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Credit Crisis and the Role of Banks During Transition: a Five-Country Comparison

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TABLE OF CONTENTS

RÉSUMÉ

La crise du crédit et le rôle des banques pendant la transition, une comparaison de cinq pays

Cet article compare l'évolution du crédit aux entreprises au cours de la transition, dans cinq pays relativement avancés, dont le cadre macroéconomique a été rapidement stabilisé : l'Estonie, la Hongrie, la Pologne, la Slovénie et la République Tchèque. On s'est appuyé pour l'essentiel sur des données financières et monétaires agrégées, telles qu'elles sont publiées par les Banques centrales : ceci rend certes délicate l'interprétation d'évolutions principalement microéconomiques, mais autorise en revanche des comparaisons beaucoup plus fermes que celles auxquelles peuvent conduire les nombreuses études sur échantillons réalisées au cours des dernières années.

Une première partie repose sur une évaluation des montants absolus d'intérêts dus par les entreprises, qui sont comparés, sur une base trimestrielle, au flux de nouveaux crédits obtenus sur la même période. Ceci permet de différencier nettement les évolutions de chaque pays, ainsi que les phases successives de durcissement ou de relâchement dans la distribution du crédit. Il ressort que ce degré de contrainte financière a été généralement plus faible pendant les périodes de chute ou de stagnation de la production et de la productivité, alors que les phases de reprise se traduisent par de faibles accroissements du stock de crédit. Si des facteurs macroéconomiques ont certainement pesé (notamment les déficits budgétaires), ceci tend à indiquer que des éléments d'ordre microéconomique jouent également, selon un partage toujours difficile à estimer entre effets d'offre et de demande.

La seconde partie est fondée sur des estimations des flux réels d'intérêts et de capital (déboursements ou amortissements nets) qui permettent de comparer entre pays les effets de transferts de revenus impliqués par la relation contractuelle de crédit entre banques et entreprises. Ces flux, mesurés en pourcentage du PIB, montrent de très larges divergences entre pays. Ainsi, les entreprises tchèques ont bénéficié de transferts relativement abondants grâce à une politique fiscale très restrictive, qui a interdit tout effet d'éviction, tant par les prix que par les quantités. Ceux-ci ont été observé en revanche en Pologne et en Slovénie en 1992-1993, mais surtout en Hongrie, où les entreprises ont été soumises a un véritable drainage depuis 1992 jusqu'en 1995 ; ceci paraît avoir une des causes directes de la crise bancaire de 1992-1993. Finalement, l'Estonie a préservé, malgré le cadre strict imposé en principe par le Currency Board, un niveau élevé de répression financière qui a entraîné des transferts inflationnistes importants des ménages vers les entreprises.

Alors que ces diverses données soulignent la fragilité des systèmes bancaires est-européens, notamment au regard des déséquilibres fiscaux ou quasi-fiscaux, les risques de

marginalisation qu'ils encourent semblent s'être accrus récemment en raison de flux croissants de crédits étrangers vers les entreprises, sans intermédiation locale. Ceux-ci ont représenté de 30 à 45 % de l'accroissement total de l'endettement brut des entreprises, de janvier 1994 à juin 1995, en Hongrie, en Slovénie et en République Tchèque. Bien qu'il soit difficile de faire la part de chaque explication possible de ce phénomène, l'impact de contraintes d'ordre microéconomique sur l'offre de crédit par les banques locales, semble ne pas pouvoir être écarté. Si une telle tendance devait se confirmer elle pourrait entraîner entre autres, à plus long terme, des problèmes récurrents de solvabilité des banques, une segmentation accentuée entre entreprises, une mobilisation insuffisante de l'épargne domestique et une croissance instable du revenu national.

SUMMARY

This paper compares the evolution of enterprise credit during transition, in five relatively advanced countries, where macroeconomic framework has been rapidly stabilised, namely: the Czech Republic, Estonia, Hungary, Poland, and Slovenia. Aggregate monetary and financial time-series published by the Central Banks have been used as the main data sources. It makes the interpretation of mostly micro-level evolutions difficult, but it also allows for sounder comparisons than those which may be derived from the many sample surveys developed in recent years.

The first section is based upon estimates of nominal amounts of interest due by enterprises, which are compared to increases in gross enterprise credit during the same period: this provides an index of the relative toughness of credit distribution to enterprises, and highlights sharply differentiated patterns between countries and over sub-periods. A rather general conclusion is that this apparent degree of financial pressure was on the whole weaker during the early periods of falling or stagnating levels of production and productivity. Conversely, recoveries have most often been associated with lower take-up of new credits. If macroeconomic factors have certainly played some role here, this observation shows that micro-level factore have also been active. As usual, the impact of supply and demand cannot be directly differentiated amongst them.

The second section relies upon estimates real terms of capital amortisation or disbursement, as well as of their implicit cost; this allows for a more precise comparison of the resource flows implicit in the decentralised, contractual credit relationship. Measured as a percentage of GDP, very large national divergences surface again: Czech enterprises have on average received a substantial net positive inflow of resources, thanks to a restrictive fiscal policy which has prohibited any form of quantity or price crowding out. This was not the case of Poland and Slovenia in 1992-1993, nor that of Hungary. Since 1992, enterprises in the latter country have been subject to a massive drain of resources, which played an important role in the 1992-1993 banking crisis. Finally, in Estonia, a high level of financial repression and inflationary transfers has been observed since stabilisation, despite the strict policy framework imposed in principle by the Currency Board.

An important conclusion is that the high vulnerability of Eastern European banking systems, especially with regard to fiscal and quasi-fiscal imbalances, may lead to their progressive marginalisation, as large segments of the enterprise sector may either be tightly rationed, or may find alternative sources of external finance. Here, recent trends point less towards local capital markets, than direct borrowing abroad, as an increasing number of enterprises simply skip local banks intermediation services completely. From the beginning of 1994 till June 1995, foreign financing source represented between 30 and 45% of the total increase in enterprise gross debt, in the Czech Republic, Hungary and Slovenia. Though it is difficult to assess the relative part played by each possible

factor beyond this phenomenon, micro-level constraints on credit supply can apparently not be ruled out, a point which puts a shadow on the adjustment of banks so far. In the longer term, if this recent trend were to be confirmed, it may have enduring negative consequences as regards the bank solvency, the mobilisation of domestic savings, the segmentation of the enterprise sector, and, eventually, the potential growth of national income.

CREDIT CRISIS AND THE ROLE OF BANKS DURING TRANSITION: A FIVE-COUNTRY COMPARISON[1]

1. CREDIT CRISIS: A PRELIMINARY ACCOUNT[2]

The role of commercial banks and credit intermediation during transition has been one of the most debated topics since the very first attempts at macroeconomic stabilisation, in 1989-1990. Since then, to take only some of the problems being raised, lots of attention has been devoted to: the role of tight credit in explaining the initial recessions (Calvo and Coricelli, 1992; Portes, 1993; Calvo and Kumar, 1994); to the management of inherited stocks of non-performing loans and the available options for recapitalising banks as well as issues of supervision, bank privatisation and governance structure (Begg and Portes, 1993; Bonin and Székely, 1994; Rostowski, 1995; Berglöf and Roland, 1995; Dittus, 1994; OECD, 1993; Sgard, 1995a). More recently, high growth rates in Central Europe, and increasing levels of investments, have led to question the capacity of commercial banks to contribute to future growth through the provision of an abundant flow of cheap, well-allocated credits to enterprises.

Indeed, if real growth may look solid, at least in some countries, the outlooks for banks is not very favourable. On an aggregate level, countries like Hungary and Poland, which have registered average growth rates of industrial production of 6.6% and 8.9% annually since 1993, have also witnessed falling or, at best, stabile levels of real credit to enterprises (Graph 1). On the other hand, in the Czech Republic or Slovenia, large increases in real credit have been associated with late or slow recoveries. This, at least, does not illustrate a strong contribution of intermediate finance to enterprise growth, in countries where capital markets do not yet offer an alternate source of external financing. Large and sometimes successive recapitalisation programmes, high intermediation margins or slow progress in privatisations are other indices of a slow stabilisation of Eastern European banking systems.

A host of possible explanations have been proposed among which a consensus on the relative weight of each has yet to be build. Macroeconomic analysis generally emphasis the constraints of often large budget deficits in a context of low financial savings rates and restrictive monetary policies. But as a rule, micro-level are generally considered more decisive, or more commonly observed among different countries. Internal constraints of banks certainly play a role, such as the short supply of production factors (human and own capital) or problems of governance; but environemental constraints such as weak property rights and high asymmetry of information are as well considered as critical, if not decisive issues. A last type of approach rather emphasis the systemic dimension of the reform process in the banking sectors, defined as the progressive switch from a past, quasi-fiscal mechanism of resources allocation, to a decentralised one which should be based upon tough, microeconomic solvency constraints. During the painful construction of effective commercial banks, on the basis of loosely specialised bureaucratic networks,

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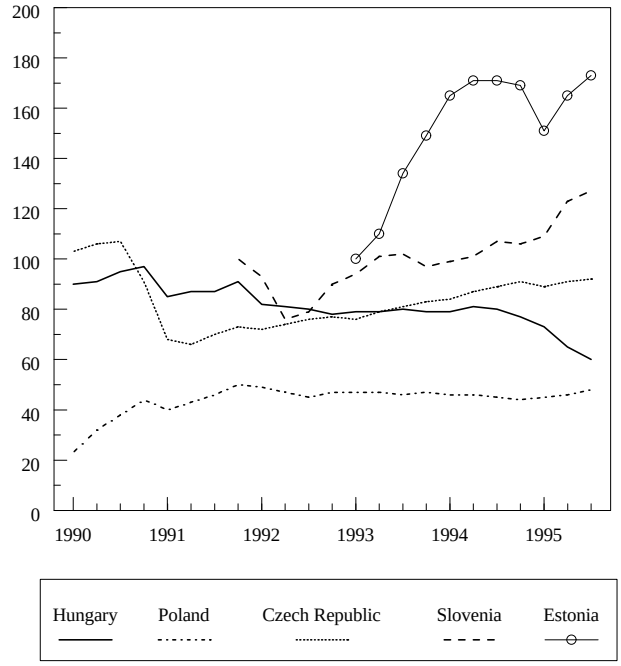
[2] The preparation of this article has received the support of the European Commission, under its Phare-Ace programme (contract 94-0630-R).

the emergence of pervasive forms of quasi-fiscal forms of resources re-allocation is then interpreted as an inevitable, although destabilising by-product of the transition process.

Graph 1
Real Domestic Credit



Source: see annex.

This article does not directly address the microeconomic factors beyond the present transitional credit crisis, but rather compares their *ex post* effects on the evolution of enterprise credit in five 'advanced reforming economies'. The contention is that diverging trends in the distribution of credit since 1990, as in the consolidation of non-performing loans and the degree of crowding out, have borne heavily on national trajectories, and will prove a decisive factor in shaping future financial systems. Till now, these factors have mostly affected enterprises through liquidity or short-term cash-flow constraints; but, in the future, as the overall structure of balance sheets will weigh in a more differentiated way, they will increasingly affect the financing patterns of the economy, the governance structure of enterprise, the overall financial stability or the working of monetary policy.

Five national experiences are compared: the Czech Republic, Hungary, Poland and Slovenia -generally considered as 'front-runners' (EBRD, 1995) - to which Estonia was added, due to an early stabilisation followed by rapid progress in systemic reforms (as well as in the provision of statistical data). Between them, these countries show a large array of common or opposite features, which increase the relevance of a comparative approach. Most important, the three later ones experienced very high initial inflation, so that stocks of assets and debts, 'carried over' from the previous regime of soft budget constraints, were sharply reduced *before* transition started. On the eve of transition, the enterprise sectors' net position vis-à-vis domestic banks was slightly positive in Poland (December 1989), as opposed to Czechoslovakia especially, where net debt represented almost 45% of GDP (December 1990). Another critical difference opposes countries with a small foreign debt, against Hungary and Poland, which inherited a heavy burden from the 1970's borrowing spree, even if the later benefited in 1991 from a 50% debt reduction. Institutional arrangements also have a role as, for instance, with the strict policy framework witnessed in Estonia, due to the adoption of a Currency board, compared to countries like Poland and Hungary where policy-makers are left with a

substantial degree of discretion. Finally, it may also be recalled that Estonia and Slovenia splitted away, in the early 1990's, from a dominating, less-developed federal structure: this means that they had to introduce their own currency before they could stabilise, and had then to bear the full costs of building a complete new State structure. Conversely, the Czech authorities generally consider that the separation from the Slovak Republic brought about substantial savings.

The main statistical sources being used are the standard monetary and banking time-series, whose relatively close methodological premises now allow for precise comparisons among countries: something which remains awkward in the case of most micro-level, sample surveys that have been developed over the last years. Certainly, a part of the large distortions witnessed in enterprise and bank accounts do find their way down into these aggregate series. But it is hoped that their effect has been controlled and that the residual statistical noise, which is certainly not negligible, does not bear on the large structural divergences between countries which we shall highlight.

The next section analyses how early 'remonetisation' at the beginning of the transition process transformed the nature of the agents financial accounts, and how the large capital losses, which surfaced during the first years of reforms, interacted with the process of financial consolidation. In section 3, the evolutions of the bank-enterprise relationship, from the stabilisation phase through the recession and into recovery, are compared among countries so as to give a first measure of the short-term liquidity constraint exerted on enterprises. Section 4 switches to flows of resources in real terms (capital and interest) and focuses on indices of underlying quasi-fiscal reallocation of resources by banks. Section 5 analyses how, over the last two years, enterprises partly circumscribed the effects of inefficient domestic intermediation through increasing reliance upon foreign borrowing. Section 6 concludes.

2. THE LEGACY OF THE PRE-1990 AND EARLY STABILISATION PERIODS: INVENTING THE CREDIT CONTRACT

Eastern European reforms all started with a macroeconomic stabilisation programme, associated with the 'remonetisation' of a large part of microeconomic relations, thanks *inter allia* to market-clearing prices, a sharp reduction in subsidies and external convertibility. The effect was first to brake up almost instantaneously the centrally-planned structure, and then to provide a decisive lever for a progressive hardening of micro- financial constraints. A corollary is that, even under a strong indexation clause, all domestic assets and liabilities, especially if denominated in local currencies, had not the same economic nature before and after this cut-off date. For households, the end of forced savings and the development of clearing markets, together with a large diversification in the supply of consumer goods, vastly increased the scope for inter-temporal trade-offs between present and future consumption. This does not mean however that they could immediately adopt savings patterns as 'practically-Ricardian' as in a standard western economies. On the one hand, important institutional restrictions to inter-temporal optimisation are still in place (the limited development of consumption and housing credit, weak market structures for land and housing investment, uncertainties with regard to future levels of pension payments or possible restitution of pre-1945 properties, etc.). On the other one, high initial inflation is generally considered by the public to have caused substantial, real losses on pre-1990 banks and savings accounts:

although their equivalence with post-1990 financial savings is at best hollow, this may have enduring consequences on financial savings rates[3].

For indebted enterprises[4], remonetisation implied that past 'funding flows', as allocated and recorded by the former monobank, on a quasi-fiscal, unilateral basis, were forcefully transformed into bilateral, decentralised debt contracts. These contracts may be enforced by law and should derive a part of the enterprise revenue, even if adverse evolution in relative prices, losses of markets shares, or outright squandering make it impossible to match *ex post* this new liability with a real asset, which would produce a balancing flow of revenue. In other words, the real adjustment of enterprises had to go together with a financial consolidation, for those which, by accident, had some debt. Notwithstanding the impact of initial periods of high inflation, the only alternative would have been full-scale monetary reform, which would have discretely reduced all real stocks of debts and assets - certainly not a very engaging prospect for the new democratic governments in 1990[5].

This brought about one of the most amazing paradoxes of Eastern European reforms, namely that initial remonetisation relied directly upon the existing pre-1990, would-be banks balance sheets, arguably one of the most dubious economic matter ever observed in a centralised economy. But once 'carried over' into a regime of hardening budget constraints, these stocks became the financial basis on which monetary policy was conducted and with which harder financial constraints were to be enforced, even they would also provide the basis for large-scale distortionary redistribution of resources. As large SOEs struggled in the new competitive environment and had to face cuts in subsidies, their immediate answer, which often became pervasive, was to capitalise interest due and absorb large parts of the banks loanable funds. Even if this misallocation of resources was kept within manageable limits, it would impose serious microeconomic distortions, in the form of reduced returns on the stock of new or restructured productive capital. But if uncontrolled, a debt-trap dynamic could rapidly develop, which would first decapitalise the banks, before the liabilities could possibly be transferred to the State, and eventually to the Central Bank, that is to the population. At this point, different forms of levy would have been imposed: either as higher fiscal taxation, or by a large inflation tax, or, for instance, through direct wealth losses by deposits-holders, if banks were to fail without being bailed-out. As is to be expected, the easiest option, namely a foreign debt write-off, is also the least probable, as it would require an inwards wealth

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[3] Relatively consistent, optimizing investment strategies by households could also be observed in reformed socialist economics, although the markets for assets were highly distorted. In the case of Hungary, see Abel and Székély (1993).

Abel I. et Székelyi I.P. sur l'épargne en Hongrie, 1970-1980.

[4] At the beginning of transition, as a general rule, public administrations had very little or no debt towards the domestic banking sector.

[5] This option was only adopted in the case of the German monetary union of July 1990 although on a partial basis: average exchange rates for the old Ost-Mark were more favourable for housholds deposits than for enterprise credits so that banks had to be *immediately* recapitalised, on an amount of 65 billion DeutscheMark or around 33% of the estimated East-german GDP.

transfer from foreign taxpayers (Paris Club debt), or foreign deposit-holders and bank shareholders (London Club debt).

However, the most important point is that in any case and in all countries, the non-performing debt of unadjusted or bankrupt enterprises has to be financed eventually by solvent agents, whose accumulation of own capital, or primary savings, are to be reduced proportionately. In this case, if pre- or early-transition inflation immediately reallocated some wealth, although of uncertain quality, its real redistributive effects were mostly pre-emptive, as they reduced the basis for future, distortionnary reallocation of revenue through banks, fiscal or inflationary taxes. This means that as far as older debts were allocated on a random basis, servicing them, in a post 1990 environment, can be interpreted from the enterprise point of view as a quasi-fiscal transfer, which drains the revenue of the indebted ones.

As an aside, this predominance of liquidity constraints also provides the basis for Bofinger's analysis of transitional monetary policy, where variation in interest rates affects mostly agents with limited capacity to reallocate revenue (State and large SOEs): higher rates may then either increase interest arrears or implicit capitalisation, either cause undue, or ill-timed bankruptcies which may incur costly damages in the banking sector (Bofinger, 1992 and 1994)[6]. More generally, as long as property rights remain relatively weak, and financial markets underdeveloped, the different types of liabilities in enterprise accounts will not exercise clearly differentiated constraints on them: the working of monetary policy will probably be restricted to liquidity adjustments, directly or via the cash-flow effect of interest rates on the given structures of agents' balance sheets. Indeed, the operation of other transmission mechanisms of monetary policy, be they the neo-classic, cost-of-capital channel, or different forms of credit channels, supposes a strong enforcement of property rights through, *inter allia:* effective though costly bankruptcy laws, contractual discipline enforced by commercial courts and, not least, the optimisation of the profit-to-capital ratio, as opposed for instance to the liquidity position of enterprises or the personal wealth of managers - which may include assets with various shades of grey and black.

Empirically, during the first years of reforms, the very first move out of a purely liquidity-based monetary policy probably occurred when commercial banks stopped focusing exclusively on their short-term relationship with the Central Bank, and started asking the State for a recapitalisation. Before that, notions of own capital and solvency requirements exercised only weak constraints so that overall financial discipline in the economy fell massively upon the Central Bank. The downside was that this turn towards more decentralised discipline also corresponded to the moment when commercial banks started rationing deliberately large segments of the enterprise sector, while still being unable to brake the hold of large, loss-making SOEs. In this sense, stronger solvency constraints on commercial banks relieved Central Banks of some pressure, but did not necessarily imply decisively better performance of the microeconomic relationship between banks and enterprises. As will be witnessed further later, banks concerned with their own capital base, while still channelling large amounts of quasi-fiscal resources, may then impose an enduring credit crunch on the real sector, while large proportion of enterprises may simply never enter the credit market.

[6] See also Gomulka S. (1994).

The next section compares the evolution of enterprises' gross debt towards domestic banks, during the different phases of transition. It first focuses on the link between enterprise credit and the large swings in industrial production and labour productivity observed since 1990. Then it concentrates more directly on cash-flow relations between the two sectors, on the basis of estimated flows of interest payments and new lending.

3. BANK CREDIT AND THE LIQUIDITY CONSTRAINTS OF ENTERPRISES SINCE 1990

Real Enterprise Credit during the Recession

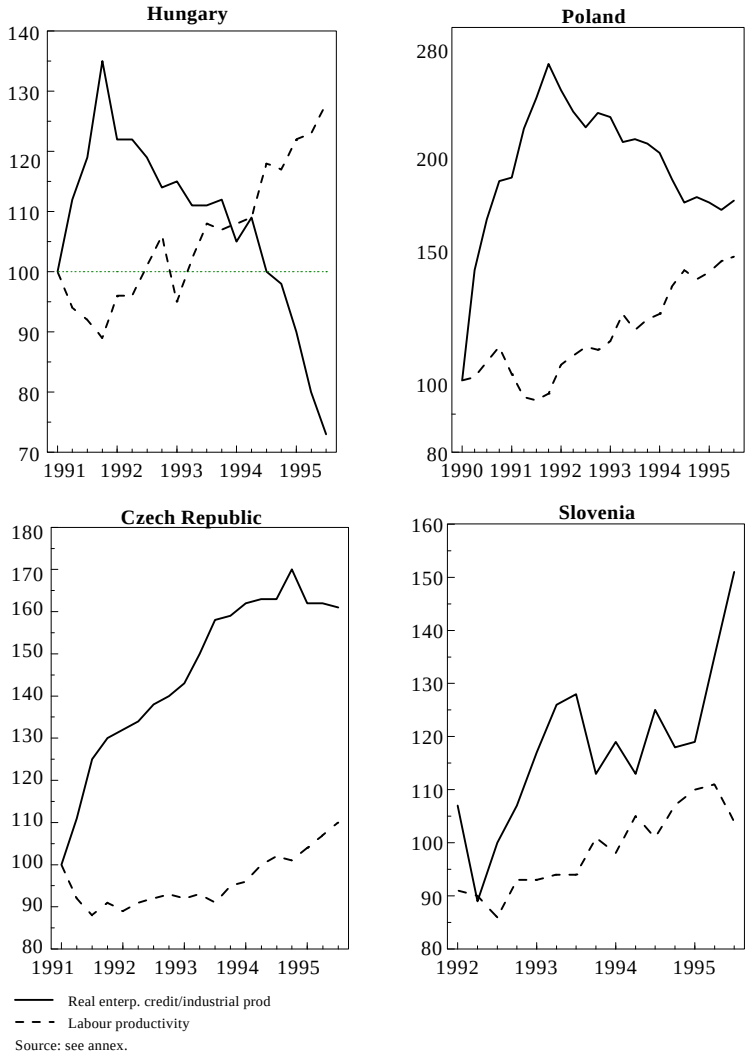
The successive periods of macroeconomic stabilisation, recession and eventual recovery have imposed very different sets of macroeconomic and financial conditions on Eastern European enterprises and banks. At a time of rapid internal adjustment process, this implies that they would not react in the same way to a comparable impulse, say at the time of remonetisation, at the trough of recession or after two years of high growth. In order to differentiate among countries and sub-periods, Graph 2 compares the evolution of labour productivity to an index of credit input per unit of production, defined as IPP-deflated gross domestic currency loans, divided by the index of industrial production.

Starting with Poland and the Czech Republic, the first two years of transition witnessed in the former case large losses in labour productivity, together with rapid growth in enterprise debt, at a time of slow and noisy micro-economic adjustment. Then, from the first quarter of 1992 onwards, real debt started to recede and, in April the same year, industrial production picked up and immediately delivered large gains in labour productivity. This pattern remained valid till the end of 1994, with decreasing volumes of credit per unit of production, and rapid gains in labour productivity (12.5% annualy on average, between 1992 and 1994). But in 1995 both trends showed a new, though perhaps provisory inverse inflexion: labour productivity somewhat slowed down (to 8% on an annual basis) and real credit accelerated to about the same pace as industrial production, despite a continuous decline in unit labour costs. A comparable evolution can be observed in the Czech Republic, although with a different time-pattern: the initial fall in production was comparable to that witnessed in Poland, but industry did not recover before four years. However, as in the Polish case, limited progress in labour-productivity has been associated with an increasing level of enterprise indebtedness, despite already high gearing. Conversely this relation was reversed in 1995, as in Poland in 1992, when raising industrial production allowed for a sharp acceleration in productivity gains and, for the first time since 1990, lead to a decline in aggregate domestic credit input per unit of industrial production.

Hungary follows these line well, although it did not mirror the symmetric turnarounds observed in Poland and the Czech Republic in 1995. Since the second half of 1992, productivity and production have kept increasing at sustained rates, despite constantly falling real domestic credit, that is a severe real term credit crunch, over the whole

period. In other words this country appears as an extreme case of disintermediated growth[7], although, as in Poland and the Czech Republic, the increasing reliance upon

Graph 2
Labour Productivity and Enterprise Credit



Source: see annex.

[7] The Hungarian credit series take into account the impact of the large loan write-off linked to the December 1992 recapitalisation. Apparently, there has been since then an increasing level of debt write-offs by banks, and to a lesser extent, of debt/equity swaps; this certainly contributes to blurring the evolution in real debt. In all other countries, piecemeal write-offs or debt/equity swaps, directly negotiated between banks and enterprises could neither be discounted and may also add a marginal element of inprecision.

direct foreign borrowing, since 1994, certainly adds a degree of complexity (see Section 4 below). With the rapid growth of credit, Slovenia may partially contradict the trend, although its recovery in both production and productivity was much slower than in all neighbouring countries[8].

That being said, a preliminary conclusion is that, through the whole period of transition, domestic credit and labour productivity show pattern of a substitution relationship, though this relationship is probably not very symmetric. Indeed, during the early phase of stabilisation, growing real credit has apparently helped cushion productivity losses, but would have probably not delivered symmetric results if mobilised in support of immediate efficiency gains. All experiences of transition rather show that tight credit is a necessary ingredient of stabilisation and disinflation, but that too many restrictions may rapidly incur counter-productive effects, through more accumulation of arrears, that is more financial indiscipline. Furthermore, there is neither strong chronological evidence that slowing credit supply may have been a primary *short-term* factor beyond productivity take-off. If many micro-economic surveys actually conclude that there is an important contribution of cash-flow constraints, partially imposed by banks, to productivity-enhancing adjustment, this only works in the medium-term, with banks functioning as micro-economic instruments to force restructuring[9]. Finaly, the simultaneous inflexion in industrial production and real enterprise credit can be partly interpreted, on an ex post basis, as indices that adjusted, growing enterprises apparently do not need large amounts of external finance.

This would suggest an interpretation of present growth trends running from medium-term, supply-side adjustment to real growth, productivity gains, and eventual lower demand for loans, or lower impact of credit rationning, on enterprises with large cash-flows. In other words these would be Say-type economies, with supply growth feeding demand and a limited role for monetary dynamics, or alternatively a relatively endogeneous, short-run evolution. Though many macro- and microeconomic evidences indeed pull in this direction, during the present recovery, a fully demand-side interpretation of current credit crisis in transition economies would not be fully satisfying. Indeed in countries like Poland and the Czech Republic, enterprises growing in 1995 at rates between 5 and 10%, and often more, should have had a demand for credits priced at 4 to 5% in real terms. This suggests that supply-side problems, deriving from the banks' own constraints and behavior, may also weigh.

In this case, a more general implication would be that very high efficiency gains during the current 'first growth wave' may by chance limit the impact of an on-going adjustment crisis in banks. But one could then wonder whether, in the years ahead, when growth will rely increasingly upon capacity-increasing investments and standard technological catch-up, more tensions on the savings-investment relation may developp and start to bear on potential growth rates, prices and foreign payments.

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8 The absence of time-series on industrial employment precludes the inclusion of Estonia in this comparison.

9 See: Pinto, Belka, Krajewski (1993), Belka, Shaffer, Estrin, Singh (1994) Brada, Singh, Török (1994), Carlin, Van Reenen, Wolfe (1994), Fries (1994), Grosfeld I. & G. Roland (1995).

Different Levels of Liquidity Constraints

Indexes of real enterprise credit only give a partial understanding of the pressure imposed by banks, and do not allow to take into account the impact of different cash-flow constraints deriving from levels of interest rates and credit distribution. In order to appraise the short-term degree of liquidity constraints imposed upon enterprises, interest rates have been estimated for each quarter T, as the average lending rates on newly-distributed credits, over the *preceding* six months (quarters T_{-1} and T_{-2}). This rate is then applied to the stock of gross debt at the end of quarter T_{-1}, so as to give an estimate of total interests due by enterprises. The increase in credit during T, measured as a proportion of them, then provides a measure of short-term liquidity constraint imposed by banks. This ratio can also be interpreted as an estimate of the aggregate degree of interest capitalisation by banks, although large underlying divergences between categories of borrowers are probable, in terms both of credit distribution and lending rates.

Very different national patterns appear on Table 1, which also highlights important changes over time. In the case of Czech enterprises, they have received substantially more credits than they have had to pay as interest, at least until the end of 1994. This relatively accommodating approach to enterprise finance emerged almost immediately, when reforms started in January 1991. An initial bout of inflation, of limited duration and magnitude, has translated into a rather large inflationary reduction of debt, although it was associated with a distinctly accommodating policy with regard to the distribution of new enterprise credits. A comparable pattern is observed in Estonia, but from an initial level of enterprise debt which had been drastically reduced by high inflation (enterprise gross debt represented 8% of GDP in 1993, and 10% in 1995).

In Poland, during the first eighteen months of reform, the pattern remained more comparable than one would have expected despite very different initial context in the two countries[10]. The overall picture was marked by a sharp, initial fall in enterprises real debt, when prices were liberalised at the onset of the 'shock-therapy', followed by an intermediate period where high real interest rates and falling output levels could be somewhat cushioned: low initial levels of debt translated into relatively small absolute amounts of interest payments, which in turn absorbed only a fraction (though an increasing one) of newly distributed credit. Although quarterly data show large swings, the trend also clearly reflected the much-debated episode of monetary policy relaxation,

[10] From a 100 basis in december 1989, the index of real enterprise credit felled to 23 by the end of March 1990, and recovered to 44 at the end of the same year and 48 by september 1995.an

Table 1
Average Lending Rates to Enterprises

		1990	1991	1992	1993	1994	1995
b/ Real Rates	Hungary	1.1	13.0	16.1	18.4	11.6	-0.7
	Poland	-18.5	11.9	6.9	0.8	3.0	3.1
	Czech Republic	-1.0	-17.3	3.9	2.2	7.6	3.9
	Slovenia	-	-	-	27.3	17.1	15.7
	Estonia	-	-	-	3.6	-8.7	-1.1
a/ Nominal Rates	Hungary	27.6	35.1	33.0	25.4	27.4	32.6
	Poland	101.4	54.6	39.0	35.3	32.8	27.7
	Czech Republic	6.0	15.3	13.9	14.1	13.1	12.8
	Slovenia	-	-	-	49.0	39	23.4
	Estonia	-	-	-	3.6	-8.7	-1.1
Nominal Intermediation Spread	Hungary	10.6	13.2	14.3	14.1	13.7	13.6
	Poland	63.8	16.3	10.7	9.3	10.0	7.0
	Czech Republic	3.0	7.9	6.5	6.7	5.9	5.7
	Slovenia	-	-	-	23.6	16.3	11.6
	Estonia	-	-	-	26.1	16.9	14.0
Avoir des entrées/Monnaie locale	Hungary	0.11	0.12	0.14	0.12	0.10	0.08
	Poland	0.06	0.07	0.08	0.07	0.07	0.07
	Czech Republic	0.16	0.15	0.21	0.24	0.28	0.27
	Slovenia	-	-	0.05	0.07	0.08	0.10
	Estonia	-	-	-	0.08	0.08	0.07
Gross Enterprise Credit in Local Currency							
	Hungary	0.27	0.28	0.26	0.20	0.17	0.14
	Poland	0.06	0.07	0.08	0.07	0.07	0.07
	Czech Republic	0.62	0.56	0.61	0.63	0.65	0.62
	Slovenia	-	-	0.08	0.09	0.10	0.13
	Estonia	-	-	-	0.08	0.10	0.10
Total Debt	Hungary	0.36	0.36	0.32	0.27	0.26	0.27
	Poland	-	-	-	-	-	-
	Czech Republic	-	-	**0.74**	0.72	0.78	0.81
	Slovenia	-	-	0.17	0.17	0.18	0.21
	Estonia	-	-	-	0.09	0.11	0.11
Domestically Intermediated Debt as a Percentage of Total Credit	Hungary	0.90	0.90	0.87	0.79	0.72	0.62
	Poland	-	-	-	-	-	-
	Czech Republic	-	-	0.92	0.91	0.87	0.83
	Slovenia	-	-	0.90	0.82	0.78	0.81
	Estonia	-	-	1.00	0.99	0.99	0.95
Local Currency Credit/Total Credit	Hungary	0.86	0.84	0.81	0.72	0.65	0.53
	Poland	-	-	-	-	-	-
	Czech Republic	-	-	0.89	0.88	0.83	0.76
	Slovenia	-	-	0.38	0.47	0.50	0.57
	Estonia	-	-	0.95	0.91	0.95	0.92

Source: see annex.

during the second half of 1990, as well as the ensuing tightening[11]. Then, from 1992 onwards, Polish enterprises experienced a net outflow of resources, as interest payments outstriped new lending decisevely. This in turn can be related to a worsening fiscal position, i.e. more crowding out (Table 2), as well as to increasing attention paid by banks to their own long-term solvency constraints. This later turn may be linked to disinflation as well as to institutional reforms, such as the corporatisation of commercial banks (late 1991) and the recapitalisation programme initiated in March 1993. An important point, however, is that this turnaround affected enterprises at a time when some adjustment had already taken place (Pinto et alii., 1993; Belka and alii. 1994), which probably explains why industrial production could pick up despite a low marginal intake of new credit.

Hungary presents yet another pattern, as the country implemented a strong macroeconomic stabilisation programme in 1990, but waited a full year before taking the decisive steps in terms of price liberalisation. Thanks to this strategy, and to substantial financial reforms introduced before 1989, monetisation was soft, almost 'gradualist', and did not impose any inflationary transfer before the limited one which immediately followed the February 1995 devaluation. In other words, all pre-1990 debts were 'carried

Table 2
Implicit Index of Interest Capitalisation by Banks

	1990	1991	1992	1993	1994	1995
Hungary	0.92	0.52	-0.04	0.34	0.58	0.35
Poland	2.23	1.09	0.62	0.94	0.73	1.14
Czech Republic	-	1.84	1.14	1.41	1.20	0.79
Slovenia	-	-	0.82	0.80	1.14	2.33
Estonia	-	-	-	2.14	2.05	1.63

Source: see annex.

over', a rule also applied to foreign liabilities, as Hungary pointedly refused to ask for a Brady-type debt-reduction programme. Then, the real financial shock to enterprises came in 1992, when the fiscal crisis started to crowd them out massively, a situation which was not decisively eased during the following years as illustrated by Table 1: since the beginning of 1992 till September 1995, the agregate index of nominal interest capitalisation by banks is estimated at only 30% on average in Hungary, against 85% and 113% in Poland and the Czech Republic respectively. In other words, on a net basis, a large flow of resources has been transferred by the Hungarian enterprise sector to the rest of the economy at a time of painfull restructuring.

The impact on this trend of a massive crowding out of enterprises by the government sector is quite clear, as the latter siphoned-off the largest part of the increase in domestic credit during most of the period: 75% on average between 1992 and September 1995 (95% in 1992), as opposed to 42% in Poland and -15% in the Czech Republic, where the State has been a net lender (but also issued large amounts of bonds, on behalf of other

[11] A degree of imprecision certainly derives from the difficulty of estimating *average* lending rates in January 1990, which are reported in Lipton and Sachs (1990) to have been negative in real terms during the two first weeks of the year.

agents). But the price factor also bore heavily, as real lending rates have generally been much higher than in the two other Visegrad countries (Table 3): 12.3% on average in Hungary since 1992, against 4.3% and 4.5% respectively in Poland and the Czech Republic. On top of fiscal variables, this difference probably has some microeconomic causes, reflecting uneven conditions within each banking sectors. Indeed, since mid-1991, intermediation margins (lending minus deposit rates) have remained rather stable in the two countries which did not experienced very high initial inflation, but at quite different levels: 13 to 14 percentage points in Hungary, against 5 to 7 point in the Czech Republic. Conversely, inflationary countries initially suported very high intermediation costs, which were then brought down progressively; this allowed intermediation margins in Estonia and Slovenia to reach lower levels than in Hungary in 1995, exactly as had been observed in Poland two years earlier.

As an aside, an interesting point is that, on a chronological basisn, these empirical evidences do not confirm the thesis that an excessively tight lending policy was a decisive cause beyond the initial recessions (Calvo and Coricelli, 1992; Calvo and Kumar, 1994). On the contrary, credit distribution appears to have been initially quite soft in four countries out of five, before tightening decisively at a later stage, when production picked up and banks started to adjust to increasing solvency constraints. Morever, Poland and Hungary have experienced early recoveries despite negative outflows of resources from the enterprise sector, and vice-versa in the Czech Republic as well as, to some extent, in Slovenia[12]. More accomodative credit distribution has been *de facto* associated with slower recovery, although more argument would be needed in order to establish a reverse causal relationship.

4. FLOWS OF REAL RESOURCES

In the present section the working of credit relationship during transition is analysed on the basis of real term estimates of interest, capital flows and enterprise indebtedness. In countries were inflation often remains at substantial levels this allows for a more precise understanding of the bank-enterprise relationship as well as of the bearing of solvency constraints on both categories of agents. In order to do this, the average nominal interest rates for each quarter T (as calculated in the preceding section) has been deflated with the producer price index observed during the same period. This yields an estimate of real interest payments by the enterprise sector as well as of net flows of real credit

[12] Also note that large-scale liberalising reforms before 1992, and a first, federal-level 'shock therapy' in January 1990, casts the 1992 Slovenian experience in an intermediate position between transition-type programmes and standard experiences with stabilisation in developing countries.

Table 3
Distribution of the Increase in Domestic Credit

Hungary	1990	1991	1992	1993	1994	1995
Government	5	99	95	72	62	69
Enterprise sector	85	103	3	17	28	46
Households	10	-101	4	11	10	-15
Total	99	100	101	100	100	100
Budget deficit (%gpd)	0.8	-4.4	-6.9	-6.6	-7.7	6,5*

Poland	1990	1991	1992	1993	1994	1995
Government	-20	57	65	57	56	-7
Enterprise sector	114	42	32	37	39	93
Households	6	1	3	5	6	14
Total	100	100	100	100	100	100
Budget deficit (%gpd)	3.1	-6.5	-6.7	-2.9	-2.5	-3.0

Czech Republic	1990	1991	1992	1993	1994	1995
Government	-64	-53	-19	-10	-28	3
Enterprise sector	153	148	109	110	132	105
Households	10	6	10	0	-4	-8
Total	100	100	100	100	100	100
Budget deficit (%gpd)	0.1	-2	-3.3	1.4	1	1

Slovenia	1990	1991	1992	1993	1994	1995
Government	-	-	16	71	17	14
Enterprise sector	-	-	73	17	52	51
Households	-	-	12	12	31	35
Total	-	-	100	100	100	100
Budget deficit (%gpd)	-	-	0.2	0.5	-1.0	-0.5

Estonia	1990	1991	1992	1993	1994	1995
Government	-	-	-	-105	-189	-156
Enterprise sector	-	-	-	187	232	163
Households	-	-	-	17	57	25
Financial inst°	-	-	-	2	1	68
Total	-	-	-	100	100	100
Budget deficit (%gpd)	-	-	-	-1.4	0.9	1

Source: see annex.

(distribution or amortisation)[13]. The results obtained for each country are presented in Table 4, on an annual basis and as a percentage of GDP; the 'inflationary transfers' line highlights the years when average negative real lending rates translated into an implicit transfer of resources towards enterprises, *whatever* the distribution of new credits. The sum of interest due and net capital flows, i.e. the estimated net flow of real resources, is logically equal to the nominal estimates which could be derived from the data underlying Table 2[14].

The Czech Republic and Poland

The heavy pressure which fiscal constraints can potentialy exercise on credit evolutions, in a context of low financial savings rates, is well exemplified by the comparatively, most favourable case of the Czech Republic. In accounting terms, other things equal, comparatively large flows of real credit to enterprises (3.7% of GDP annually between 1992 and 1995) would have not covered real interests due (resp. 2.6%) if the average financing position of the State sector had deteriorated by more than 1.1% of GDP, a rather small shock in the transition context. On the other hand, the direct cash-flow impact on Czech enterprises of an increase of one percentage point in interest rates can be estimated to around 0.5% of GDP in 1991 (against 0.22% and 0.05% in Hungary and Poland respectively). Fiscal discipline was then crucial, in the Czech Republic, in order to alleviate financial distress in highly vulnerable enterprises and banks. In other words, if levels of crowding out and real interest rates had been only slightly closer to those witnessed in Poland or Hungary, in 1992 and 1993, a massive financial crisis may have occured in the Czech Republic: high interest payments would have massively increased enterprises losses and bankruptcies, which in turn would have translated into large capital losses by banks, higher unemployment and larger public deficit. The fragility of the underlying financial balances at the beginning of transition would have pushed the Czech transition experience from the current, rather favorable equilibrium, into a more negative one, closer to that observed in neighboring countries, with more financial distress in the State, enterprise and banking sectors.

Till now, the Polish economy has experienced many of these drawbacks, as the country imposed negative resource transfers on enterprises in 1992-1994, and later moved towards only slightly positive ones, as the fiscal crisis receded and real interest rates where reduced. Although bank consolidation seems to have been relatively successful so far, this limited contribution of bank finance to enterprise growth since four years is a sign of the progress yet be made. In part, this certainly reflects the impact of pre-transition inflationary experiences, which proved helpful in bringing down immediate

[13] Since 1990, in all countries, most enterprises credit have a maturity under one year, though this has no implication on the conditions for renegociation and roll-over.

[14] As in the preceding section, flows of assets linked to recapitalisation programmes are not included in the present etimates, neither flows linked to domestic loans in foreign currency, direct foreign borrowing by enterprises, bonds, shares and deposits.

Table 4
Net Transfers Between the Enterprises and Banking Sector

(in percentage of GDP)

	1990	1991	1992	1993	1994	1995
Hungary						
Net transfer of resources:	-1.1	-4.2	-8.1	-3.1	-2.2	-3.6
- real credit	-0.6	-1.9	-4.1	0.4	-0.3	-3.8
- inflationary tranfer	0	0	0	0	0	0.2
- real interests	-0.6	-2.3	-4.0	-3.5	-1.9	0
Poland						
Net transfer of resources:	5.6	0.6	-1.7	-0.2	-1.0	0.3
- real credit	-14.6	2.2	-0.7	-0.1	-0.6	0.8
- inflationary tranfer	20.2	0	0	0	0	0
- real interests	0	-1.6	-1.0	-0.1	-0.4	-0.5
Czech Republic						
Net transfer of resources:	-2.9	6.0	1.1	3.3	-1.1	1.1
- real credit	-6.8	-13.5	3.6	4.6	3.8	2.9
- inflationary tranfer	4.0	19.5	0	0	0	0
- real interests	0	0	-2.5	-1.3	-4.9	-1.8
Slovenia						
Net transfer of resources:	-	-	-2.3	-0.8	0.3	0.3
- real credit	-	-	0.2	1.6	2.4	2.1
- inflationary tranfer	-	-	0	0	0	0
- real interests	-	-	-2.5	-2.4	-2.1	-1.9
Estonia						
Net transfer of resources:	-	-	-	2.5	2.1	0.4
- real credit	-	-	-	2.7	1.2	0.3
- inflationary tranfer	-	-	-	0	0.9	0.1
- real interests	-	-	-	-0.3	0	0

Source: see annex.

financial pressures, but may also weigh heavily on present and future financial savings rates. The interesting point however, when compared to the Czech experience, is that Poland *de facto* opted for a much larger socialisation of capital losses: first through a massive inflation tax (and foreign debt write-off), then with a comparatively larger bank consolidation programme, which transfered a large part of residual bad loans to the State (i.e. the taxpayers). Conversely, in the Czech Republic, a clear choice was made for a decentralised financing strategy, by which the amortisation of pre-1990 and early transition losses remained much more at the micro-economic level (i.e. enterprises and banks, or their shareholders).

This option has a clear link with the strategic choice not to engage structural adjustment in industry before the completion of privatisation. An open question is the possible link between these very specific pattern and the relatively late recovery in production and

labor productivity which did not start before the end of 1994. However, with regard to the future adjustment of Czech enterprises, this rather soft financial adjustment course has also strong implication for banks: as could be seen on Table 2, before 1995, on the aggregate level, even a fraction of *nominal* interest due by enterprise was ever paid on current revenue, a unique situation in Central Europe. This means that, other things equal, the underlying solvency of the enterprise and bank sectors has not been as severely tested in the Czech Republic as most other reforming economies.

This underlines the consequences on the aggregate policy framework which can derive from this alternative between a centralised and a decentralised financing options. Poland's experience with high inflation will probably have long-term, adverse consequences on savings behaviours. But, it has also made possible that a good part of past capital losses has already been absorbed, with the public debt now clearly on a downwards slope. Thanks to a rapid, real growth, which may have some link with past reform strategies, this economy is then probably by now more financialy stable than the Czech one. As the latter remains more vulnerable to outside shocks to the budget or to interest rates, future governments will be committed to much more financial orthodoxy: the expected benefits of financial orthodox on taxation, on financial intermediation or on public confidence in banks could be damaged if Czech enterprises eventually do not prove able to grow out of debt as well as the Polish State is now does[15].

Hungary

The destructive impact of a tight interaction between budgetary and financial dynamics in transition economies is most clearly exemplified by Hungary, a country which inherited a moderately indebted enterprise sector, a large public foreign debt but no internal State debt. Since 1992, quantity and price crowding out by the Budget has forced a massive transfer of resources from enterprises to the other sectors, *via* the banks. On average and on a net basis, between 1992 and 1995 (third quarter), enterprises have had to transfer annually 4.3% of GDP to the rest of the economy, evenly split between capital amortisation and real interests due. In other words the real sector has experienced a continuous, large-scale credit crunch since the beginning of reform.

A remarkable point is that this resource transfer should have reached a maximum of 8.1% of GDP in 1992, though *of course* it proved impossible to attain it, which means that a massive breach in the microeconomic discipline of payment occurred. There is little doubt indeed that, together with the 'institutional shock' brought upon that year by new banking and bankruptcy regulations (Bonin and Schaffer, 1995; Sgard, 1995a), financial distress in the enterprise sector played a critical role in the banking crisis which started in April 1992. Hence, in accordance with Kiralyi (1995), it is very probable that over the following months a « Fischer-type » debt-deflation cycle developed, whereby a large wave of enterprise bankruptcies further reduced the banks capital bases, as well as their ability, or willingness to lend. This situation of distress finance has progressively receded after the implementation of two bank recapitalisations, at the end of 1992 and

[15] Czech public authorities injected large amounts of funds in the commercial banks, through the Consolidation Bank; but as a proportion of total enterprise debt these represented a much smaller socialisation than in th eother countries. See: Capek (1994).

1993, for a total cost of 9% of GDP, or 80% of the total resources which enterprises should have transferred to banks during these two years. Since then, however, the underlying banking crisis has only slightly receded, though liquidity levels and enterprise failures have been brought back to more manageable levels. Real debt amortisation (or write-off) has continued at a sustained rate, with almost undiminished real lending rates[16]. Hence the overall pattern is that of a continuously shrinking banking sector, whose main functions are now to invest private deposits in Treasury Bills, to provide liquidity services to enterprises and households, while possibly, in some cases, contributing to the restructuring of loss-making SOEs.

To what degree does this extreme Hungarian experience remain mostly country-specific, and may not offer much to the more general understanding of the adjustment process of banks during transition? Certainly, a series of idiosyncratic factors can be identified, among which the refusal of a foreign debt write-off has probably been most damaging, due to the pressure on the savings/investment balance and to the implicit risk of a future State default. A more general lesson of this on-going, low speed bank crisis is how much a formally decentralised banking system, in a rather dinsinflationary macroeconomic environment, can (try to) extract enormous resources from the enterprise sector. Apparently, this comes as an answer to increasing solvency constraints, which, *inter allia*, contributes to increasing dramatically the incentives for a rapid portfolio shift towards high-yield, Treasury Bills. In this sense, large budget deficits have crowded out enterprises, but may also have made irrelevant to distressed banks any investment in the painfull accumulation of a new know-how. In an environment of high asymmetry of information and weak property rights, learning how to screen and monitor enterprises, would be simply an investment which does not pay of.

A corollary is that the tendancy for banks to function as quasi-fiscal agents in a transition context is even more stronger than expected. It was already mentionned that they have been instrumental in the initial inflationary redistribution of assets and debts, in the channeling of hidden subisidies to loss-making SOEs, or in forcing a State write-off of enterprises debts. In the present case, very high real interest rates and the distress amortisation of (real) credit by enterprises is even more significant as, apparently, a large part of these amortised liabilities in fact dated from before 1990 (Bonin and Schaffer, 1995). The implication is, at least on an analytical level, that a substantial part of them were allocated under soft solvency constraints, on dubious economic rationales and at a time when the price structure was highly distorted. Later on, in 1990-91, these past 'funding flows', as allocated on a quasi-fiscal basis, were forcefully rewritten as bilateral, decentralised debt contracts: from then, they should have derived a part of the enterprise revenue, even if on average there was there is no microeconomic reason for a real (adjusted) asset to produce a balancing flow of revenue. In this precise sense, servicing pre-1990 debt should be interpreted, from the point of view of enterprises, as just another, highly distortionary fiscal transfer, earmarked to the amortisation of the huge aggregate capital losses implicit in the transition process.

Let's be clear: in any case and in all countries, the non-performing debt of unadjusted or bankrupt enterprises has to be eventually financed by solvent agents, whose accumulation

[16] Real lending rates became negative during the first months of 1995, after the devaluation in March, but had already recovered to previous levels by the third quarter of that year (12% in real terms).

of own capital, or primary savings, are to be reduced proportionately. So, the critical issue is not that losses should be financed, but how the burden is to be shared, and which instruments should be used in order to do this. The Czech Republic has opted for a decentralised, financially orthodox strategy, while Poland massively socialised the older debt under the expectation that more solvent agents, including the State, would balance the long-term negative impact of large, initial inflationary transfers. Hungary then get the worst of the two worlds: it initialy refused to socialise pre-1990 debts, but was then unable to provide the kind of financial environment which would have allowed them to follow the Czech way. As both foreign and domestic net creditors escaped any form of capital levy, the financial burden fell upon present taxpayers and enterprises. The former now transfer a large part of their income to the State, at least as long as they are wage-earners, while the latter support large crowding out together with huge service payments on their pre-1990 debt. In-between, banks mostly transfer domestic savings to the State while fighting to stay afloat despite huge capital losses in the enterprise sector.

Slovenia and Estonia

The case of post-inflation Slovenia appears rather to that of Poland, with both an initial experience with high inflation and large fiscal imbalances in 1993 which imposed a negative transfer of resources to enterprises. The 1994-95 stabilisation was stronger than in Poland, though real lending rates (15% in 1995) and intermediation margins have not been reduced as rapidly[17]. This may imply that implicit microeconomic problems in the banking sector have not been wholly resolved, despite the large recapitalisation in 1993; such high levels of interest rates also put the current credit recovery under some shadow, as the implicit risks of adverse selection should be signficant in an environment with this still high asymmetry of information.

Estonia presents yet another pattern, as hidden redistribution of revenue remains comparatively large, whatever may be the disciplinary effect expected from the Currency Board adopted in June 1992[18]. Indeed, while budget discipline was strong since then, a considerable degree of financial repression has been observed, as real lending and deposit rates were constantly negative till 1995. The consequences have beeen twofold: on the one hand, firms have received substantial amounts of both new credits and inflationary transfers from households (estimated at an average of 1.4% and 0.3% of GDP respectively, between 1993 and 1995). But on the other hand, expectedly, the demand for money has remained very weak, so that money and credit markets have almost not developed since the economy was stabilised: domestic credit represented only 7.5% of GDP in 1995, against 7.2% two years later. This stands out in sharp contrast with the experience of the two other countries with high inflation records (Poland, Slovenia), where subsequent financial discipline has had a comparatively a much more positive impact. The interresting point is that, despite budgetary discipline and sharp disinflation,

[17] See: Mencinger (1993), and Ribnikar (1994).

[18] Since June 20, 1992 the Estonian Cown is pegged to the Deutsche Mark (1DM=8EEK) and all issuing of reserve money by the Central bank has to be 100% backed by foreign reserves. See: Bennett (1993), Estonian Academy of Sciences (1995).

banks under strong solvency constraints have been again functionning as quasi-fiscal agents, channelling resources to enterprises.

Considering all the difficulties encountered over the past years, and the many deep faultlines still witnessed in all banking sectors, an open question is whether banks still have room for learning new operating rules and competencies, which would allow them to build progressively of a new, performing financial intermediation mechanism. Or, conversely, is their a clear danger that they may remain for a long time in their present, intermediate position, channelling savings to the budget and working out bad loans, while ignoring the developments in the real (i.e. growing) economy. Although the question will probably remain unanswered for some time, indirect lessons from recent, large capital inflows towards the private sectors incline rather towards a pessimistic assesment.

5. A FUTURE FOR DOMESTIC BANKS IN EASTERN EUROPE? THE LESSONS FROM HIGH FOREIGN BORRONWING BY ENTERPRISES

Since 1994, Central European countries have witnessed a rapid increase in the absorption of foreign capital lent by the private sector, accompanied by varying amounts of direct investment, low public foreign borrowing if any, and relatively large current account deficits. This sharp turnaround, with regard to the situation prevailing in the early 1990's, has forced most Central banks to undertake large scale sterilisation. If much of these inflows has gone to short-term investments in local bond and equity markets, some has found its way through to enterprises, either *via* the resident banking system or directly from foreign lenders to the borrowing enterprises (in which case this capital flow is not registered in the domestic credit aggregates but only in the balance of payment). Available data from the Czech Republic, Hungary and Slovenia provide a measure of this recent trend (Table 5). Capital controls in the case of Estonia strictly limit foreign borrowing by the enterprise and banking sectors, whereas flow and stock data are not available for Poland[19].

From 1993 till September 1995, the direct foreign debt of enterprises has increased by respectively US$ 3,5 billion dollars in Hungary, US$ 3,2 billion in the Czech Republic, and US$ 520 million in Slovenia. Although these amounts do not represent exceptional macroeconomic magnitudes, they have borne increasingly on the financing of these economies, as well as on the adjustment of their domestic financial systems (Table 6): since 1994, their relative share in the total increase in enterprise gross debt was close to 50% in Hungary, and remained around 30% in the Czech Republic and Slovenia (domestically intermediated debt included; securities and domestic inter-enterprise debt excluded)[20]. More diffentiated patterns emerge as regard the relative share of local

[19] Morever, the very large inflows linked to border trade with Eastern Germany and the CIS forbides any interpollation on the basis of banks balance sheets, flows of public debt and porfolio investments.

[20] Here and in the following discussion, only stocks of loans are considered, as flows of equity and direct investments are no taken into account.

Table 5
Foreign Capital Inflows Towards the Private Sector

(in billion US$)

	1993	1994	1995
Czech Republic			
Net increase in res. entreprise foreign liabilities	753	1918	466
Net increase in res. comm. banks foreign liabilities	-10	387	1335
Direct investments	744	995	2458
Hungary			
Net foreign borrowing by res. enterprises	331	1036	819
Net foreign borrowing by res. banks	45	286	185
Direct investments	2360	1183	799
Slovenia			
Net increase in res. entreprise foreign liabilities	-19	338	469
Net increase in res. comm. banks foreign liabilities	-434	-1043	-1259
Direct investments	112	88	124
Estonia			
Net foreign borrowing by res. enterprises	16	7	-13
Net increase in res. comm. banks foreign liabilities	-24	94	-33
Direct investments	170	217	154

Source: National Banks.

currency credit in this total, which should reflect more directly macroeconomic and fiscal conditions: as the situation has been deteriorating steadily in Hungary, the domestic market recovered in Slovenia, as the nominal foreign currency debt owned to local banks was steadily reduced; the relative decline observed in the Czech Republic is indeed more surprising considering the relative stability and expansion of local markets and banks. Estimates or published data on actual stocks of foreign liabilites confirms these trends[21]. The recovery in Slovenia is confirmed on an balance sheet basis, as, from a much higher starting points, both other countries witnessed a relative decline in their local currency market. With more than half of enterprise liabilities now denominated in foreign currency, the sharp trend observed in Hungary is impressive, though not totally surprising. The Czech case is apparently safer although the trend towards some marginalisation of local banks since late 1993 is quite strong, indeed.

What are the possible factors for this apparently increasing pressure exerted on domestic banks by foreign lenders?

[21] For the Czech Republic and Slovenia stocks of debts are accounted for on a pure historical basis: the almost complete stability of nominal foreign exchange rates practically limits valuation effects to cross-variations between the international currencies in which foreign liabilities are denominated. Different hypothesis on initial level of direct foreign indebtedness by Slovenian enterprise lead to different estimates after 1992.

One immediate candidate is the high interest rate differentials which, in a context of appreciating real exchange rates, have created strong incentives to borrow abroad, including for purly speculative motives. However, two reasons should contribute to limiting the impact of this factor: first, a large part of short-term capital inflows originate from financial investors which, clearly, would have non reason to rely upon a non-financial local intermediary. Then, as shown in Table 6, large *ex-post* premiums have only been the rule, over the last years, for financial investments in Slovenia, where the relative share of direct foreign borrowing has been relatively stable since late 1993.

Otherwise, good bets have been limited to recent dollar-investments (contrary to DM ones) in Poland and in the Czech Republic, whereas successive devaluations would have caused substantial losses on investments in Hungarian.

Table 6
An Estimate of Enterprises Borrowing Structure

	1993	1994	1995
Czech Republic			
Domestic currency	80	54	46
Dom. borrowing in foreign currency	8	9	31
Direct foreign borrowing	12	37	23
Total	100	100	100
Hungary			
Domestic currency	46	37	-13
Dom. borrowing in foreign currency	20	14	61
Direct foreign borrowing	34	49	52
Total	100	100	100
Slovenia			
Domestic currency	78	72	84
Dom. borrowing in foreign currency	-2	-1	-10
Direct foreign borrowing	24	30	26
Total	100	101	100

Domestic borrowing are derived from Banking Surveys; flow data on direct foreign borowing are provided by the Hungarian National Bank; corresponding figures for the Czech Republic and Slovenia are derived from stock sources.

This account implies that other, more micro-economic factors are probably also at stake. Three main explanations can then be put forwards, though the available information do not allow for a clear discrimination between them. One hypothesis is that a large part of foreign direct funding is in fact made up of enterprise-to-enterprise loans, linked to various forms of trade finance and subcontracting agreements[22]. This explanation would relieve the local banking sector of some causal responsibilities, although these (non-intermediated) funding flows also have opportunity costs for the lending partner.

[22] Available data do not allow to differenciate between firms and enterprises on the supply side.

Another possibility is that foreign banks consider that they face less risks (and potential bankruptcy costs) when lending to Eastern European enterprises as opposed to lending to commercial banks, which would be exposed to higher insolvency and systemic risks. This diversion effect would imply that the asymmetry of information is higher for banks than for enterprises, which would not be good news with regard to their own stabilisation and reform proceses.

This leads to the third possible factor, which partially takes stock of the earlier discussion on the systemic impact of distress adjustment by *inter allia* Hungarian banks. The basic contention is actually straightforward: Eastern European enterprises which can directly borrow abroad should either have exceptional credentials of their own, or have an active, foreign shareholder who may provide some form of guarantee. But in both cases, performing local banks should be able to collect this information and monitor loans at much lower costs than, say, a Frankfurt-based competitor. In other words, the data in Table 5 would suggest that a credit market may be developping between domestic enterprises and foreign agents, more or less as a substitute to the domestic one. To put in a nutshell, this might be a partial answer to the puzzle of a stagnation in real enterprise credit at a time o fsustained industrial recovery and rather low real interest rates.

This brings back the question of risk aversion, in a situation of high assymetry of information, as a possible cause weighing against the development of a performing market structure. Generally, the litterature on credit markets, whether on Western, developing, or reforming economies, emphasis its impact supply-side: banks ration credit to enterprises when they fear that the assymetry of information may be tactically exploited by the borrower in order to hide a competitive and financial situation which may be much more risky than assumed. There is little doubt that this weighs heavily in Eastern and Central Europe (Cornelli et alii, 1995): it is often said, not only as a joke, that in the present context of high growth, rapid gains in productivity and high assymetry of information, an enterprise which asks for a bank loan just provides the best available information that it should *not* receive it. However, this says nothing of the enterprises who do not demand loans, when that would be perfectly rational for them as for the banks to contract: such a segment of enterprises certainly exists. This suggests that high risk aversion may be also a decisive factor on the demand-side of the credit market: profitable, growing enterprises may massively refuse to finance investment with domestic credit, due to the bad track-record of commercial banks.

The story would be the following: disinflation, rapid steps towards commercialisation and increasing solvency constraints, starting around 1992, have precipitated a period of distress adjustment by commercial banks; in some cases, this crisis was also sharply increased by fiscal imbalances which may have indirectly increased capital losses. Large variations in real interest rates and indiscriminate curtailment of rolled-over, short-term debt were then a standard answer to the squeeze. But this short-term, rapid adjustment to evolving microeconomic constraints may have also severely damaged the prospects for a future recovery of the domestic credit market: with hinsight to the bad track-record of the banking industry, profitable enterprise would be reluctant to expose themselves again to comparable shocks in the future.

Hence a rather pessimistic hypothesis: Eastern European credit markets may be trapped in a low-level equilibrium (though unevenly low among countries) where both banks and enterprises would not be able to establish a track-record which would allow the other party to over-come risk-aversion. This would then deprive banks of the possibility to accumulate a new screening and monitoring know-how, so as to progressively reduce the assymetry of information.

6. CONCLUSIONS

Summarising the previous analysis, Hungary illustrates how the refusal to default on inherited financial liabilities, through a foreign debt write-off or more inflationary financing, has caused large-scale disruption in microeconomic discipline without contributing clearly to more confidence in the domestic banking sector. On the other hand, the Czech Republic opted for a much softer approach to enterprise financing, made possible by stricter fiscal discipline; the implicit gamble is that a slower, long-term consolidation would not be disrupted by exogeneous shocks and would deliver more stability, more savings and more growth eventually. The Polish experience, and to a lesser extent that of Slovenia, fall between these two opposite cases and should probably be considered as the closest most transition economies can come practically to an optimal trade-off between early default on debt and ulterior financial orthodoxy; or between discrete financial policies and the progressive stabilisation of a new, disciplined regime. Although its experience is still recent, Estonia may provide a counter-example, as the rule-based regime implied by the Currency Board has been accompanied by large-scale financial repression and massive transfers of revenue from households to enterprises.

A broader conclusion is that whatever the very large divergences among countries may be, none has yet been able to rebuild a performing credit intermediation system, which can provide a noticeable contribution to enterprise growth. Apparently it has proved extremely difficult for banks to learn how to work out old bad loans, and how to allocate new ones efficiently at one and the same time. It is argued here that this is probably partly due to the adverse environment of the early years of transition, but also to the large, quasi-fiscal functions which banks are still fullfilling, even in a stabilised, disinflationary macroeconomic framework. The rapid increase in direct foreign borrowing by enterprises then suggested that a common ground to the present credit crisis, in most if not all transition economies, may be the difficulty for both banks and enterprises to overcome risk aversion. As both categories of agents have been engaged since the early 1990's in a difficult, often chaotic process of adjustment, both would lack a track-record strong enough to develop a domestic market for credit contracts.

Whatever the relative weight of each possible explanation in the present situation of a low level equilibrium of credit markets, long term damaging consequences may developp as they would face a process of continuous shrinking. As the most dynamic exporting firms would take the full advantages of freer capital movements, domestic banks may be progressively restricted to funding the State and the sector of sheltered enterprises, as well as providing immediate liquidity services to the population. Such activities however are characterised by slow growth, lower profit and less potential for learning-by-doing. Although this issue does not fall within the scope of this paper, the capacity of domestic capital markets to provide an alternative source of finance may be doubted, in the absence of strong domestic financial institutions. As for the economies as a whole, the

most probable consequence in this (arguably pessimistic) scenario would be less capacity to mobilise domestic savings, an increased segmentation among enterprises according to their financing sources, and an excessive exposure of the private sector to foreign exchange risks. A policy-oriented conclusion would be that a rapid reduction in capital controls, when domestic banks have not yet learned how to intermediate domestic savings efficiently, may have long-term negative consequences on the potential growth rate of national revenue.

ANNEX

Hungary

- Monetary data series: National Bank of Hungary (*Monthly Report, Annual Report*); changes intervened in the first quarter of 1993 have been retroacted till 1989; debt reductions of firms carried out at the time of capital refunding in December 1992 are substracted from stock changes and from real credit data series (they do not appear as firm amortization).
- Interest rates: average rates of less than one year maturity in four major commercial banks, National Bank of Hungary (*Monthly Report, tables IV/7).*
- Public finances: National Bank of Hungary (*Annual Report*) and Kopint-Datorg.
- Industrial production, employees, wages: OECD (*Short term Economic Indicators, Economies in Transition*).
- Other macroeconomic series (Table 1): BERD (*Annual Report*), IMF *(International Finance Statistics* and *World Economic Outlook*).

Poland

- Monetary data series: National Bank of Poland (*Information Bulletin*), GUS (*Statistical Bulletin*) and IMF *(International Finance Statistics)*. Debt-equity swaps intervened in the time of capital refunding in 1993-1994 could not be substracted from credit data series.
- Industrial production: OECD (*Short term Economic Indicators, Economies in Transition*).
- Employeds, wages, prices: GUS (*Statistical Bulletin*).
- Other annual macroeconomic series (Table 1): BERD (*Annual Report*) and IMF *(International Finance Statistics* and *World Economic Outlook*).

Czech Republic

- Monetary data series, interest rates: National Bank of the Czech Republic (*Quarterly Report, Annual Report).* A balanced average of interest rates for private and public domestic debtors was used.
- Industrial production, employees, wages: OECD (*Short term Economic Indicators, Economies in Transition*).
- Other macroeconomic series: WIIW (*Monthly Report*), BERD (*Annual Report*) and IMF *(International Finance Statistics* and *World Economic Outlook*).

Slovenia

- Monetary data series, prices, interest rates, public finance, external debt: Bank of Slovenia (*Monthly Report, Annual Report*).
- Industrial production, employees, wages: WIIW (*Monthly Report*).
- Other annual macroeconomic series: WIIW (*Monthly Report*), BERD (*Annual Report*) and IMF *(International Finance Statistics* for data before1992).

Estonia

- Bank of Estonia *(Monthly Bulletin)*.
- OECD (*Short term Economic Indicators, Economies in Transition*).

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