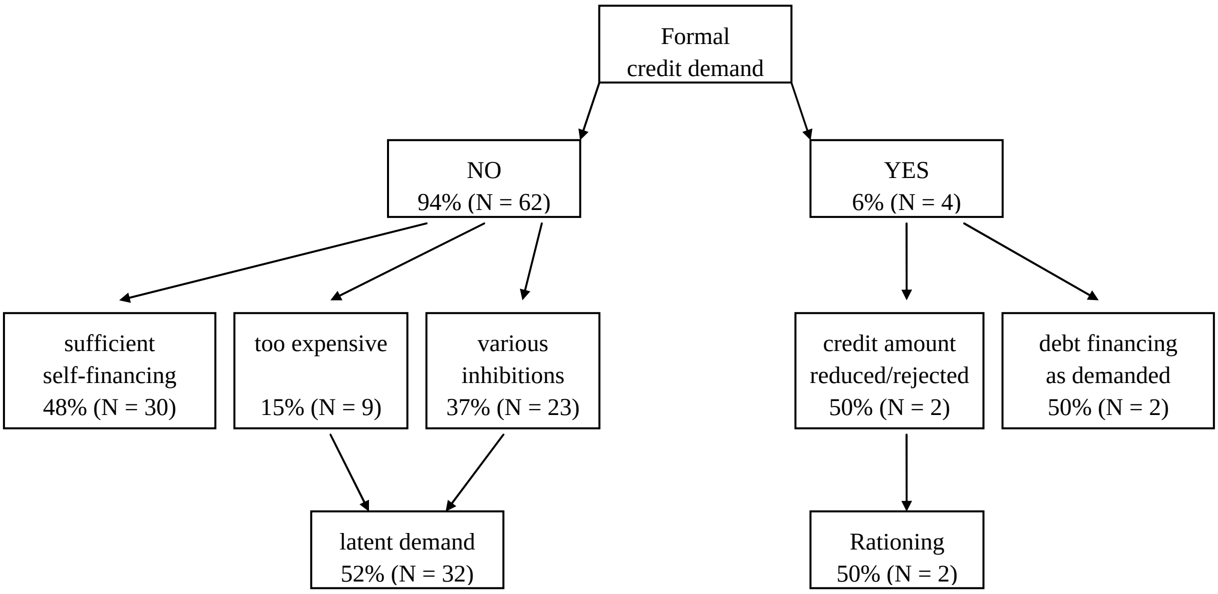

Figure 4.1 Decision tree of credit demand and supply in the formal rural financial system in Timis/Romania

Source: Heidhues and Schrieder (1997)

Within the survey, individual private farmers' loan portfolios were evaluated. The loan portfolios can consist of loans acquired from the formal and the informal financial market. The latter refers to informal financial savings and credit groups (such as the CAR and Roata), the extended family, neighbors and friends. In the Timis county, just 9 (14%) of the 65 interviewed small private farmers received a loan during 1996, despite the fact that the need to invest in the productive capital base was obvious and the self-financing capacity was limited. The median loan was slightly below US-$ 100, while the average was US-$ 1,500 and the maximum almost US-$ 10,000. The sample distortion occurred due to two formal market loans disbursed by BA. The loan portfolio of the individual private farmers shows that they primarily rely on the informal intermediaries in the rural financial system. Also, the Timis data demonstrate that small private farmers save preferably in foreign currency, such as US-Dollars and German Marks. These savings are mostly kept at home. Farmers were reluctant to give any indication of the amount of foreign exchange savings retained. Only 30% (N = 19) reported having savings accounts with local financial organizations, mostly with BA (52%) and CEC (21%). In this case too, several farmers (N = 6) refused to indicate the savings balance. For those in the sample providing data, the average and median savings amount was US-$ 907 and US-$ 856, respectively.

Financial market. Frequently, the lack of local formal financial intermediaries inhibits potential investors from participating in the formal financial market. This is particularly frequent in rural areas. Rural financial intermediaries may discourage small private entrepreneurs from becoming their customers due to three major constraints: (1) information asymmetries between market participants (client ↔ agent), (2) lack of suitable collateral, and (3) as a result, high transaction costs. Innovative forms of contractional arrangements and organizations can circumvent or ease these constraints of efficient financial intermediation. Innovations are particular relevant in rural financial intermediation when dealing with high cost and high risk market segments such as the small-scale private agricultural sector.

Imperfect information at the financial agent level concerning the ability and willingness of potential borrowers to honor the debt payment schedule leads to problems in three areas (Hoff and Stiglitz, 1990): screening, incentive, and enforcement.

Innovative financial organizations attempt to overcome these problems by demanding collateral substitutes which they can seize in the case of loan default such as:

- tied contracts (specific credit cum labor, cum land, or cum marketing arrangements) or leasing arrangements;
- third-party guarantees (as practiced in Albania by the GTZ supported Foundation for Enterprise Finance and Development);
- stocks and equipment as security similar to leasing arrangements (Croatia, Poland); and
- threat of loss of access to future borrowing opportunities (World Bank, 1996).

Throughout the CEE, banks still regard collateral in farming as inadequate. This is partly due to a slower progress made in reforming property rights and land titling than in other parts of the economy. Banks are generally wary of any involvement with discounted lending schemes or guaranty funds as they have to assume some of the risk. Thus, farmers and agri-processors are mainly confined to dealing with State banks, such as the BA in the case of Romania.

The third major impediment to increased access to credit and savings services are transaction costs (TCs) which are either incurred by the financial intermediary delivering the service or by the enterprise demanding the service, or both. TCs include any costs involved in an exchange of assets or services other than the price, the asset, or service. High TCs due to information asymmetries appear to be less of a hindrance in networks of close social interaction, e.g. in self-help group-based systems, such as the CAR or Roata in Romania.

In many CEE-countries, the financial market's legal and policy framework discriminates indirectly against small-scale rural entrepreneurs. Often, the policy of subsidized lending to rural priority sectors leads to an adverse selection phenomenon, namely the selection of large-scale enterprises with a high degree of moral hazard. This is because credit is frequently allocated to heavily indebted and inefficient state enterprises that are incapable of repayment.

The services offered by financial intermediaries frequently do not reflect real demand. Deposit schemes lack flexibility, depositing and withdrawal may be expensive. The same frequently applies to credit schemes. Also, the managerial capability of loan department officials is often unsatisfactory. With particular reference to financial services, the access of private rural enterprises in the rural formal financial system could be enhanced. The adoption of appropriate innovations could close the service gaps in rural financial intermediation.

Complementary institutions. Financial markets in transition economies, particularly in rural systems, lack many features that are taken for granted in most industrial countries. A poorly developed communication and transportation infrastructure makes formal financial services more costly for potential customers. The virtual absence of insurance markets, e.g. crop and weather insurance, to mitigate the problems of income uncertainty is also detrimental to financial intermediation.

At the macroeconomic level, insufficient land and lease markets, distorted input-output markets and the lack of extension for private farmers reduce the capability and willingness of potential investors and creditors alike, to engage in financial transactions. These constraints weigh heavily as in Romania about 86% of the arable land is privately owned. In the county Timis, 35% of the arable land is cultivated by farming associations and 65% by small-scale family farms (see Table 2.1). Yet, less than half of the private landowners have received a legal land title, that could be used as credit collateral (Heidhues, 1995). Small-scale farming still dominates because land leasing only became possible in 1994. An effective land market is still to be introduced. These policies are crucial to transforming Romanian agriculture from its present small-scale farming to more efficient systems.

Rural Financial System Reforms and Agricultural Transformation

Market distortions and the lack of a conducive institutional environment refrains financial intermediaries from servicing small-scale private agriculture. They do not have the variety, quality and efficiency of services to deal with this type of clientele. While the Romanian rural financial system is relatively “deep” with regard to the number of intermediaries, it is by no means so with regard to its monetarization, service array and outreach.

Therefore, financial intermediaries engaging in the rural system need to adopt financial innovations to become capable of effectively and efficiently supplying their services without external support (Schrieder, 1996). The task lying ahead is considerable. Otiman (1997) estimates in his outlook 2015 that in the mid-term, about 1.4 million Romanians will remain in agriculture. To efficiently restructure the agricultural sector given this labor force, he estimated a finance demand of between 9 and 11 thousand billion Lei annually for the agricultural sector for the next 15 years at current prices. In comparison, in 1996, all commercial banks in Romania allocated 20 thousand billion Lei (US-$ 7.56 billion) in domestic credit to the entire economy (NBR, 1996).

Clearly, the present structure of the financial system in Romania as well as in other CEE-countries cannot cope with this financing task. The agricultural transformation process requires a rural financing system that is reliable, trustworthy, efficient and geared to serve the new demands of the agricultural and rural clientele. Changes and innovations at four levels are needed, i.e., (1) at the finance system level, (2) at the level of financial organizations, (3) in the administration and processing of financial services (savings, credit, insurance and leasing), and (4) in product design (Schrieder, 1996; von Stein, 1991).

Each of these financial innovation categories has the potential to reduce private farmers’ market access constraints. They will improve market integration and expand customer coverage. Innovations at the level of financial organizations will ameliorate the economies of scope and thus the service accessibility for unattractive market segments. Process innovations are cost reducing and increase organizational efficiency; and product innovations ameliorate the banking entity's orientation towards customers' demands (Schrieder and Heidhues 1997; Schrieder 1996).

Financial system innovations*:* Financial system innovations at the macro level are aimed at creating a reliable, fair and enforceable legal and regulatory framework, standardized accounting procedures together with politically and institutionally independent supervisory bodies. Their decisions must be strictly enforced. Banking regulations should not just be „on the books" but forcefully applied. Tight on- and off-site supervision ought to be implemented, sending a strong signal to bankers about the penalties for inappropriate banking behavior (Fleming et al., 1996). This is crucial in an environment where there has been (and still is) a close and often cozy relationship between enterprises and banks. Collusion between them (and between banks) can limit market entry and competition. Similarly, corruptive practices must not be tolerated. No other sector in a market economy is so dependent on trust and ethical business practice as the banking sector. In the case of Romania, where commercial banks are unlikely to restructure their operations sufficiently to provide appropriate rural finance, the more plausible way to go may be either to institute new micro-finance organizations (institution building) or to strengthen already existing rural financial intermediaries such as the CEC and/or SCC (institution strengthening).

Financial organization innovations: The term financial organization innovation refers to changes in the structure, management, and legal form of an institution. Giassemi (1997) considers the restructuring of banking institutes pertinent to developing their capability in dealing efficiently with new market segments. The transformation of a co-operative structure into a commercial banking intermediary, as is presently in discussion with the Romanian SCC could be considered as such an innovation. Also, the possible selling, thus privatization of state-owned commercial banks would result in an organizational change of the legal structure. Most likely, the RDB and RCB will be the first to be sold by auction in Romania (Embassy of Romania, 1997b).

Administration and processing innovations: Processing innovations focus on improving organizational and service distribution aspects of financial institutions. A processing innovation in rural finance is, e.g., the simplification of financial transactions. A processing innovation in the area of improved marketing would be a participatory client approach (Heidhues, 1995).

Product innovation: Financial product innovations are defined as new or modified financial services that have not existed in the market before or differ substantially from existing ones (von Stein, 1991). Product innovations play a critical role in rural finance that aims at accelerating the economic pace (Schrieder, 1996). An often emphasized product innovation is the introduction of flexible savings facilities. At the rural enterprise level, deposit schemes reduce the risk of seasonal income shortfalls since stress periods can be bridged through dis-saving. Rural finance schemes that offer savings contracts are important in improving the capital and income situation of the rural population (World Bank, 1996). The transition of the Romanian Savings House (CEC) into a fully-fledged commercial bank may bring about more flexible and profitable savings contracts for its rural clientele.

The majority of loans extended are short-term loans. Short-term loans are acceptable for input financing but not for the required capital investments. Other options to realizing investments may be needed. Banks or leasing companies might profitably offer leasing arrangements instead of financing the direct purchase of assets (Nagarajan and Meyer, 1997). The development of a market for asset-backed securities or factoring may facilitate this development.

Finally, Romania's current rural financial system, and this is true for other transition countries as well, is not adapted to the demands of the small-scale private agricultural sector. Financial innovations are required at all levels of the system. Clearly, the implementation of the appropriate innovations will require a major long-term effort in education, training and gathering experience, in changing laws, in restructuring other institutions and organizations. Needless to emphasize that this is a longer-term process requiring time and persistence; a shock approach will not succeed.

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