Rural regional development in transition economies: Country case Romania

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THE MAIN OBJECTIVE OF THE TRANSITION PROCESS is to restructure the centrally planned allocation of production factors into a market orientated allocation process. The difference between the transformation process in transition countries and structural adjustment in other countries is the fundamental change of the entire system. In addition to the transformation of the economy, the political and cultural institutions must also be adapted. This implies a fundamental change of all institutions [Richter and Furubotn, 1996], i.e. restructuring of property rights and distribution, political and organizational framework, and the formal and informal rules regulating the relations between citizens, organizations and the government. This complex and far-reaching political, social and economic restructuring process affects all sectors of the society.

Although the agricultural sector is still the dominant sector for income generation in rural regions, more and more attention is given to the non-farm sector and its role for rural economic development. The importance of the non-farm sector is largely due to its potential in absorbing excess labor from the agricultural sector and urban-rural migration especially in transition countries, in contributing to income growth and in promoting a more equitable distribution of income. Thus, agricultural and especially regional development policies (ADPs and RDPs) for the agricultural and the underdeveloped private non-farm sector² appear to be of utmost importance for an effective transformation into a market economy. This paper presents recommendations for ADPs and particularly RDPs based on empirical research in Romania in 1997 (counties of Timis, Brasov and Dolj). The following section presents first the conceptual framework of the analysis, then proceeds to discuss the empirical findings within the agricultural, non-farm and rural financial sector, as well as the rural enabling environment. The paper finishes with conclusions and policy recommendations.

Transition process in Romania

Empirical evidence on the sequencing of economic reforms in the transition process is summarised in TABLE 1. Generally, institutional reforms are seen at the beginning of transition. Measures to reach economic stability should start at about the same time. The timing for the introduction of financial market reforms is not as clearly pinpointed. Partly, financial market reforms are requested to start early on, partly they are seen to come in towards a later stage of transition. Following the sequencing of reforms in TABLE 1, a detailed structure of reforms can be set-up (nach Pappenberger, 1994):

- A1 Transformation of institutions (e.g., public administration)
- A2 Other reform measures to create a legal framework
- B1 Reform area "stabilisation"
- B2 Reform area "price liberalisation"
- C1 Preparation of financial market reforms
- C2 Implementation of financial market reforms
- C3 Institutionalisation of capital markets
- D Reducing overhang of liquidity
- E1 Privatisation of micro-enterprises
- E2 Privatisation of banks
- E3 Privatisation of small enterprises

- E4 Privatisation of large enterprises
- F International integration
- G Trade liberalisation

The reform process according to this systematisation is summarised in TABLE 2. Basic reforms in the institutional environment were started early on, however, broad based implementation lacked behind. Important economic sectors appear to have been tackled only after the last election in 1996. In the area of economic stabilisation, serious efforts to reduce the budget deficit started after the intervention of World Bank and International Monetary Fund (IMF) in 1996. Nevertheless, the governmental crisis at the end of 1999 caused the IMF to withheld the second credit instalment whose disbursement was scheduled for October 1999. Its disbursement is now conditioned to the consolidation of the budget 2000. The basic laws for the privatisation of land and state-owned enterprises passed the Parliament very early in 1990/91, however, with very low upper limits. At the beginning, the state owned enterprises were simply converted into share companies and renamed commercial companies but still owned by the government. Mass privatisation started in 1994 when vouchers were issued to the population. In the agricultural sector in particular, privatisation of state-owned enterprises is not yet completed. Only in 1999, a law passed Parliament that allows private agricultural enterprises to extend the land holdings to a level that allows for efficient operations. Similar to the privatisation issue, the basic laws to reform the financial market to a two-tier banking system were issued within the first two years of transition. Nevertheless, it took until 1998 to revise the central bank and commercial bank laws in such a way that the central bank law allows for an independent monetary policy and the bank law requires insurance for depositors. Although the discussion to privatise state-owned banks began in 1996, the first privatisation took only place in 1998. Large reform deficits are evident in the rural financial sector. Recently, the World Bank (1998) stated that an appropriate rural financial sector to finance, e.g., agriculture is still missing. In the current government programme (Government of Romania, 1999), agriculture and rural development are stipulated as political priorities, rural finance forms part of this area.

Rural regional development

Socio-economic systems change. These changes can be gradual or abrupt, transitional or permanent in nature. The substitution of basic social and economic principles that leads to a new socio-economic system with different fundamental institutions and organizations is defined as transformation. In contrast, reforms are modifications on specific elements on the whole socio-economic system. These corrections can be characterized as readjustments while the basic economic principles are maintained (Hagedorn, 1991 in Wolz et al., 1997). Such corrections are pertinent for the socio-economic development of the rural regions in transition countries. Based on the OECD (Organisation for Economic Co-operation and Development) definition of rural regions, this work has emphasized its research on policies aiming at improving structural issues in the non-farm sector as well as the agricultural and rural financial sector pertinent for rural economic development.³ Figure 1 illustrates the rural sectors this paper focuses on in the process of rural development. It is based on the hypotheses that rural regions can be restructured effectively only if the domestic financial market provides at least basic financial services to the private agricultural and non-farm sector to acquire working capital and finance investments. In addition, the new growth theory implies that the economic development of the private sector in rural areas can be advanced if it has access to an effective institutional environment and support infrastructure, particularly knowledge markets (World Bank, 1999).

In view of the proposed rural sectors in Figure 1, the objective of this research is to provide regional decision makers with a foundation for their rural policy interventions. A better policy foundation should contribute to (1) improve the competitiveness of the rural region surveyed, (2) reduce inter-regional economic disparities and standard of living, and (3) maintain and develop the natural resources and cultural heritage (OECD, 1993). Also in light of the objectives of the special rural development instruments by the European Union (EU), priority areas for rural development need to be identified.

The policy areas will be grouped along the so called five 'Is': innovation, infrastructure, inputs, institutions, and incentives that were primarily associated with agricultural growth in the 1960s (Streeten, 1987). Tomich, Kilby, and Johnston (1995) added the sixth 'I', namely initiative. Recently, Hazell (1998) stressed the five 'Is' again for rural economic growth and added that, since the 1970s and 1980s, additional 'equity modifiers' have been promoted. Among other measures, the rural non-farm sector should be actively encouraged, as it benefits from powerful income and employment multiplier effects as agriculture grows. Similarly, as the non-farm sector grows, it produces multiplier effects for the agricultural sector especially in view of the disguised employment problem. ⁴

Reform of the rural enabling environment

In neoclassical theory, economic development is a result of anonymous market forces under the condition that it is cost-less to transact. Only under the condition of cost-less bargaining will the market participants maximise aggregate income regardless of the institutional set-up. North (1994: 360) points out that "when it is costly to transact, then institutions matter. And it is costly to transact." Thus the institutional set-up, or in other words the enabling institutional environment is crucial for rural development, particularly in transition economies (see Figure 1). Government's chief role is that potential investors meet as few barriers as possible, and that problems in marketing, distribution and production are overcome through private enterprise and investment, rather than through governmental intervention (Hare and Davis, 1997).

As in Romania, other CEE-countries face equally difficulties in effectively reforming rural areas. The status regarding rural reforms in the CEEC-6 is compared across the countries in TABLE 3. Romania occupies presently the second last position just before Bulgaria.

Socio-economic reforms and structural adjustment are pertinent for the socio-economic transformation of the rural regions in transition countries. At the beginning of the transformation process in transition countries, economic policies were mainly attached to macroeconomic problems. The increasing income disparity between rural and urban regions was ignored (Bachtler, 1995: 202f). Now, it becomes clear that the increasing inter-regional divergence in the transition economies is one of the major transformation problems. This is, among other reasons, why the EU formulated special rural development strategies such as Phare (Poland, Hungary Assistance for the Restructuring of the Economy), a framework for assistance to agriculture and rural development (the Special Accession Program for Agriculture and Rural Development known as SAPARD) and a new instrument for regional policy (Instrument for Structural Policies for Pre-Accession known as ISPA) in view of the expansion to the East. The financial volume of Phare (EURO 1 billion per year), SAPARD (EURO 500 million per year), and ISPA pre-accession instruments (EURO 1.5 billion per year) comprises EURO 3 billion per year from 2000 to 2006. Under SAPARD, a wide range of structural and rural development measures are eligible to receive assistance. These include among others (EC, 1999; Poppinga, Fink-Keßler, and Luley, 1998): investments in agricultural holdings, improving the processing and marketing of agricultural and fishery

products, improving and reparcelling land, establishing and updating land registers, improving vocational training, and developing and improving rural infrastructure. ISPA targets two areas, the environment and the trans-European networks and their expansion to the East. ISPA can contribute up to 85% to the public expenses in these two areas.

Under SAPARD, each candidate country⁵ will draw up development programs for rural areas to cover the period 2000-2006. The proposed programs should set out the priority needs of the rural areas concerned and their development potential. They should establish a strategy with clear and quantifiable objectives as well as indicate the expected impact. Overall, market efficiency, quality and the creation of jobs in rural areas should be of priority. Whether the non-farm rural sector can contribute to reducing disguised and open unemployment in rural regions of CEE-countries needs to be assessed thus. It should be noted, however, that in the list covered by SAPARD, the non-farm sector is not specifically mentioned while in the Green Paper of the EU and the Government of Romania (1998) on rural development in Romania the set up of small and medium sized enterprises in industry, handicraft, trade and services is made explicit as a strategic objective.

Rural development policies and strategies aim at (1) improving rural regions' competitiveness to maximise their contribution to the domestic economic development; (2) implementing an acceptable and intra-regional comparable living standard for the rural population; and (3) maintaining and developing of natural resources and cultural heritage in rural regions. To realise these objectives a variety of instruments and policies are used (see TABLE 4). As can be still seen from TABLE 4, traditionally agricultural policies dominated the development strategies of rural regions (OECD, 1996: 9).

Above it was pointed out that specific development strategies and policies exist to socio-economically promote disadvantaged regions. However, the question has to be raised whether indigent (needy) regions are worthy of preferential socio-economic strategies to reduce welfare gaps? From a neoclassical economic point of view it is questionable whether an active equalising between regions is preferable to the principle of inter-regional competition. If one assumes complete and unregulated markets, inter-regional welfare gaps would be balanced by factor movements and a subsequent adaptation of factor remuneration. Nevertheless, if the assumptions of the neoclassical model are removed, namely complete factor mobility and homogeneity or if one includes assumptions of the New Institutional Economics (NIE), namely uncertainty, information asymmetries and risk, then inter-regional economic convergence through competition may quickly reach its limits. Under such circumstances, direct and indirect balancing mechanisms to achieve better intra-national income equity may make sense (Pohlan, 1998).⁶

Agricultural sector reforms

Agriculture is still an important sector for economic development in most of Central and Eastern European countries (CEECs). On average, 22% of the labour force is employed in agriculture and agriculture contributes 7% to gross domestic product GDP (European Commission, 1998). In Romania, e.g., agriculture is a key economic sector accounting for about 20% of GDP, 37% of employment and 9% of exports. After the political changes from 1990, Romania pursued the privatisation of agriculture vigorously. Under the land reform process the former land of production co-operatives was fully privatised. State farms, however, were exempted from privatisation. About 86% of arable land is now privately owned by an estimated 2.8 million farming households. Four farm types coexist at present in Romania (Heidhues *et al.*, 1998; Davis and Gaburici, 1999):

- (1) large scale state farms, almost unchanged since the central planning period, averaging 2,700 ha in size. They are often operated with little concern for efficiency and are generally loss making operations, heavily dependent on subsidies by the government;
- (2) farm associations with legal status, mostly successor organisations of former production co-operatives with around 400 hectares;
- (3) farm associations without legal personality (family associations) with around 100 hectares. This is a new organisational form that has developed only since 1990. Several households, normally former members of production co-operatives join together to pool their land for joint cultivation; and
- (4) small private farms, also created after the 1990 reform. The arithmetic average farm size is around 2.2 hectares. Leasing and donation of farm land can increase the operational farm size however (see TABLE 5).

It is particularly the farm types (2), (3) and (4) that need adjustments in the agricultural policy and regional policy framework.

Individual land holdings are generally small, creating specific problems for agricultural credit delivery. In addition, land titling is progressing more slowly than expected; while 97% of the new land owners have received a provisional title, only 40% have a full legal title (Heidhues, 1995). Reforms in sector policies and the institutional framework in support of private agriculture have been lagging behind. In particular, the institutional and policy set-up in agricultural processing and marketing, research and extension and rural credit is still predominately geared to state farms and medium and large scale farm associations. Also, the government's price and subsidy policies are heavily biased against the small individual producer. Premia on outputs and subsidies on inputs are often bypassing the small farms. In addition, state enterprises tend to reap a disproportionate share of the subsidies by virtue of their established relationship within the state complex and the preferential treatment they enjoy as the presumed main guarantors of government's food security policy. Banca Agricola (BA), the main supplier of agricultural finance, extends credits almost exclusively to larger scale farms, particularly state farms. Most BA loans to agriculture used to be heavily subsidised. As a result, state farms have been the major beneficiaries of premia, input and credit subsidies reducing the share available to the private sector.

The key issues of agricultural production units are low yields, low efficiency, high labour inputs, over aged and antiquated technology, and small farm size in the private individual farm sector. Davis and Gaburici (1999) have discussed these issues comprehensively for the small-scale private agricultural sector in Romania. As in this analysis, Timis county was part of their survey. Nevertheless, they did not include state-owned farms and associations as done in the evaluation of the agricultural sector in this paper. For the county of Timis, the yields of the most important crops are distinguished for state farms, private associations and individual farms in three surveyed villages (see TABLE 6). Average yields are higher in the private farm section of Timis country but still below EU average. In the counties Dolj and Brasov, state farms were not part of the sample, thus, the overall averages in TABLE 6 refer only to private farm enterprises in Timis, Dolj and Brasov. The overall average yields of the individual farms in the sample are, as expected, below EU average. As can be seen from TABLE 6, Timis suffered of hail in 1997. Therefore, the average yields of the private individual farms are somewhat below the three-county average. Nevertheless, some communities in Timis come quite close to the three-county average for all crops.

At the end of 1997, 97% of the used tractors and combines were aged more than two years and 56% of the other machinery was aged more than seven years. These data highlight the

enormous need for replacement of equipment and associated with it, the need for financing. The foundation of farm equipment associations could help the effective use of equipment in the private agricultural sector.

As a result of these problems, low yields and old machinery, many farm enterprises operate with low gross margins or even negative gross margins for wheat production as the paper of Davis and Gaburici (1999) revealed. Nevertheless, the empirical research in the county of Timis proved that gross margins can be significantly improved if access to inputs, extension services and liquidity is achieved (see TABLE 7). The results in TABLE 7 are realised from reference farmers and experimental farms in Timis county that achieve higher yields than the average private individual farms. While Davis and Gaburici (1999) calculate a gross margin 2 of about 10 USD per hectare in Timis, this analysis showed that with improved inputs and access to finance, gross margins of 365 USD per hectare are possible.

Improvement in agricultural productivity and competitiveness will have to address the following policy issues (Grosskopf *et al.*, 1997):

- (1) eliminating the uncertainties in land ownership and title situation and supporting the efficient functioning of a land and rental market. The planning models showed that private individual farms need to increase the cultivated land to become economically sustainable. Access to land could be counted under Hazell's (1998) incentive-I. Presently, more than 70% of the farms in the sample cultivate less than 8 ha. Raising the limits of land restitution in Romania to the pre-war level (with a maximum of 50 ha of arable land and 30 ha of forest) as well as raising the rent limit to 200 ha was a step in the right direction;
- (2) improving technical, economic and organisational/management know-how through training, extension, and agricultural research. This policy issue could be counted under Hazell's (1998) innovation-I. The reference farms and the experimental farms in the sample had better access to extension services which, in turn, had a positive effect on their production technology and access to the financial market. Establishing knowledge transfer centres, eventually integrated into the regional agricultural universities and linked with the regional extension service could be essential in improving the average private farmers access to these services;
- (3) renewal of agricultural machinery, equipment and buildings. This policy issue could be counted under Hazell's (1998) input-I. All private model farms in the planning model (between 20 and 50ha) had access to credit (between US-\$ 288/ha and 577/ha). This requires an efficient rural finance system;
- (4) improving the reliability, efficiency and access to output marketing and input supply services. The planning model assumed ready access to input and output markets. It should be noted here that the rural non-farm sector plays also an important role at this level to provide employment for the growing rural labour force and in promoting a more equitable rural income distribution (Lanjouw and Lanjouw, 1997). This policy issue could be counted under Hazell's (1998) infrastructure-I; and
- (5) building up and strengthening agricultural extension. This policy issue could be counted under Hazell's (1998) institution-I. Extension is often understood to entail transfer of technical knowledge only. It needs to be expanded to focus also on issues of management, organisation, marketing and finance.

Implementation of such a program requires a proper institutional framework and environment (see Figure 1). These issues and the necessary RDPs are further explored in the next sections.

Non-farm sector

Köster (1997) emphasises that the rural labour markets in transition countries are under significant stress because of

- the slow expansion of the private sector which could absorb the excess labour (from disguised unemployment in the private agricultural sector),
- the low formal qualification and high average age of the agricultural labour force,
- the high market transaction costs for good, services and production factors, and
- the mobility constraints which are augmented by shortages on the housing market in transition economies.

The single most promising way of achieving greater inter-regional equity in transition countries is to put emphasis on employment creation. Especially in rural areas, disguised unemployment in the agricultural sector and open unemployment could be reduced by opportunities in the rural non-farm sector.

In Romania, the level of employment went down by 25% between 1990 and 1995. At the same time, the private agricultural sector experienced a growth of the labour force. The level of employment in 1997 reached in the agricultural sector 108.7% and in the industrial sector 60.4% of its level in 1990. The indices of agricultural production indicate an increase by 5.6% from 1990 to 1997, while the increase of employees in the agricultural sector amounts to 8.7% in the same period (National Commission for Statistics, 1998). Thus, agricultural labour productivity decreased. The same tendency is indicated by the high percentage of people employed in the agricultural sector (37% in 1997) compared to the low contribution of agriculture (18.8%) to the GDP (EBRD, 1998). These figures show that a large proportion of the industrial labour force moved into the private agricultural sector, creating high levels of disguised unemployment, an issue still unsolved. TABLE 8 shows that agriculture played the role of an employment buffer, although with large regional differences.

Non-farm small and medium enterprises (SMEs) could contribute to rural employment because they are generally more labour intensive. Moreover, the lower labour and higher capital prices faced by SMEs correspond more closely to the inputs' true relative scarcities in rural areas. Because the relative factor proportions in SMEs are more 'appropriate', the development and start-ups of SMEs, especially in rural areas should be encouraged (Lanjouw and Lanjouw, 1997). Although it is commonly found that SMEs generate more employment per unit of capital than larger-scale enterprises, Little, Mazumdar, and Page (1987) conclude that in general there is not a linear relationship linking capital per worker or capital productivity to firm size, when firm size is measured by employment. Apparently, medium sized firms (employment over 50) tend to have the highest capital productivity. In Romania, SMEs are officially defined as enterprises either having between 50 and 250 employees or having an equity capital between 2.5 and 18 billion Lei (EC, 1998: 20). The non-farm enterprises in the Brasov and Dolj sample (N= 72) employed mostly less than 50 persons (average was eleven) and the equity capital varied between 4.2 million and 2.8 billion Lei. Thus the enterprises in the sample are classified as micro and small enterprises (MSEs).

Still, when considering the potential contribution of non-farm SMEs to development it is important to ask whether or not such activity is more or less efficient in converting resources into output relative to agriculture (or urban counterpart enterprises). Commonly three measures of productivity are used, namely labor productivity, capital productivity and aggregate productivity (Lanjouw and Lanjouw, 1997). Labor productivity which measures the value added (gross output deducting intermediate inputs, but not deducting capital and labor costs) per unit of labor input and capital productivity which measures the value added per unit of capital are partial measures. By evaluating non-farm activities based on one of these partial

productivity measures, say capital productivity, one is implicitly treating the other input, labour, as having a zero opportunity cost. In a situation with positive wage costs but unemployment and/or disguised unemployment such as in Romania, it is preferable to assume that labor has zero opportunity costs. In the case of the Romanian sample, the micro-economic costs were 910 USD in 1997 (around 6.6 million Lei).

The formative process of small and medium enterprises (SME) has different determinants that can be divided in economic and non-economic reasons. The most obvious economic reason is that an new enterprise will enter the market if the price for its products will exceed the long run average costs. The marginalistic economic theory relies primarily upon explanatory factors related to the slope and position of the demand curve for entrepreneurship, such as changes in demand for the final product, or in the relative costs for inputs. The supply curve of entrepreneurship is assumed to be invariant or, where movements do occur, NIE and other disciplines than the neoclassical economy are sought for explanation. Therefore, education is one of the key elements for the SME development and entrepreneurship. Among the interviewed non-farm enterprises in the counties Brasov and Dolj, the education and vocational training level of the entrepreneurs lied distinctly above the counties' level as the figures in TABLE 9 reveal. These results clearly support the importance of education and vocational training for entrepreneurial economic activities. Compared to the national average, non-farm entrepreneurs have more often a high school degree and quite often an university degree. The fact that the education and vocational training level of the entrepreneurs are lying distinctly above the counties' level (National Commission for Statistics, 1998), emphasises the importance of human capital for entrepreneurial and economic activities. Thus for the foundation, development and promotion of non-farm SMEs in rural areas, the general and vocational education levels play an enormous role. Beside education, access to finance is an important issue for the development of non-farm SME and MSE. TABLE 10 illustrates the educational standards of non-farm entrepreneurs in Brasov, Doli and Timis with and without access to credit. While in Timis more than 50% of the interviewed SMEs have access to formal loans, the share of SMEs with access is much lower in Brasov and Dolj where only between one fifth and one third of all SMEs in the sample had access to formal loans. The education level of the SME managers is relatively high as compared to the county level. Also, a slight correlation of better education and credit access can be observed (Breitschopf and Schrieder, 1999).

Obviously, SMEs do not face development obstacles only in the lack of access to education and finance. There exists a wide variety of problems in rural areas, e.g., insufficient road, communication and market infrastructure, and widening gaps in the relative prices are clearly perceived as bottlenecks. Apart from these bottlenecks, missing price information systems as well as extension and consulting services are creating impediments for potential entrepreneurs and existing SMEs. In the Romania sample, almost one third of the entrepreneurs stated that they do not know what to think about consulting and what could be understood by the term 'consulting' (Jehle, 1998).

In the past, it was always the large-scale urban industrial sector which was expected to be the real engine of economic growth in transition countries. There has been a move away from this view and new emphasis on more 'broad-based' qualitative growth, where the development of the agricultural sector in particular, and the rural economy in general is gaining importance. Interest in the non-farm sector is part of this focus on rural development. Improvement in non-farm productivity and competitiveness will have to address the following policy issues (Breitschopf and Schrieder, 1999):

- (1) renewal of productive assets and supply of qualified workers. This policy issue could be counted under Hazell's (1998) input-I. Although there are strong indications that inance is not the single most limiting factor for capital accumulation, an efficient rural finance system is still important particularly for the allocative efficiency of capital and for offering an effective payments system;
- (2) building up and strengthening the quality in extension, financial and other service intermediation. This policy issue could be counted under Hazell's (1998) institution-I. Especially the aspect of appropriate information and knowledge transfer provided by institutions can positively contribute to the economic development of SMEs.
- (3) improving the reliability, efficiency and access to transportation and communication infrastructure where appropriate. This policy issue could be counted under Hazell's (1998) infrastructure-I. In the empirical analysis of non-farm entrepreneurs in Romania by Breitschopf and Schrieder (1999), nevertheless, the level of infrastructure seemed to be appropriate for the entrepreneurial activities; and
- (4) improving technical and management know-how through training, extension, and research. This policy issue could be counted under Hazell's (1998) innovation-I.

Financial sector reforms

Lack of liquidity and poor management qualifications are among the main constraints in the restructuring of enterprises. Only an efficient financial market can overcome this bottleneck. To meet the tasks faced by the financial sector during the process of transformation is challenging, and its extent became clear only during the course of transition. First, it is crucial to build the required institutions, the legal and regulatory framework that is pertinent to guarantee an independent, reliable and competitive financial sector. Some countries such as Hungary, the Czech Republic, and the Baltic States are on the right path. Other countries, particularly the countries that emerged from the former Soviet Union (FSU) as well as Bulgaria, and up to recently Romania, still have a financial sector with strong GOV intervention. Their financial sectors lack an independent and transparent banking supervision, face restricted competitiveness and enjoy subsidisation (EBRD, 1997). Second, economic stability is pertinent for a well-functioning financial sector. A distinctive feature of the transition countries is that economic stability and the efficiency of the domestic financial sector are interdependent. On the one hand, it is difficult for financial organisations to mobilise savings and offer long-term credit lines when inflation is high. On the other hand, a financial system that is misused to transfer government-mandated subsidises to loss-making state-owned enterprises (Heidhues, Davis and Schrieder, 1998). Third, human capital formation is crucial to create an efficient financial sector. The implementation of "the new rules of the game" requires training in banking, information technology, legal aspects and business administration. The necessary institution building and human capital formation is a challenging task for the transition countries. The extent and duration of this task was often underestimated at the beginning of the transformation process. Fourth, the development and consolidation of the privatisation of assets are needed to facilitate financial intermediation. This aspect was tackled at the beginning of the transformation process by all countries, although the intensity and consequences of privatisation varied. In particular, access to longterm loans depends on the availability of marketable private assets and collateral due to information asymmetries (Schröder and Pieper, 1996; Hoff and Stiglitz, 1990).

While the weaknesses of the financial market in Romania and other transition countries are well recognised, many policy decisions have not been made. In this respect, Romania lags

well behind other CEE-countries as TABLE 11 indicates (Schröder and Pieper, 1996). In Romania, although the number of banks increases seven-fold from 1991 to 1998, five primarily state-owned banks dominated the banking sector. These were the Bancorex, the Banca Romana Dezvoltare (BRD), the Banca Comerciala Romana (BCR) and the savings bank (CEC: Casa de Economii si Consemnatiuni). The first four mentioned banks owned 62% of the banking assets, the savings bank 9.8%. They accounted for 56% of the equity capital and 72% of the deposits by the end of 1998 (Gaburici, 1999): In 1999, a total of 45 banks accounted for 3,636 branches, whereof 1,576 branches could be called rural (43%) in Romania. The House of Credit Co-operatives (CreditCoop) comprised 787 savings and credit co-operatives, 71% of them are located in rural regions. Almost 15% of the bank branches can be associated to the Banca Agricola and BCR. The privately owned BankCoop counted 270 branches in March 1997 (Heidhues, Davis and Schrieder, 1998: 262), this would be equivalent to 7.5% of the total bank branches (TABLE 12). On average, there are 0.79 bank and credit co-operative branches available per rural community (comprises more than one village) in Romania. In the three surveyed counties, there are however large differences to this reference value. While Timis comes close to the national average, Brasov and Dolj count 1.3 and 1.4 banking branches per community, respectively. Rural financial intermediation in Romania is dominated by a few banking organisations. These are the Banca Agricola, BankCoop, BankPost, CEC, Banca Romana Dezvoltare (BRD), Banca Comerciala Romana (BCR), Banca Internationala Religiilor (BIR), as well as the Banca Ion Tiriac (BIT) and the savings and cooperatives of CreditCoop. In 1998, a little over 90% of all loans disbursed in the surveyed counties were consumption loans, just 8.6% went to private enterprises. The BRD services alone 24% of all private enterprise sector loans. The BankCoop and the Banca Agricola administer another 32%, the Bank Post and the BIR 24%. These five banks thus service 80% of all loans that are directed towards private enterprises with legal personality.

From the above it becomes clear that neither in Romania nor in the other CEEC-6 countries rural financial markets are capable to satisfy rural enterprises' finance demand appropriately. High transaction costs (TCs) associated with the structure of the financial market and the institutional environment impede effective servicing of the rural economy.

Thus, policy reforms and financial innovations are needed at different levels of the financial sector. At the *macro-economic level* the promotion of economic stability and confidence in a reliable and efficient financial sector is pertinent. In this context, the establishment of an independent Central Bank which promotes a monetary policy that is conducive to economic stability is of furthermost importance. The confidence in the financial sector can be promoted if trade and bankruptcy laws as well as regulations on the financial discipline are enacted. Romania encountered in 1999 a noticeable inflation rate and banking crisis. The banking crisis is based two bankruptcies in mid 1999, Albina bank andsCredit Bank. The BankCoop has displayed financial problems since May 1999, apparently the accumulated losses exceed the capital base. The BankCoop and the Dacia Felix Bank are both under judicial investigation presently. Apparently, the Bancorex and the Banca Agricola have problems too. The banking crisis falls into a time of economic instability. The inflation target for 1999 was around 30%, actually an inflation of 55% was observed. Moreover, the GDP development is still negative (see TABLE 13).

Financial innovations are needed at the financial *sector level* in order to improve financial intermediation and integration, and subsequently, widen the client coverage. Sector innovations intend to establish a reliable, legally binding and regulatory framework for the financial sector. This comprises the implementation of laws and regulations which govern the capital structure, the risk management and the valuation of assets for the balance preparation.

Changes in the *organisational structure* and *management* of financial intermediaries can be defined as organisational financial innovations. Giassemi (1997) finds it imperative to restructure banks and/or their management to reduce market entry barriers. It is more than possible, however, that the rural market will not immediately profit from a restructured and thus more efficient banking sector. Instead, restructured financial intermediaries will first try to meet the unsaturated credit demand of the industrial and service sectors in the urban areas before moving into the rural areas.

Within the financial organisations, *product innovations* are important to satisfy the real financial service demand of the rural clientele. Only if the access to credit financed investment capital is improved, the development process and economic growth can accelerate. Thus, it is crucial to improve the supply of medium and long-term loans. Presently, the traditional forms of credit collateral are charged with various kinds of restrictions and are thus avoided by the financial intermediaries in most transition countries. Innovative loan collateral alternatives must therefore be sought. In Croatia and Poland, stocks and production assets are used as a loan collateral by means of innovative leasing contracts (World Bank, 1996).

Conclusion and policy recommendations

In summary, there exist growth impeding factors in the agricultural, the non-farm, and the financial sector as well as the rural enabling environment in transition economies. The main obstacles in the agricultural sector are a lack of efficiency, often outdated technological equipment and lack of access to credit and extension services. The non-agricultural rural enterprises face similar impediments. In the rural financial sector, the relatively high transaction and risk costs involved in the supply of financial services to small-scale agriculture interfere with the willingness of intermediaries to serve the potential clientele. Consequently, structural reforms are needed at several levels:

- Creation of an effective rural financial market. This must include capacity building measure at the client level through, e.g., courses in financial management as well as the adoption of innovations at the intermediary level.
- Implementation of a competent rural extension system for agricultural and non-agricultural enterprises.
- Improvement of the educational and professional training system in the areas of enterprise management (agricultural and non-agricultural enterprises). Recently, the World Bank implemented an National Training Board (NTB) to co-ordinate the set-up of a reformed education system,
- Structural adjustment of the overall enabling environment (e.g., input and output markets) to promote the creation and maintenance of competitive rural enterprises of all sectors, and finally
- Promotion of the non-farm sector to absorb the rural labour force and to improve the income distribution.

These recommendations ought to be incorporated in a rural policy framework. This framework should be implemented through decentralised administration, where the policy competence, to a certain degree, lies at the regional and local level.

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- ¹ The new institution economics (NIE) defines an "institution" as a commonly accepted set of formal and informal rules and norms that determine the coordination among individuals and structure their incentives towards a joint goal. Examples of institutions are markets, property rights, land, tree and animal tenure systems, and other systems of exchange that are determined by implicit contracts, rules or social norms.
- ² The non-farm sector includes all economic activities in rural areas except agriculture, livestock, fishing and hunting. Since it is defined negatively as non-agriculture, it is not in any sense a homogenous sector (LANJOUW and LANJOUW, 1997).
- ³ OECD (1993: 10) states that (1) rural regions comprise the people, the land and other resources of the environment and the communities outside of the immediate economic influence of larger urban centers and (2) the rural region is not limited to a specific type of land use, a certain stage of economic development or economic sector. A community is classified as rural if the population density per square kilometre is less than 150 persons. Rural is often also defined to include localities of 5,000 or fewer inhabitants (LANJOUW and LANJOUW).
- ⁴ Due to a lack of data, a shortcoming of this paper is the neglect of farm women's contribution to the farm household economy.
- ⁵ The countries concerned are Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovak Republic, and Slovenia. The income level of these countries averages about 40% of the EU15 average.
- ⁶ Equity is a normative concepts: what is equitable depends on a nation's sense of right and wrong. Most concepts of equity allow for some degree of inequality in the distribution of income (Gillis *et al.*, 1996: 76).
- ⁷ The gross margins, assuming access to credit and extension services, are presented for the Timis county only because of the ready availability of data from reference farmers and experimental farms, the latter operated by the Agricultural University of the Banat/Timisoara.
- ⁸ Data on the equity capital situation of the 52 MSEs in Timis was not available. The equity structure of MSEs in the non-farm sector there, may me slightly better than in Brasov and Dolj.
- ⁹ Until December 1999, the minimum salary was 450 thousand per month (5.4 million Lei per year). It was now increased to 700 thousand Lei per month, i.e., to more than eight million Lei per year.

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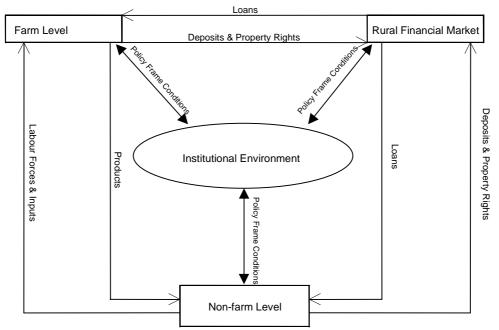
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FIGURE 1



RURAL ECONOMIC SECTORS PERTINENT FOR ECONOMIC DEVELOPMENT

Note: The institutional environment is the set of fundamental political, social and legal ground rules. These establish the basis for production, exchange and distribution. Examples are rules governing elections, property rights, and the right of contract. The term 'institutional arrangement' describes an arrangement between economic units that govern the ways in which these units can co-operate and/or compete. It comes very close to the popular use of the term institution (Davis and North, 1997: 6f).

 ${\bf TABLE~1}$ Sequencing Recommendations of the Economic Transformation Process in Transition Countries

	Institutional reforms	Price & market reforms	Stabilization	Financial reform	Privatization	Trade liberalization	Liberalization of capital markets
Dornbusch (1991)	1	4	2	5	3	4	3/4/5
Fischer & Gelb (1991)	1	2	1	4	1/3	2	5
Gelb & Gray (1991)	1	1	1	3	1/3	1	3
Hindis (1991)	1	2	1	3	1/4	2	
Jonston (1997)	1	1/2		1/2		1/2	
Lipton & Sachs (1990)	1	1/2	1		3	1/2	
McKinnon (1991)		3	1	2		3	4
Nuti (1991)	1	1	1		2	3	4
Pappenberger (1994)	1	3	1/2	2/3	3/4	4/5	4
Roland (1990)	1	3	3	2/4	2	3/4	2/3/4
Rybczynski (1991)	1		3	1	2		•••
Siebert (1991)	1	3	2	3	3	3	•••

Source: Extension of Falk and Funke (1993: 188)

Notes: Only broad areas of reform are considered. A 1 (5) indicates that this area should be reformed first (last). The ranking refers to the beginning of the reform, thus, different reform areas may evolve simultaneously. More than one figure implies that a clear ranking was not possible.

TABLE 2
REFORM PROCESS IN ROMANIA

Symbol	Reform area	Reform process
A1	Transformation of institutions	since 1989, continuos on
A2	Other reform areas	since 1989, continuos on
B1	Economic stabilisation	Agreement with IMF in 1996, budget deficit shall be limited to 2.2% of GDP, could not be satisfied, since 1998 independent central bank
B2	Price liberalisation	gradually since 1990, agricultural producer and consumer prices were liberalised in $2 \slash$
C1	Preparation of financial market reforms	since 1990, Transformation of mono-banks into commercial banks and law for the organisation of savings and credit co-operatives
C2	Implementation of financial market reforms	since 1991, laws for the central bank and for the commercial banks, modified status of central ban, new commercial bank law and savings and credit co-operative law in 1998, continuos on
C3	Institutionalisation of capital markets	since 1993, over-the-counter (OTC) trade possible, since 1994 bourse
D	Reduction of overhang of liquidity	Overhang of liquidity led at the beginning of the transition in 1991, then in 1993 and 1997 (budget deficit largely due to election) to hyper inflation. IMF makes disbursement of loan dependent on austerity programme.
E0	Privatisation of land	since 1991, Restitution was limited to 10 ha per person, 1999 expansion of maximal area per person to 50 ha; 1994 first lease law with an upper limit of 100 ha per enterprise, 1997 expansion of maximal allowed land lease to 300 ha per enterprise.
E1	Privatisation of micro- enterprises	On the one hand, this area can not be separately identified. On the other hand, the land law of 1991 allowed the foundation of several million micro and small agricultural enterprises. 1)
E2	Privatisation of banks	since 1998, State sold shares of commercial banks, continuos on
E3 & E4	Privatisation of small & larger enterprises	since 1990, first privatisation law for state-owned enterprises
F	International integration	until 1999, Romania together with Bulgaria formed part of the so called second accession round of the EU. In the Helsinki resolution (12/99), the EU decided, however, to start accession negotiations with Romania already in 2/2000.
G	Trade liberalisation	22.5.1996: Romania becomes a member of the WTO
		1.7.1997: Becomes a member of Central European Free Trade Agreement (CEFTA)
		since 1997: Member of the Black Sea Economic Co-operation (BSEC), Bilateral trade agreements with Hungary and Moldowa

Source: Systematisation follows Pappenberger (1994); World Bank (1998) Note: 1) 9.3 million hectares were distributed to 4.7 million persons.

TABLE 3OVERVIEW OF THE STATUS OF RURAL REFORMS IN CEEC-6, MID 1997

	Price & market liberalization	Land reform	Agroprocessing & input supply	Rural finance	Institutional framework	Total score
Romania	7	7	6	6	4	6.0
Bulgaria	6	7	5	4	5	5.4
Poland	9	8	7	6	8	7.6
Slovakia	7	7	8	8	7	7.4
Czech Republic	9	8	8	8	8	8.2
Hungary	9	9	9	8	8	8.6
Average score	7.8	7.7	7.2	6.7	6.7	7.2

Source: Grohs (1998)

Notes: 1 = centrally planned economy and 10 = completed market reforms

TABLE 4

	POSSIBLE RURAL DEVELOPMENT POLICIES
Policies to develop, stru	cturally adjust and diversify agriculture
Structural policies	 Measures to boost investments
	 Measures to promote factor mobility
	 Measures to support land reparcelling
	 Measures to allocate land use for alternative uses such as tourism
	 Measures to further market and information technology infrastructure
Income policies	 Assistance to marginal regions, e.g., through direct compensation payments
Social policies	Special social security systems
Policies to create emplostandards	yment and secure intra-regional acceptable and comparable living
Economic policies	 Measures to create employment through financial aid to enterprises, e.g., loans, tax reductions
	• Measures to support enterprise foundations, e.g. technical aid
	 Measures to improve economic climate for enterprises by providing information and improve access to credit and new technologies
	 Measures to advance service sector in order to improve overall economic setting
	 Measures aiming at diversifying economic activities, e.g., production in market niches, tourism
'Human capital' policies	• Vocational training in the areas of agriculture, environment, etc.
	 Vocational training in the use of software and information technologies
Infrastructural policies	Measures to improve transport, electricity and sewage system
	 Measures to improve access to information, e.g., telecommunication system
	 Programs to rehabilitate and redevelop rural communities
Policies to protect the no	atural resources
Environmental policies	 Promotion of integrated respectively ecological sound land use
	 Control of land use in protected natural areas
	 Promotion of the cultivation of renewable resources
Other environmental	 Measures to protect flora and fauna
policies	 Investment in the improvement of water quality

Haarbeck and Boger (1997: 7) in Pohlan (1998: 24) Source:

TABLE 5

PRIVATE FARMS AND TOTAL ARABLE LAND DISTRIBUTION IN THE ROMANIAN SAMPLE, 1997

			Percent		
Hectares	Brasov	Dolj	Timis	Total	_
< 1	1	12	6	19	8.6
$> 1 \le 2$	7	26	2	35	15.9
$> 2 \le 4$	15	26	4	45	20.5
> 4 ≤ 8	34	8	15	57	25.9
> 8 ≤ 16	17	2	17	36	16.4
> 16 ≤ 32	3	3	14	20	9.1
> 32	3	0	5	8	3.6
Total	80	77	63	220	100.0

Source Heidhues *et al.* (1998: 11); see also Davis and Gaburici (1999: 851) The survey was carried out jointly by University Hohenheim, the Heriot-Watt University, and the Economic Forecasting Institute, Bucharest.

Notes Total arable land = owned land - rented-out land + rented-in land

TABLE 6
YIELDS (DT/HA) OF IMPORTANT CROPS FOR STATE FARMS, ASSOCIATIONS AND INDIVIDUAL FARMS IN TIMIS, AND OVERALL AVERAGE, 1997

	Wheat	Barley	Maize	Sunflower seed
Timis				
State farms	30.2 (23)	30.0 (23)	42.7 (21)	16.7 (19)
Assoziations	20.6 (17)	21.9 (12)	45.5 (16)	13.8 (15)
Individual farms	29.6 (50)	26.5 (23)	42.4 (30)	16.4 (18)
 Dumbrovita 	34.5 (19)	28.8 (10)	43.6 (10)	22.7 (3)
• Masloc ¹⁾	20.3 (14)	25.0 (5)	29.7 (13)	14.5 (13)
 Varias 	31.8 (17)	24.6 (8)	64.1 (7)	19.5 (2)
Timis, Dolj & Brasov ²⁾				
• Overall average	34.4 (174)	35.9 (53)	66.7 (153)	14.5 (45)
 Median 	35 (174)	35 (53)	70 (153)	14 (45)
EU-15				
Average	55.2	44.7	88.8	17.8

Source Grosskopf et al. (1997: 70) and Heidhues *et al.* (1998: 15); and Davis and Gaburici (1999: 860); FAO (1998); Figures in brackets refer to the

number of observations

Notes Numbers in brackets refer to the number of surveyed farms.

- 1) Losses through hail
- 2) Only private individual farms

TABLE 7
GROSS MARGINS OF THE MOST IMPORTANT CASH CROPS UNDER IMPROVED PRODUCTION TECHNOLOGIES AND YIELDS, TIMIS/ROMANIA

	Winter wheat	Maize	Sunflower seed
Present average yield (dt/ha)	20-34	30-64	14-23
Improved yield (dt/ha)	54	63	31
Market price (\$/dt)	12,46	11,82	16,58
Revenue (\$/ha)	673	745	514
Seed costs (\$/ha)	43	45	29
Fertilizer costs (\$/ha)	112	111	75
Plant protection costs (\$/ha)	37	38	29
Machinery costs (\$/ha)	91	81	83
Insurance (\$/ha)	9	9	9
Estimated interest rate (9 %) (\$/ha)	11	11	7
Total variable costs (\$/ha)	303	295	232
Gross margin 1 (\$/ha)	370	450	282
Labor costs (\$/ha)	4,8	5,2	5,2
Gross margin 2 (\$/ha)	365	445	277

Source: Grosskopf et al. (1997: 79)

Notes: Revenue - variable costs = gross margin 1

Gross margin 1 - labor costs = gross margin 2

Gross margin 2 - subsidies = gross margin 3

Gross margin 3 - fixed costs = surplus

 $\begin{tabular}{ll} \textbf{TABLE 8} \\ \textbf{Number of Employed People, in 1,000 of Employed Persons} \\ \end{tabular}$

	1990	1997	Level of employment in 1997 compared to 1990 in %
Romania			
Total	10,840.0	9,022.7	83.2
Agriculture	3,055.0	3,322.1	108.7
Industry	4,055.0	2,450.0	60.4
Timis			
Agriculture	90.7	101.1	111.5
Industry	148.7	85.6	57.6
Dolj			
Agriculture	155.6	144.7	93.0
Industry	105.0	61.0	58.1
Brasov			
Agriculture	43.9	42.1	95.9
Industry	173.7	126.7	72.9

Source: National Commission for Statistics (1996: 141 & 1998: 118)

TABLE 9

LEVEL OF EDUCATION IN ROMANIAN COUNTIES AND AMONG NON-FARM
ENTREPRENEURS, IN PERCENT

	Secondary school	High school	Vocational training	Higher education
Counties 1997				
Timis	40	32	10	17
Dolj	42	33	7	18
Brasov	35	25	7	33
Interviewed non-farm entrepreneurs 1997				
Timis	22	37	22	20
Dolj	5	62	19	14
Brasov	7	61	7	25

Source: National Commission for Statistics (1998: 764f); Breitschopf and Schrieder (1999: 11)

Note: Vocational training normally follows the secondary school degree.

The figures may not add up to 100 due to rounding.

TABLE 10

EDUCATION LEVEL OF BUSINESS OWNER, WITH AND WITHOUT ACCESS TO THE FORMAL FINANCIAL SECTOR

	Without credit access constraint			al credit access
	Number	In % of SMEs	Number	In % of SMEs
Timis				
Secondary school	11	15	4	5
Vocational training	7	10	11	15
High school	13	18	12	16
Higher education	10	14	5	7
Brasov				
Secondary school	0	0	2	7
Vocational training	1	3	1	3
High school	2	7	15	55
Higher education	2	7	5	18
Dolj				
Secondary school	0	0	2	5
Vocational training	2	5	6	13
High school	9	21	18	41
Higher education	3	7	3	7

Source: Breitschopf and Schrieder (1999: 13)

TABLE 11
A COMPARISON OF THE BANKING SYSTEMS OF THE CEEC-6

	Bulgar	Romani	Polan	Slovaki	Czech	Hunga
	ia	a	d	a	Republic	ry
Dissolution of the monobanking system	yes	yes	yes	yes	yes	yes
Independence of the Central Bank	+	±	+	++	++	+
Monetary policy		-	±	±	±	++
Inherited debt solution	-	-	+	-	-	+
Privatization of state-owned banks	±	-	±	-	-	±
Implementation of int. accounting standards	no	no	no	no	no	no
Savings security fund	-	-	+	-	+	+
Banking supervision & prudential rules	-	±	-	-	±	+

Source: adapted from Schröder and Pieper (1996: 111)

Notes: + positive development; ++ extremely positive development; - unsatisfactory development; -- poor

development; ± unsatisfactory development with positive aspects in individual sectors

	Total	Rural
Commercial banks	3.636	1.576
Banca Comerciala Romana (BCR)	233	6
Banca Agricola (BA)	314	63
Savings and Credit Co-operatives (CreditCoop)	787	561

Source: Gaburici (1999)

TABLE 13

OVERVIEW OF ECONOMIC DATA IN ROMANIA

	1993	1994	1995	1996	1997	1998	1999	2000
Change in GDP, in %	1.5	3.9	7.1	3.9	-6.6	-5.5	-4.0	-1.5
Industrial index, annual change in %	101.3	103.3	109.4	109.9	94.1	83.0		
Agricultural index, annual change in %.	110.2	100.2	104.5	101.3	103.1	92.4		
Inflation, in %	295.5	61.7	27.8	56.9	151.4	45.0	55.0	
Exchange rate, Lei/USD	1,276	1,767	2,578	4,035	8,023	11,040	13,262	15,500
Budget in % of GDP	-1.8	-4.0	-2.7	-4.9	-3.6	-4.1	-2.7	-2.5
Trade balance in USD Billion	-1.13	-0.48	-1.60	-2.49	-1.97	-2.60	-1.70	-1.2
Current account in USD Billion	-1.24	-0.52	-1.73	-2.61	-2.34	-3.40	-1.9	-2.0
Unemployment, % end of year	10.4	10.9	9.5	6.6	8.8	9.2	12.0	12.0

Source:

EBRD (1998: 224) and Deutsche Bank (1996: 3 and 1999: 43)

Note:

The figures for 1999 and 2000 are based on prognosis of the Deutsche Bank (1999: 43).