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THE NATURE AND PERFORMANCE OF SMALL FIRMS IN BULGARIA

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by

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Abstract

Using new survey data for small private, state and cooperative manufacturing firms we find: (a) overall the Bulgarian small firm manufacturing sector probably is quite well developed compared to other former socialist economies; (b) the characteristics and behavior of Bulgarian small firms often differ according to ownership and when compared with large firms. Particularly noticeable are differences for employment levels and employment dynamics, average age, sources of capital and average levels of worker earnings; (c) Compared to small private manufacturing firms in other restructuring economies, Bulgarian small private manufacturing firms are smaller, more dependent on the state, perceive unusual levels of competition, and are not export oriented; (d) partial productivity measures suggest that (i) small Bulgarian manufacturing firms typically are less capital intensive and have higher capital productivity than do larger Bulgarian firms; (ii) no particular legal form of enterprise is clearly more efficient.

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Introduction

As some have noted (e.g. Acs and Audretsch, eds., 1993.) much of the debate on small firms in Bulgaria (and other former Socialist countries) uses limited empirical data. To improve on the available data, "stylized facts" on the nature of the three main organizational types of small Bulgarian manufacturing firms --private, state and cooperative-- are assembled during the period 1989-1992. In addition some comparisons with small firms in other former socialist economies are made.

Another objective is to present preliminary evidence on the comparative "performance" of small versus large firms and also on different legal forms of small enterprise. Such data are relevant to debates on the role of small firms in post-socialist economies (e.g. Clague and Rausser, 1992), including the matter of economically preferred forms of ownership.

To address these issues we draw on new sample survey data for manufacturing firms-- private, state and independent. This simultaneous gathering of enterprise data that are representative of the underlying populations of manufacturing firms, and which vary by both size and ownership, constitutes an unusual resource.

In the main sections of the paper we first describe the nature and scope of Bulgarian small firms, then make comparisons with small firms in other former socialist economies and finally consider their performance. We continue, however, in the next section by briefly reviewing Bulgarian industrial policy on small firms.

I Economic Context and Industrial Policy ¹

Before discussing key legislation on small firms, we briefly note some important features of the Bulgarian economy since the late 1980's, i.e. since discussion of the need for small firms (often as part of a strategy of "privatization") first seems to have begun.² First, unlike Poland and even the former GDR and Hungary, there was no private sector to speak of in Bulgaria during the communist era. The starting point on the road to

owned and where even in 1988, the last year before the political revolution, there were probably no private firms at all in Bulgarian manufacturing. Also the cooperative sector (which was part of the socialized sector) was quite small compared to countries such as Poland; this was especially the case in the industrial sector. In turn this predominant type of industrial organization led to fantastic economic concentration; giantism without small firms was the order of the day (Jones and Meurs 1991; Jones and Parvulov 1992).

Second, the beginnings of the transitional process in

general were marked by an economic context that was extraordinarily unfavorable, even when compared to many other Eastern and Central European economies. This is the case on matters such as: the level of external debt; the enormous dependence on CMEA markets; and severity of the disruption to trade and loss of markets because of the recent conflicts in the Balkan and Middle east region ³.

Until the replacement of the dictator, Zhivkov, after a bloodless coup in November 1989, there were some modest innovations concerning industrial policy towards small firms. Under the communists, several initiatives (mainly Decree 12 and 33) were introduced and supportive institutions were established (notably the Bulgarian Industrial Association) to foster the development of new firms within the state-owned sector (Puchev, 1990). However, in practice only a minority of these small firms were autonomous and in the aggregate these firms barely affected the existing size distribution of firms and the prevailing mode of giantism (Jones and Meurs, 1991:320-323).

Potentially a more important change was the introduction of Decree 56 in January 1989. This new commercial code led to the entry of new private enterprises and by the end of February 1990 more than 14,000 (of a total of 15,500) registered firms were private firms. However, few of these enterprises actually operated, and those that did typically were quite tiny.

The political revolution of November 1989 was followed by the rapid emergence of political pluralism, much of which coalesced into the United Democratic Front (UDF). However, it was the Bulgarian Socialist Party (the BSP, formerly the communists) that received a mandate in the first free elections in June 1990. For much of this period small firms emerged in an uncoordinated way--as ad hoc privatizations. This "wild", "quiet" or "spontaneous privatization" involved the sale of portions of state-owned assets at their listed book value. Due to accounting practices under the previous system, in many cases these values had little relationship to any probable market valuation. This period of privatization has been condemned by some as one of self-serving and scandalous grand theft on the part of managers and communist party members. However the scale of the these privatizations is not clear since no data appear to exist.

After the fall of the Socialist government subsequently a coalition caretaker government headed by the UDF under Dimiter Popov emerged. As a result this period was also characterized by political deadlock and not such legislative activity in fact took place.⁴ In particular, the Popov government failed to enact a comprehensive privatization law.

One hallmark of this period was the so-called small privatization of mostly service and retail units. This began at

the end of 1990 after the new more liberal ministers took office in December. Several small auctions (both open bid and solicited tenders) occurred on an irregular schedule. However, the small privatization program in fact led to very little transfer of ownership and little raising of revenue, with property sales including a few gas stations (Jones and Rock, 1993.)⁵

Following new elections, in November 1991 for the first time a non-socialist party alone formed the government. For most of 1992 it was the UDF, led by Prime Minister Filip Dimitrov, that was in the driving seat. However since the balance of power was held by the party that represents the ethnic Turks, the position was often tenuous, and it proved difficult to introduce or even effectively implement new laws. Unsurprisingly the situation proved to be unstable and in November 1992 the UDF government fell. This latest political stalemate was resolved with the emergence of a new coalition government (in January 1993) under the leadership of Lyuben Berov.

During this period the focus clearly shifted to the privatization of large-scale firms. However, there was also evidence of renewed interest in government support for small firms. Perhaps the best example, following the passage of Decree 108 of June 1991, was the introduction in September 1991 of a fund to help to provide diverse forms of assistance to small firms (Bartlett, 1993:17). The growth of various institutional support agencies, such as the Union of Private Economic Enterprises (UPEE), was also evident during this period.

But the major change was the introduction of the new policy on competition in late 1990. Major structural changes began as some horizontally organized firms in the food industry were split and their regional subsidiaries given economic and legal independence. In March 1991 a large scale de-monopolization process was initiated. This break-up of many state monopolies would naturally be expected to lead to major changes in the size distribution of Bulgarian firms (Jones and Parvulov, 1992).

II The Scope and Nature of the Bulgarian Small Firm Sector

A. Changing SCOPE of the Small Firm Sector: 1985-1992

The upshot of all of the foregoing is that, in all probability, the small firm sector has continued to grow during this period, though the rate of increase has varied, especially for different legal forms of enterprise. For private firms there have been continuing large increases in the number of new firm registrations: by the end of 1990 there were 69,000 firms and this had grown (according to differing estimates) to between 130,000 and 180,000 by the end of 1991. By February 1992 there were about new 200,000 firms registered; by mid 1993 about another 10,000 had been added. Hence it appears that the growth

rate in the number of new private firms has been falling. So far as industrial distribution is concerned, data obtained from the Union of Private Economic Enterprises (reported in Bartlett, 1993) indicates that 25% are in manufacturing, 24% in services, 17% in construction and 15% in trade.

At the same time, the absence of any reliable and comprehensive system of gathering information means that it is impossible to obtain reliable data on even basic indicators for small Bulgarian firms such as mean/median sales or employment.⁶ It seems, however, that the size distribution of new private Bulgarian firms is heavily skewed towards the very small. Thus data provided by the Central Statistical Institute indicate that throughout Bulgaria in the middle of 1992 there were only 130 private sector manufacturing firms with 10 or more permanent employees. Data such as these strongly suggest that the impression of small firm economic activity revealed by crude registration data is probably exaggerated. Equally, the official data do not catch informal/underground economic activity. In these circumstances it is not surprising that estimates of the size of the overall private sector and its economic significance range widely. While the official estimates vary from 5-7% of GDP, claims have been made that the private sector accounts for up to 37% of overall economic activity, with more than 50% in some sectors such as retailing.⁷

For firms that originated in the state-owned sector, official data indicate the main trends in the distribution both of legal forms of enterprise and in their size. Thus the most recent population data (e.g. Jones and Parvulov 1992 and Parvulov, 1993) show an abrupt reversal in the growth of giantism. However these data are limited since they give no clear indications of whether firms are independent (particularly important for some cooperatives) or whether firms had attained a joint stock status. Also, reflecting problems with the central gathering of data during times of transition and of fiscal crisis, they tend to be rather dated.

Consequently, during such turbulent times, survey data may be both more current and also enable one to more reliably and more finely determine the main trends in ownership and size. The results of such a panel survey⁸ for manufacturing firms that began as SOEs and which was representative of employment in such enterprises in the principal urban areas from 1988-1992 are shown in Table 1. In 1988, 92.1% of manufacturing firms were state owned. By 1990 this had fallen slightly to 89.7% with further declines in 1991 to 80% and in 1992 to 76%. This same table shows that during the same period the percentage of joint stock companies in which the state had a significant (often a 100%) ownership position increased steadily from 0.7% in 1988 to 12.7% in 1992. Even as early as 1988, there were enterprises in which respondents reported that they were independent cooperatives.

They accounted for 5.7% of the sample in 1988 and registered significant growth to 8.5% of the sample by 1992. But fully-fledged private firms were always a rarity in those manufacturing firms that were once state-owned; even by 1992 they represented only 1.8% of the sample.

In terms of the size distribution of small firms the sample data show that in 1991, for state firms, 36.4% of manufacturing firms employed fewer than 250 workers. Fewer than 16% had 1,000 or more workers. This represents an extraordinary turnaround from the situation prevailing as recently as 1989 when: only 15.9% of state manufacturing enterprises had 500 or fewer employees; only 4.9% of firms employed 200 or fewer workers (Jones and Parvulov, 1992: Table 2); and 66.6% of all state manufacturing firms had 1,000 or more workers (with 21.8% having 5,000 or more.) Similar processes were apparently underway amongst firms designated as cooperatives. Thus in 1991 60% of sample firms employed fewer than 250 workers and only 13 % had 1,000 or more employees. In other words, the growth of the small firms sector in general has been remarkably rapid.

B The Nature of Small Manufacturing Firms.

Here we report preliminary results from our attempt to develop an improved portrait of small Bulgarian manufacturing firms. Since at least outside of the private sector there have been so few tiny manufacturing firms and also because firms of all sizes typically have been contracting employment since late 1990 (AECD, 1992), we consider as "small" all firms with, on average, fewer than 250 employees during 1991. Our sample survey data (described in the appendix) are for 105 private manufacturing firms, 123 small state firms and 23 small independent cooperatives.

(1) Private Firms

Reflecting the novelty of Bulgarian private enterprise, unsurprisingly in 1992 a large number of firms (83%) had been in existence for fewer than two years. (In fact in the middle of 1992 the average private firm was 16 months old.) Essentially all firms had been independent organizations since December 1991 and typically there was no state participation in ownership. Nearly all private firms (97.1%) began from scratch (rather than as spin offs from large state-owned firms.) Of the various possible legal forms of private ownership⁹, about 47% of the sample were headed by a single owner with a similar proportion (48%) representing partnerships. Relatively few (5%) had adopted the legal form of limited liability.

Different measures are used to present information on the average size of private sector manufacturing firms in 1991 and also in the first half of 1992. For the whole of 1991 the average

private manufacturing firm sold goods worth 1.245 million leva (about \$50,000) and produced goods worth about the same amount (in fact, 1.278 million leva.)¹⁰ At the end of 1991 average employment was a little over 20 workers. Unsurprisingly the bulk of the sample, in fact 94.3% of firms, employed 50 or fewer workers at the end of 1991. Large private manufacturing firms were extraordinary--only one firm employed more than 250. Average profits amounted to about 125,000 leva. In 1992, by annualizing data for the first half of 1992, sales were now 871,000 leva, output 844,000 leva and profits 128,000 leva. In mid 1992, average fixed assets stood at 368,000 leva (about \$15,000).

Almost four in 10 of entrepreneurs in small firms expected to increase employment during the period June 1992-June 1993; only 14% anticipated the need to make job cuts.

On average in 1992 87% of a firm's fixed assets were owned by the firm, with 10% leased and only 1% rented. By far the biggest source of capital were owners' savings, which typically accounted for 60% of the total. On average bank credit amounted to 25% of capital supply.

The average level of capacity utilization in the middle of 1991 was reported to be 73%. A year later this was essentially unchanged. Also in June 1992, a surprising number of firms -- almost one third -- reported that they could produce current levels of output with fewer workers. Furthermore, these firms reported that overmanning was quite extensive and averaged almost 23% of the workforce. Since there do not seem to be any legal or institutional constraints preventing private employers from releasing workers (see on) the explanation for this behavior must lie elsewhere.

Turning to sources of inputs, the situation for private firms was very different than for capital supplies. There was an overwhelmingly dependence on state-owned firms for supplies of raw materials for use in manufacturing of product. So far as the destination of products was concerned the bulk of output was sold in domestic markets; on average exports accounted for only 3% of sales though this did increase a little in 1992 compared to 1991. While bartering of final product was not unknown it was typically unimportant.

Information on the importance of the principal customers of private sector small firm manufacturers was also gathered. This shows that there was considerable dispersion in the dependence on the top three customers. In more than one in four cases the top three buyers accounted for more than 75% of sales, suggesting a continuation of the strong vertical links that characterized the old command economy arrangements. But in more than a third of cases, the top three customers bought less than one quarter of sales.

Turning to the extent of product market concentration, fourteen percent of respondents believed that they had a complete monopoly in the product market. However the norm was one where producers perceived the existence of strong competition. Indeed almost 44% of firms believed that they faced competition from at least 50 other producers.

So far as the range of products is concerned, 45% of respondents indicated that they had increased the range during the previous year. Only 10% had decreased the product range while the balance had not changed matters.

While forty % of respondents said that they set prices as a mark up on production costs, 20% indicated that their prices were set in the marketplace; the balance reported that they used a combination of these methods.

During the year preceding the survey, while 39% of respondents had increased their labor force, only 16% employed fewer workers. As such the typical employment dynamic was very different than in large state sector manufacturing firms which typically reduced employment by an average of 31% in the preceding year (Standing et al., 1993.)

On average, at the end of 1991, the labor force was structured so that 44% of a private sector manufacturing firm's employment was female, less than a fifth were under 25 y.o. and almost a quarter were over 54 y.o.

So far as payment systems are concerned, the most preferred form of compensation in private manufacturing was piece rates (53%) while time rates were used by 38% of respondents and some other system of payment in remaining firms. About one-in-ten firms reported using a profit sharing system. Typically the payment of non-monetary benefits (e.g. food, consumer goods) was unimportant in small Bulgarian private firms, amounting to an average of 3.85% of production worker earnings. The average worker received earnings of more than 2100 leva --about \$89 a month.

More than 77% of respondents reported hiring workers on civil contracts during the preceding year.¹⁵ Skilled workers were the grade of labor that was most apt (in 54% of cases) to be hired using such contracts; non-managerial specialists were the second group most likely to be hired under such an arrangement. However, respondents reported that while in 4/10 cases workers on civil contracts were unlikely to receive different pay than were employees on labor contracts, in more than 3 in ten cases, civil contract workers were likely to receive better pay and in only 16% of cases was pay apt to be less.

Representation of employees by trade unions was essentially

absent in the private sector. In only 5% of cases was the existence of unions reported. In all cases the trade union was CITUB, the union that succeeded to the old "official" unions (Jones, 1992). In firms where unions existed, on average, about 7% of the workforce were members of CITUB.

Nearly all respondents replied that they operated only one shift and that this has not changed recently. More than half of respondents (58%) indicated that their current operations required a greater degree of technical knowledge than had been the case a year ago. Fewer than 2% believed that there had been a decrease in technical complexity; in the bulk of remaining cases matters had not changed. Consistent with these responses, 31% of respondents reported that they had introduced new technology during the last two years.

(2) Small State Firms

Despite the novelty of smallness in the state sector, surprisingly in 1992 only a small number of small firms (3.3%) had been in existence for fewer than two years. In fact the average small state firm was 27 months old. Basically what seems to be happening is that, while all firms had begun as (parts of) state firms that were part of the centrally administered system, in 1992 all sample firms viewed themselves as operating autonomously-- they were all spin offs from large state-owned firms.

In 1991 the average small state firm had annual sales of 13,274 million leva (about \$530,000), fixed assets of 4,794 million leva (about \$190,000) and a labor force that averaged 182 workers during the year but which had fallen to 153 by the end of the year. Amongst all state firms, only 4.9% of firms employed fewer than 50 workers.

Reflecting their sense of being independent entities, 72% of small state manufacturers responded that their main source of capital was internal. Only 8.2% of firms listed allocations from the government as the main source of capital, with 16% replying that the local bank played the key role. Assets were leased by fewer than 2% of small state firms.

In the middle of 1991 the average level of capacity utilization was reported to be 66.5%; a year later this had fallen to 63.3%. Also in June 1992, almost two thirds of firms reported that they could produce current levels of output with fewer workers. Furthermore, these firms reported that the average level of overmanning was almost 21%.

Turning to sources of inputs, the bulk (70%) of small state firms obtained their main raw materials by paying cash locally (rather, from example, than from allocations by the government

[6.4%]). So far as final products are concerned, the bulk of output was destined for sale in domestic markets; on average exports accounted for only 3% of sales though this did increase a little in 1992 compared to 1991.

From information on product markets for several size classes of state firms (large and small), it is apparent that it is the smallest firms that are the least export-oriented. Thus, whereas the exports of firms with fewer than 50 employees accounted for about 2.75% of output, for firms with 251-500 employees the corresponding figure is 18.8% and for firms with more than 1000 employees it is 35.8%. That small manufacturing firms that are state owned are principally playing the role of filling domestic niches for their larger state brethren is also indicated by the typical tendency of smaller firms to engage in bartering of output.

About 10% of small state firms believed that they had no serious competitor for their principal product. At the same time almost 16% of firms believed that they faced competition from 50 or more firms and another 42% of the sample perceived that they faced from 11-50 competitors.

So far as price setting is concerned, however, in 63% of cases small firms still saw the government as playing the key role. Only about a third of the time did small state firms see that they set prices alone. Interestingly, the sample was more or less equally divided on the question of changes in the range of products during the preceding two years. Whereas 32% responded that they had increased their product range, 29% said that their number of products had fallen and 37% reported "no change".

Almost 93% of small state firms reported that they had decreased their labor forces during the period January 1990-December 1991; only 4.1% reported that they were employing more workers during this period. For the average small firm, the labor force fell by more than 16%. So far as the structure of the labor force is concerned, at the end of 1991, on average 45 % of a small state sector manufacturing firm's employment was female, about 11% were under 25 y.o. and almost 8% were over 54 y.o.

Workers in the smallest state firms (with fewer than 50 workers) were the best paid of all state sector workers. On average they received 2,030 leva per month and there does not seem to be an obvious sectoral explanation for this phenomenon. This compared with 1,260 leva for workers in firms with 51-100 employees, and 1,440 in firms with 101-250 employees. The most preferred form of compensation in state manufacturing firms was piece rates (57%) while time rates of various kinds were used by about 39% of respondents and some other system of payment in remaining firms. Just over one-in-five small state firms reported using a profit sharing system.

More than 68% of respondents reported hiring workers on civil contracts during the preceding year. Skilled workers were the grade of labor that was most apt to be hired using such contracts; non-managerial specialists were the second group most likely to be hired under such an arrangement.

Representation of employees by trade unions was very strong in small state firms--averaging 83% in firms with fewer than 50 workers and 73% in other firms with fewer than 2509 employees. While in most cases the preferred trade union was CITUB, the union that succeeded to the old "official" unions, the new union Podkrepa, was also present.

Nearly all respondents replied that they operated only one shift and that this has not changed recently. A little over half of respondents (50.4%) reported that they had introduced new technology during the last two years.

As for the immediate outlook for small state firms (at the end of 1991), most firms (46%) expected no change in employment during 1992. While 22% anticipated the need to make further job cuts, 29% expected to be increasing their labor forces.

(3) Small Cooperatives

As in the state sector, smallness has until recently been quite scarce in the cooperative sector (Jones and Meurs, 1991). However, despite the novelty of smallness in the cooperative sector, surprisingly in 1992 only 4.3% of firms reported that they had been in existence for fewer than two years. The average small cooperative in manufacturing was 32 months old. As in the state sector what seems to have been happening is that small cooperatives were beginning to appear as spin offs from the previous large and state-controlled cooperatives.

In 1991 the average small cooperative firm had annual sales of 7,676 million leva (about \$300,000), fixed assets of 1,954 million leva (about \$75,000) and a labor force that averaged 169 workers during the year but which had fallen to 147 by the end of the year. Amongst all cooperatives in the sample, only 8.7% had a labor force with 50 or fewer workers.

Reflecting their sense of being independent entities, 87% of small cooperative manufacturers responded that their main source of capital was internal. No firms listed allocations from the government as the main source of capital, with 9% replying that the local bank played the key role. Assets were leased by no small cooperatives.

In the middle of 1991 the average level of capacity utilization was reported to be 75%; a year later this had fallen to 72%. Also in June 1992, almost 70% of small cooperatives

reported that they could produce current levels of output with fewer workers. Furthermore, these firms reported that the average level of overmanning was almost 22%.

Turning to sources of inputs, the bulk (81%) of small cooperatives obtained their main raw materials by paying cash locally. Not a single small cooperative stated that allocations by the government were its principal source of raw materials.

So far as the destination of products was concerned the bulk of small cooperatives' output ended up being sold in domestic markets; on average exports accounted for only 4.2% of sales though this did increase a little in 1992 compared to 1991.

When it comes to price setting, in 56% of cases small cooperatives still saw the government as playing a key negotiating role; by comparison, almost 40% of respondents reported that they set prices alone. On the question of changes in the range of products during the preceding two years, only 24% responded that they had increased their product range. This contrasts with 48% who said that their number of products had fallen, while 29% reported that there had been no changes.

While 78% of small cooperatives reported that they had decreased their labor forces during the period January 1990-December 1991, 13% reported that they were employing more workers (with the balance indicating that matters were unchanged). For the average small firm, the labor force fell by about 13%. So far as the structure of the labor force is concerned, at the end of 1991, on average 44% of a small state sector manufacturing firm's employment was female, about 11% were under 25 y.o. and almost 9% were over 54 y.o.

Workers in smaller cooperatives were paid much better on average than were workers in larger cooperatives. On average workers in firms with fewer than 50 employees received 1160 leva per month while those in the 101-250 size class earned 1320 leva on average. These sums compared to the average of 840 leva per month for workers in firms with 250-1000 employees and 960 for employees in firms with more than 1000 workers. In terms of preferred forms of compensation in small cooperatives, sample firms were evenly divided between piece and time rates. About four-in-ten firms reported using a profit sharing system.

Almost 61% of respondents hired workers on civil contracts during the preceding year. Skilled workers were most likely to be engaged under such contracts.

Representation of employees by trade unions was quite strong in small cooperatives--averaging 55% in firms with fewer than 100 workers and 70% in other firms with fewer than 250 employees. While in most cases the preferred trade union was CITUB, the

union that succeeded to the old "official" unions, the new union Podkrepa, was also present.

Nearly all respondents replied that they operated only one shift and that this has not changed recently. Only 27% of small cooperatives reported that they had introduced new technology during the last two years.

At the end of 1991, and consistent with their reporting overmanning, many small cooperatives expected that the process of shedding labor still had a ways to go. In fact 40% of firms anticipated that there would be more job losses. But surprisingly even more firms (44%) expected no change in employment during 1992, while the balance (17%) expected that they would be increasing their labor forces.

C. Comparisons by size and ownership

By drawing on the foregoing, and mainly in Table 2, we summarize some of the similarities and differences between small Bulgarian firms with different forms of ownership. We also make use of the available data to make comparisons between the average small firm and its large counterpart. When such comparisons are made, the principal observations are as follows.

Major differences exist concerning employment dynamics by both size and ownership. Nearly all large (state and cooperative) firms cut their workforce during 1991--on average by 31% (Standing et al., 1993). By comparison, fewer small cooperatives cut jobs--only about three in four-- and small state and cooperative firms shed workers at about half the rate in large firms. Even more striking is the fact that only 16% of private firms cut employment and that the average small private sector firm added workers during 1991. Also, a greater fraction of private firms expected to add workers when compared with small state and cooperative firms.

The average small private firm is considerably smaller than its cooperative or state counterpart. Relative to a state firm, a small private firm sells one tenth as much, has a capital stock that is 1/13 as large and a labor force that is 1/10 as big.

Small private firms are overwhelmingly internally financed from owners' savings. But both small state and small cooperatives as well as large state and large cooperatives rely on internally generated funds. Even for large state firms in only 11% of cases were allocations by the government the main source of capital. At the same time private sector firms are much more likely to use bank loans than other small and large firms. Neither leasing nor foreign private capital was of any significance on average for any small or large Bulgarian firm.

In a number of respects all small and large firms were surprisingly similar. Thus all forms of small and large firms claimed similar levels of capacity utilization (63-72%) and similar levels of overmanning (about 20%). The proportion of women in the labor force was basically similar in all forms of small and large firm as was the use of piece rates and civil contracts. Levels of perceived competition were surprisingly similar in all forms of enterprise.

In a number of additional respects all small firms were surprisingly similar, though sometimes there were differences with some large firms. Thus while no type of small firm was export oriented in a major way, the average large state firm exported more than 17% of its output--more than twice the amount for small state firms.

Private sector firms have labor forces that contained greater proportions of both younger and older workers than did state or cooperative firms, both large and small. Profit sharing was a form of compensation that was four times as likely to be preferred by cooperatives (large and small) as private sector firms and twice as likely as in small and large state firms.

Since the average wage in large ($L > 1000$) firms is 1,740 leva per month, on average workers in very small state firms were better paid (receiving 2,030 leva per month) though employees in large firms did earn more than workers in small firms with 50-250 workers. For cooperatives the average worker in a large cooperative earned 960 leva, significantly less than employees in smaller coops. However, on average, the best paid of all were workers in the private sector, though there is some evidence that they did not receive benefits comparable to those earned by workers in the state and cooperative sectors.

It was no surprise to find that trade union density was much higher in both small state firms and in small cooperatives compared to small private firms where very few workers were union members. More surprisingly, however, was the finding that trade union membership was much more prevalent in both small state and small cooperative firms than in large state firms and in large cooperatives. Unlike patterns observed in western countries, in Bulgarian firms member commitment to the new trade unions is clearly strongest in smaller firms.

In all likelihood the key to explaining many of these differences lies in the varying origins of the firms, in particular the fact that private manufacturing almost always began de novo and that private firms are much newer-- for example typically 50% younger than a small cooperative.

III. Comparisons with other former Socialist Economies

When making comparisons of the size and composition of Bulgarian small firms and small firms in other former socialist economies, we note that the available data for other countries are particularly rich for features of small private firms (e.g. Webster (1992a, b; Swanson and Webster, 1992; Charup and Webster, 1993). However, in making such comparisons it must be remembered that such an exercise is fraught with unusual difficulties--there are, for example, enormous problems in the precise definitions and measures of key variables. Also, differences in the nature of the private sector across countries reflects variation in the pace of privatization policies. At the same time, if a comparative exercise reveals major differences, conceivably these may persist across countries even after the extent of privatization becomes more uniform.

In Table 3 we summarize some of the principal features of the average small private firm in several former socialist countries for which data are available for 1991. Compared to small firms in Hungary, the former Czechoslovakia, Poland and St. Petersburg, from the standpoint of the size of the average workforce, the average Bulgarian private firm is always considerably smaller-- by at least a third.¹¹ Also the size dispersion of the populations is different. Whereas very few Bulgarian manufacturing private firms employ more than 50, in Hungary and the former Czechoslovakia, one in five private firms has more than fifty workers. An even larger difference exists concerning average sales, except when compared with private firms in St. Petersburg.

There are important differences between Bulgarian private firms and other private firms in terms of origins, product and capital markets. Compared to small firms elsewhere (including St. Petersburg) an unusually large proportion of Bulgarian small private firms began as independent start-ups. Bulgarian private firms are typically much newer than private sector firms elsewhere. From the standpoint of input supplies, Bulgarian small private manufacturing firms are unusually dependent on state firms. While many of the private Bulgarian firms regard themselves as pure monopolists, the bulk perceive that they face an environment that is unusually competitive compared to firms in nascent private sectors elsewhere. Finally, and very importantly, insofar as Bulgarian private firms export a tiny fraction of production (4%) they differ greatly from firms in Hungary, Poland and the former Czechoslovakia.

There are also interesting differences concerning the nature of labor markets and associated institutions. Relative to other small firms in former socialist economies (excepting St. Petersburg), Bulgarian small firms pay poorly--at least 40% less (though the pay differential with bigger firms is not necessarily very different). While trade union membership is quite low (about

5%) this is qualitatively different than the typical situation elsewhere.¹² Also it appears that the structure of the labor forces may differ--note the smaller fraction of the labor force that is female in Bulgaria. Finally there is some suggestion that the nature of the typical compensation system may vary, with profit sharing being more prevalent in Bulgaria than in other small private firms.

In accounting for many of these differences across nations, as with variation amongst small firms within a country, crucial factors are likely to include the varying origins of private firms in different countries. In particular the facts that, in Bulgaria, private manufacturing almost always began *de novo* and that private firms are much newer than comparable firms in other former socialist countries, are of great significance.

When we compare the size and composition of the Bulgarian small firm manufacturing sector with small firm manufacturing sectors elsewhere, we reach two tentative related conclusions. First, it seems that small firms in general are at least as important in the Bulgarian economy as in other former socialist economies such as the Czech Republic. At the same time the composition of the Bulgarian small firms sector is somewhat surprising. While it is probably unsurprising to see that the private sector is not nearly as well developed in Bulgaria as it is in other countries such as Poland and Hungary, it is perhaps more surprising to observe that, compared to small state and cooperative firms elsewhere, in Bulgaria such firms already are of considerable importance. Of course of all this may well change quite swiftly as the privatization process unfolds and firms that were cooperative/state change their form of ownership.

IV The Performance of Small Firms

For diverse reasons, including weak or perverse incentives for managers and absence of competitive pressures, the conventional wisdom is that large firms in the former centrally administered economies are technically inefficient. The corollary is that small firms would be expected to be relatively more efficient than large firms and that, therefore, diverse measures should be taken to foster the spread of small firms. Another important issue concerns the appropriate forms of ownership for these new small firms. While some seem to argue that only small **private** firms will have the desired efficiency advantages, others argue that small firms that are not private may also be potentially efficient and hence argue for policy that encourages a broader range of forms of ownership (e.g. Estrin, 1991; Murell, 1991.)

For the most part, empirical evidence for Bulgarian firms on these issues is lacking. An exception is Parvulov (1991) who, by using several partial productivity indicators, finds that small

and medium firms outperformed larger firms in 1988-89. However these exercises could only be undertaken for state firms and since then there have been significant changes in the economic context. Hence, to provide additional evidence that bears on these issues, we extend the approach adopted by Parvulov. We use partial productivity indicators to see whether or not there are differences in performance, on average, for small firms compared to large firms and, within a given size class, for different legal forms. In Table 4 we present such information where performance is measured by: sales per worker; value added per worker; sales per unit of fixed assets; value added per unit of fixed assets and costs per unit of sales. In addition we compute the capital-labor ratio. The means are presented for the three main types of ownership and for different size categories.¹⁴

For state firms, in the main these data show that capital productivity (sales per unit of fixed assets; value added per unit of fixed assets) was higher for firms in the smallest size classes (below 100 workers) compared to larger firms (with 250 or more workers). While sales per worker were typically much higher in bigger state firms, this was not the case with value added. Hence there was no consistent pattern by size class for state firms for labor productivity. While the capital-labor ratio was lower in most small firms (compared to large firms), surprisingly the biggest capital-labor ratio was for state firms with fewer than 50 workers.

Broadly speaking, the picture that applies in cooperatives points in the direction of the better comparative performance of small cooperatives. Thus capital productivity (sales per unit of fixed assets; value added per unit of fixed assets) is always higher for firms in the smallest size classes (below 100 workers) compared to larger firms (with 250 or more workers). In addition, sales per worker are considerably higher in the smaller cooperatives and value added per worker slightly higher.

Unfortunately because of the different data gathered in the different samples, comparisons across the different legal kinds of enterprise, do not enable many comparisons to be made. The available data do not point to a clearly and consistently better record for any particular legal form of enterprise.

However the data do suggest that private sector firms are clearly the strongest in terms of capital productivity-- an unsurprising finding given the relatively low capital-labor ratios of private firms. In conjunction with our earlier findings on the significantly smaller average capital stock of private firms, points to the embryonic nature of Bulgarian capital markets, especially their inability to allocate sufficient capital to private firms.

V. Conclusions

We report findings drawn from new survey data of small manufacturing firms in the private sector as well as in the state sector and independent cooperatives. We also compare some of our findings with those for large state and cooperative firms and with small private firms elsewhere. In addition we undertake some preliminary analysis of the performance of these different forms of enterprise. Before reviewing our findings we again must stress that the nature of the available data means that we must be cautious in interpreting these findings. ¹⁴ These caveats notwithstanding, we find:

(a) While the **private manufacturing** sector is not very extensive, because many small cooperatively and state-owned manufacturing firms exist, in terms of its **overall** importance in the economy, the Bulgarian small firm manufacturing sector probably is quite well developed compared to other former socialist economies. (Equally, the available data do not permit very precise statements to be confidently made about the size of the Bulgarian small firm sector.);

(b) The characteristics and behavior of Bulgarian small firms are often quite different according to both form of ownership and when compared with Bulgarian large firms. There are important differences by legal type concerning employment levels and employment dynamics, average age, sources of capital, the prevalence of profit sharing, average levels of worker earnings and union density;

(c) Bulgarian small firms are often quite different from those in former socialist economies. Compared to small private manufacturing firms in other restructuring economies, Bulgarian small private manufacturing firms are smaller, more dependent on the state, perceive unusual levels of competition, are not export oriented and have a relatively small proportion of women in their labor forces;

(d) Partial productivity indicators of performance indicate that small Bulgarian manufacturing firms typically are less capital intensive and have higher capital productivity than do larger Bulgarian firms. There is no evidence that any particular legal form of enterprise has a clearly and consistently better record.

One set of implications of our findings concerns the size of the small private firm **manufacturing** sector. While much has been done to foster a private sector --e.g. the spate of new legislation--whatever the true size of that part of the small firm sector, it is clear that it remains quite tiny. In part this reflects the fact that much energy has been focussed elsewhere--e.g. on the problems of trying to rapidly privatize large state-

owned manufacturing firms. The conditions conducive to the entry of new small firms have remained less than ideal. Following North (1990:76 ff.), in established sectors like manufacturing (and unlike relatively underdeveloped activities like services), arguably there does not seem to have been sufficient appreciation of the staggering complex set of informal and formal rules that confront individual entrepreneurs and thus inhibit the emergence of flourishing private manufacturing firms. While it is clear that more work is needed to determine precisely what are the impediments to the expansion of the private sector, the following considerations may be pertinent.

For one thing, the fact that the private sector, in general, is characterized by many tiny and new firms probably means that collective action by advocates of that sector (e.g. through employer associations) is bound to be difficult. In part this reflects the very partial nature of the information available to each owner as well as the difficult logistics of preference formation (Scolfiels, 1985). In turn, fast changing situations mean that some of these early advocates of the emerging private sector probably have had to allocate scarce resources to more immediately pressing issues and thus are less effective in coalition building. The newness of policies designed to promote private firms, past policies which prevented export oriented policies toward the west, a small firm policy that has lacked consistency but has been distinguished from others by its focus on restitution and its eschewing spontaneous privatization, seem to have combined to inhibit the development of ties among different private sector firms. Hence there is some indication of the need to increase the scope and nature of the institutions that exist to assist the private sector.

At the same time, ideas of path dependency, first-mover advantages, market power and the corporate life-cycle (Mueller, 1992) suggest that the choices made in the next few years will have long-lasting consequences. Our preliminary findings suggest that industrial policy should not focus on encouraging a single form of ownership to the exclusion of others. However, on these and similar matters, a clear need exists for on-going and preferably longitudinal research.

Notes

- ¹ This section draws heavily on Jones and Rock (1993).
- ² However we do not systematically examine the slew of other micro and macro policies designed at least in part to encourage market-type behavior. For discussion of "marketization" including attempts to restructure management, (and stabilization) see World Bank (1991) and Wyzan (1993).
- ³ Representatives of all parties acknowledged the need for "restructuring", of which "privatization" was a part, because of a rapidly deteriorating economy since the mid 1980's. For elaboration of the economic conditions when privatization began see World Bank (1991).
- ⁴ However a major stabilization program was introduced. Policies included: price liberalization; deciding to let the leva float; wage controls; and a tightening of macro fiscal and monetary policy. For more discussion and evaluation of the success of these policies see Wyzan (1993).
- ⁵ Also during this period the slow process of restitution of land to former owners was begun. For accounts see Jones and Rock (1993) and Bogetic and Wilton (1992).
- ⁶ Estimates by the Union of Private Economic Enterprises suggest that the average firm employs fewer than four people with the highest average (of 7.6) in construction. However, these estimates do not appear to be based on reliable sampling methods. By using a sample that is nationally representative, Anachkova *et al.* (1992) estimate that in 1990 the average size of a new firm was about 3.
- ⁷ For example see AECD (1993).
- ⁸ See the Appendix for details of the sampling method.
- ⁹ According to the commercial code of May 1991 "private" firms may assume diverse legal forms. These include various forms of partnership (differing according to the number of partners and authorized capital) as well as companies with either unlimited or limited liability.
- ¹⁰ Substantial differences exist in these figures according to legal form. Typically values for firms that are "limited liability" are much higher.
- ¹¹ This is especially striking when it is noted that, whereas the Bulgarian sample is for the largest private firms, in the studies by Webster and her colleagues, the samples are representative of all size classes and do not exclude even tiny firms. Equally,

however, whereas the Bulgarian private sector did not contain any firms that formerly had different forms of ownership (e.g. cooperatives) this is not the case elsewhere, especially in the northern tier trio.

¹² Also the very high rates of union membership in small state firms and in small cooperative firms suggest that, as such firms privatize, that membership levels in small private firms in the future may well increase.

¹³ Reflecting the uneven nature of the available data, not all measures are available for all enterprise types/size classes.

¹⁴ Thus, despite our best efforts, the fluidity of the federal statistical gathering efforts, means that there may be omissions from our sample of the largest private sector manufacturing firms. The novelty of the new accounting frameworks mean that inevitably there also may be measurement errors for key variables such as fixed assets.

Table 1 Property Forms in Large Manufacturing Sample (%)

| <u>Property Form</u> | 1988 | 1989 | 1990 | 1991 | 1992 | Expected) |
|------------------------------|------|------|------|------|------|-----------|
| State | 92.1 | 90.5 | 89.0 | 80.0 | 76.0 | 22.2 |
| State-Joint Stock | 1.4 | 1.6 | 1.6 | 10.3 | 12.7 | 44.2 |
| (Independent) Cooperative | 5.7 | 6.9 | 7.3 | 7.9 | 8.5 | 10.0 |
| Private | | 0.2 | 0.4 | 0.8 | 1.8 | 23.5 |
| Other | 0.8 | 0.8 | 1.0 | 1.0 | 1.0 | 1.7 |

Notes: "State" refers to or organizations that are controlled by central bodies. In some cases ownership is municipal, in other cases cooperative. Private includes limited and unlimited liability legal forms.

Source: The sample of 495 firms is drawn from the Bulgarian Management Survey. (For a description, see the appendix and Jones 1993).

Table 2: Descriptive Statistics: Bulgarian Small firms:1991

| | Private | State | Cooperative |
|----------------------------------|----------------|--------------|--------------------|
| Average Sales (\$ '000s) | 50 | 530 | 300 |
| Average employment (mid 91) | 16 | 182 | 169 |
| Average Employment (end 9) | 20 | 153 | 147 |
| % firms fewer 50 employees | 94 | 5 | 9 |
| % firms raising employment | 39 | 4 | 13 |
| % firms reducing employment | 16 | 93 | 78 |
| women in workforce (%) | 44 | 45 | 44 |
| workforce < 25 y.o. (%) | < 20 | 11 | 11 |
| Overmanning (% firms) | 23 | 21 | 23 |
| Average wage (leva per month) | 2100 | (1600) | (1250) |
| Profit Sharing (% firms) | 10 | 20 | 40 |
| Trade Union Density | 5 | 75 | 65 |
| Average age small firm (months) | 16 | 27 | 32 |
| No competitors (% sample) | 14 | 10 | n.a. |
| > 50 competitors (% sample) | 44 | 16 | n.a. |
| Average capacity utilization (%) | 73 | 67 | 72 |
| Exports (% sales) | 4 | 3 | 4 |

Source: Surveys of private, state and cooperative manufacturing firms. (See appendix).

TABLE 3: Comparisons with Other Private
Sector Manufacturing Firms

| | Bulgaria | Czech. | Poland | Hungary | St. Petersburg |
|---|----------|--------|--------|----------|--------------------------------|
| Average Monthly Sales (\$ Thousands) | 4.2 | 26 | 47 | 109.4 | 4.8 |
| Average Labor Force | 20 | 42 | 32 | 44 | 74 |
| Firms <50 employees | 94 | 80 | 90 | 78 | n.a. |
| Main Source Start-Up Capital = Own/Family Savings (%) | 60 | | | 52 | 67 |
| Value of Equipment (\$ Thousands) | | 244.5 | 132.3 | 320.5 | |
| Women in Labor Force | 44 | 57 | 53 | | 42 |
| Average Wage (monthly)(\$) | 89 | 151 | 155 | 207 | 13 (unskilled) 30 (skilled) |
| Average Cost of Labor (monthly) (\$) | | | 297 | 303 | 31.3 |
| Incidence (%) Profit Sharing | 10 | Rare | | | |
| Union Density (%) | 5 | 0 | 0 | <5 | n.a. |
| State Firms as Primary Source of Inputs (%) | >90 | 80 | 71 | 74 | 77 |
| 0 Competitors | 14 | | | | 33 |
| >50 Competitors | 44 | 20 | 42 | n.a. | <20 |
| Value of Exports (%) | 4 | 33 | 17 | 36 | 3 |
| Average Age of Firm (months) | 16 | | | 75% > 36 | 22 |
| New Start-Ups (%) | 97 | | | 25 | 38 |

Source For Czechoslovakia, Webster and Swanson (1992); Poland, Webster (1992a); Hungary, Webster (1992b); St. Petersburg, Webster and Charup (1993); For Bulgaria, the Author's survey

Table 4: Performance Indicators by Size and Ownership

| | Private | State | | | | | Cooperative | | |
|-------------------------------------|---------|-------|----------|---------|--------|-------|-------------|----------|--------|
| | | >1000 | 251-1000 | 101-250 | 51-100 | <50 | >1000 | 251-1000 | 50-250 |
| Sales per worker | 54.5 | 141.0 | 142.1 | 76.9 | 65.3 | 111.8 | 28.9 | 22.4 | 46.9 |
| Sales per unit fixed assets | 38.8 | 3.8 | 4.6 | 4.0 | 7.3 | 11.8 | 4.7 | 4.6 | 19.6 |
| Value added per worker | | 25.0 | 46.1 | -49.8 | 20.5 | 57.9 | 18.9 | 20.4 | 20.8 |
| Value added per unit of fixed asset | | 1.1 | 1.7 | -3.3 | 6.1 | 8.3 | 2.6 | 3.4 | 14.7 |
| Capital Labor Ratio | 15.3 | 50.5 | 69.9 | 25.4 | 27.9 | 82.9 | 41.2 | 5.8 | 12.7 |
| n | 66 | 53 | 162 | 96 | 21 | 6 | 5 | 12 | 23 |

Notes: All values are in 1000s of leva. In 1991 the exchange rate varied from approximately 25 - 27 leva per \$.

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Appendix: The Samples

The three samples are for different forms of ownership and were gathered during the summer of 1992. The data were gathered by enumerators who administered instruments devised by the author sometimes in collaboration with teams including colleagues from the ILO and Charles Rock.

This list of the largest **privately** owned manufacturing firms was derived from the records of the Bulgarian Central Statistical Institute. All 130 such firms were contacted; 105 provided information.

The state and cooperatively owned firms are a subset of a sample for which the design proceeded at two levels. First, five groupings of the 320 municipal districts in Bulgaria were selected on the basis of geographic and urban variability, reproducing in the aggregate the country-wide industry distributions, and minimizing data collection costs (Sofia, Pernik, Plevna, Burgas and Plovdiv). Second, within each of the five regions, population enumeration lists of enterprises that were state and cooperatively owned in 1988 were compiled by the Central Statistical Bureau. The number of sampled establishments per region was set to reproduce the population proportions of establishments per region. The five regions contained a population of 727 state and cooperatively owned enterprises. Within each region, within major industry categories, establishments were ordered by size and the approximate two-thirds largest were selected up to the desired sample size of 500. Thus the sample contains 69% of the population of establishments but selected to reproduce population establishments distribution by industry and region. In terms of employment, the sample firms contain about 95% of all employees in state and cooperative manufacturing in the five regions. In order to facilitate more meaningful comparisons with private firms, in this paper the sub-sample of firms comprises all (338, large and small) **state** (including 123 small and medium firms) and all 38 **cooperative** firms that regarded themselves as independent entities, including 23 with fewer than 250 workers.