WORKING PAPER SERIES

BUDGET CONSTRAINTS OF BULGARIAN ENTERPRISES, 1996–1997

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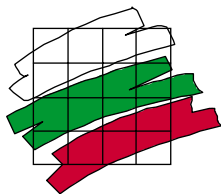
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1.   INTRODUCTION

In 1996 and early-1997, the Bulgarian economy experienced a most severe and acute crisis which resulted in a sharp deterioration of all macroeconomic parameters. GDP decreased by about 11%, the price index rapidly increased and the economy was in danger of losing control in a hyperinflationary spiral in the first two months of 1997. Real incomes contracted drastically and the country's average wage hit levels five times lower than the early-1996 level. Economic agents lost confidence in the banking system and the national currency which resulted in a cash run on banks and overnight depreciation of the lev. The forex reserves of the Central Bank hit critical levels and there were all the pre-conditions necessary for another moratorium on the country's foreign debt.

The parameters of the 1996 economic crisis are in many ways comparable with the economic parameters of the 1990 crisis, i.e. in the pre-stabilisation period in Bulgaria. On the other hand, the absence of any market principles and mechanisms of operation of the economic system brought about both crises. The 1990 crisis was the logical aftermath of the imbalances/disequilibria accumulated under the command economy. The 1996 and early-1997 crisis was triggered by the delay and suspension of an otherwise stalled restructuring of the real[1] and banking sectors of the economy. There was no large-scale privatisation of the state sector, nor were there established major market institutions such as a stock exchange, for instance, and those already in place (the Commission on the Protection of Competition) were inefficient. The judicial system, however, also failed to strictly observe and implement all legal acts and regulations bearing upon the collection of payables in arrears and bankruptcy procedures. Moreover, the then legal framework was far from being perfect and hence efficient. Thus, the 1996 crisis proved to be the immediate effect of economic developments that had taken place for at least three years in a row.

Many analysts argue that the real sector of the economy had been functioning under soft budget constraints in the pre-1996 crisis period. There are different ways to soften the budget constraint: by extending credit funds from the government budget to firms, commercial banks and other institutions in dire financial straights; by an increase in tax arrears, etc. It can be assumed that the effect of state budget subsidies on soft budget constrains in the economies of transition is not as strong as it was under the command economy. Budget subsidies are essentially price subsidies for a small number of goods and services in the public transport, agricultural and electric power generation sectors, a phenomenon well-known in many developed market economies.

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[1]   The „real sector" is defined as all non-financial enterprises outside the budget sector.

The crisis in the banking sector and the enormous budget deficit in 1996 were also generated by the absence of institutional and legislative reforms in the economy. 1996 also witnessed a series of closedowns of both the largest private bank (First Private Bank and TSBank) and state-owned commercial banks (Mineralbank, the Economic Bank and Balkanbank). Bankruptcies in the state-owned sector were mainly brought about by severe problems deriving from the centrally planned economy while the winding-up of the private banks had to do with the aggressive credit policy they were pursuing and the extension of non-collaterilised loans. It can therefore be said that these institutions had been used by the state as a major instrument of ensuring soft budget constraints for other firms.

The government of the time tried to bail out and rescue, or at least postpone, the bankruptcy of some enterprises by transforming a number of quasi-fiscal deficits into a government budget deficit[2]. All this resulted in a sharp and enormous increase in the budget deficit to be later financed by printing more and more money.

This paper examines the major financial flows between the real sector and other sectors of the economy as well as the financial flows within the sector itself. In doing so, we shall answer the question of whether or not the real sector of the economy was functioning under soft budget constraints during the crisis period. Our effort is further aimed at finding the ways in which it functioned under soft budget constraints as well as assessing the contribution of the real sector to the aggravation of the 1996 crisis.

Part 2 provides a detailed description of the methodology and data used in this research paper. Part 3 examines the financial flows in the real sector itself, i.e. the so-called trade credit and payables in arrears to suppliers, while Part 4 focuses on the financial flows between the real sector and the budget. Part 5 studies the financial flows between the real sector and the banking system. Part 6 tackles the question whether or not firms could have achieved an optimal structure of their capital. Part 7 presents a summary of the conclusions made. ❑

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[2] *A number of examples can be given, one of them being the 100% state insurance of deposits with banks under bankruptcy procedures. The regulation was revoked in 1997.*

2.   DATA AND METHODOLOGY USED

The bulk of this research is based on data on the annual balance sheet reports and income statements of:

- 9596 state- and municipally-owned enterprises (1995 and 1996);
- 32 751 private firms (1996);
- 44 469 enterprises (1997).

Having in mind the number of firms registered in Bulgaria as well as their distribution by type of ownership, it can be assumed that the analysis has covered almost all state-owned enterprises (SOEs). It is, however, difficult to estimate what part of the private firms in the country are covered by the analysis, for it is not clear how many of the firms registered under BULSTAT have been actually working. The scope of the analysis covers about 10 to 15% of private firms. Most probably, large and medium-sized enterprises from both the public and the private sector have been entirely covered while those left out of consideration are almost entirely small-sized firms. There is a high level of confidence in assuming that the firms left out of the samples analysed have indeed operated under hard budget constraints. Hence, they were indifferent to the problems tackled here.

The legal requirements regarding the use of statistical data have imposed certain restrictions on the research. Thus for instance, we could not construct reliable enough variables for the purposes of the regression analysis in Part 6 that could be estimated for two years in a row. This in turn made us rely on preliminary assumptions long before the analysis was begun.

Certain other parts of the research draw upon data of the NSI (GDP data) as well as of the Ministry of Finance (implementation of the budget) and other sources of information.

Furthermore, the nominal change in the financial flows between the real sector and other sectors of the economy has been analysed. This is case in Part 5 where the nominal financing of enterprises by commercial banks has been examined. In most cases, however, the focal point of our analysis has been the change and direction of the financial flows between the real sector and other sectors of the economy at constant prices, i.e. at their real-term values. Where parameters represent stock variables as of a certain period (end-year), their nominal values have been deflated by the PPI as at end-year (PPI December-December). Where the parameters represent flow variables (in all cases, the period spans over a whole year), their nominal values are deflated by the annual average PPI in the corresponding year. The extremely high price dynamics over the period concerned have largely impeded the analysis. ❑

3.   TRADE CREDIT AND INTERFIRM PAYABLES

The nature of trade credit in transition economies is still debatable. Some researchers may argue that there are very large stocks of trade credit and overdue trade credit, also known as „inter-enterprises arrears", in these economies and therefore they can be regarded as an example of weak financial discipline and a source of soft budget constraints[3].

Other analysts tend to back up the opposite argument saying that suppliers even in the transition economies impose hard budget constraint on customers. They also argue that total trade credit in the developed economies is not larger than total trade credit in the transition economies. The same holds true of overdue trade credit, or trade credit in arrears[4].

Table 3.1

Trade Credit in Some OECD Countries and Transition Economies[5] (end-year)

Country	Year	Total Trade Credit (as % of annualised GDP)
Czech Republic	1994	49
Hungary	1993	24
Kazakhstan	1996	25
Poland	1995	15
Russia	1996	27
Finland	1990	20
France	1990	38
Sweden	1990	21
UK	1990	209
Bulgaria	**1995**	**14**
Bulgaria	**1996**	**22**
Bulgaria	**1997**	**19**

Source: Schaffer (1997), NSI, AEAF.

It is normal for suppliers in the developed market economies to extend credits to their customers, i.e. to wait for customers to pay for the goods already supplied and received rather than ask them to pay for them in advance. In Bulgaria, however, the law does not protect creditors and lenders (commercial banks or suppliers) and their rights in

[3]   See Kornai (1993).
[4]   For further detail, see Schaffer (1997).
[5]   As percentage of GDP, calculated at end-year prices in the corresponding period. In the Bulgarian case, at end-1994 prices.

the best and most appropriate way possible. Thus, Bulgarian suppliers prove to be more cautious in extending, let alone increasing, trade credit to buyers. As shown in Table 3.1, the level of total trade credit in Bulgaria remained close to the levels of trade credit in other transition economies and the developed market economies. Its 1996 increase of 8 percentage points was mainly due to the collapse of the banking system in end-year, checking and blocking entirely the country's settlement system. This undoubtedly impeded payments among enterprises and triggered a trade credit increase. At the same time, this was a period of most severe and acute economic crisis when enterprises minimised their business activity as much as possible, which in turn may have been the reason behind the non-payment of their loans to lenders and creditors.

It is also noteworthy that trade credit was concentrated in a very small number of enterprises. In 1996, the ten firms with the largest in amount payables to suppliers accounted for 48% of all payables to suppliers in the sample[6]. The bulk of the firms that have extended the largest amounts of trade credit to their customers were in the wholesale trade and construction sectors. In either case the relatively high level of payables to suppliers could be explained by the very nature of the business. In 1997 there was a slight degree of deconcentration of trade credit. On the one hand, the share of firms with no receivables at all from customers was steadily declining, which was partly due to the higher degree of predictability of the macroeconomic environment in the country and the relatively better operating system of settlement of payments, and hence restored confidence among economic agents. On the other hand, the ten enterprises with the largest receivables from customers accounted for about 35% of the total receivables of the enterprises in the sample.

And yet, in 1997 there was another decrease in total trade credit relative to the annualised GDP. Again, it reached levels that were normal for developed market economies. In end-1997, real trade credit volume (deflated by the PPI at end-period) decreased by 11.8% from a year earlier, outstripping the real-term decline in the 1997 GDP.

Trade credit stock in 1995 corresponded to an average payment period of 1.25 months. In 1996, delayed payments from the sample enterprises to suppliers slightly increased to 1.3 months but in 1997 when the crisis in the banking sector subsided and the settlement system had again started functioning, the average delay in payments to suppliers steadied at a level of 1.06 months. Similar delays in payments are considered to be the normal practice in other countries and are usually provided for in the contracts negotiated between suppliers and buyers. Even if the usual delay in the repayment

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[6]   It is worth mentioning that the total number of firms in the sample exceeded 44 000. Or, only 0.2% of the enterprises held about half of the receivables from clients. Obviously, the rest of the enterprises either did not extend trade credits to their clients (about 60% in 1996 and around 50% in 1997) or the amounts of trade credit extended were within the normal limits and credit relationships between suppliers and buyers.

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period had been shorter (say a month or so), some buyers would have tended to further delay their payables due by another month or two. They, however, paid in the end.

Even when some firms placed their customers under soft budget constraints, the reason for that was to be found with the government rather than a particular enterprise. The government tolerated directly or indirectly the delay in the payments on the delivery and supply of gas, petroleum products, coals, electricity and heating, etc. And this was only possible because all firms producing and supplying these goods and services were not only SOEs but state monopolists as well. Such soft constraints were imposed mainly on other SOEs in deplorable financial state on the pretext that they were all strategically important to the Bulgarian economy. The government tried to bail out and rescue chronic loss-makers via other economic agents instead of resorting to other stabilisation measures like privatisation, liquidation or removal of price controls on their products.

Why are suppliers in Bulgaria not inclined to expand trade credit to their customers? We should first note that the Bulgarian Commercial Code has not been properly implemented and has not protected lenders and their rights appropriately in collecting receivables from their debtors. This has further made economic agents (suppliers) all the more reluctant to extend credit funds in any form. Second, most Bulgarian firms have little and low liquidity, which in turn makes the increase in trade credit volumes rather limited. The low credit activity of commercial banks and low liquidity of non-financial enterprises in Bulgaria are largely interrelated and reduce the chances for the real sector of registering greater economic growth. To this we can add the liabilities of enterprises to their staff. In end-1996, the stock of liabilities to employees decreased by 24.4% relative to end-1995. By sectors, the indicator stepped down by 29.1% for public firms and by 16.8% for all private firms (deflated by the PPI, end of period). This was mainly due to the sharp shrinkage in real incomes in end-1996 rather than a delay in the payment of wages and salaries. Public firms resorted to this source of financing their activity to a much greater degree than private firms. In end-1996, about 63% of public firms delayed the payment of wages and salaries by more than a month and accounted for 97% of total liabilities to staff in the public real sector. At the same time, only about 26% of private firms delayed the payment of monthly salaries by more than a month, which represented about 91 % of total liabilities to employees in the sector.

In end-1997, liabilities to enterprise staff stepped up to 5% than a year earlier (deflated by the PPI, end of period), which indicated that firms made a better use of this source of financing their business activity, compared to 1996. 1997 changes in liabilities to enterprise staff cannot be thoroughly examined by sectors because the year witnessed relatively great restructuring in the ownership of assets and there proved to be considerable incompatibility and discrepancy in the samples of firms by type of ownership.

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4. FINANCIAL FLOWS BETWEEN THE REAL SECTOR AND THE BUDGET

Budget Subsidies

Financial flows between the real sector and the budget include government budget subsidies and the taxes paid by firms. The government budget may also extend temporary financial support to some firms which can be regarded as a form of credit lending of the government to the real sector under favourable terms and conditions. If not paid back when due, this form of government support may turn into a subsidy rather than a credit. Unfortunately, data on temporary financial aid from the budget are too scarce to examine its nature in detail. According to the annual balance sheets of enterprises, state aid from the budget in 1996 amounted to about 13% of total subsidies while in 1997 this ratio declined to some 10.5% which accounted for barely 0.1% of GDP in both years. This part of the financial flow from the budget to firms will not be discussed further in this paper.

Following the outset of the transition period, the budget subsidies/GDP ratio drastically declined compared to the ratio levels under the command economy. Prices under the centrally planned economy were administratively set, and budget subsidies were one of the major instruments via which the then price system fulfilled its „social" functions.

Radical price liberalisation was one of the first steps undertaken towards the transition to a market economy. The government has thus reduced the need for budget resources used as price subsidies for certain goods and services. Following 1994, the scope of price regulation[7] was gradually increasing. Nevertheless, the rate of budget subsidies as percentage of GDP continued to decrease until 1997 mainly due to two reasons:

▮ As a result of the enormous external debt burden, all other budget expenditures had to be reduced to minimum. Furthermore, in 1996 the government undertook some measures that led to a sharp increase in budget expenditures, hence in the budget deficit (e.g. the programme for the rehabilitation of the banking system that failed and the 100% deposit insurance in banks under bankruptcy procedures). This in turn reduced any possibility of the non-interest expenditures increasing.

▮ The government was making continuous attempts to finalise different agreements with the international financial institutions (International Monetary Fund (IMF) and The World Bank (WB)) to finance the country's foreign debt. However, the cutback in budget expenditures, budget subsidies in particular, was a major requirement to be met.

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[7] *For more detailed information on the scope of price regulation, see the 1994 and 1995 Annual Reports of the Agency for Economic Analysis and Forecasting, as well as Petrova, Stoyanova and Gueorguiev (1996).*

Table 4.1

Budget Expenditures and Subsidies (as % of GDP)

Year	Budget Expenditures	Budget Subsidies
1989	58.5	15.5
1991	54.7	4.0
1992	46.0	1.8
1993	50.3	2.2
1994	47.6	1.4
1995	42.9	1.1
1996	43.6	0.8
1997	39.4	1.1

Source: NSI, Ministry of Finance.

The increase in budget subsidies as percentage of GDP in 1997 was mainly due to the latter's decline. It is also noteworthy that subsidies to non-financial enterprises stepped up by about 77% in real terms as well (deflated by the average annual PPI) and surpassed their 1995 level (at constant prices) by about 18%. If we draw upon data on budget subsidies from the balance sheets of firms, we shall see that subsidies went up by only 39% (at constant prices) in 1997, on a year earlier. In 1996, the finical flows from the government budget to firms declined substantially in real terms. In 1997, however, they increased again to steady at their pre-1997 crisis level.

Budget subsidies in the period considered were essentially targeted towards certain sectors and industries such as railway and public city transport, the energy sector (heating and coal mining), catering, etc. It can be assumed that budget subsidies were extended to support economic activity other than the activity related to general government and public services (education, health care, science, etc.). Over the 1992-1996 period, about 90% of all government subsidies was extended to the industrial (energy) and transport sectors. The substantial 1996 reduction in budget subsidies was mainly due to the fact that electricity was taken out of the price subsidy list. This was one of the major requirements of the World Bank that the Bulgarian government had to meet before being given another credit. Budget subsidies for postal and telegraph services increased in 1995, reflecting the attempts of the government of the time to intervene in price setting. According to preliminary 1997 GDP data of the NSI, more than 50% of total budget subsidies was extended to the sectors of transport and telecommunications and about 39% to the manufacturing sector.

Table 4.2

Distribution of Budget Subsidies by Sectors (as % of total)

	1991	1992	1993	1994	1995	1996	1997
Manufacturing sector	93.6	38.0	52.4	44.5	47.7	37.3	38.4
Construction	0.0	4.0	2.6	0.0	4.6	3.6	3.9
Transport and communications	1.5	49.6	39.7	46.5	41.1	50.8	53.4
Trade	4.8	8.1	3.6	7.7	5.9	5.9	3.1
Other	0.0	0.3	1.7	1.2	0.8	2.4	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NSI.

Over the 1995-1997 period, the level of budget subsidies amounted to about 1% of gross value added, or it remained close to the level of budget subsidies in other transition economies and EU member states. It can be therefore assumed that budget subsidies were not the mechanism imposing soft budget constraints on the prevailing proportion of enterprises in the real sector. Budget subsidies were concentrated in a very small number of SOEs.

Table 4.3

Distribution of Budget Subsidies and Revenue of Enterprises by Subsidy Rate
(Share of Groups as % of Total)

Subsidies/ Revenues (%)	1995			1996			1997		
	# of Firms	Revenues	Subsidies	# of Firms	Revenues	Subsidies	# of Firms	Revenues	Subsidies
0	89.4	85.1	0.0	73.0	79.5	0.0	90.6	78.6	0.0
0 – 1	6.7	13.3	10.7	6.1	14.4	1.6	3.4	15.5	0.4
1 – 5	2.9	0.8	10.7	14.8	2.6	8.7	1.8	1.0	3.3
5 – 25	0.7	0.6	37.7	5.4	2.8	40.2	3.0	4.0	47.9
> 25	0.3	0.2	40.9	0.7	0.7	49.5	1.2	0.9	48.4
All firms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NSI.

Table 4.3 represents the distribution of firms by the share of budget subsidies in their total revenues. As budget subsidies to the private sector were rather negligible amounting to a bare 0.9% and 0.5% of total budget subsidies in 1996 and 1997, the sample covers only public enterprises with a predominant share of state or municipal participation in their capital.

Over 90% of public firms did not practically enjoy budget subsidies (budget subsidies amounted to less than 1% of their revenues). They accounted for about 95% of the sample public firms' revenues. At the same time, the firms that were granted about 90% of total budget subsidies in 1996 amounted to 6% of all public firms in the 1996 sample and to 4% of the 1997 sample firms, registering less than 5% of revenues from sales. If we add to this all private firms which are not covered by the analysis, the number of subsidised firms would be almost negligible.

It is noteworthy that the share of public firms granted subsidies of over 1% of their revenues increased in 1996 on a year earlier. Most probably this increase reflected the enlarged scope of price regulation in 1996. One of the first and most important steps undertaken by the new government was to liberalise the prices of as many goods and services as possible.

Table 4.4

Concentration of Budget Subsidies in the Largest Subsidy Recipients
(as % of Total Budget Subsidies Extended)

	1995		1996		1997	
	S*	R*	S*	R*	S*	R*
5 firms granted the largest amounts of S	61.1	0.6	56.9	1.8	67.0	3.0
10 firms granted the largest amounts of S	67.9	4.3	68.5	2.4	77.2	3.7
25 firms granted the largest amounts of S	79.7	4.7	78.6	3.0	87.8	4.8
50 firms granted the largest amounts of S	87.6	10.5	82.3	3.2	92.7	5.3
100 firms granted the largest amounts of S	92.7	11.3	86.5	5.2	96.8	5.7

R* = revenues;
S*= subsidies.   **Source:** NSI.

Table 4.4. best reveals the concentration of budget revenues. In 1996, the five largest recipients of budget subsidies used 56.9% of their total volume while the 50 largest recipients utilised over 80%. At the same time, the volume of revenues collected by the same firms accounted for about 2% and 3% of total revenues of firms.

In 1997, their share in the subsidies provided to the sample firms increased by about 10 percentage points in both cases while their share in total revenues had risen by about 1 to 2 percentage points. This rise was brought about by the privatisation of some of the firms in the sample in 1997, which increased the burden of each of the remaining sample firms. The largest subsidy recipients were firms producing heating and electricity as well as enterprises in the transport sector. As for the group of the 25 largest recipients of budget subsidies, 8 of them were from the transport sector (railway and city transport) and another 12 firms were in the power generation sector (mainly heating and electricity).

Data on budget subsidies (including concentration and business line target) in the Bulgarian economy has by and large overlapped data from the front running economies in the transition period[9]. The volume of budget subsidies in the Czech Republic, Poland, Hungary and Slovakia over the 1992-93 period resulted from the scope of price controls retained and were mainly directed to a very small number of business and economic activities, as was the case with the Bulgarian economy. Even at that early stage of the transition period, budget subsidies were granted to only few industries. Polish and Czech firms enjoying budget subsidies that comprised less than 1% of their revenues in 1991 and 1992 amounted to about 95% of all manufacturing enterprises, which in turn indicated that the manufacturing sector in these countries was liberalised to a greater degree and much earlier compared to Bulgaria (four years later). At the same time, the concentration of budget subsidies was smaller, compared to Bulgaria. The 25 largest subsidy recipients in Poland in 1991 accounted for 52% of the total subsidies extended while this share in the Czech Republic hit a much higher level of 61%. The 25 largest Bulgarian recipients of budget subsidies over the 1995-1997 period accounted for 80 to 88% of the total subsidies extended and paid. Therefore, it can be assumed that relatively small (in amount) subsidies were provided to a relatively great number of firms (as compared to their total revenues).

Taxes Paid and Tax Arrears

According to 1996 data of the Finance Ministry on the implementation of the government budget, tax revenues fell by about 21% at constant prices (deflated by the average annual PPI) on a year earlier. This fall was larger than the decline in the country's economic activity in the same year, as gauged by the decline in real GDP. The economic crisis was one of the key factors accounting for the tax revenue decline but tax collection had ostensibly deteriorated as well. Thus for instance, private as well as public companies improved their financial results at constant prices in 1996 on a year earlier while profit tax revenues from non-financial enterprises registered a real-term drop of about 9%. The decline in revenues from VAT, excises, etc. was much sharper than the decline in real GDP, which in turn indicated that the deteriorating economic activity in the country was not the only reason behind the drastic 1996 fall in the real tax revenues of the government budget. 1997 witnessed an increase of over 10% in the real tax revenues of the government budget despite the decline in GDP registered in the same year. Profit tax revenues from non-financial enterprises exceeded 35% at constant prices. Most probably, tax collection in 1997 improved on a year earlier as a result of the macroeconomic stabilisation of the country and the resolution of the political crisis.

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[9]   *For a more detailed analysis of the problem, see Schaffer (1995).*

Table 4.5

Ratio of Tax Arrears of Non-Financial Enterprises
(to the National Social Security Institute (NSSI) included) and GDP (at December 1994 prices)

	1995	*1996*	*1996*
Tax arrears/GDP (%)	*11.5*	*8.4*	*6.7*

Source: NSI, AEAF.

The change in tax revenues at constant prices was largely due to the price dynamics especially in the second half of 1996 and early-1997. If we examine the dynamics of tax liabilities of non-financial enterprises as percentage of GDP, we can see that this ratio was steadily declining over the 1995-1997 period. If we assume that tax liabilities as percentage of GDP fluctuated about 0% at the end of the command economy era (end-1989), we can estimate that the annual financial flow from the budget to firms steadied at about 2% of GDP over the 1990-1995 period. This implies that the financial flow, deriving from the increase in tax liabilities was approximately equal to the financial flow from the government budget to firms, generated by direct budget subsidies. The bulk of tax liabilities of firms could also be treated as subsidies (especially the liabilities of public firms), as they were unlikely to have been paid in full. It may also be assumed that in most cases (e.g., privatisation of firms where investor's interest was flagging) the liabilities of many firms were written off. Tax revenues from tax arrears in previous years amounted to about 30% of firms' tax liabilities in end-1995 while their share in 1996 further decreased to 11%. In 1997, however, the financial flow from the budget to non-financial enterprises hit a negative level (in real terms) due probably to the improved tax collection and the fact that the economy was beginning to recover from the political and economic crisis. In 1997, firms' tax liabilities (including liabilities to the National Social Security Institute) decreased at constant prices to fall by 12.3% in end-year, relative to end-1996 (deflated by end-of-period PPI).

The problem of tax arrears of firms is crucial to the transition economies. Schaffer (1997)[10] argues that in the rapidly reforming CEECs tax arrears are the key means of easing and softening budget constraints and one of the key means of softening budget constraints in the slower reformers. Tax arrears include only the tax liabilities accrued and made known to the tax authorities, but unpaid to the budget. The problem at hand does not concern tax evasion which relates to the ability of the tax administration to identify the taxes evaded, while tax arrears relate to the collection of taxes already accrued and known to the tax authorities, which in turn is indicative of the tax administration's capacity to perform its functions and responsibilities properly.

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[10]   *Schaffer (1997).*

Table 4.6 15

Tax Revenues and Tax Arrears (end-of -period stocks)

	Tax Revenues		Tax Arrears (public firms alone)	
	1996	*1997*	*1996*	*1997*
Profit tax from				
non-financial enterprises	*11.5*	*13.3*	*12.7*	*9.0*
VAT	*22.9*	*25.0*	*18.1*	*31.2*
Excise duties	*9.0*	*5.6*	*11.9*	*19.6*
Social security payments	*27.3*	*26.8*	*16.3*	*12.1*
Other taxes	*29.3*	*29.3*	*41.0*	*28.0*

Source: *NSI, MF, AEAF.*

Table 4.6 presents a breakdown of tax arrears stocks of firms in 1996 and 1997 (public firms alone) as well as a breakdown of budget tax revenues by type of taxes over the same period. On the revenue side, VAT and income taxes were the main sources of implementing the consolidated government budget. They accounted for over 50% of total tax revenues in 1996 and for over 43% as of end-1997. In 1996, the share of VAT increased relative to previous years due mainly to an increase in the VAT rate. In 1997, VAT grew in importance within the overall structure of tax revenues due probably to the price dynamics in early-1997. Income and profit taxes were next in importance for the implementation of the government budget.

As the table figures reveal, the variation between the different types of tax liabilities was not as marked as the variation between the different taxes and the budget. As of end-1996, VAT arrears to NSSI were among the largest while in the end of the same year. VAT and excise duties ranked among the highest in terms of relative shares. The dynamics of both taxes was mainly brought about by the higher price level in end of 1997 as well as by the growing domestic consumption. Other things being equal, due VAT and excises would have been higher in amounts as a result of the payment period and deadlines provided for by law. We should also bear in mind the period of return of VAT amounts to firms by the government budget. Perhaps, most firms tried to offset the amounts the budget had delayed in returning by generating more VAT arrears. Profit tax arrears amounted to over 12% of total tax arrears of firms in end-1996 while in end-1997 their share within total tax arrears decreased to 9%.

Table 4.7 shows the distribution of firms, their assets and tax arrears (to the NSSI included) by groups of firms where profitability is gauged as the ratio between after-tax profit and sales.

Table 4.7

***Distribution of Firms, their Assets and Tax Arrears (to the NSSI included) by Groups of Firms
where Profitability Is Gauged as the Ratio between After-tax Profit and Sales.***

	1996		1997	
	Public firms	*Private firms*	*Public firms*	*Private firms*
Profit/sales >= 10%				
% of all firms	26.3	18.5	17.5	19.8
% of all assets	26.3	12.0	18.6	28.8
% of total tax arrears	8.8	19.8	16.5	42.9
10 > Profit/sales >= 0				
% of all firms	45.2	46.2	56.5	66.1
% of all assets	47.1	33.7	59.1	45.8
% of total tax arrears	21.6	33.8	64.2	10.9
0>Profit/sales >= -10				
% of all firms	15.8	18.1	14.7	1.9
% of all assets	11.1	24.1	9.8	11.0
% of total tax arrears	2.7	11.8	4.8	24.7
-10>Profit/sales >= -20				
% of all firms	4.2	5.0	3.1	3.7
% of all assets	0.1	5.4	5.5	1.9
Hold percent of total tax arrears	60.2	2.5	2.7	2.8
Profit/sales < -20				
% of all firms	8.5	12.3	8.3	8.6
% of all assets	15.4	24.8	7.0	12.5
% of total tax arrears	6.7	32.1	11.8	18.8

Source: NSI, AEAF.

There were two opposite tendencies observed in the behaviour of public and private economic agents:

▌ among public firms, firms with positive profitability proved to be better tax payers;

and

▌ among private firms, firms with positive profitability accounted for over half of the tax arrears in the sector, and hence firms with (a) negative profitability (margin) proved to be relatively better tax payers (to the budget and the NSSI), in particular those whose financial results were not strongly negative.

As for public firms, there was discerned a concentration of tax arrears of firms with a negative profit rate equal to or less than 10%. In 1996, they accounted for about 67% of all tax arrears in the public real sector. The concentration of tax arrears in the loss-making firms in the public sector indicated that the budget constraint was softened by non-collection of the taxes due.[11]

The conclusion that loss makers are better tax payers is rather surprising. However, the delay in tax payments, and even non-payment, proved to be a very successful strategy on the part of Bulgarian enterprises over the same period. This was indicative of the weaknesses of the country's tax system as well as of the general absence of financial discipline. The tax arrears of loss-making firms may also be interpreted as one mechanism of softening the hard budget constraint while the tax arrears of profit-makers signal a general absence of financial discipline, as well as weaknesses of the country's tax administration capacity or are a sign of lobbying in favour of certain firms or businesses.

The government of the time allowed loss-making SOEs to delay payment of, or not pay at all, the taxes due thus placing them under soft budget constraints. This most probably led to the erosion of tax discipline and private firms opted for a more profitable strategy - delay, even non-payment of due taxes to the budget and the NSSI. Trying to soften the budget constraints for SOEs, the 1996 government created a feeling and awareness of a tax holiday in all economic agents. In addition to that, the tax legislation in effect was far from being efficient. The fees and interest charged on non-paid taxes were extremely low compared to the tax level that made delays and even non-payment of due taxes very attractive. But the non-payment of payables in arrears to suppliers or commercial banks may have proven to be a flawed strategy. Suppliers may have ceased deliveries, and commercial banks may have imposed a freeze on a firm's deposit accounts. Moreover, under a well-functioning commercial code, they may have required insolvency procedures for a bad debtor. Thus if a firm has suffered liquidity problems (no matter if it is a loss- or a profit-maker), the non-payment of due taxes or their delay may have proved to be the best strategy when the tax administration and regulations fail to sanction such action via appropriate fees or other measures.

Why did the government tolerate the increase in tax arrears, especially of SOEs in financial dire straits? The SOEs in permanent financial distress (with a profit rate of less than - 10%) accounted for a relatively high share of employment in the economy - about 11% of the employed in the public sector and around 6% of the economy as a whole in 1996. Bankruptcies would have only produced redundancies in the workforce and led to a sharp increase in unemployment. Rampant unemployment can be a costly experience from a political point of view. There were presidential elections in late-1996 and parliamentary elections in early-1997, and the government opted to bail out and rescue

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[11]   Such a development was discerned in Russia, Hungary and Poland and has been analysed in studies by Shaffer (see Scheffer, 1995) as well as Alfandari, Gilles and Schaffer (1996).

these enterprises, softening the budget constraint by letting them increase their tax arrears. According to estimates of the AEAF, over the 1995-1996 period the economy operated with higher employment than its optimum level. Or put in more precise terms, the government (and probably the trade unions) preferred to maintain the employment level high at the expense of a decrease in real wages and salaries.

1997 witnessed even a higher degree of concentration of tax arrears in the group of private firms with the highest rate of profit, which was further proof that delays in tax payments to the budget and the NSSI were a relatively rewarding business strategy. The increase in the tax arrears of profit-making public firms was brought about by an increase in their share in the sector in 1997.

The 1997 increase in the profitability of firms was essentially due to the runaway rate of inflation in the second half-year period of 1996 and early-1997. Such a development - increased profit and growing profitability as a result of the acceleration of price dynamics, was discerned as early as 1990 in Bulgaria as well as in other CEECs (in Poland, 1990). The lag between the purchase of raw materials, inputs and services for the core business activity of enterprises and sales proved to be the main source of high profitability of firms. Other factors that led to an increase in EBIT (earning before interest and taxes) had to do with the retention of the level of some operating costs in real terms. Nominal wage increases in the first half of 1997 lagged behind the increase in producer prices while depreciation allowances remained practically unchanged in nominal terms.

At the same time, economic activity in the country was steadily declined for two years in a row (1996 and 1997). In 1997 alone, the volume of revenues from sales of the firms in the sample dropped by more than 6% in real terms. Profit generated not by a real increase in economic activity but by changes in the macroeconomic environment, and by price dynamics in particular, is often called paper profit and is not an indicator of an improving real sector. As a result of the drastic decrease in the inflation rate from the early-1997 hyperinflationary levels to about 0% - 0.5% monthly in 1998, much of this profit was lost, which cannot be regarded in itself as an indicator of a deteriorating real sector. ❑

5.   FINANCIAL FLOWS BETWEEN THE REAL SECTOR
        AND THE BANKING SYSTEM

The financial inflow into the banking system from the real sector includes repayments on loans extended and interest while the outflow to the real sector encompasses all fresh loan extensions. Thus, changes in the nominal stocks of bank loans to enterprises, plus interest payments, determine the volume and direction of the financial flows between the real and banking sectors of the economy.

And yet, drawing upon the balance sheets of enterprises, this method of examining the financial flows between the two sectors of the economy may yield unreliable and misleading results. Bank credit to enterprises as well as all other balance sheet items are calculated in BGL. At the same time, the bulk of loans lent have been denominated in foreign currency. Due to the continuous devaluation of the lev in the period prior to the currency board arrangement, the nominal stocks of bank loans in foreign currency tended to increase in every following annual balance sheet due mainly to the fact they were recalculated in BGL, though the real stocks of loans may have not decreased at all.

According to data of the Bulgarian National Bank (BNB), foreign currency (FC) bank loans extended to the real sector amounted to 43.2% of all loans lent to firms in end-1995 while their share in end-1996 further stepped up to 78.8%. The growing share of FC bank loans to the real sector in end-1996 was primarily due to the devaluation of the national currency over the same period as well as the increase in the nominal stocks of FC bank loans extended, as resulting from the recalculation of loans in BGL. The stocks of FC bank loans to firms increased six times (calculated in BGL) in end - 1996, on a year earlier. The lev's exchange rate against the US currency had increased by 6.9 times over the same period. If we recalculate bank loans in USD by dividing the exchange rate over the two periods, we shall see that the stocks of bank loans as of end-1996 declined by 12.4%, on a year earlier. Similarly, the real stocks of loans, denominated in foreign currency stepped up by more than 20 % in 1997. If we add payments on loan interest to the stock/value of the financial flows from firms to commercial banks, we may as well conclude that the real stocks of financial flows from firms to commercial banks may have been even larger than the outflow from the banking sector. The direction of the financial flows between enterprises and commercial banks is closely related to the budget constraint imposed on enterprises. According to Schaffer (1997), the banking system in a slow reforming economy (like the Bulgarian economy) is of crucial and key importance in softening the budget constraint on firms. Bank credits are usually either rolled over by fresh loan extensions used for the purposes of servicing old debts, or are simply written off. Very often, bank credits are used for payroll purposes or for covering the operating costs of a firm.

Table 5.1

Changes (%) in the Stocks of Bank Loans to Enterprises at Constant Prices in End-year,
Relative to a Year Earlier (deflated by the PPI, end of period)

	1996	*1997*
Public firms	*-5.6*	*-21.6*
Private firms	*2.0*	*-17.6*
Private firms without foreign participation	*-3.4*	*-17.7*
All firms in the sample	*-3.2*	*-18.8*

Source: NSI, AEAF.

As evident from the balance sheets of enterprises, 1997 witnessed a considerable reduction in the bank loan stocks from commercial banks to non-financial enterprises. This was attributed to the reluctance and unwillingness of commercial banks to extend new loans to the real sector due first to its deplorable state and second to the amendments to the banking regulations which now delegated more powers to bank supervision authorities as well as imposing more stringent requirements on loan extensions to firms, in particular to the extension of big credits.

To find out whether or not commercial banks in Bulgaria placed firms/borrowers under soft budget constraints, we shall first assess if firms with negative EBIT, i.e. firms that were unable to cover their operating costs, received net financing from banks, as gauged by the change in the nominal stocks of bank credits reduced by payments on credit interest. If net financing of firms in financial dire straits had been positive, the funds would have then flowed from commercial banks to enterprises, placing the latter under soft budget constraints. And vice versa, net financing of loss-making firms implied that commercial banks imposed hard rather than soft budget constraints on enterprises/borrowers.

The analysis encompasses only borrowers of bank credit amounting to BGL 135 million in end-1996, or bank loans exceeding BGL 500 million in end-1997. Either way, firms with foreign participation are left out of consideration, for these firms are supposed to have had access to credit funds not only of Bulgarian commercial banks. So, a change in nominal bank financing may not necessarily reflect/represent a financial flow between the real and banking sectors inside the country. They may have also had large investment costs, making their EBIT negative, without having an adverse impact on their credit rating and grade. Referring to Graphs 1-4, the vertical axis measures net bank financing in end-1996 (NBFA) while the horizontal axis measures profitability of enterprises on the basis of EBITA (earnings before interest, tax and depreciation allowances). Both indicators have been normalised by the value of assets in end-1996. It is preferable to draw upon firm data in previous years, for commercial banks may have

Net bank financing of all firms with negative EBITA in 1997 and bank loans more than 500 mln. leva
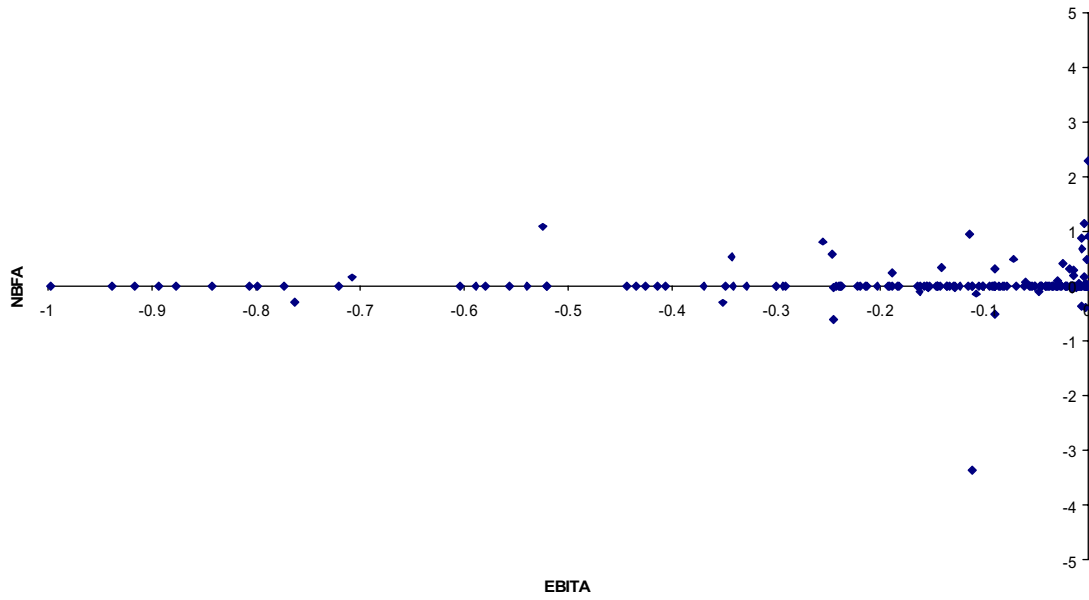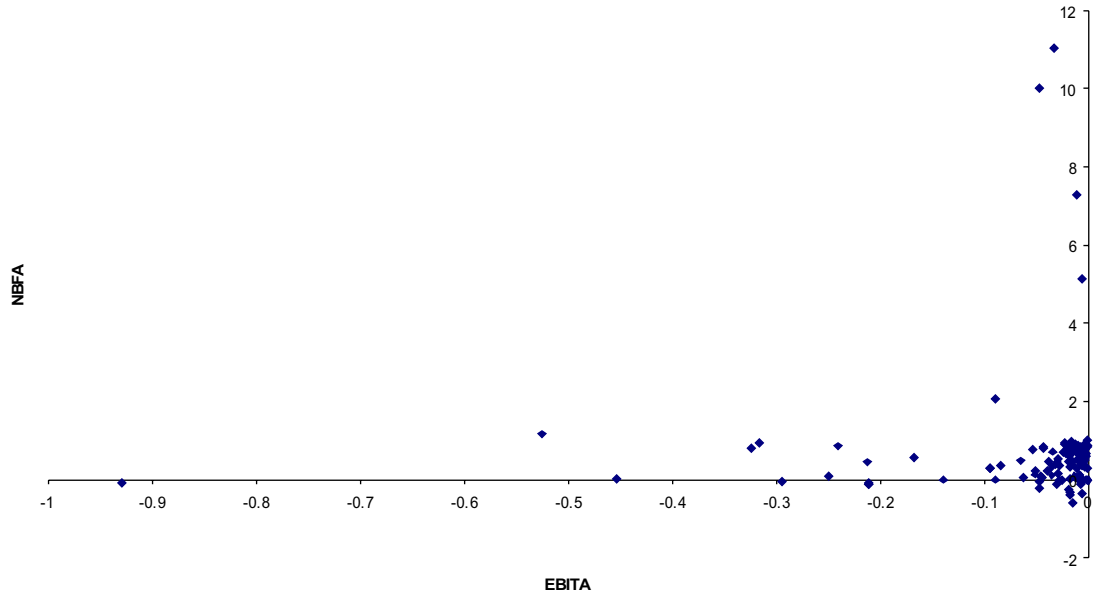

Graph 1

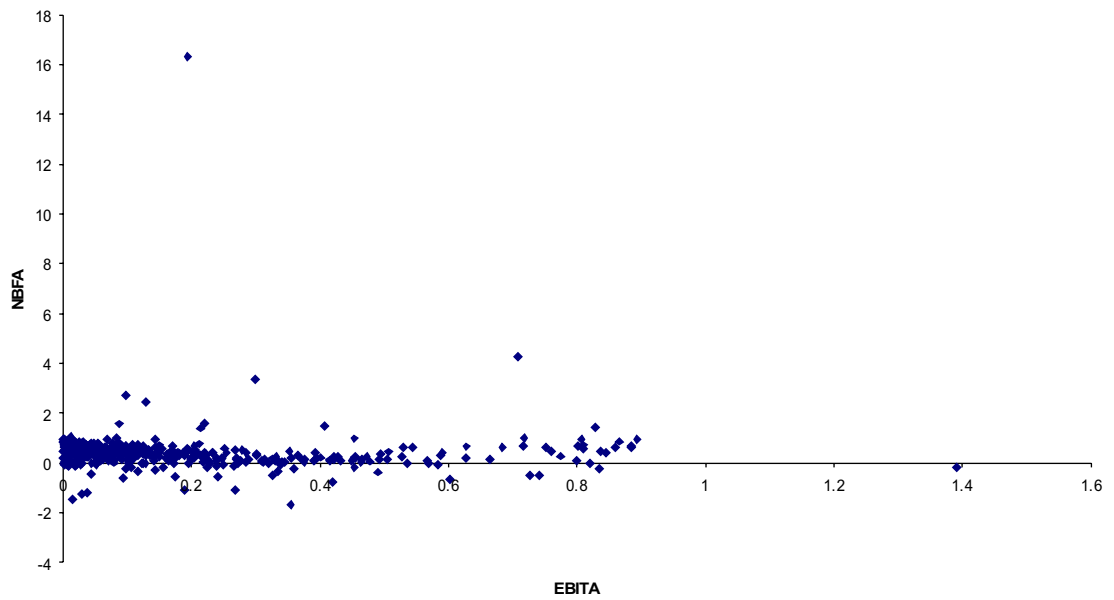**Net bank financing of all firms with positive EBITA in 1997 and bank loans more than 500 mln. leva**
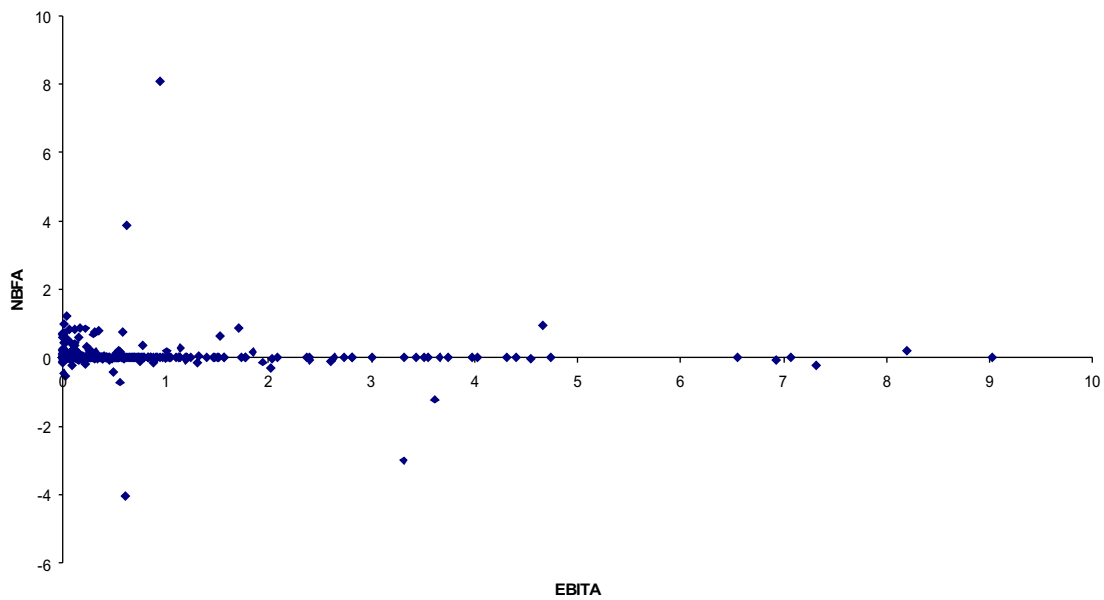
Graph 2

Net bank financing of all firms with negative EBITA in 1996 and bank loans more than 135 mln. leva

Graph 3

Net bank financing of all firms with positive EBITA in 1996 and bank loans more than 135 mln. leva

Graph 4

relied on the financial results of firms in preceding years to decide on increasing or decreasing their credit exposures to firms. Unfortunately, we do not have available comparable data on firms' income statements (profit and loss) in the preceding years, which in turn made us rely on income statements (profit and loss account) in the corresponding year.

Graph 1 and 2 show the firms with negative EBITA while graph 2 shows all firms with EBITA equalling or below zero in 1996, respectfully. If firms showing negative EBITA received positive net bank financing, we can assume that they had been placed under hard budget constraints by commercial banks. The enterprises with negative EBITA amounted to 24% of all firms with large stocks of bank loans in 1996 while in 1997 their share rose by about 32%. About 84% of the firms with negative EBITA in 1996 had positive net bank financing. We can assume about the majority of firms the increase in net bank financing was mainly due to the 1996 depreciation of the lev, provided the loans extended were in foreign currency. For only about 9% of all firms with negative EBITA (11 firms altogether) net bank financing registered a two-fold rise. It is difficult to conclude that the increase in the net bank financing of the majority of these firms was brought about by the sharp depreciation of the lev alone. In four of the cases examined, NBFA is >5, and it can therefore be assumed, at a high level of confidence, that these firms were placed under soft budget by commercial banks.

In 1997, only 15.4% of all firms with negative EBITA enjoyed positive net bank financing, with only one firm demonstrating NBFA>2. Having in mind the exchange rate levels in late-1996 and early-1997, we cannot refute the hypothesis that the increase in net bank financing of enterprises was due to the structure of their loans by type of FC and exchange rate dynamics. We may also assume that banks tended to place their debtors with negative EBIT under hard budget constraints in most of the cases examined.

As for firms registering positive EBITA in 1996, net bank financing exceeded 0.5 in only about 42% of all cases examined while it surpassed 5 in only two of the cases studied. Only two of the firms in this group increased their net bank financing by over 3 times in 1997, which may have been attributed to an increase in their loans as well. Commercial banks might have increased their financing to these firms readily, compared to firms with negative EBITA. Nevertheless, the share of firms with positive EBITA and a relatively high increase in net bank financing was smaller than the share of firms with negative EBITA due to:

▌ The structure of the loans already extended (BGL or FC); and

▌ The unwillingness of firms with positive EBITA to borrow more bank credits because of the high price of loans as gauged by the level of the real interest rate on credits. ❑

6. OPERATION OF THE FINANCIAL SYSTEM IN BULGARIA AND THE ABILITY OF NON-FINANCIAL ENTERPRISE TO ACHIEVE AN OPTIMAL STRUCTURE OF THEIR CAPITAL

The successful restructuring of the Bulgarian economy is considered an important precondition for sustained economic growth. This, together with the low liquidity of Bulgarian firms, has predetermined their growing need for bank credits to finance their production and investment activity. The firms that needed external financing urgently were mostly newly emerging firms as well as the former SOEs in the post-privatisation period. The acute crisis in the banking sector in 1996 as well as the deterioration of economic activity in the real sector of the economy in late-1996 and early-1997 made commercial banks extremely cautious and compelled them to almost cease credit lending to non-financial enterprises. In the second half of 1997, however, the macroeconomic situation in the country improved, showing signs of stabilisation, but it was only in 1998 that net bank financing, especially of private firms, registered a slight increase. Commercial banks were and still are, very cautious in approving new credit extension projects.

Investment promotion and economic restructuring are closely related to the operation of the financial system, which can facilitate firms in achieving an optimal structure of their capital.

Many empirical studies have dealt with this problem in the developed market economies and CEECs as well[12]. The analysis below is based on the analysis of Cornelli, Portes and Shaffer (1996) of the factors of bank financing of firms in Hungary and Poland. The analysis rely on the following suppositions:

▌ Bankruptcy/liquidation costs in CEECs are very low. Bankruptcy courts are inefficient, preventing lenders from collecting their debts. Furthermore, the government is likely to bail out politically important firms if they got into trouble. All this implies that the demand of profit making enterprises for credit resources would be greater at times when the real interest rate is low and even negative. We can thus assume that credit demand is positively correlated with firms' profitability.

▌ In CEECs there is information asymmetry between lenders and borrowers. Our second suppositions is that firms offering larger security for loans, will be allowed easier access to credit funds and therefore imposed less stringent credit restrictions imposed on them. Or, credit supply is positively correlated to credit collateral and firms' profitability.

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[12] *E.g. Fazzari and Petersen (1988); Hoshi, Kashyap and Scharfstein (1990); Petersen and Rajan (1994). For a detailed analysis of the same problem in CEECs, see Corbett. and Jenkinson (1996); Rajan and Zingales (1995), etc.*

▌ Theoretically speaking, it is not clear what impact the size of a firm may have on its access to credit resources. It is true that large firms are less likely to go bankrupt (even because the government may prevent them from winding up). Also, small-sized firms are very likely to just „disappear", which in turn makes any credit lending rather risky. On the other hand, large firms are difficult to restructure: the book value of their assets may prove a less reliable indicator of their true value, as a result of which the size of a firm may have an adverse effect on credit supply.

The analysts have considered two possible scenarios. The first scenario presents the financial system as a good intermediary, trying, on the one hand, to solve bad debt problems (to institute financial discipline) and select the creditworthy firms having greater needs for financial resources and less ability to self-finance their activity (firms undergoing structural adjustment), on the other. Under this scenario, firms may be able to optimise their capital structure.

As for the second less optimistic scenario, commercial banks do not have enough experience to make adequate judgements as to what exactly the financial state and conditions of firms are. All this makes banks increase the price of bank lending, thus providing against higher risk. Under this scenario, firms would tend to use more internal resources to finance their activity rather than expensive bank loans.

Under the first scenario, there should be a positive correlation between the supply of credit and firms' profitability and ability to secure bank loans (also called tangibility) while under the second scenario, there should still be a positive correlation between the supply of credit and firms' profit and ability to secure collateral for bank loans (tangibility) in as so much as balance sheet data on these indicators provide reliable information about firms. This scenario, however, shows that the demand for credit would be negatively correlated to firms' profits, because more profitable firms would find it easier to self-finance their business, instead of using more expensive external sources of financing. They may also want to have access to larger credit funds but due to the inefficient operation of the financial system (absence of precise data on firms) they may be able to substitute internal financing (by retaining their earnings) for the more expensive bank loans to a larger extent.

Table 6.1

Regression Table – Private Firms without Foreign Participation,

Dependent Variable: Debt/Assets Ratio, 1996

Independent variable	Coefficient	Standard Error	T
Constant	0.457	0.074	6.205
EBITA	-0.511	0.004	-126.689
Log of sales 1996	0.028	0.008	3.460
Fixed capital/asset ratio 1996	-0.224	0.058	-3.836
Mean of dependent variable	0.6630		
R^2 =	0.352		
N =	29708		

Source: NSI, own calculations.

Table 6.2

Regression Table – Public Firms,

Dependent Variable: Debt/Assets Ratio, 1996

Independent variable	Coefficient	Standard Error	T
Constant	0.354	0.028	12.428
EBITA	-0.738	0.025	-28.994
Log of sales 1996	0.049	0.003	17.157
Fixed capital/asset ratio 1996	-0.657	0.021	-31.663
Mean of dependent variable	0.4637		
R^2 =	0.197		
N =	6826		

Source: NSI, own calculations.

Table 6.3

Regression Table: Public and Private Firms.

Dependent Variable: Debt/Assets Ratio, 1997

Independent variable	Coefficient	Standard Error	T
Constant	0.475981	0.012	41.37339
EBITA	-0..20238	0.005	-39.4086
Log of sales 1996	0.015228	0.001	14.65685
Fixed capital/asset ratio 1996	-0.37786	0.007	-52.4864
Mean of dependent variable	0.485907		
R^2 =	0.093576		
N =	37877		

Source: NSI, own calculations.

We here base our analysis on the least squares method to examine which scenario was most likely to have happened in Bulgaria over the 1996-1997 period. The dependent variable represents the debt/total assets ratio, estimated on the basis of end-1996 data on firms. The independent variables represent the ratio between long-term fixed assets and the value of total assets (as a measure of tangibility); EBITA is used as a measure of profitability; and the log of sales is employed as a measure of the size of firms). The independent variables of the regression analysis of public firms are estimated on the basis of 1995 data. As there were no 1995 data on private firms' income statements (profit and loss), the independent variables have been estimated on the basis of 1996 data. This is a disadvantage of the model, for the behaviour of commercial banks (credit supply) was probably determined on the basis of firm data in the preceding years. Therefore, we have also tested the regression model of public firms by calculating all independent variables on the basis of 1996 data. The coefficients of the independent variable retained their signs, and the statistical characteristics of the model have not deteriorated. If we make the same supposition about the regression model of private firms, using 1996 data instead of 1995 data, we can then expect the coefficients of the independent variables to retain their signs. We have further analysed 1997 data on both private and state-owned firms in the real sector of the economy together due to changes in the principal, following the completion of the first mass privatisation wave. For this same reason, the debt arrears of privatised firms to commercial banks can be identified as a characteristic feature of bank financing of state-owned firms in some previous periods rather than of bank financing of private firms.

The tables above show the results of the regression analysis. The signs of the coefficients of the independent variables are identical, which in turn implies that with public firms as well as with private firms, in both 1996 and 1997, the factor variable affected the dependent variable in the same way. The bigger value of the constant in the 1996 model of private firm, as compared to the model of public firms in the same year, indicates that public firms used fewer bank loans to finance their assets. This was probably due to the financing of long-term fixed assets under the command economy when bank credits were used primarily for the financing of working capital while the bulk of investments were transformed into equity. At the same, all coefficients of the independent variables are higher in value in the public firm regression model, which implies that changes in the factor variables may lead to greater changes in the debt/assets ratio.

As expected, the profitability coefficient proved to be negative. One reason for this may be that the negative coefficient in the (implicit) credit demand equation dominates the positive coefficient in the supply equation. As has already been pointed out, this was due to the information asymmetry, and hence the high price of bank credit. Another possible reason is that the performance of firms in the short-term may have not been a reliable indicator of their long-term potentials and was therefore disregarded by banks as a credibility indicator evaluation of firms. And yet, the fact remains that the debt/

assets ratio in more profitable firms was lower, which was a sign that the financial system had failed to ensure the most favourable conditions for firms to optimise their capital structure.

The coefficient of the fixed assets/total assets is also negative for a number of reasons. First, the regression analysis draws upon the balance sheet (book) value of assets (tangible assets including) which may be far from their market value (be it lower or higher). Second, the capital-intensive sectors of the economy with a high fixed assets/total assets ratio are looked upon by banks as sectors with worse prospects of development. We have also tested the correlation between profitability (EBITA) and the fixed assets/total assets ratio in private and public enterprises which proved to be negative in both cases. Therefore, if we still hold the hypothesis that profitability is positively correlated to credit supply, the supply of credit should then be negatively correlated to the fixed assets/total assets ratio.

The coefficient of the log of sales is positive in sign but the coefficient itself is close to zero. As expected, there is not a clear-cut and distinct correlation between the size of firms and their access to bank credit. ❑

7.   CONCLUSION

As a result of the above analysis we have arrived at the following conclusions:

■ Over the 1996-1997 period most non-financial enterprises operated under hard budget constraints. Suppliers tended to maintain, and sometimes even reduce trade credit to buyers due either to their attempts to impose a harsher financial discipline on their clients or to their low liquidity. Firms that have not imposed hard budget constrains on their clients are assumed to have been large SOEs, holding a monopoly over the supply of certain goods and services. The government thus tried not to aggravate further the financial position of other state-owned enterprises in permanent dire financial straits.

■ Commercial banks, too, imposed hard budget constraints on borrowers. If in the pre-crisis period banks had extended loans and credits rather recklessly and enterprises, including private firms, that had only started up their business, accumulated bad loans rather quickly. In 1996 and 1997 in particular, commercial banks sought ways to reduce credit lending to a minimum and collect their debts. The change in the behaviour of commercial banks was largely triggered by the collapse of the banking sector in late-1996 and early 1997 which made credit lending extremely risky and by amendments to bank legislation which reinforced and strengthened bank supervision.

■ Tax collection improved but the financial indiscipline inherited was not to be easily overcome by the tax administration. The level of tax arrears of non-financial enterprises to the budget and the NSSI remained rather high. Preliminary 1998 data on state-owned enterprises show that tax arrears alone tended to increase in the first half-year period of 1998. Therefore it can be assumed that the budget alone again tended to soften the budget constraints on state-owned firms. All this eroded the financial discipline in the economy and made profit-making private firms often seek ways to evade taxes.

■ The financial system did not function properly and efficiently, thus failing to ensure favourable conditions for firms to optimise their capital structure. This may have been due to the asymmetry and unreliability of the information available (performance and growth potential of enterprises). To this we can add other factors at play such as the bad financial conditions of the bulk of non-financial enterprises, the low activity of commercial banks in evaluating the credit-worthiness of credit applicants. We should also emphasise the importance of another problem the resolution of which may only improve and reinforce credit lending to the real sector of the economy. The rights of lenders were not and are still not protected by the country's bank legislation efficiently and effectively. Moreover, court authorities do not effectively implement current regulations. This is a factor that not only makes bank financing of the real sector of the economy inefficient but curbs trade credit growth as well. ❑

REFERENCES

AECD (1995), *Annual Report on the State of the Bulgarian Economy 1994*, Sofia: AECD.

AECD (1996), *Annual Report on the State of the Bulgarian Economy 1995*, Sofia: AECD.

Alfandari, G. and M. Schaffer (1996), „Arrears in Russian Enterprise Sector", Commander, S., Q. Fan and M. Schaffer eds. *Enterprise Restructuring and Economic Policy in Russia*, Washington, D.C.: EDI/World Bank, pp. 87-139.

Corbett, J. and T. Jenkinson, „The Financing of Industry. 1970-1989: An International Comparison", *Journal of Japanese and International Economies*, 10(1), pp. 71-96.

Corneli, F., R. Portes and M. Schaffer (1996), „The Capital Structure of Firms in Central and Eastern Europe", CEPR Discussion Paper, No. 1392, London: CEPR.

Fazzari, S., G. Hubbard and B. Petersen (1988), „Financing Constraints and Corporate Investment", *Brookings Papers on Economic Activity*, No.1, pp. 141-195.

Hoshi, T., A. Kashyap and D. Scharfstein (1990), „Corporate Structure. Liquidity and Investment: Evidence from Japanese Industrial Groups", *Quarterly Journal of Economics*, 27, pp. 33-60.

Petersen M. and R. Rajan (1995), „The Effect of Credit Market Competition on Lending Relationship", *Quarterly Journal of Economics*, 110(2), pp. 407-444.

Petrova, P., G. Stoyanova and I. Gueorguiev (1996), *Applied Cointegration Analysis. Inflation, Consumption*, AEAF Working paper, Bulgaria: Sofia.

Rajan, R. and L. Zingales (1995), „What Do We Know about Capital Structure? Some Evidence from International Data", *Journal of Finance*, 50 (5), pp.1421-1460.

Schaffer, M. (1997), „Do Firms in Transition Economies Have Soft Budget Constraints? A Reconsideration of Concepts and Evidence", CERT Doscussion Paper, No 9720 (Edinburgh: CERT, Heriot-Watt University.

Schaffer, M., (1995), „Government Subsidies to Enterprises in Central and Eastern Europe Budgetary Subsidies and Tax Arrears", in Newbery, D. ed., *Tax and Benefit Reform in Central and Eastern Europe*, London: CEPR, pp. 115-144.

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