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"Mobilizing financial resources for transformation and development – the domestic dimension"

Background Paper for Special Session I on Mobilizing Financial Resources for Transition and Development: The Domestic Dimension

prepared by

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Paper for the
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Introduction

The following paper is structured around the five issues raised in the programme for the UN/ECE Conference on Financing for Development, "Mobilizing financial resources for transformation and development – the domestic dimension". The hypotheses presented here are based both on theoretical considerations and on practical experiences, many of them collected in projects supported by German development aid in the area of development finance and financial institutional building, mainly in transition economies.

Proposition 1:

Finance is a constraint on transition, development and growth. However, countries with soft finance constraints are the ones with the worst growth and development performance.

The evidence that finance is a constraint for development and transition is overwhelming. On a *macroeconomic level*, many researchers have found a significant positive correlation between variables which capture the level of financial asset formation in an economy, like the M2/GDP ratio or the ratio of credit (issued by the banking system to private enterprises) to GDP, and the level of per capita income. This suggests that a developed financial system which provides financial services on a broad scale is a key factor for achieving a higher per capita income and a higher per capita growth rate. Conversely, the per capita income of economies which fail to achieve financial

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Rather than interrupt the text with footnotes, references to the literature have been placed in the Annex, classified according to the hypotheses to which they are relevant. For the same reason, the empirical evidence supporting the views expressed in the hypotheses is also presented in the Annex.

development, remains low. On a *microeconomic level*, surveys of firms in developing and transition countries almost always confirm that the private sector, in particular the bulk of small and micro enterprises, face a finance constraint, in particular with regard to their access to finance from formal financial sector.

The desire to compensate for the underdevelopment of their financial systems and thus to overcome the finance constraint faced by enterprises has led economic policymakers in many developing and transition countries to pursue a policy of soft budget constraints. In the past, this policy was relatively easy to diagnose, since it manifested itself in an inflationary monetary or fiscal policy and in weak government-owned development banks or commercial banks *(financial repression)*. Today, however, it also appears in a different, more subtle form. For example in many South-eastern European transition economies and in most CIS countries it was an ill-designed privatization and liberalization policy with regard to the banking sector (e.g. allowing the mushrooming of "agent banks"), which intentionally or unintentionally allowed the policy of soft budget constraints to continue undetected under the cover of relative macroeconomic stability. However, it is only a matter of time before these "contingent liabilities" of the state become visible in the form of a financial crisis. These crisis are accompanied either by severe losses of output and jobs or – if these losses are considered politically unacceptable – by overt government interventions, i.e. bailouts, which then lead to (hyper-)inflation. All the empirical evidence suggests that the countries pursuing policies of soft budget constraints in one form or another have the worst growth and development performance, at least in the medium term. Consider, for example, the wide variations between the growth performance of transition economies: Very early on in the transition process, policymakers in Poland and Hungary forced enterprises to rely heavily on internal finance by imposing hard budget constraints and tight credit policies, and in so doing laid the foundations for a recovery in fixed investment. In many other transition economies, by contrast, soft budget constraints and inflationary credit policies obscured the ability (or inability) of enterprises to survive in a market-oriented economy and limited their eventual access to external finance for investment. Thus, the conclusion to be drawn here is: yes, finance is a constraint, but without this constraint a market economy is not able to operate successfully.

Proposition 2:

The principal bottlenecks for mobilizing financial resources domestically are not a lack of funds, but rather inflationary monetary and fiscal policies, an absence of good and reputable financial institutions, and inappropriately designed foreign assistance.

The feature common to both the old and the new variants of the policy of soft budget constraints is the assumption that the finance constraint is caused by a lack of funds. This assumption leads to the conclusion that the government, which has access – explicitly or implicitly – to the resources of the local central bank, can use these funds to alleviate the constraint. However, the finance constraint is not rooted in a lack of funds, but in a lack of governance, reputation and technical expertise on the part of the institutions issuing debt. This applies on the one hand to the central bank, whose liability – money – is no longer accepted by the population as a store of value if it is permanently being used by the central bank's owner, i.e. the government, to finance open and contingent liabilities of the public sector. The consequences are (hyper-)inflation, currency substitution and a situation in which no-one is willing to supply funds for lending to anybody. Therefore, in order to be not only formally

independent but also in a position to enact a credible monetary policy a central bank has to rely on prudent fiscal policies.

The same principle applies to commercial banks, which are rightly regarded as not being creditworthy if their owners constantly lend to related parties in the knowledge that these loans are non-collectible. If banks have a reputation for being bad delegated monitors, i.e. if they have proved themselves incapable of organizing efficient credit relationships, it is no surprise that households and enterprises prefer to hold onto their cash rather than deposit it in the banking system. This in turn means that they are forced to deploy capital within the limited circle of persons with whom they personally interact, and therefore that in practical terms the financial sector in transition and developing countries consists mainly of the informal financial sector. Financial sector studies conducted in transition and developing countries on behalf of German Financial and Technical Co-operation have regularly found that the informal financial sector is the most important supplier of external finance to micro and small enterprises.

The finance constraint put forth by the formal financial sector in such an economy is overwhelming, and when multilateral and bilateral institutions send missions to these countries and ask banks why they do not finance small enterprises, farmers or other target groups the banks tell them that it is due to a lack of funds, or as the case may be a lack of long-term funds. Since donors, by definition, have (long-term) funds available, the solution to the problem seems obvious. Very often, no thought is given to asking why local banks suffer from a lack of (long-term) funds. Because if such a question were asked, it would soon become apparent that this is due not only to macroeconomic circumstances but also and primarily to the inability and unwillingness of the banks to organize successful credit relationships, i.e. to preserve the real value of the deposits placed at their disposal because their lending activities are characterized by non-performing loans and preferential interest rates. Donors are not normally confronted with this reality, however, until they find that a large proportion of the funds they have placed at the banks' disposal is not being lent out to borrowers (the disbursement problem), or the target group is not being reached (the outreach problem), or the loans go bad (the portfolio quality and repayment problem). Yet because there are enough plausible explanations for the poor results, e.g. unstable macroeconomic conditions, lack of a satisfactory legal and regulatory environment, a difficult target group to work with etc., or because the donors are covered by a guarantee issued by the local government, they continue with projects of this kind. And in doing so, they too are endorsing a policy of soft budget constraints and are thus contributing to the survival of institutions whose behaviour is the principal bottleneck to the domestic mobilization of financial resources. To avoid this outcome, the provision of funds has to be combined with institution building measures. Only then can a donor-funded programme make a positive contribution to the development of the financial system and of the target group that the project was designed to support. Examples of this form of funding are described under propositions 4 and 5.

Proposition 3:

The key institutional requirements for mobilizing resources for investment are transparent and credible macroeconomic policies and sound banking institutions. Public policy can foster financial development by opening up the local financial system to reputable foreign banks.

There is broad agreement about the institutional macroeconomic framework needed to foster domestic mobilization of financial resources: An independent and credible central bank and a transparent and solid fiscal policy, putting an end to the practice of building up contingent liabilities in other areas of the public sector, like social security, state-owned enterprises and state-owned banks, in order to make the central government budget appear sound.

The institutional requirements in the banking sector are well known, and have been understood since the liberalization failures of the 1970s, if not earlier. No-one disputes the need for proper regulation and supervision, based on the Basle principles. Here too, however, a distinction needs to be drawn between form and substance. Experience shows that a proper regulatory framework is no panacea for achieving banking sector stability; this is so for at least two reasons:

a) Even the best regulations are useless if they are not enforced, either because regulators do not have the technical knowledge and means to enforce them or because they are put under political pressure to grant exceptions and postponements to "important" and "favoured" banks.

b) At the heart of the problem are wrong incentives for, and poor governance of, many banks in transition and developing countries. Incentives and governance are related to ownership. It has long been recognized that in most cases the incentive and governance problems of state-owned banks, be they commercial or development banks, cannot be solved by changing the regulatory framework, because the state as the owner is always tempted to use "its" banks to conduct quasi-fiscal operations, i.e. given hidden support and subsidies to large enterprises and other politically sensitive target groups. The new insight of the 1990s – a decade which saw a proliferation of financial crises in largely private sector-dominated banking markets – is that on the one hand real privatization of former state-owned banks is very difficult to achieve, and on the other hand very often, due to ownership problems, the entry of private banks does not lead to a significant change in the quality and outreach of banking services provided. Banking regulators and supervisors are largely unable to deal with these problems because it is very difficult to stipulate unambiguous qualitative criteria which would enable the authorities to decide whom to grant or not to grant a licence to own and operate a bank.

Both aspects lead to the conclusion that improvements in banking regulation and supervision are undoubtedly a necessary precondition for the successful mobilization of domestic resources. However, it would expecting too much of regulation and supervision to regard them as the cornerstones on which stable and efficient banking systems can be built and developed. Financial history shows that they did not perform this function in Western economies either; rather, they emerged in order to prevent mistakes or misconduct by individual banks that could have had disastrous consequences for the whole of a financial system whose core was generally healthy. This core consisted and consists of banks whose owners and managers have a genuine incentive to

practise sound banking. This explains why in many developing countries and transition economies there is an increasing tendency for Western banks to penetrate the local banking systems. Since the mid-1990s, foreign – and in particular Western – capital has begun to play a much more important role in the banking sectors of many developing and transition countries.

The stabilizing role of these banks is not due to their regional origin – the fact that they are foreign, Western banks – but to their having acquired a strong reputation over a long period of time. The entry of Western banks that do not have a good reputation is therefore just as unhelpful as the widespread licensing of local agent banks. For only banks with a strong reputation have a clear incentive to engage only in sound banking, because any other strategy would jeopardize their biggest asset, i.e. their "reputational capital". To allow solid, reputable foreign banks to participate in local financial markets without any restriction is therefore not a measure which exposes local banks to unfair competitive pressure. And it is certainly not a sign of the interventionism and imperialism of Western capitalism. Rather, it is a measure that fosters financial development in transition and developing countries by importing one of the most urgently needed types of capital, namely reputational capital.

Proposition 4:

The international community can effectively assist in improving the institutional environment by promoting sound institution building.

Most of the Western banks that have gone into transition countries have set up operations in order to serve non-financial firms from their own countries that are active in transition countries or co-operate with local enterprises. These banks focus on areas that generate fees and commissions, e.g. international payment transactions, short-term trade credits, and the issuance of securities, whereas retail banking is largely avoided. As a result, the external financing options of the private sector remain very limited. This is especially true for the newly emerging sector of micro and small enterprises.

To fill this gap, numerous development co-operation projects sponsored by multilateral and bilateral organizations have been, and are still being initiated with the goal of systematically promoting the SME sector by improving their financing situation. As has already been mentioned, the results have been mixed at best, because most efforts have not taken into account the necessity of financial institution building. This approach, which is grounded in the insight that the finance constraint in most developing and transition economies is due not to a lack of funds, but to weak financial institutions, combines the provision of donor money with intensive efforts to improve the banks' ability to engage in financial intermediation, serving broad sections of the population and micro and small enterprises in particular. Recognizing that in order to apply the new skills they acquire, e.g. appropriate credit technologies, the banks need a suitable organizational structure and strategic orientation, the institution-building approach also addresses the governance and organisational problems facing these financial institutions.

In fact, the term "financial institution building" covers several related but distinct approaches to development assistance. Based on experiences in developing countries, particularly in Latin America, two main approaches have evolved: downscaling and upgrading. The <u>downscaling approach</u> is based

on the assumption that (selected) commercial banks in a given country are, at least in principle, interested in working to alleviate the finance constraints facing large sections of the enterprise sector, yet they refrain from doing so because they do not have the capabilities to serve this clientele. Experience confirms that these capability constraints can be dealt with successfully in selected partner banks, usually by means of an intensive and well-designed technical assistance input. In the context of German Financial Co-operation, countries where downscaling projects are currently in progress include Ukraine, Romania, Bulgaria, Armenia, Bosnia-Herzegovina and Azerbaijan.

Bearing in mind the institutional deficiencies of the partner banks, it is hardly surprising that the implementation of downscaling projects is often fraught with difficulties: more often than not, owners and managers of commercial banks are not prepared to accept an institutional transformation which would involve taking retail banking seriously and adapting the way the bank organizes its lending operations in order to accommodate new lending techniques. This applies in particular to partner banks which are quite successful in their current business, and to state-owned institutions. The problem of unwillingness is the main reason why the downscaling approach can be much more laborious and time-consuming than it would be if it were simply a matter of transferring know-how in applying a new credit technology, which usually does not take more than two years. Nonetheless, in various downscaling projects carried out since 1994, German Financial Co-operation and other international financial institutions, in particular EBRD, have succeeded in making this approach work in practice.

The upgrading approach entails establishing a new financial institution which is part of the formal, regulated financial sector and which focuses its activities primarily, if not exclusively, on serving small and micro-scale businesses. Upgrading can mean transforming an existing target group-oriented NGO into a formal financial institution; or starting a greenfield operation by setting up a credit institution in the legal form of a foundation or association which will later be converted into a commercial bank; or founding a commercial bank right from the start. The upgrading approach is based on the assumption that it is easier to implement the appropriate lending technology and the necessary organizational structure at an existing informal institution which is already committed to serving the target group, or at a new institution, built from scratch and designed from the start to serve the target group. There are several examples which justify the assumption that this is a promising approach, among them Banco Sol and Caja Los Andes in Bolivia, Financiera Calpiá in El Salvador, the Micro Enterprise Banks (MEBs) in Bosnia-Herzegovina and in Kosovo, FEFAD Bank in Albania and the Microfinance Bank in Georgia. Most of them have received support from German Financial Co-operation; indeed, without this support, some of them would not have come into existence at all.

Proposition 5:

Microbanks are an innovative approach to alleviating the finance constraint and mobilizing resources.

The microbanks operating in transition countries are universal banks that offer credit, savings facilities and payment services to low-income groups of customers, including not only micro and small businesses but also private households. They have been founded by groups of investors comprising both international and bilateral financial institutions like KfW, the IFC or the EBRD, and private investors. In most of the microbank projects it has sponsored, German Development Cooperation has given start-up support in the form of international experts and training to promote institution building, together with credit lines to allow the institutions to engage in lending to micro and small enterprises from the very beginning.

The owners of these banks are firmly convinced that the existence of efficient privately-owned micro and small enterprises is an essential precondition for economic progress. And they are also convinced that the availability of a dependable source of credit will foster the development of this important sector of the local economy. Accordingly, the owners measure the success and significance of the banks not only in terms of business volume and profits but also by the number of customers reached. Whereas these goals initially apply to the credit side of their business, the banks also strive to mobilize a sufficient volume of deposits from the general public to make retail deposits an important source of loanable funds.

The results so far have been very encouraging. Since they were established, the four banks have disbursed more than 11,500 loans with a combined volume of more than EUR 70 million. The portfolio at risk (> 30 days) has remained consistently below 2% of the outstanding portfolio, which currently amounts to approximately EUR 25 million. The strong reputation which these institutions enjoy on account of their ownership structure and their successful lending operations is increasingly enabling them to collect deposits from the general public. While there are sizeable differences from region to region, in total these institutions have attracted deposits amounting to EUR 89.4 million, held in accounts maintained by a total of 28,000 customers. This means that the institutions are succeeding in mobilizing domestic resources for onlending in the local economy, although some of them still need credit lines from bilateral and multilateral financial institutions to finance the rapid, and in some cases extremely rapid growth of the loan portfolio.

In addition to the direct positive impact of the microbanks on their prioritised target group of micro and small enterprises, their decisive transition impact is their demonstration effect: other banks recognize that it is possible to conduct retail banking with small and micro enterprises on the one hand, and private households on the other. In this respect, the presence of the microbanks in their respective local financial sectors represents a breakthrough for open access to credit and other financial services for the broad majority of the population. People are able to participate in the financial system regardless of their social status. They can now rely on banks which are not impeded by the familiar governance and quality problems. It is this experience which lends substance and credibility to the international community's efforts to create a civil society in the countries of transition.

Annex 1: References

Proposition 1:

In recent years increasing attention has been devoted to the connection between finance and development. See for example:

King, R.G. and R. Levine: Finance and Growth: Schumpeter Might Be Right. In: *Quarterly Journal of Economics*, 107 (1993a), pp. 717-737

King, R.G. and R. Levine: Finance, entrepreneurship, and growth. In: *Journal of Monetary Economics*, 32 (1993b), pp. 513-54.

Levine, R. (1997), Financial Development and Economic Growth - Views and Agenda. In: *Journal of Economic Literature*, 35, No. 2, pp. 688 – 726

Beck, T.; A. Demigüc-Kunt and R. Levine: *A New Database on Financial Development*. Financial Sector Discussion Paper No. 2, The World Bank, Washington, DC.

Surveys which show how finance is a constraint at the microeconomic level include the following examples:

Muent, H.; F. Pissarides and P. Sanfey: *Opportunities and Constraints for Albanian Enterprises: Evidence from a Field Study*, London 2000, mimeo.

Webster, L.M.: *The Emergence of Private Sector Manufacturing in Hungary. A Survey of Firms.* World Bank Technical Paper Number 229, Washington, DC, 1993.

Webster, L.M.: *The Emergence of Private Sector Manufacturing in Poland. A Survey of Firms.* World Bank Technical Paper Number 237, Washington, DC, 1993.

The problem of contingent liabilities has been put forward very clearly by:

Brixi, H. P.; H. Ghanem and R. Islam: *Fiscal Adjustment and Contingent Government Liabilities: Case Studies of the Czech Republic and Macedonia*, The World Bank, mimeo, Washington, DC, 1999.

The role of the financial sector in creating contingent liabilities for the government is particularly clearly defined in:

Bell, G.: *The Role of the Financial Sector in Macroeconomic Adjustment Programs*, Paper presented at the Conference on “Financial Development in Eastern Europe: the First Ten Years”, organized by the Commerzbank Chair on Money and Finance, TU Chemnitz, Klaffenbach/Chemnitz, February 2000.

On the performance of transition countries with hard and soft finance constraints, see

EBRD: *Transition Report*, London, 1994.

Bokros, L.: *Perspectives on Financial Sector Development in Central and Eastern Europe*, Paper presented at the Conference on “Financial Development in Eastern Europe: the First Ten

Years", organized by the Commerzbank Chair on Money and Finance, TU Chemnitz, Klaffenbach/Chemnitz, February 2000.

The author's contributions to the "finance and development" discussion include the following papers:

Winkler, A.: Financial Markets and Economic Development. In: Menkhoff, L. and B. Reszat (eds.), *Asian Financial Markets – Structures, Policy Issues and Prospects*, Baden-Baden, 1998, pp. 15 – 44.

Winkler, A.: *Wirtschaftswachstum und Finanzsystementwicklung*, Post-doctoral dissertation, University of Würzburg.

Winkler, A.: Financial Sector Development and Financial Institution Building in Albania. In: *Südosteuropa*, 49 (2000) 9-10, pp. 474 – 502.

Schmidt, R.H. and A. Winkler: Financial Institution Building in Developing Countries. In: *Journal für Entwicklungspolitik*, XVI (2000) 4, forthcoming.

Proposition 2:

The idea that local money is not accepted as a valuable liability by private sector agents, leading to inflation and currency substitution, has been extensively dealt with by:

Shaw, E.S.: *Financial Deepening in Economic Development*. New York, London, Toronto, 1973.

McKinnon, R.I.: *Money and Capital in Economic Development*. Washington DC, 1973

Calomiris, C.W.: Financial Factors in the Great Depression. In: *Journal of Economic Perspectives*, 7 (1993) 2, pp. 61-85

Ize, A. and E. Levy-Yeyati: *Dollarization of Financial Intermediation: Causes and Policy Implications*, IMF Working Paper 1998/28, Washington DC.

The delegated monitoring function of banks was originally explained in

Diamond, Douglas W.: Financial Intermediation as Delegated Monitoring. In: *Review of Economic Studies*, 51, 1984, pp. 393-414.

A very recent study showing outreach and sustainability problems of donor-provided credit lines to local banks for onlending to SMEs in transition countries is:

EU: *PHARE – An Evaluation of Phare-financed programmes in support of SMEs, Final Synthesis Report*, Brussels, 2000.

Similarly disappointing results are presented in the study by

Webster, L.M.; R. Riopelle and A.-M. Chidzero: *World Bank Lending for Small Enterprises 1989 – 1993*. World Bank Technical Paper Number 311, Washington D.C., 1996

Proposition 3:

That banking regulation and supervision are not a panacea to assure a stable and smooth development of banking sectors in developing and transition countries is argued by

Caprio, G.: *Safe and Sound Banking in Developing Countries - We're Not in Kansas Anymore*. The World Bank, Working Paper No. 1739, Washington D.C., 1997.

Caprio, G. and P. Honohan: *Beyond Capital Ideals: Restoring Banking Stability*. World Bank Policy Research Paper No. 2235, Washington D.C., 1999.

The importance of reputational capital for banking sector development is stressed by

Hellmann, T. and K. Murdock: *Financial Sector Development Policy: The Importance of Reputational Capital and Governance*. Stanford University Research Paper No. 1361, 1995.

Proposition 4:

The performance and activities of foreign banks in transition and developing countries have been studied by:

Buch, Claudia: *Opening up for Foreign Banks – Why Central and Eastern Europe Can Benefit*. Kiel Working Paper No. 763, The Kiel Institute of World Economics, Kiel, 1996.

Buch, Claudia: *Is Foreign Control A Panacea? – On Governance and Restructuring of Commercial Banks in Transition Economies*. Paper presented a the Conference on "Financial Development in Eastern Europe: The First Ten Years", organized by the Commerzbank Chair on Money and Finance, TU Chemnitz, Chemnitz, 2000.

On the different approaches to financial institution building, see:

Krahnen, J.P. and R.H. Schmidt: *Development Finance as Institution Building*, Boulder, San Francisco, Oxford et al., 1994.

Schmidt, R.H. and C.-P. Zeitinger: Critical issues in microbusiness finance and the role of donors, in: Kimenyi, M.S.; Wieland, R.C. and J.D. Von Pischke (eds.): *Strategic Issues in Microfinance*. Ashgate, Aldershot et. al., 1998, pp. 27 - 51

The experience of German Financial Co-operation with the downscaling approach has been analysed by

Neuhauß, W.: *Refinancing Banks in an Unstable Financial Environment – The KfW Experience*, Paper presented a the Conference on "Financial Development in Eastern Europe: The First Ten Years", organized by the Commerzbank Chair on Money and Finance, TU Chemnitz, Chemnitz, 2000.

For detailed empirical evidence on the downscaling approach, visit the IPC website: www.ipcgmbh.de

Proposition 5:

Detailed information about the four microbanks mentioned in the text can be found in

Zeitinger, C.-P.: *Financial Institution Building: Only a Drop in the Ocean?* Paper presented at the Conference on "Financial Development in Eastern Europe: the First Ten Years", organized by the Commerzbank Chair on Money and Finance, TU Chemnitz, Klaffenbach/Chemnitz, February 2000.

Please also visit the website of Internationale Micro Investitionen (IMI) AG: www.imi-ag.de

Annex 2: Finance and Development: The macroeconomic dimension

The development of modern growth theory has led to the creation of a sizeable body of new empirical research on growth, and the focus of interest has again shifted to the correlation between the level of outstanding financial assets in the financial sector as a share of GDP, and the growth rate of per capita income (GYP). The following function as additional variables for the real economy:

- GK, the growth rate of capital intensity,
- INV, the investment rate,
- PROD, the Solow residual, as a measure of technological progress. In calculating PROD, it is assumed that the partial production elasticity of capital (α) has a value of 0.3.

All financial indicators are defined by setting a particular stock of outstanding financial assets in relation to GDP; specifically, the indicators are:

- the ratio of liquid liabilities (currency held outside of the banking system plus demand and interest-bearing liabilities of banks and nonbank financial intermediaries) to GDP (DEPTH);
- the ratio of credit issued by the banking system to private enterprises to GDP (PRIV/Y);
- the ratio of domestic credit issued by deposit banks to domestic credit issued by deposit banks and the central bank (BANK);
- the ratio of claims on the nonfinancial private sector to domestic credit (PRIVATE).

Table: Correlation coefficients for financial indicators and growth indicators (averages for the period 1960 – 1989 in 80 economies)

	DEPTH	PRIV/Y	BANK	PRIVATE
GYP	0.56	0.37	0.44	0.50
GK	0.69	0.65	0.56	0.49
INV	0.54	0.48	0.59	0.49
PROD	0.47	0.41	0.36	0.30

Source: King/Levine (1993b, p. 530)

Table: Financial indicators: regression coefficients and standard errors as determined in cross-country growth regressions (averages for the period 1960 – 1989 in 77 economies)

		DEPTH	PRIV/Y	BANK	PRIVATE
GYP	Regression coefficient	0.024***	0.032***	0.032***	0.034***
	(standard error)	(0.009)	(0.010)	(0.010)	(0.010)
	R^2	0.50	0.52	0.50	0.52
GK	Regression coefficient	0.022***	0.025***	0.022**	0.020**
	(standard error)	(0.006)	(0.007)	(0.008)	(0.008)
	R^2	0.65	0.64	0.62	0.62
INV	Regression coefficient	0.097***	0.102***	0.133***	0.115***
	(standard error)	(0.029)	(0.034)	(0.038)	(0.036)
	R^2	0.46	0.44	0.46	0.45
PROD	Regression coefficient	0.018**	0.025***	0.026**	0.027***
	(standard error)	(0.008)	(0.009)	(0.010)	(0.010)
	R^2	0.42	0.44	0.43	0.43

*** 1% level of significance
** 5% level of significance

Source: King/Levine (1993a, p. 727)

Annex 3: Indicators of financial sector development in selected transition countries

Country	Broad Money/GDP (1999)	Private Sector Credit/GDP (1999)	Number of banks (of which foreign-owned), 1999	Dollarisation Ratio+ (1999)	Asset share of state-owned banks (1999)
Albania	58.6	3.6	13 (11)	25.2	85.6
Armenia	11.3	9.2	32 (11)	79.8	2.4
Bulgaria	32.3	14.6	28* (7*)	61.4	66.0*
Georgia	7.7	5.8	34 (9)	79.0	0.0
Kazakhstan	14.4	9.3	55 (18)	≈ 50.0	19.9
FYR Macedonia	21.5	11.3	23 (5)	44.0***	2.5
Moldova	20.6	12.0	23 (7)**	50.2	0.0**
Romania	25.7	10.5	34 (19)	37.8	50.3
Russia	14.4	11.7	2,376 (33)	57.9	41.9**
Ukraine	17.0	8.8	161 (15)	44.7	12.5

* = 1997; ** = 1998; *** = September 1999

+ = Foreign currency deposits/total deposits

Sources: EBRD (2000), Armenia, Georgian, Kazakhstan, Moldovan, Russian, Ukrainian Economic Trends, National Banks of Bulgaria, Macedonia and Romania, IMF (2000), own calculations

Annex 4: Income levels in 1999 (compared to 1989), cumulative growth rate until 1998 (since lowest point on real income curve), inflation rate (average for the years 1995 – 1998) and private sector's share of GDP in selected transition countries

Country	Incomes in 1999 (1989 = 100)	Cumulative growth rate* (Ranking)	Inflation rate in per cent (Ranking)	Share of the private sector in GDP, in %, mid-2000
Poland	122	42.5 (2)	15.47 (9)	70
Slovenia	109	25.7 (5)	8.32 (4)	55
Slovak Republic	100	32.9 (3)	6.15 (3)	75
Hungary	99	16.2 (9)	19.20 (11)	80
Czech Republic	95	12.7 (11)	8.32 (4)	80
Albania	95	43.1 (1)	18.55 (10)	75
Croatia	78	20.6 (7)	4.10 (2)	60
Estonia	77	25.7 (6)	15.22 (8)	75
Romania	76	1.8 (14)	69.17 (16)	60
FYR Macedonia	74	5.2 (12)	1.97 (1)	55
Bulgaria	67	3.5 (13)	232.17 (17)	70
Lithuania	62	19.8 (8)	14.87 (7)	70
Kazakhstan	63	0.0 (15)	25.55 (12)	60
Latvia	60	14.0 (10)	11.5 (6)	65
Russia	57	0.0 (16)	61.45 (14)	70
Ukraine	36	0.0 (17)	62.70 (15)	60
Georgia	34	29.2 (4)	53.27 (13)	60

* = Cumulative output growth between lowest level year since 1989 and 1998
Source: EBRD (2000), own calculations

Annex 5: Dollarisation ratio of selected developing and transition countries (foreign currency deposits as a percentage of broad money)

	1990	1995	1998/99
Argentina	34.2	43.9	52.2
Armenia	n.a.	20.4	48.1
Bolivia	70.8	82.3	82.3
Bulgaria	12.0	28.4	61.4
Costa Rica	n.a.	31.0	41.4
Georgia	n.a.	30.8	79.0
Macedonia	n.a.	18.1	44.0
Moldova	n.a.	11.0	31.0
Mozambique	n.a.	32.6	35.1
Nicaragua	n.a.	54.5	63.3
Peru	n.a.	64.0	60.9
Philippines	17.4	21.5	41.7
Romania	n.a.	21.7	48.3
Russia	n.a.	20.6	29.3
Turkey	23.2	46.1	39.3
Ukraine	n.a.	26.9	21.3
Uruguay	80.1	76.1	84.7

Sources: Balino, Tomás J.T., Adam Bennett and Eduardo Borensztein (1999), *Monetary Policy in Dollarized Economies*, IMF Occasional Paper No. 171, Washington D.C.; IMF, websites of the respective central banks, own calculations.

Annex 6: Foreign banks (foreign capital > 50%) as a percentage of total assets in the banking systems of selected economies

	1994	1999
Central Europe		
Czech Republic	5.8	47.3
Hungary	19.8	59.5
Poland	2.1	52.8
Total	7.8	44.0
Latin America		
Argentina	17.9	41.7
Brazil	8.4	18.2
Chile	16.3	53.6
Colombia	6.2	16.2
Mexico	1.0	18.6
Peru	6.7	33.2
Venezuela	0.3	34.7
Total	7.5	24.2
Total (without Brazil and Mexico)	13.1	39.5
Asia		
Korea	0.8	11.2
Malaysia	6.8	14.4
Thailand	0.5	6.0
Total	0.5	6.0

Source: IMF (2000), *International Capital Markets: Developments, Prospects and Key Policy Issues*, Washington D.C.

Annex 7: Key Indicators of KfW's Downscaling Programmes in Eastern Europe as of December 31st, 1999

	Start[1]	Financial Co-operation funds*	Number of loans granted	Total volume of loans granted*	Average loan amount*
Ukraine	03/97	12.0	1,150	33.5	29,000
Bosnia (SME+HCLP)[2]	01/98	47.7	1,565	30.5	19,000
Bulgaria	12/98	8.5	140	2.8	20,000
Romania	12/98	8.5	55	1.2	22,000
Armenia	05/99	6.0	130	2.6	20,000

	No. of loans outstanding	Outstanding Portfolio*	Arrears rate (PAR[3])	Main problems encountered
Ukraine	375	5.1	5.0%	Macroeconomic and financial sector instability; lack of commitment by partner banks, bureaucratic procedures
Bosnia (SME+HCLP)[2]	1,560	27.6	1.0%	Small size and financial instability of banks, governance problems, political pressures
Bulgaria	121	2.1	0.0%	Banks show varying levels of commitment; entrepreneurs distrust banks
Romania	51	0.9	2.3%	Macroeconomic and financial sector instability; bureaucratic procedures
Armenia	130	2.0	0.0%	Banks show varying levels of commitment

* in DEM million

1 = First disbursement by KfW; 2 = SME = Small and Medium Sized Enterprises Credit Programme; HCLP = Housing Construction Loan Programme; 3 = Portfolio at risk

Source: Neuhauß (2000)

Annex 8: Balance sheet data of four Microbanks in Eastern Europe

	Total assets in US$ '000	Liquidity and quasi-liquidity in US$ '000	Gross loan portfolio in US$ '000							Number of outstanding Loans					Deposits in US$ '000	Number of accounts	Liabilities to financial institutions in US$ '000	Equity and reserves in US$ '000	Profit of this period before taxes in US$ '000	Taxes on profits of this period in US$ '000
			Total	arrears > 30 days to present portfolio	Loan loss provisions to present portfolio	Loan size categories *)				Total	Loan size categories *)									
						I	II	III	IV		I	II	III	IV						
MEB/Bosnia & Herzegovina																				
Dec. 97	1.980	1.530	450	0,0%	6,1%	11	399	40	-	110	23	85	2	-	-	-	-	1.980	-98	-
Dec. 98	4.368	942	3.152	0,6%	5,4%	134	3.002	16	-	937	214	722	1	-	180	152	2.094	1.956	-4	-
Dec. 99	9.207	1.270	7.137	0,3%	3,2%	328	5.818	991	-	2.171	519	1.603	50	-	570	958	5.438	2.763	245	-
June 00	11.694	2.247	8.569	0,5%	3,6%	410	6.757	1.402	-	2.739	713	1.949	77	-	1.281	1.616	7.145	2.870	198	-
Sep 00	12.073	3.772	7.927	0,5%	3,7%	491	6.191	1.245	-	2.865	888	1.891	86	-	2.193	2.507	6.368	3.066	365	-
FEFAD/Albania																				
Dec. 97	3.713	2.383	1.417	9,3	20,5%					315					-	-	2.232	1.431	115	-
Dec. 98	8.230	3.753	4.502	2,8	9,9%	54	1.571	2.648	228	607	96	381	126	4	-	-	6.095	1.526	520	-
Dec. 99	18.157	10.459	7.311	1,2	7,7%	90	2.547	4.214	459	1.007	156	637	207	7	8.613	1.444	4.849	3.709	145	71
June 00	25.036	13.196	11.368	0,9	7,2%	217	4.022	5.965	1.164	1.779	391	1.071	301	16	12.221	2.793	6.753	5.014	343	103
Sep 00	28.101	15.602	11.748	1,1	7,7%	267	4.294	6.052	1.135	2.101	526	1.235	323	17	13.492	3.364	8.383	4.764	635	191
MBG/Georgia																				
Jun. 99	2.599	1.065	1.140	0,0%	3,0%	31	167	942	0	218	150	36	32	0	0	84	42	2.550	-77	0
Dec. 99	5.513	2.143	3.125	1,2%	3,9%	21	1.217	1.591	103	1.635	1.162	391	80	2	0	584	2.907	2.450	-140	0
June 00	10.139	2.780	6.509	0,8%	3,7%	440	2.175	3.258	636	3.489	2.486	650	146	7	97	2.486	6.878	2.504	1	39
Sep 00	13.177	2.814	9.572	0,8%	3,6%	756	3.188	4.146	1.482	5.527	4.007	1.306	195	19	345	3.781	9.189	2.569	97	49
MEB/Kosovo																				
Jun 00	50.593	47.200	886	0,0%	3,0%	3	852	31		177	5	170	2	-	46.792	10.423	487	2.194	959	192
Sep 00	70.614	67.334	1.725	0,0%	5,0%	9	1.585	131	-	412	17	387	8	-	59.073	18.224	2.529	2.045	2.315	458

*) I: Loans < US$ 1,000 II: Loans > US$ 1,000 and < 10,000 III: Loans > US$ 10,000 and < 50,000 IV: Loans > US$ 50,000

Annex 9: Efficiency indicators of four Microbanks in Eastern Europe

	Number of staff	Number of outstanding loans / Number of staff	Gross loan portfolio / Number of staff (in US$)	Number of accounts / Number of staff	Deposit volume / Number of staff (in US$)	Number of money transfers in preceding month	Total income as % of average total assets	Total interest costs as % of		Net currency gains (+) or losses (-) as % of		Additional loan loss provisions for the year as % of average total assets	All administrative costs as % of average total assets	Taxes as % of average total assets	Return on average assetts **RROA**	Return on average equity **RROE**
								(average total liabilities)	average total assets	(equity and reserves)	average total assets					
MEB/Bosnia & Herzegovina																
Dec. 98	31	30	102.000	5	0	58	15,1%	(1,8%)	0,6%	-	-	3,1%	11,9%	-	-0,4%	-0,6%
Dec. 99	54	40	132.000	18	8.000	302	22,4%	(1,0%)	0,6%	-	-	2,3%	15,8%	-	3,7%	10,4%
June 00	61	45	141.000	27	21.000	538	22,2%	(1,0%)	0,8%	-	-	1,6%	15,9%	-	3,9%	15,2%
Sep 00	77	37	103.000	33	29.000	773	21,9%	(1,2%)	0,9%	(-0,1%)	0,0%	1,0%	11,4%	-	5,6%	22,9%
FEFAD/Albania																
Dec. 97	34	9	41.700	-	-	-	13,0%	(1,0%)	0,6%	(+3,7%)	+1,4%	2,6%	8,0%	0,0%	3,3%	8,4%
Dec. 98	49	12	89.300	-	-	-	17,8%	(2,1%)	1,5%	(+0,8%)	+0,2%	1,2%	6,9%	0,0%	8,5%	29,1%
Dec. 99	62	16	120.700	23	139.000	213	9,5%	(3,3%)	2,6%	(+1,0%)	+0,2%	1,1%	5,1%	0,5%	0,4%	2,0%
June 00	67	27	169.700	42	184.000	258	13,9%	(3,9%)	3,0%	(+1,1%)	+0,2%	2,6%	5,3%	1,0%	2,2%	10,8%
Sep 00	66	32	178.000	51	204.000	268	14,1%	(4,0%)	3,2%	(+1,7%)	+0,3%	2,1%	5,3%	1,1%	2,7%	13,9%
MBG/Georgia																
Jun 99	30	7	39.000	3	0	20							33,2%			
Dec. 99	40	41	78.000	15	0	45	14,3%	(1,4%)	0,8%	(-0,6%)	-0,5%	5,6%	12,4%	0,0%	-5,1%	-5,7%
June 00	73	48	89.000	34	1.300	232	15,9%	(5,8%)	4,0%	(+4,8%)	+1,5%	2,3%	10,9%	1,0%	-1,0%	-3,1%
Sep 00	102	54	94.000	37	3.400	471	17,3%	(6,1%)	4,8%	(+5,9%)	+1,4%	2,6%	9,9%	0,7%	0,7%	2,6%
MEB Kosovo																
Jun 00	80	2	11.000	130	585.000	2.885	7,3%		0,0%	-	-		3,5%			
Sep 00	122	3	16.900	149	475.000	4.881	14,7%	(0,2%)	0,2%	-	-	0,3%	5,8%	1,7%	6,8%	83,1%