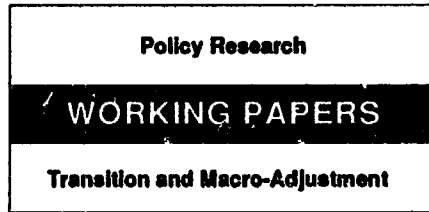


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# Transforming State Enterprises in Poland

## Microeconomic Evidence on Adjustment

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**Poland's state sector is far from a write-off. Success stories among state-owned enterprises are emerging in all manufacturing sectors, contradicting negative stereotypes. The industrial revival showing up in economywide statistics can be regarded as a sustainable trend born of genuine microeconomic adjustment.**

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Basing their report on repeat visits in late 1992 to 75 large state-owned manufacturing enterprises (which had been earlier surveyed in mid-1991), Pinto, Belka, and Krajewski present optimistic new evidence about the transformation of state-owned enterprises in Poland.

This evidence shows state-owned enterprises in a much more favorable light than the stereotype of myopic, decapitalizing companies that dominates discussion of Poland's state manufacturing sector. Success stories are emerging, and the state sector is far from a write-off.

Moreover, favorable evidence is drawn from all manufacturing sectors, attesting to the potential for a diversified manufacturing base. The state-owned enterprises' operations are largely autonomous, so the positive adjustments indicate that decentralized approaches to transformation could work — if bolstered by appropriate managerial incentives. But several problems remain, and many issues have yet to be addressed.

Pinto, Belka, and Krajewski examine various adjustment indicators (labor shedding, material and energy costs, bank borrowings, and export

performance) and correlate these with firms classified by 1992 financial performance. (By 1992, presumably, the transitional measurement distortions of 1990 and 1991 had disappeared.) They show that significant differences exist between "successful" and "unsuccessful" firms. Managers in successful firms have tended to stress a change in product mix, have generally become more efficient in the use of materials and energy, have maintained labor productivity, and have shown restraint in setting wages and in borrowing from banks.

The authors discuss key transformation issues: the disappearance of such safety valves as easy bank loans and interfirm credit, hardening of the microeconomic budget constraint, excess-wage tax reform, and, most important, managerial attitudes and incentives.

To complete the picture, they correlate the results of manager interviews with the quantitative performance of firms. Essentially, firms have learned a good deal about operating in a market economy in the past three years, and managers have matured. The industrial revival showing up in economywide statistics can be regarded as a sustainable trend born of genuine microeconomic adjustment.

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**TRANSFORMING STATE ENTERPRISES IN POLAND:  
MICROECONOMIC EVIDENCE ON ADJUSTMENT**

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## Glossary: Accounting Framework and Definitions

### Revenues

- Sales (main business)
- Other Income
  - subsidies (all)
  - sales and leasing of assets
  - financial income

### (-) Costs of Revenues

- Costs of sales
  - Turnover tax
  - Materials and energy
  - Depreciation
  - Interest
  - Wage Costs (see note below)
  - Other
- Costs of other income

### (+) Balance of extraordinary gains and losses

(=) GROSS PROFIT (also pre-tax profit or PROFIT II)

NET OTHER INCOME = Other Income - Costs of other income

UNDERLYING PROFITABILITY = (Sales - cost of sales)/Sales = (PROFIT II - net other income - balance of extraordinary gains)/Sales

NET PROFIT = GROSS PROFIT - income tax - dividends - ppww

DISPOSABLE CASH = GROSS PROFIT - income tax - dividends + depreciation

PPWW = Polish acronym for excess wages tax (wages paid in excess of indexation norm).

### SECTORAL ABBREVIATIONS:

- MET = metallurgy
- ELEC = electromachinery
- CHEM = chemicals
- LIGHT = light manufacturing (textiles, leather)
- FOOD = food processing.

NOTE ON WAGE COSTS: Wage costs = basic wage plus payroll taxes and social insurance contributions. Calculated as wage bill x 1.65 pre-1992 (20% payroll tax, 45% contributions); and as wage bill x 1.2 x 1.45 in 1992 to reflect payment of social insurance contributions on gross wages.

## I INTRODUCTION

Nearly three years into the Polish Economic Transformation Program (ETP), the state manufacturing sector remains vital to fiscal balance and the restoration of a healthy banking sector. It also holds the key to growth and the supply response in view of its unutilized capacity, export potential and economic linkages typical to manufacturing. State-owned enterprise (SOE) behavior and reform, the subject of this paper, are as relevant today as in the early stages of the ETP owing to slow privatization and the continuing large size of the state sector in GDP, exports and taxes. Initial readings suggest that the same is likely to be true of other emerging market economies owing to similar starting points. There is much to be learnt from Poland's experience as a front-runner.

This paper reports on the second phase of the experience of 75 large SOEs drawn from five disparate manufacturing sectors and scattered all over Poland. The initial selection was non-random, size as measured by 1989 sales being used as the criterion. However, the fortunes of the firms have evolved in random-walk fashion following the "big bang" and three years later, the non-randomness of the initial selection seems of limited relevance. The paper combines three years of data on the 75 SOEs - 6 months before and 30 months after the "big bang" - with manager interviews to form a much more positive picture of SOEs than the stereotype of a decapitalizing, myopic firm, paying everything out in wages and then approaching the government for a bailout.

The focus on large SOEs is valuable because these still account for a large part of economic activity. They also embody many of the more complex problems in transforming the manufacturing sector because of their size and bargaining power. Further, their behavior will not only influence the responses of smaller SOEs but also affect the credibility of the ETP. Annex I describes the sample.

The big bang was accompanied by an immediate and sizable drop in aggregate industrial output. Both 1990 and 1991, when CMFA trade was dismantled, were years of recession marked by declining sales and profitability and rising inventories, with little apparent adjustment. After the travails of 1990 and 1991, seasonally adjusted industrial output data displayed an upward trend in 1992 corroborated by surveys of business anticipations, which indicated more optimism among state enterprise managers. These developments fuelled the expectation that the recession might be at an end, surprising because: (a) fundamental structural reform (privatization of manufacturing, banking sector reform) have yet to take place; (b) the political system was marked by considerable short-run instability following the fragmenting effects of the 1991 elections, culminating in a change of government in mid-1992.

It was decided to re-survey the very same enterprises first visited in mid-1991 to determine whether the recovery indicated by aggregate data was underpinned by solid microeconomic adjustment and to obtain insights into the nature of the revival.

There is little doubt, given its size and potential, that state manufacturing suitably restructured and privatized can provide an important source of energy for medium-run growth. Quantitative data are used to show that there are emerging success stories among SOEs based on solid performance. Qualitative data based mainly on structured interviews with managers are used to answer the central issue of what SOEs can be reasonably expected to deliver and the related incentives and instruments. What do managers expect from the Government of Poland (GOP)? Are they optimistic? How do they assess the credibility of the ETP? What is their response to excess wage taxation and the modifications proposed

in the recent SOE Pact?<sup>1/</sup> What is their perception of the underlying causes of the 1990 export boom? Did it signify genuine adjustment? How are they coping with the social assets (worker housing, vacation resorts, etc.) problem? What are their attitudes and incentives?

### I.1 Main Results From First Phase (Jan. 1990 - March 1991)

The first phase examined the microeconomic reactions of the sample firms to the macroeconomic reforms introduced as part of the "big bang" in January 1990 (Pinto, Belka, Krajewski (1991, 1992)). It tracked the evolution of output, costs and profits and examined wage setting behavior, enterprise debt dynamics and enforcement of the "micro" hard budget constraint by banks, made a firm-level analysis of the export boom and its causes, and documented the evolving tax burden on enterprises. The findings were based on a direct survey of the firms covering the period June 1989 - March 1991, i.e., six months prior to and 15 months following the big bang. Both quantitative and qualitative information (manager interviews) were collected during the enterprise visits.

Some of the main quantitative conclusions were: (a) The high nominal interest rate on working capital (reported by managers as between 50% and 72% for the month of January 1990 alone) inhibited borrowing and motivated firms to pay off zloty loans, leading to a squeeze on working capital. The huge decline in real wages, which were partly compressed to accommodate rising financial and input costs, led to a demand shock, witnessed by rising finished goods inventories. Firms that could more easily pass through their costs to their customers and maintain their margins ("low elasticity of demand") were more likely to have maintained output. Consequently, the initial, unexpectedly large, decline in output could be explained by a combination of nominal interest rate shock and standard demand considerations; (b) high 1990 profits were temporary, stemming from inflationary gains on once-off inventory sales, devaluation gains on enterprise dollar accounts and implicit input subsidies from CMEA trade; (c) banks were lax in enforcing creditworthiness, leading to an adverse selection problem marked by loans going mainly to "bad" firms, which was reinforced by the reluctance of "good" firms to borrow; (d) SOEs tend to be myopic, with short-run pressure on wages that works to the detriment of restructuring investments essential for reducing energy and material intensity and product re-design; (e) nominal and real wages both displayed remarkable flexibility. Although significant, employment reduction has lagged output reduction partly because partial indexation of wages to inflation enforced by a punitive tax, has kept real wages low; and partly by the natural reluctance of worker-controlled SOEs to shed labor. Therefore, there is clear possibility of much higher unemployment once privatization and commercialization get underway on a large scale. Relatedly, there are few signs of an emerging factor market for labor. An impediment is the absence of a housing market, inhibiting labor mobility; (f) the hard currency export boom in 1990 resulted more from slack domestic demand than higher export profitability.

The main qualitative finding was a definite attitudinal shift in favor of profits and marketing in contrast to the old, exclusive emphasis on production targets. Further, managers tended to be the source of change and innovation, with workers playing more of a reactive, ratifying role. However, there was (and is) a serious principal-agent problem, with managers serving at the pleasure of the Workers' Council and no obvious owner stressing long-term viability considerations in decision-making.

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<sup>1/</sup>The "Pact on SOEs", a framework for enterprise transformation was sent by GOP to the main TUs on September 9, 1992 in a consensus creation effort. A few details (debt restructuring) started filtering out by late August. The bulk of the enterprise visits took place between mid-August and end-September. Annex II contains a brief description.

## I.2 Conceptual Framework

The ETP had two major behavioral implications for all enterprises, private and state sector:

(i) trade liberalization and removal of entry barriers meant an end to pricing behavior based on "cost plus constant mark-up" rules. Prices would be constrained by international parities and quality.

(ii) following the rapid elimination of manufacturing subsidies in the new regime, firms would be forced to look at profits, marketing and financial management, unlike in the old shortage economy when the production target was prime.

In addition to market discipline, SOEs had two constraints placed on them: (a) a punitive tax on wages paid in excess of the indexation norm (which applied to the private sector only in 1990); and (b) the threat of bankruptcy proceedings if dividend payments were in arrears for more than three months.<sup>2</sup> This focus on penalties, rather than positive inducement, flowed from two considerations: (a) the stereotypical image of SOEs as myopic and determined to decapitalize the firm through indiscriminate wage awards; (b) the belief that privatization would be swift and deal with the horizon problem and decapitalization.

In reviewing SOE response to the ETP, three points are worth making. First, the economic environment has been such that the short horizon problem would apply equally to private and state sector firms - as witness, the natural attraction of the private sector to trading, helping to keep options open. This absence of long-term commitment could be ascribed to: high real interest rates, especially for export oriented manufacturing; high and uncertain inflation; changing tax regime, import tariffs as well as domestic taxes; fluid legal framework, with property rights not resolved; political fragmentation and seeming indecision on key structural issues, e.g., mass privatization. In addition, the myopia of SOEs has been reinforced by absence of positive incentives to deal with the transition to privatization and job insecurity, which would naturally lead to an emphasis on the short-term and possible decapitalization.

Second, a large part of the deterioration seen in the state sector would probably have taken place even if all state assets had been instantaneously transferred to private hands on January 1, 1990: the energy price increases and huge jump in interest rates combined with macro stringency and the intended deflationary impact of the 1990 stabilization program would have exacted a toll even from a fully private manufacturing sector. Likewise, the CMEA shock, which had a big terms of trade effect and involved loss of an important market would have been difficult to deal with even by the private sector.

Third, postponing dealing with incentives in SOEs means that it is impossible to separate the effects of structural adjustment (decline of heavy engineering and energy intensive sectors; some unavoidable costs of adjustment in terms of reduced output and employment) from distorted incentives.

Below, quantitative and qualitative data are used to demonstrate that remarkable changes are taking place in SOEs as they continue to adjust to the new market system.

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<sup>2</sup>The wage norm was obtained by fractionally indexing wage increases to inflation using September 1989 as a starting point. The dividend is a tax on capital assets based on the share of the founding organ in capital as of January 1, 1983.



## II ADJUSTMENT AND FINANCIAL PERFORMANCE

A critical question throughout the ETP has been whether SOEs would adjust without privatization, and whether macro stringency would suffice to propel this adjustment. In empirically assessing adjustment, three issues arise: (a) How much time should firms be allowed to adjust to their radically new environment? (b) Can profitability be used as a measure of successful adjustment? (c) What other criteria should be applied to measure adjustment?

The first phase results covering January 1990 to March 1991 suggested that (a) macro stringency, while necessary, was insufficient to propel firm-level adjustment; (b) profits would be an extremely unreliable measure of adjustment owing to their unsustainable and artificial nature stemming from once-off inflationary gains on stocks and hidden subsidies from CMEA trade; (c) time lapse was insufficient because of the sheer magnitude of the change from a centrally planned to a market economy and the size of the shocks related to the big bang and the collapse of CMEA trade. In any event, the trend in underlying profitability (a measure of profits that tried to approximate profits on the basic business of the firm) showed a steady decline, dropping abruptly in first-quarter 1991 with the collapse of CMEA trade. Further, apart from impressive labor shedding, there was little tangible sign of adjustment. But it was apparent from visits to enterprises that managers were keenly aware of their weaknesses in marketing and finance and of the magnitude of the effort it would take to cope with the changes they faced.

An impressive aspect of the financial performance of firms in this first phase of the study was the clear link to sectoral origin of the firm. This was the most important differentiating factor in explaining profitability, with metallurgical firms at the top of the heap and light manufacturing (textiles, leather) at the bottom, reflecting the strong influence of the initial conditions (dollar accounts, CMEA trade) that favored heavy industry. Table 1 shows that profitability has been on a downtrend with an erratic but growing variance (measured by the coefficient of variation) within each sector. This suggests that profit-making and loss-making companies are emerging in each sector, and that sectoral location is no longer the key in explaining financial performance. In fact, it is shown below that good and bad performers are to be found in all sectors.

In contrast to the negative stereotyping of SOEs, this second phase presents quantitative evidence emphasizing a more positive side of SOEs. The approach is to focus on firms grouped according to 1992 profits (which are relatively free of distortions unlike in 1990 and 1991) and then gauge whether there are significant differences in adjustment response for these groups. Of course, it is difficult to form a picture of transformation possibilities in SOEs based only on quantitative information. Results from lengthy and lively interviews with managers are correlated with the numbers to complete the picture. It will be amply shown first, that there are emerging success stories among SOEs; second that these are distributed among all sectors, implying (a) that Poland has the potential for a well-diversified manufacturing base, and (b) that picking winners or favoritism based on sector would be a mistake. In short, the state sector is not a write-off, is far from extinct and SOE managers are capable of good, market-based performance.

This possibility adds a new dimension to the "privatization versus restructure and then privatize" debate. The focus in Poland has always been on rapid privatization of manufacturing; restructuring SOEs and clarifying managerial accountability and rewards has received little attention. Yet privatization of manufacturing has not taken off for a number of reasons: size of the state manufacturing sector (20-30% of GDP); absence of quoted shares or other financial instruments/mechanisms that would not only

facilitate sale but also solve the information and valuation problems that are bound to plague any large scale privatization of state assets; limited resources of the private sector to buy up the state sector; legislative hurdles, especially the clarification of property rights; political obstacles stemming from perceptions of the patrimony being given away too cheaply. If success stories are emerging from SOEs, which are autonomous, this implies that: (a) decentralized approaches to reforming and transforming firms can work and are to be favored; (b) MBOs and decentralized approaches such as privatization through restructuring should be encouraged. The evidence given below will confirm that this is indeed the case.

Lastly, the evidence will prove that the upturn in industrial output in 1992, signalling an end to the recession, has solid microeconomic foundations.

Table 1: Pre-tax Profit to Sales (%)

FOR THE SIX MONTHS ENDING

	Dec-89	June-90	Dec-90	June-91	Dec-91	June-92
MET.	Average	38	23	17	9	-18
	Variation	41	52	84	226	277
ELEC.	Average	49	27	21	19	-10
	Variation	44	44	83	168	279
CHEM.	Average	48	30	23	11	0.1
	Variation	29	47	47	77	38745
LIGHT	Average	39	17	7	-6	-73
	Variation	28	74	206	334	100
FOOD	Average	23	18	21	15	10
	Variation	21	34	42	52	87
A A A	Average	38	26	23	15	10
	Variation	42	43	53	56	177
A A	Average	34	24	13	10	-8
	Variation	32	37	35	41	192
A	Average	38	19	9	0.7	-57
	Variation	47	73	157	3832	108

- Notes:** 1. Pre-tax profit is Gross Profit or Profit II. See Glossary.  
 2. Variation is standard deviation divided by the absolute value of average profits x 100.  
 3. For definitions of AAA, AA and A firms, see text below.

## II.1 Financial Performance in 1992

How are SOEs performing in the third year of the ETP? Have they lived up to their stereotype

of myopic, decapitalizing firms? Or are there signs of positive microeconomic adjustment that underpin the recovery in industrial output indicated by economy wide data? To answer these questions, a simple classification of sample firms was developed based on financial performance. Using profitability as an indicator of performance early in the ETP would be flawed owing to the various temporary factors that supported the unsustainable paper profits of 1990. However, by 1992, with the evaporation of inflationary gains and the implicit subsidies from CMEA trade, profitable financial performance can be reasonably interpreted as a sign of adjustment. In addition, since Polish SOEs are for all practical purposes autonomous with little control exercised by the founding organs and ministries, profitable performance can also be taken as a sign of good, decentralized management.

Firms were classified as follows:

- AAA - positive net profit in January-June 1992 (the tail-end of the sample period)
- AA - positive gross profit in January-June 1992, but negative net profit
- A - negative gross profit in January-June 1992.<sup>3/</sup>

AAA firms could be regarded as having adapted the best, relatively speaking, to market conditions. Further, since positive net profit means that some profits were retained in the company, AAA firms could be regarded as responsible in wage setting, making appropriate trade-offs between immediate gain in the form of higher wages and the long-term health of the company. Similarly, AA firms (which pay income tax, but are unable to meet dividend and PPWW payments) could be regarded as adapting, but not as successfully as AAA firms; while A firms are in questionable shape, not even covering total costs.<sup>4/</sup>

The results of the classification were as follows: 31 AAA firms; 8 AA firms; 25 A firms. Tables 2 to 4 summarize the characteristics of these groups.

Table 2: Characteristics of AAA Firms

1. Sectoral Origin:	Met - 5, Elec - 5, Chem - 10, Light - 3, Food - 8. Total: 31.
2. Main Products:	Processed ferrous and non-ferrous products; refrigerators, ovens; heavy engines; transformers; wires and cables; paints and varnishes; tires; fertilizer; floor tiles; finished garments; cigarettes; sweets and chocolates; processed meat.
3. Organization:	2 privatized, 10 commercialized, 19 state-owned
4. Size:	Avg. 1991 Sales = \$103 million; Avg. empl. June 92 = 2939

<sup>3/</sup>Net profit is retained earnings after paying corporate income tax, the dividend and excess wage tax (PPWW). Gross profit is pre-tax profit. See Glossary for complete definitions of these terms, which conform to Polish accounting conventions.

<sup>4/</sup>Quantitative evidence on adjustment is provided below. The temptation to interpret A firms as useless or unviable should be resisted, as such firms may well, with debt restructuring and better managerial incentives (or privatization) have long-term potential.

Table 3: Characteristics of AA Firms

1. Sectoral Origin:	Met - 4, Chem - 1, Food - 3. Total: 8.
2. Main Products:	Raw and semi-processed steel products, steel pipes, fertilizers, meat products, sugar.
3. Organization:	2 commercialized, 6 state owned.
4. Size:	Avg. 1991 Sales = \$99 million; Avg. empl. June 92 = 2890

Table 4: Characteristics of A Firms

1. Sectoral Origin:	Met - 4, Elec - 5, Chem -2, Light - 12, Food - 2. Total: 25
2. Main Products:	Semi-finished steel products, raw steel, processed steel products -small amount, means of passenger road transportation, trailers, machine tools, construction equipment, man made fibers, plastics, hosiery, shoes, textiles, threads, woolen threads, sugar.
3. Organization:	1 privatized, 11 commercialized, 13 state owned.
4. Size:	Avg. 1991 Sales = \$55 million; Avg. empl. June 92 = 3300.

An important feature of the AAA firms is that they defy any simple classification: these firms include consumer and producer goods companies; heavy and light industry; those that were heavily affected by the collapse of the CMEA and those that were not; exporters to the west and predominantly domestic sellers. Sectoral origin, which was the dominant explanatory factor of profit performance in the early part of the ETP is irrelevant today. Notably, the A firms are dominated by the light manufacturing sector (shoes, textiles), with roughly half the firms. Once again, a broad cross-section of products is represented; but these firms have significantly higher employment than AAA or AA firms and much lower sales. The A firms are not necessarily without good prospects. This could depend upon suitable financial, labor and other restructuring, as the findings below will indicate.

AAA firms come from all sectors and produce a variety of goods. Regarding organization, 2 are privatized (by a foreign strategic investor acquiring a majority stake), 10 are 100% Treasury-owned companies ("commercialized") and 19 are state-owned. The material distinction is that commercialized companies do not have Workers' Councils and are controlled by the manager, who reports to a Supervisory Board usually consisting of 4 members nominated by the Ministry of Privatization and 2 drawn internally. SOEs are controlled by Workers' Councils, which play an important role in clearing all strategic and even operational decisions in the firm. It is difficult to make a clear link between form of organization and performance (a bias arises if the best firms are chosen for commercialization; the time lapse is inadequate to conclude that one form is decidedly superior to the other). In fact, there are more SOEs than commercialized firms among AAA, and roughly the same number among A. But managers expressed a distinct preference for commercialization, discussed later.

The lower panel of Table 1 shows the profit performance of the three groups. All are on a downward trend, although this is arrested for AAA and AA firms in 1992, with AAA firms somewhat

more consistent.

Key facets of adjustment are now correlated with the firm groupings AAA, AA, A. Owing to the small number of AA firms, the comparison will focus on the two extremes, AAA and A.

## II.2 Labor Adjustment: Real Sales, Productivity and Unit Labor Cost

The "big bang" was accompanied by an immediate and sharp drop in industrial output measured by real sales. This was an economy-wide phenomenon, resulting eventually in a 12% decline in GDP in 1990. But the drop in output was not matched by labor shedding, leading to declining productivity and eventually, rising unit labor cost.

Results in the sample followed this general pattern. However, employment reduction has continued while sales have gradually stabilized. Figure 1 plots real sales for selected months for the AAA, AA and A firms, using September 1989 as the base. For AAA firms, real sales hit rock bottom in mid-91 and have been on an uptrend since. AA firms show recovery in 1992; but A firms are on a downtrend throughout. The difference shows up in productivity, shown in Figure 2. Comparing June 1992 and September 1989, AAA firms almost maintained productivity levels (-3%), while these fell for AA firms (-15%) and dropped drastically for A firms (-40%). Not surprisingly, efficiency measured by unit labor cost shows that AAA firms were far ahead of A firms.

Figure 3 plots the trend in unit labor cost. The year 1989 was marked by sharply rising wages, with an acceleration in the last quarter. The big bang of January 1, 1990 was marked by a huge increase in materials and energy prices and a more than three-fold increase in interest rates, which exceeded 50% for the month of January alone. Firms froze nominal wages as a shock absorber, leading to a sharp drop in unit labor costs. However, as fears of bankruptcy receded, real wages and unit labor costs grew rapidly, a trend that persisted until the end of 1990. Subsequently, the trend has been downward, indicating that all firms in the sample are taking measures to control labor costs, including wage restraint, labor shedding and maintaining output; but in comparing the two extremes, the performance of AAA firms is decidedly superior to that of A firms.

Table 5 shows substantial labor shedding, in spite of Workers' Councils. For the total sample, labor was reduced by a remarkable 27%, with the labor-intensive A group leading the way. However, this group has also been plagued with the biggest marketing problems, leading to falling productivity.

Table 5: Index of Employment (September 1989=100)

	Dec-89	June-90	Dec-90	June-91	Dec-91	June-92
AAA	101.7	95.1	93.4	87.4	84.4	79.4
AA	99.7	98.7	95.2	87.3	78.5	76.5
A	100.1	95.9	88.5	81.9	74.0	67.1
Total	100.8	95.8	91.3	84.7	78.8	73.2

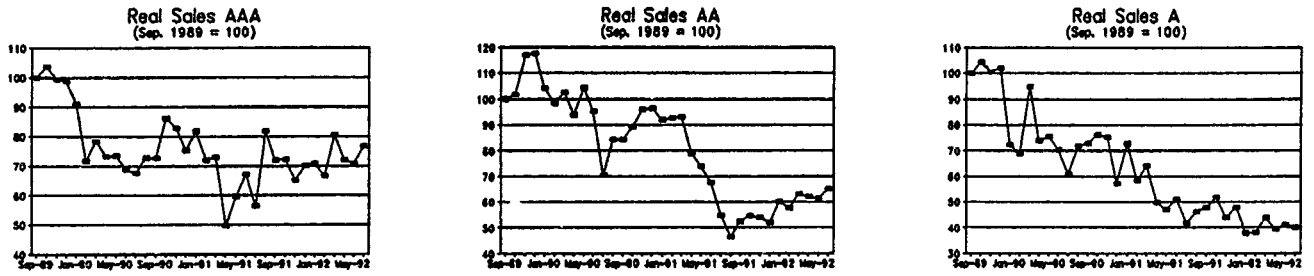


Figure 1

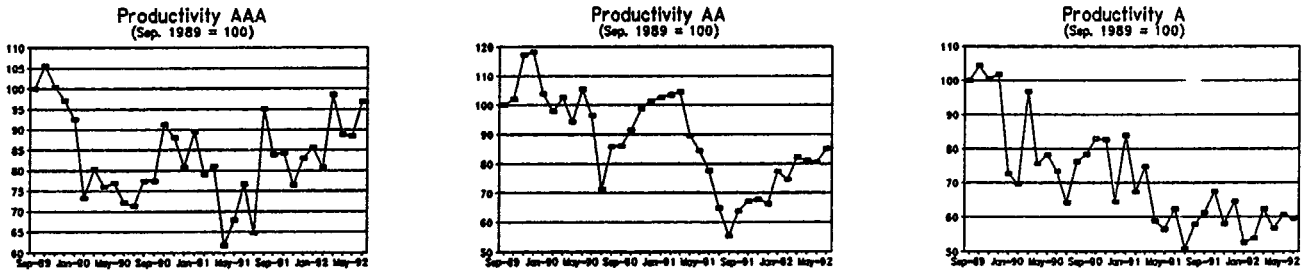


Figure 2

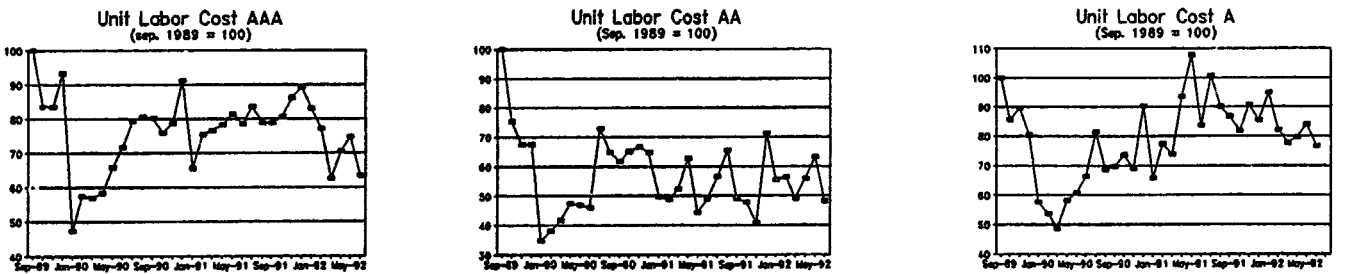


Figure 3

### II.3 Materials and Energy Costs

Table 6 contains the ratio of materials and energy costs to sales for selected periods. In 1990, all three groups were level. The dollarizing of CMEA prices and the removal of related implicit subsidies shows up in the numbers for the first six months of 1991; but a downward course was then set in motion proving that the efficiency of materials and energy consumption is on the rise. It is remarkable that A firms exhibit this increased efficiency as well. This leads to the conclusion that a key problem for A firms is low capacity utilization, shown by the sharp compression of real sales, with a continuing decline in 1992 (Figure 1). As the analysis showed, moreover, these firms have a larger labor stock on average and are plagued with inefficient labor usage despite much greater labor shedding (Table 5).

Table 6: Materials and Energy Costs to Sales (%)

	1990	1991 (1-6)	1991 (1-12)	1992 (1-6)
AAA	52	58	50	45
AA	47	60	61	50
A	48	47	45	39

### II.4 Budget Constraint: Bank Loans, Interfirm Credit and Tax Arrears

A general perception during 1990 and early 1991 was that the discipline of macro stringency was being diluted by bank loans, interfirm credit and the accumulation of tax arrears. In short, the firm-level budget constraint was not yet hard. This section reviews the relevant quantitative evidence from the sample, using the new classification of firms, AAA, AA and A. It concludes that the firm-level budget constraint, while lax through 1991, is now marked by substantial tightening of bank loans, levelling off of net interfirm lending by AAA firms, but considerable laxity in tax payments.

Preceding results showed that A firms lagged behind significantly in maintaining sales. As depicted in Figure 4, inventories of finished goods (finished goods to sales %) rose rapidly for these firms, then stabilized at a high plateau. This is in sharp contrast to AAA firms, where inventories initially jumped up in January 1990 from the low, shortage economy levels, reached a peak in December 1991 and then declined. A similar pattern obtains for AA firms, although the decline in 1992 was much sharper. If the inventory accumulation of A firms was financed by working capital loans or inter firm borrowing, this would indicate softness in the budget constraint.

Figure 5 plots the path of nominal working capital loans from banks for the three groups of firms. Comparing AAA and A firms, January 1990 was marked by a modest nominal increase in loans despite 110% PPI inflation. Between January and March 1990, there was a rapid increase in loans to AAA firms, coinciding with lower interest rates; but A firms increased borrowing much less. Thereafter, the pattern is drastically different. In the 21 months March 1990 - December 1991, loans to A firms rose by 214% compared to 92% for AAA firms. This period coincided with the rapid accumulation of finished goods stocks by A firms noted above.

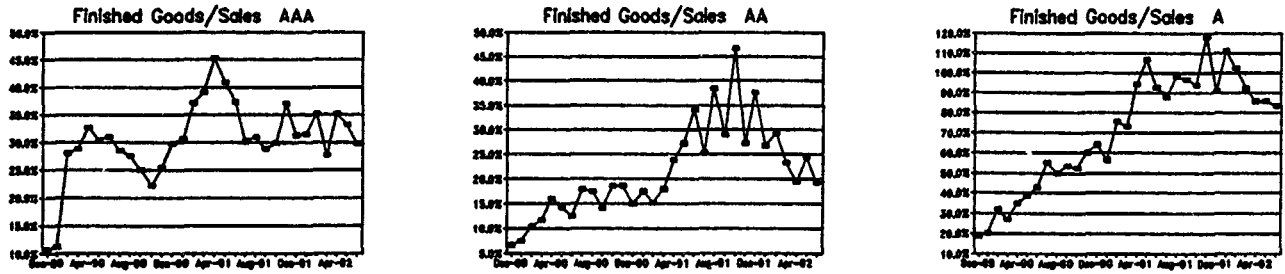


Figure 4

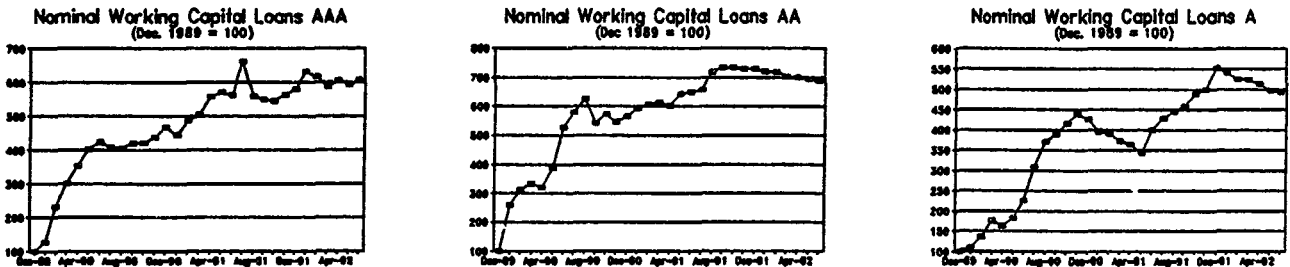


Figure 5

The period December 1991 - June 1992 is also remarkable. Working capital loans to AAA firms rose only slightly for AAA firms; but fell for A firms, suggesting that the commercialization in late 1991 of the nine banks spun off from NBP and the appointment of supervisory boards combined with closer monitoring by MOF of the bad loans portfolio were having the desired effects. Working capital loans scaled by total operating costs (costs of sales) confirms the initial laxity of bank credit.

Table 7: Working Capital Loans to Costs of Sales (%)

	Dec-89	Mar-90	Dec-90	Jun-91	Dec-91	Jun-92
AAA	49.5	84.3	96.0	116.0	86.8	89.7
AA	24.5	26.4	34.2	50.9	70.8	45.4
A	93.3	73.7	142.4	157.4	176.	207.4

Table 7 shows that this more than doubled for A firms between March 1990 and December 1991,



with almost no change for AAA firms. This supports the inference that the big increase in working capital loans to A firms did not support a higher level of activity, but was a result of rolling over interest payments as they fell due, and financing growing stocks.

Figure 6 shows the time path of investment loans from banks. AA firms exhibit a jump in borrowing for investments at the start of the ETP and then stagnation thereafter. Between December 1989 and mid-1991, investment loans grew fastest for A firms. It is only after mid-1991 that investment loans to AAA firms began growing faster than those for A firms. These results show that "good" firms are investing, but that A firms have been receiving loans as well, despite rapidly dropping capacity utilization and shrinking profitability.

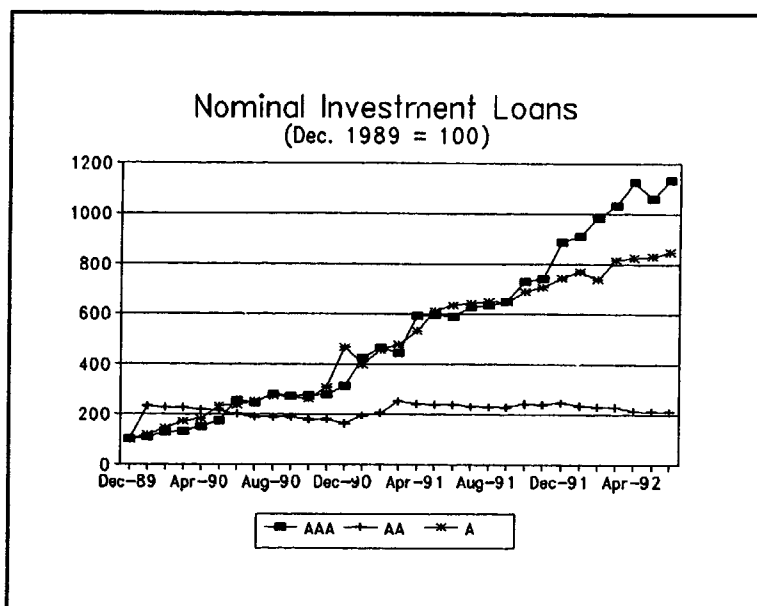


Figure 6

The dynamics of net lending (inter firm credit measured as receivables minus payables - Table 8) confirms the view that such credit served as a substitute for bank loans. This shows up especially dramatically in 1992, when the curtailment of bank loans led to a sharp increase in inter firm borrowing by A firms. Lending by the better off AAA firms stabilizes in 1992, suggesting that greater caution is being exercised by them.

Table 8: Net Interfirm Lending To Sales (% , selected months)

	Dec-89	Jun-90	Dec-90	Jun-91	Dec-91	Jun-92
AAA	68.5	100.3	54.6	81.2	54.1	54.1
AA	59.4	104.6	43.7	53.6	-97.4	-6.1
A	64.7	71.4	49.9	37.7	-32.8	-33.2

Note: Manufacturing firms are net lenders to distributors and to other manufacturers.

The last leakage at the micro level is tax arrears. Table 9, which gives arrears as a percentage of taxes due, shows that this has been substantial for both AA and A firms. Further, since A firms by definition do not owe income tax in 1992, it can be concluded that the arrears are in respect of dividend and PPWW payments. In contrast, AAA firms are virtually current on tax payments.

Table 9: Tax Arrears To Taxes Due (%)

	1990	1991	1992 (1-6)
AAA	1.8	3.3	3.7
AA	0.2	17.4	26.8
A	5.0	42.7	50.8

#### II.4.A Evolution of Interest Costs

The preceding evidence suggests that A firms kept themselves afloat by financing growing inventories through increased working capital loans. This shows up dramatically in the ratio of working capital interest to sales for the three groups of firms (Table 10). A firms have consistently exhibited the highest interest ratio. Not only this, but the gap in relation to AAA firms has widened with time, from a ratio of almost 2 for the year 1990 to 3.5 for the first six months of 1992.

Table 10: Working Capital Interest/Sales (%)

	1990	1991	1992 (1-6)
AAA	3.2	3.5	2.7
AA	2.3	2.4	1.9
A	6.1	11.3	9.6

Table 11 contains remarkable information on the ratio of total interest on working capital and investment loans to sales. The evolution of these numbers captures the rapid borrowing for investment by A firms combined with declining real sales (hence low capacity utilization). The gap here between AAA and A firms widens even more rapidly than above.

Table 11: Total Interest/Sales (%)

	1990	1991	1992 (1-6)
AAA	4.2	5.8	6.3
AA	3.8	3.2	2.7
A	6.3	19.7	27.5

Figure 7 plots the amount of profits before interest and taxes being absorbed by interest payments (cumulatively within-years, by quarter). As expected, interest payments exceed such profits for A firms after mid-1991. Beyond this point, A firms as a group were unable to service their debt.

#### II.5 Wage Setting and Decapitalization

SOEs entered the ETP with at least two disadvantages: excess labor; and inefficient materials and energy consumption owing to distorted pre-ETP prices. The first would require labor shedding,

the second investments to enhance efficiency. The fear has been that Workers' Council-dominated SOEs would lack the will to take either remedial measure. Above, evidence has been presented on high labor shedding by the sample firms. This section discusses wage behavior and decapitalization.

A general perception of SOEs has been that, being worker-controlled, they would quickly pay out all surpluses as wages, run the company into the ground and then approach the government for a bailout. It has also been felt that the only way to eliminate this possibility would be to rapidly privatize. The excess wage tax, PPWW, which was originally imposed to control inflation, soon became a penalty on wage increases in SOEs. Thus, the private sector was exempted from the PPWW in 1991. At the same time, the basis for determining norm wages was changed from the wage bill to average wages, which meant that firms shedding labor could start paying more excess wage taxes. More recent proposals in the context of the Pact on SOEs (discussed below) focus on the distribution of enterprise surplus among wages, retained earnings and taxes. Throughout, the guiding principle has been that SOEs, being myopic, would rather increase wages than invest and protect the long-run interests of the firm.

This section asks two questions: who pays PPWW? And: are these also the most decapitalized firms? The answer is that the most profitable firms pay the most PPWW but are the least decapitalized. In fact, these firms (the AAA) are also the ones which have been investing the most. The results demonstrate that the image of SOEs as short-sighted decapitalizers is highly exaggerated.

Table 12 on average wages for selected months shows that all three groups were level at the beginning. Thereafter, a comparison of the AAA and A firms shows that AAA wages were about 25% ahead by December 1991; but the gap narrowed to 17% by June, with AAA firms actually freezing nominal wages, while these rose for AA and A firms. Notably, the AAA wage in June 1992 was significantly below the national average of zloty 2.4 million reported by GUS.

Table 12: Average Wages For Selected Months (Thousands of zlotys per worker)

	Dec-89	June-90	Dec-90	June-91	Dec-91	June-92
AAA	658	918	1568	1573	2178	2169
AA	765	1014	1763	1334	1885	2017
A	603	852	1395	1440	1737	1858

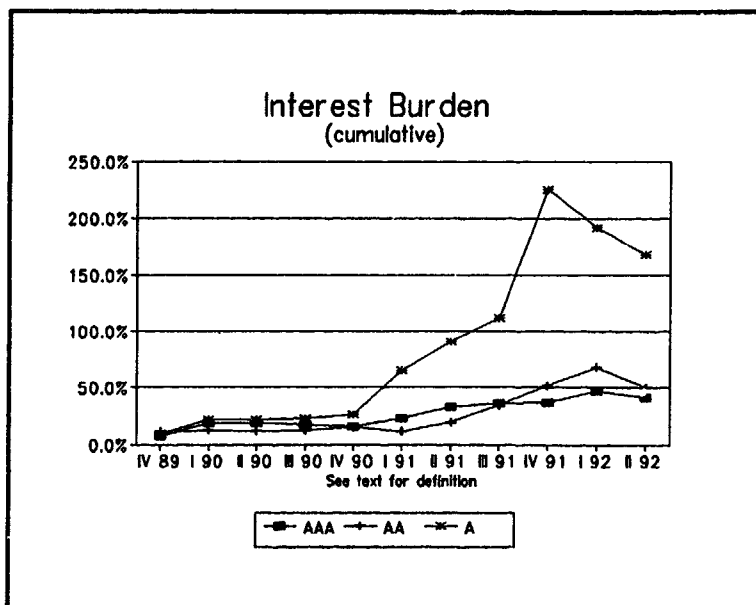


Figure 7

Table 13 on PPWW per worker (accrued, not necessarily paid) for the years 1990 and 1991 and the first half of 1992 show that AAA firms have been paying the highest excess wage taxes, demonstrating the link between higher profits and wages. In 1992 in particular AAA firms are accruing much more PPWW, and also paying it (recall Table 9 on tax arrears).

Table 13: PPWW per Worker (Thousands of Zlotys)

	1990	1991	1992 (1-6)
AAA	3655	6500	1635
AA	5675	4740	219
A	1319	1518	256

In assessing wage restraint, however, a useful measure is provided in Figure 8, which plots the share of wage costs in a crude measure of gross value added (pre-tax profit plus depreciation plus wage costs = GVA). The starting point for the graph is artificially low because of the stock profits of late 1989 and early 1990. Further, there was a huge compression of real wages in first quarter 1990 to offset the shock of higher costs and interest rates. The collapse of GVA underlies the sharply rising share of wage costs in GVA for A firms, virtually consuming all the GVA by 1992. For AAA firms, this share rises, but does so at a diminishing rate. These results show that the higher wages in AAA firms are accompanied by a maintenance of surplus generation.

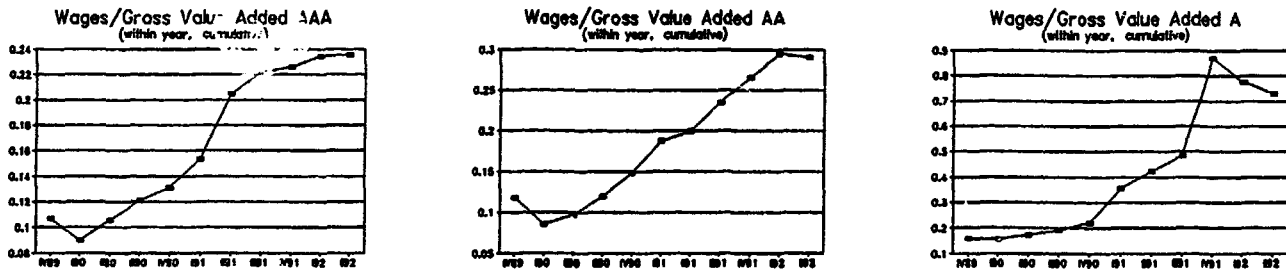


Figure 8

Table 14 contains two measures of decapitalization. The first is the ratio of accrued PPWW to disposable cash, which represents the constraint on paying PPWW after income tax and the dividend, and adding back depreciation, which is a non-cash expense. The second captures the claims on pre-tax profit, namely, income tax, dividend and PPWW. If the sum of these claims exceeds pre-tax profit, then the excess must cut into the depreciation allowance or be funded by increased borrowing. According to the first measure, AAA firms and AA firms have roughly the same results; but A firms are clearly in a state of decapitalization. The time path of the second measure is interesting. All three groups were more-or-less level at the end of 1990; but both AA and A firms indicate decapitalization thereafter. (A firms as a group had pre-tax losses in 1991 and 1992.)

Table 14: Two Measures of Decapitalization

## PPWW/Disposable Cash (%)

	1990	1991	1992 (1-6)
AAA	9.8	18.5	7.9
AA	12.1	20.0	1.9
A	7.1	-11.5	-4.0

## (IT + DT + PPWW)/Profit II

	1990	1991	1992 (1-6)
AAA	48.4	63.9	58.2
AA	50.2	195.1	189.7
A	52.0	-26.6	-25.3

Notes: 1. Disposable cash is profit II - income tax - dividends + depreciation.  
2. IT = income tax; DT = dividends. Also see Glossary.

These results clearly establish that there is no direct connection between incurring the PPWW and decapitalization. Low disposable cash could result from a high dividend tax burden, while big interest payments will directly reduce profit II. Table 15 on the ratio of dividend payments to profits after income tax demonstrates that there is no link between this tax and actual earnings, as would be the case in a market economy.

Table 15: Dividends/Profits After Income Tax (%)

	1990	1991	1992 (1-6)
AAA	7.9	13.9	16.7
AA	17.6	302.4	239.6
A	14.7	-18.9	-22.6

Lastly, Table 17 shows that investments comfortably exceed depreciation for both AAA and AA firms in 1990 and 1991; but are lower for A firms, confirming decapitalization. However, Table 16 reinforces the conclusion that high PPWW payments are not the cause of decapitalization: PPWW payments were much lower than depreciation in all cases.

Table 16: PPWW/Depreciation (%)

	1990	1991	1992 (1-6)
AAA	73.4	42.7	17.3
AA	36.2	17.0	1.9
A	35.9	12.8	3.9

Table 17: Investments/Depreciation

	1990	1991
AAA	147	144
AA	125	134
A	82	80

## II.6 Profit and Cost Dynamics

The sharp contrast between the performance of AAA and A firms is brought out by Figure 9 on underlying profitability (see Glossary - underlying profitability attempts to track the profit rate on the basic business of firms, abstracting from sales of assets and net extraordinary gains). AAA firms are remarkably consistent over time. Interestingly, there was not much to choose between AAA and A firms at the start of the sample period; but the gap widens with time. Not surprisingly, the ratio of other income (mainly, sales and leasing of assets) to sales is the highest for A firms (Figure 10 plots this by quarter for 1991 and 1992).

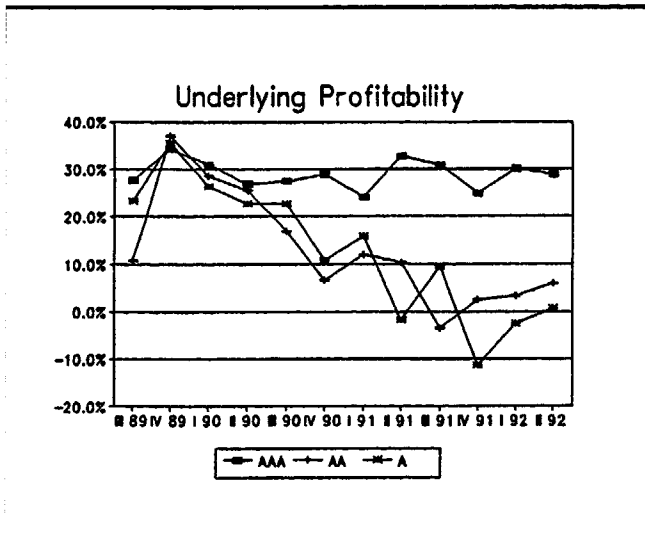


Figure 9

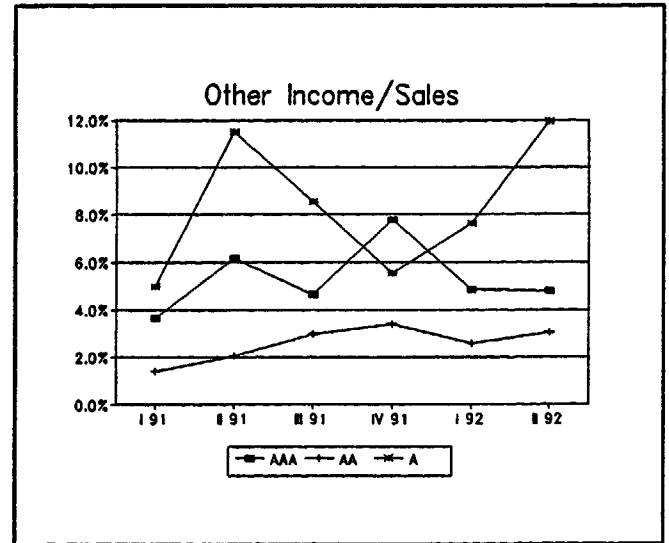


Figure 10

The preceding discussion on adjustment is summarized in Figure 11, which shows the varying shares of underlying profits and costs in sales for 1990, 1991 and the first half of 1992. Costs are broken down into their main components consistent with the previous discussion on adjustment: materials and energy; labor; interest (working capital and investment loans; bank charges); and a residual category.<sup>5/</sup> AAA firms maintain underlying margins throughout and keep interest expenses in check. The increasing efficiency in materials and energy consumption is evident from the chart. Labor costs rise over time, but one must recall that these were compressed in 1990 to accommodate higher input and interest costs. For A firms, the story is one of rapidly growing interest payments and labor costs (in spite of the fastest rate of labor shedding among the sample firms). Profits all but disappear with a small underlying loss in 1992 (not visible from the chart). Given that materials and energy costs are amply covered, however, these

<sup>5/</sup>Firms report two categories of costs: (a) costs of sales (without any breakdown); and (b) total costs per quarter, which are also broken down into individual cost items (interest, etc). Total costs refer to costs of production, which go partly into sales and partly into inventory accumulation. For Figure 11, the breakdown of the cost of sales is obtained by taking the individual cost items reported in total costs and scaling by the ratio of the costs of sales to total costs.

firms could have potential with downsizing and debt restructuring.

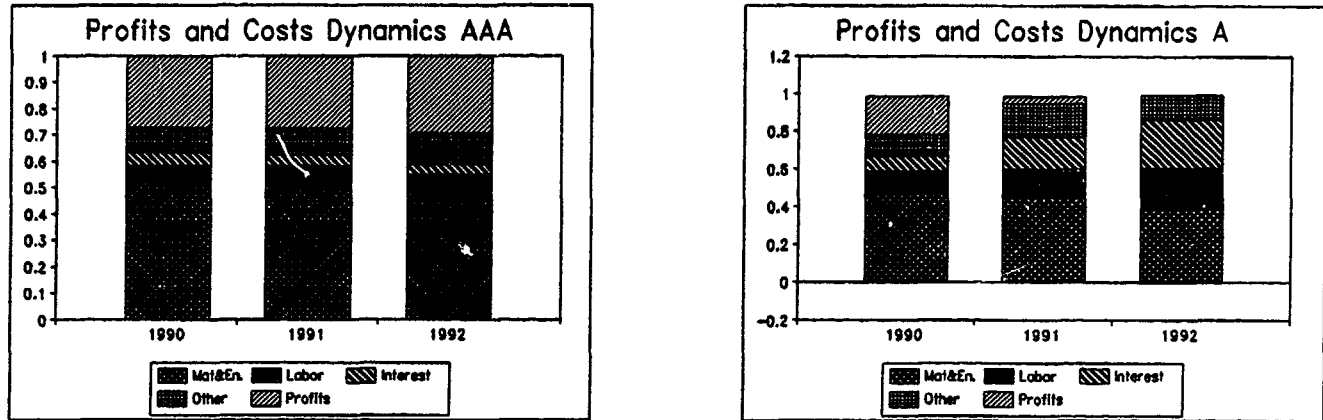


Figure 11

## II.7 Exports as an Index of Adjustment

Hard currency exports took off in 1990 leading to an almost embarrassingly large increase in reserves that rendered use of the one billion dollar Zloty Stabilization Fund unnecessary.<sup>6</sup> Ever since, two questions have arisen: (a) what motivated this increase in exports? And (b) can hard currency export performance be taken as a signal that Polish firms are capable of competing at international levels?

Based on firm-level evidence, an important finding in the first phase of this study was that the export boom was a result of a switch to the West owing to the domestic demand barrier, not a response to higher export profitability. In fact, export profitability fell to low and even negative levels by first-quarter 1991, mirroring the real appreciation of the zloty during 1990 and early 1991 (when the exchange rate remained fixed at its January 1, 1990 level).

Can the export boom be interpreted as a confirmation of the supply response capacity of Polish firms and their ability to meet western standards? It does not matter whether the diversion was from the domestic market or eastern export markets, as both had the same quality requirements, and diversion in either case would represent ability to meet the more stringent standards of the west.

Diversion from the domestic and eastern export markets to the west is obvious from aggregate data: hard currency exports grew by some 40% while total industrial sales fell by 23% and CMEA

<sup>6</sup>This does not mean that the fund was irrelevant, as it provided an *ex ante* signal of credibility.

exports shrank by 10%; but it is not so obvious is that this meant an ability to meet western quality standards. The hard currency export boom coincided with the persistence of CMEA trade in 1990, which led to continued subsidization of energy (gas) and material (iron ore) inputs at the same time that trade with the west was liberalized and the transferable ruble/dollar rate (implied by the zloty/dollar and zloty/transferable ruble rate) depreciated significantly, going from 2.97 TR/\$ in 1989 to 4.52 TR/\$ in 1990.<sup>7/</sup> In fact, the boom was the most prominent in chemicals and metallurgy sectors, both benefiting directly or indirectly from implicit CMEA subsidies on the inputs side. The relative profitability of exporting to the west increased so drastically, especially for firms importing inputs from the east that it is likely that firms that could re-orient did so *en masse* in 1990, without waiting for the 1991 CMEA collapse and dollarization of prices. In short, it is tempting to believe that most of the re-orientation took place in 1990 and those firms that were affected in 1991 were those that simply could not sell in the west at any price.

This view was tested by asking managers of metallurgy and chemicals firms (where the boom was strong) the following direct questions:

(i) The hard currency export boom to Area II in 1990 was a result of : (a) diverting essentially the same products earlier sold in the CMEA and Polish markets to the West; (b) selling new products.

(ii) Firms that could, based on product quality and technology, already diverted sales from Area I to Area II immediately in 1990, without waiting for the 1991 collapse: (a) Yes (b) No.

The following answers were obtained:<sup>8/</sup>

Table 18: 1990 Export Boom

Answer	% of Total Exports Involved <sup>1/</sup>
The same product	91
Diversion in 1990	89

1/ Total exports refer to the 1990 exports of the firms polled.

<sup>7/</sup>This can be seen by writing a simplified profit function in dollars as follows: profit(\$)<sup>7/</sup> per unit of exports =  $p_x - p_m \cdot m/E$ , where  $p_x$  is the (sticky) dollar price of unit exports to the west,  $p_m$  is the (sticky) ruble price of imports,  $m$  is the volume of imported CMEA inputs per unit of exports (fixed by short-run technology), and  $E$  is the implied TR/\$ rate. The depreciation of  $E$  raised unit profitability of exports to the west at the same time that a demand constraint appeared in the home market.

<sup>8/</sup>These firms were the same subset for which regression results were presented in phase 1, representing a significant 22% and 33% of total metallurgy and chemicals exports in 1990.



The answers show that firms exporting to the west in 1990 were selling the same products and had achieved diversion to western markets; but these firms were not necessarily more competitive or better adjusted than those selling at home under the pressure of low import barriers. Exceptions are possible, although as managers pointed out, it is almost impossible to develop new products and adjust technology in one year. Regarding implicit CMEA subsidies, the clearest answer obtained was from a chemicals firm manager: "In 1990, energy in the form of gas was cheap. We exported it in the form of fertilizer." Managers stressed the following:

(i) exports were concentrated in so-called "dirty technology" products, namely, fertilizer and semi-processed steel. Western firms were interested for three reasons: first, importing reduced pollution at home and pollution-related charges; Polish firms sold these products at a discount facilitated by cheap energy and raw material from the then Soviet Union; these products are standardized, and are not required to meet complicated technological or quality requirements.

(ii) the boom was a natural response to liberalization and the removal of export licensing.

(iii) some western competitors were taken aback by the rising exports of metallurgical products and Polish firms were given signals that unless they reigned in, there could be "repercussions". Managers felt that even after 1997, when EC barriers go, there will be informal restrictions.

Figure 12 plots the quarterly exports-to-sales ratio for the three groups of firms, AAA, AA and A. Looking at the two ends of the spectrum, A firms were ahead to start with. By the end of 1990, the shares had evened out, though A firms then gradually went ahead once more. This confirms earlier findings, that increased hard currency exports cannot as a rule be taken as an index of adjustment.

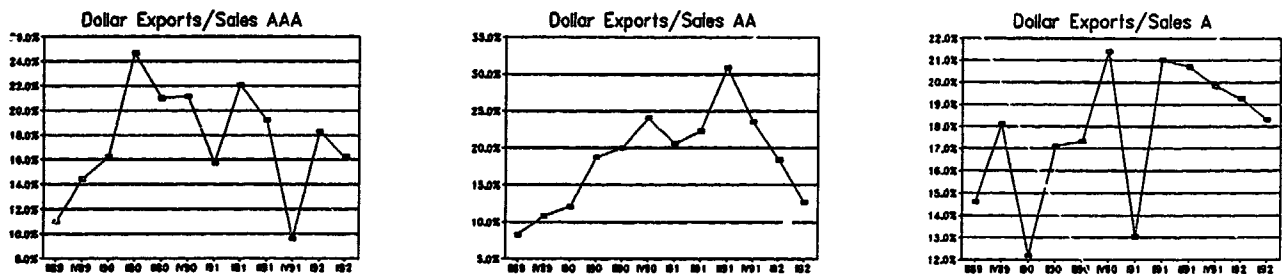


Figure 12

These results support the view that in a neutral trade regime with no anti-export bias, no QRs and low tariffs (which describes Poland's trade regime during the ETP), efficient import substitution is as valuable as exporting, as both boost the supply of tradables and the trade balance. Trade liberalization imposes discipline on all firms producing tradables, whether exported or sold at home.

### II.7.A Role of Foreign Trade Companies

State-owned Foreign Trade Companies (FTCs) played an important role in the 1990 boom. According to managers, their significance has diminished over time for two reasons: high commissions; inability to sometimes offer the quality of service expected by manufacturers. Increasingly, the tendency is for firms to develop direct contact with western clients. The only exceptions seem to be in trade with the former CMEA block; and in cases where FTCs have brand-name recognition, e.g., in some food exports.<sup>9/</sup> According to sample firms, the share of FTCs in total export sales dropped from almost 90% in 1990 to just over 50% in 1992, with direct sales to western clients and sales through new private agents reaching 27% and 16%, respectively in 1992.

### II.8 Social Assets

In the period January 1990-March 1991 covered by Phase I of the study, social assets (vacation resorts, health centers, sports amenities, cafeterias, kindergartens, hostels, cultural centers, vocational schools and many more) and worker housing represented a significant financial and huge managerial burden, with no apparent solution in sight.

The rapidly deteriorating financial condition of firms in 1991 did little to help the situation. Although the problem is still considered serious by managers, evidence this year indicates that imaginative solutions have been developed, focusing largely on cost recovery:

- kindergartens and schools have been handed over to local authorities
- cafeterias have been converted into showrooms
- redundant spaces and all sorts of buildings are leased out and/or converted into retail shops and warehouses
- vacation resorts and worker hotels are leased out or operated on a commercial basis
- sports stadiums have been offered to the city, which picks up the operating cost.

Generally, the assets are taken over by communities, often free, rented or bought by small and mid-size private firms, or by ventures set up by former employees of the enterprise. Rental contracts are common, one firm having no fewer than 54! Nevertheless, social assets remain on the books as sale is difficult owing to the glut of such assets on the market and unclear ownership rights. Giving the assets away is slowed both by the costs for a potential donor (gift tax, obligation to establish clear ownership title) and the reluctance of potential benefactors owing to high maintenance costs. It should be noted that most assets are in decent condition and do not require much investment to continue operation.

Interestingly, resistance of workers to the divesting of social assets has been minimal (with only a handful of exceptions). The reason is that firms do not have resources to operate these assets properly,

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<sup>9/</sup>FTCs have seen the writing on the wall regarding their diminished role as pure trading houses, based on conversations with them. More and more, they are attempting to integrate backwards into manufacturing to exploit their advantages in financing and foreign market contacts.

so the benefits have diminished anyway.

While being an unnecessary burden in times of crisis, social assets never really weighed that heavily in the cost structure. In most firms, these costs accounted for less than 2% of total cost, while only in 4 (out of 71) did this surpass 5%. Managers stressed the easing the managerial burden as the main benefit.

Worker housing is by far the biggest problem, especially for the larger firms, albeit not as severe as last year. Managers noted that the financial burden had decreased owing to the rise in controlled rents and utilities, which apply to firm-owned housing as well. Many offered concrete suggestions:

- (i) remove worker housing from the umbrella of controlled rents and utilities and permit commercial operation
- (ii) enact laws allowing eviction of non-workers, who benefit from the firm-financed subsidies
- (iii) create a system of owner mortgages (which applies more generally)
- (iv) speed up clarification of ownership rights and titles to property so that firms can more easily divest themselves of such property, even giving flats away free.<sup>10/</sup>

It is worth noting that the "Pact on SOEs" has recognized the need to address title and ownership of such "superfluous" assets. It should also be stressed that at this stage, the problem is largely a legal one relating to property rights and will not be solved by privatization alone. To the contrary, private investors may be deterred without resolution of this issue.

## II.9 Improved Distribution

In 1989, state-organized wholesale trade, frequently enjoying (local) monopoly power began disintegrating. By the end of 1990, liberalization of wholesale trade brought growing competition from private firms. Coupled with high interest rates and weakening domestic demand, traditional networks in nearly all sectors collapsed.

This became a real challenge for SOE manufacturers, never well-equipped in marketing and after sales service and unaccustomed to dealing with a multitude of small, frequently financially unviable customers. Moreover, the new traders, predominantly consisting of small private "wholesalers", preferred dealing with private importers owing to their greater flexibility and cooperation in tax evasion. The collapse of traditional trade networks greatly strengthened import competition, particularly in consumer goods, and contributed to the crisis in the state industrial sector.

After the initial shock, SOEs started responding. Where possible, producers have established direct contact with the ultimate consumers or with retailers. In metallurgy, managers reported that in 1992 over 80% of sales were direct deliveries to the ultimate user, in electromachinery only slightly less. Two years earlier steel mills had only a few customers, sometimes one, who would take care of the whole distribution process, with the producer fully isolated from the market.

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<sup>10/</sup>Otherwise, a firm must first buy the asset at book value before giving it away.

In consumer goods sectors such as food processing and light manufacturing, a similar process is under way. Over half of output is sold directly to retailers to avoid wholesalers' commissions and contacts with often unviable and small partners. Firms are getting rid of unreliable partners, choosing better ones, and strengthening them through a system of price concessions and relaxed terms of payment in return for controlling prices and territorial distribution of deliveries. This however is part of the solution only. The best firms are building up their own networks of reliable distributors for wholesaling and storage, sometimes supplemented with factory-sponsored retail shops.

Improving distribution is not regarded an easy task. It takes financial resources, resolution and competence. In many respects, it is more difficult for the SOEs to sell on the domestic market than abroad, where quality requirements are higher but distribution networks better. All in all, improvement of distribution is considered one of the most important indicators of adjustment.

### III KEY ASPECTS OF TRANSFORMATION

Quantitative evidence and discussions with managers indicate that four stimuli have been paramount in inducing firms to adjust:

(i) trade liberalization has forced firms to abandon cost plus pricing and pay attention to costs and efficiency - with some success as the previous section showed

(ii) the determination of GOP to eliminate manufacturing subsidies and external support mechanisms has compelled firms to focus on internal efficiency and take the initiative for change

(iii) likewise, the realization that GOP does not have the resources for a bailout has led firms to rely on their own resources to find new products and markets

(iv) managers identify their success with that of the firm and realize that based on their experience, they have a future with the SOE as is or when it is privatized.

This section discusses elements of this transformation, namely, the hardening of the micro budget constraint, PPWW reform and managerial attitudes and incentives.

#### III.1 Hardening of the Micro Budget Constraint

The quantitative sample evidence (section II.4) on growing bank and interfirm loans to A firms in the face of sharply diminished sales and debt servicing capacity finds its echo in the economy-wide deterioration of bank loan portfolios and the gridlock caused by interfirm debts. However, the laxity in bank loans considerably reduces in 1992. Managers felt that the firm-level budget constraint had hardened and was now credible.

##### III.1.A Changing Bank Behavior

Competition among banks for the limited number of sound clients is on the rise, the adverse selection of loans is diminishing and good firms are bargaining with banks for lower interest rates. Managers unanimously report radically changed bank behavior. As they describe it, in 1990 banks acted like "cashiers", eager to dole out money. By 1992, banks were behaving like "partners" with an equity stake in the company and had become highly quality conscious.

Tables 19 and 20 show the changing perceptions of managers over time regarding the ease of obtaining credit and the level of involvement of banks in enterprise operations (average based on a 0-5 point scale ranking).<sup>11/</sup> These results show that AAA firms experience the same ease in getting loans as in 1990, while there is a sharp diminution for A firms in 1992. Impressively, all types of firms report increased bank involvement.

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<sup>11/</sup>In such responses, the trend is more relevant and easier to evaluate than the absolute value of the response.

Table 19: Ease of Obtaining Bank Credit

	1990	1991	1992
AAA	3.0	2.8	3.2
AA	3.1	2.4	1.3
A	3.2	2.0	1.2
Total Sample	3.1	2.3	2.2

Table 20: Involvement of Banks

	1990	1991	1992
AAA	2.5	3.0	3.2
AA	3.1	3.6	3.7
A	2.4	2.6	2.8
Total Sample	2.6	2.9	3.1

An improvement in the credit assessment of banks can also be inferred from the fact that of 25 enterprises denied credit in the last two years, 21 were A and only 4 were AAA. But the reason typically given was the general condition of the firm rather than the unviability of the project for which funds were sought. This points to a continuing weakness in project evaluation.

When asked why they believed bank behavior was changing, two replies prevailed: (a) banks have no option but to change owing to their vanishing net worth and deteriorating portfolios (most frequent reply); (b) banks, like enterprises, are learning. Although managers never alluded to it, there is a remarkable coincidence between perceptions regarding tighter bank behavior and the change in the governance in late 1991 of the 9 commercial banks spun off from NBP (commercialization, supervisory board control, strict monitoring by MOF, including a freeze in lending to some 2000 suspect firms - not all SOEs). At the same time, banks have been benefiting from the skills transference flowing from twinning with foreign banks.

Summing up, three positive developments are under way: (a) obviously good firms are actively wooed by banks to borrow; (b) banks were considered to have increased their involvement in enterprise operations and assessment of prospects even in cases where firms were no longer receiving loans; (c) good firms are now switching banks to bargain for lower interest rates.

### III.1.B Internal Financial Management

The budget constraint is also hardening internally. More and more, firms have installed cash management and reporting systems. Profit centers have been created in some cases to pinpoint responsibility and ease performance measurement. There are unmistakable signs that financial management is strengthening.

### III.1.C Inter firm Credit

There has been a remarkable change here. Good firms are no longer interested in supporting weaker ones. Firms frequently create their own ranking lists of buyers, specifying which will be dealt with only on cash terms, which will receive two weeks' credit, and which will not be supplied at all. Some make use of published lists of firms in conciliatory proceedings published in newspapers such as Rzeczpospolita.

### III.1.D Tax Arrears

This is the area where least change is visible, as Table 9 amply showed. Not only has the

dividend tax criterion not been enforced (firms found all sorts of ways to persuade local tax chambers that deferments beyond the stipulated 3 months for triggering bankruptcy were justified), but any large scale bankruptcy is not credible because of limited court capacity.

### III.2 Excess Employment and the PPWW

The quantitative evidence showed that AAA firms were much more efficient in labor usage than A firms. Table 21 contains managerial assessments of excess employment as of mid-1992.

Table 21: Excess Employment (number of firms)

	0%	5-10%	10-20%	20-30%	> 30%
AAA	2	14	11	2	0
AA	2	4	1	1	0
A	3	6	7	7	0
Total	7	24	19	10	0

Weighting at the mid-point of the ranges in the table, A firms estimate excess employment at 14% and AAA firms at 11%. This seemingly marginal difference needs to be put in context. A firms are typically larger, more labor intensive and have already shed labor much faster than AAA firms (section II.2). The higher excess employment reported by A firms is consistent with Figure 8, which shows labor costs consuming an ever increasing share of value added. Labor reduction will obviously be an important part of any restructuring plan for A firms.

Managers by-and-large indicated that mass layoffs were not on the cards for 4 main reasons: (a) legal and financial constraints (high severance payments), (b) resistance of the TUs; (c) humanitarian considerations, (d) expectations of sales revival. The first reason is the most pronounced within loss-making enterprises, whereas the "social and humanitarian" concerns are stressed more by AAA firms. The motives for labor shedding reported by managers are interesting. Falling sales and organizational changes (splitting up of companies) were mentioned in all interviews. In AAA firms introduction of new, labor-saving technologies received a high priority, indicating a new positive aspect of adjustment.

Has PPWW helped or hurt labor rationalization? Section II.5 showed that PPWW is paid by the best firms, which are also the least decapitalized. As expected from an instrument as controversial as the excess wage tax (PPWW), managerial attitudes were mixed, though generally negative. PPWW was blamed for hampering work force rationalization and flattening the wage structure owing to the "average wage norm" basis for excess wage taxation. On a 0-5 scale, its negative impact on the wage structure was put at 4.3.

Managers attributed the change in formula for wage indexation from the wage bill in 1990 to the average wage norm in 1991 to a desire to minimize unemployment, i.e., to meet social rather than economic goals. With only 4 exceptions out of 63, managers believe the wage bill formula is superior. Any attempt to shed labor, which is in excess, automatically raises the average wage. An extreme example of the perverse effects of the average wage norm was given by a firm in dire straits that shed 600 workers (25% of its work force) and found it had to pay the PPWW because the

average wage then exceeded the norm. Managers complained that the average wage formula directly impeded work force management: hiring a good worker (who costs more) raises the average wage; while firing a bad worker (who costs less) does exactly the same. A wage bill norm would help speed up labor rationalization and also improve the relative wage structure.

Last year's assertion that strong managers with a clear, long-run vision of the firm did not need the PPWW to contain wage demands was frequently repeated. Managers expressed irritation at having to still deal with the PPWW, whose role and time they felt had passed. They complained about the time it wasted and the discrimination it represented vis-a-vis the private sector. On the other side of the coin, some managers (both of profitable and loss making firms) said that the PPWW presented a solid excuse for not raising wages; but others complained that it was impossible to offer workers rational incentives, a constraint private firms did not face. It was admitted in 41 out of 63 questionnaires that removal of PPWW would result in a wage increase, with AAA firms likely to raise wages more often and more generously than A firms. However, only a handful of those that would increase wages expected the jump to exceed 20% (section II.5 contains evidence of considerable wage restraint by AAA firms in 1992, despite high capacity for paying the PPWW). Managers described wage setting as influenced by the following: (a) comparisons with national average wages;<sup>12/</sup> (b) firm-specific liquidity; (c) profitability. PPWW was regarded of reduced relevance in wage setting owing to illiquidity and low profitability.<sup>13/</sup>

Managers made three suggestions on the PPWW:

- uniform enforcement, no forgiveness of tax arrears<sup>14/</sup>
- return to wage bill formula for norm wage calculation
- no exceptions in rules, simplicity the best.

Some complained about the discriminatory enforcement of the PPWW. The manager of one enterprise, which is profitable and current in all payments, but where the wage is more or less at the national average, cited the example of a shipyard, which was paying about 30% above the average wage, was in arrears on the PPWW and had recently received a reduction in debts (including in accounts payable to this manager's firm) of one-third. Such resentment against the most powerful giants of the Polish industry was present in many of the discussions with the interviewed managers.

What about exceptions that give some firms a break on the PPWW based on selected efficiency criteria? Managers strongly opposed exceptions, even when they stood to gain from these. They mentioned that exceptions had never worked. An example was given to show that well-meaning

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<sup>12/</sup>When asked the average wage, managers would give it and then instinctively compare it to the national average. The national average is an important yardstick for TUs.

<sup>13/</sup>A firm does not actually have to be paying the PPWW for it to limit wages. Merely the threat of incurring it could have a restraining effect on wages.

<sup>14/</sup>This statement was usually made with respect to the set of firms (SOEs and commercialized firms) to which the PPWW applies, although the sense of discrimination in relation to the private sector was tangible.



changes in policy when combined with other policies, can have perverse effects: the proposed incentive, whereby a 100% exporter is exempted from the PPWW, could lead to a rush to export semi-processed steel, thereby hurting finished steel producers because the import tariff on semi-processed steel at 15% exceeds that on finished steel (at 3%). The PPWW incentive combined with this inverted cascading import tariff could hurt finished steel producers. This example points to the difficulties of making exceptions on PPWW payments based on essentially arbitrary criteria - managers were quick to point out that during the socialist times, all sorts of imaginative schemes of exceptions had been tried and invariably failed.

### III.2.A PPWW Reform

The very fact that the private sector was exempted from the PPWW starting in 1991 suggests that the focus changed from inflation control to other concerns, such as prevention of decapitalization and the share of wages in enterprise surplus in the absence of an owner who would emphasize long run considerations. Accordingly, recent proposals (such as those contained in the "Pact on Enterprises") have concentrated on distribution of enterprise surplus, determination of the wage norm and actual payment of PPWW based on negotiation with local tax offices; and simultaneous elimination of the dividend.

Enterprise surplus is distributed among (i) the government (taxes), (ii) retained earnings ("long-run health of the firm") and (iii) wages. Recent modifications to the PPWW aim at increasing the share of the first two components. In contrast to the more complex modifications recently enacted and proposed in the context of the SOE Pact, which are summarized and analyzed in Annex III, managers' reactions would suggest a highly simplified scheme along the following lines:

- firms free to choose wage bill or average wage norm (the latter would be preferable for a firm with expansion plans).
- maximum tax rate reduced to 100%. This would still deter wage increases yet give profitable firms more scope in deciding upon wage awards.
- no exceptions based on export performance or negotiation with local tax offices.<sup>15/</sup>
- wage norm growth determined in the same manner but with respect to target, rather than ex-post, inflation.
- retain dividend.

The crucial issue is this: should the focus at this point be on raising revenues or on medium-run growth? The fine-tuning of the PPWW will focus once again on short-run wage setting, which may be inimical to long-run interests of the firm, hence economic growth. A more positive way of inducing firms to focus on profits and long-run health is to simplify the PPWW along the above lines

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<sup>15/</sup>The evidence confirms that firms that export more cannot be presumed to have adjusted more than those selling domestically. Since efficient import substitution is at least as valuable as exports (especially given the domestic demand barrier in Poland, where a rise in domestic sales may require new product development, better packaging and distribution to compete with imports), there is no reason to especially reward exports.

and link managerial compensation to profits, at the same time clarifying the position and rewards for management following privatization so that the maximization of the firm's value becomes paramount.

### III.3 Managerial Attitudes and Incentives

In the pre-ETP days, the prime managerial attribute was ability to negotiate with the central authorities on subsidies and allocations of inputs and investments funds under the Central Investments program. A typical manager was an engineer, whose entire professional career was connected with the same enterprise, a specialist in production, knowing little of marketing and financial management. On the other hand, good managers knew how to deal with social conflicts within firms, a quality still in high demand in Poland.

Following the shock therapy of the ETP, the emphasis shifted to profits and marketing, away from the old "production target". At first, managers seemed overwhelmed by the changes they had to deal with: big, sudden changes in relative prices; a demand constraint; and import competition. In addition, the SOEs with their social assets, old technology, excess employment, and quality problems hardly seemed the ideal springboard to a market economy. However, even early in the ETP, it was clear that there were good and far-sighted managers. Phase 1 contained two important findings as SOEs struggled to cope with the new system:

- Managers were typically the moving force and inspiration behind change. Workers' Councils played at best a facilitating role
- Judging from PPWW payments and wage behavior, SOEs were myopic, with considerable focus on current wages ("high discount rate") and little emphasis on long-term restructuring.

Firm governance was marked by tension between managers and workers (Workers' Council and Trade Unions), with limited labor shedding relative to output fall and high PPWW payments. This collection of findings led to the conclusion that macro stringency while necessary, would not suffice to introduce firm-level change without addressing firm governance, clarifying accountability and responsibility and introducing managerial incentives that would emphasize long-run restructuring.

In this third year of the ETP, published surveys indicate that optimism is up, in spite of huge problems in embattled firms. Managers are looking to the longer run, there is more self-confidence and in many cases successful measures been taken to improve enterprises. What has accounted for this remarkable change?

#### III.3.A Optimism

Managers of sample firms agreed with the published survey results of the Warsaw Main School of Commerce (based on polls of SOE managers) that optimism is up.<sup>16/</sup> On a 0-5 scale, they rated the growth in their optimism in 1992 at 2.5 on average. Managers in the commercialized and privatized firms in the sample were visibly more optimistic than those that had remained SOEs. Managers in AAA enterprises expressed much stronger optimism (2.8) than AA (1.9) and the loss-

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<sup>16/</sup>"Business Survey Poland", Research Institute of Economic Development, Warsaw School of Economics, various monthly issues in 1992.

making A firms (2.2). Although the general response to the optimism question was moderate, managers were much more emphatic about what fed their optimism.

Managers have realized that the government is not going to help, leading them to find their own solutions and new markets. Such "self-help" coupled with almost three years of market experience has instilled much self-confidence. It is noteworthy that after a wave of personnel changes in 1989-1990, there has been relative stability in the top positions, leading to valuable learning.

There was an interesting bifurcation regarding more positive government pronouncements as a factor molding optimism. Managers interviewed earlier in the study (late August, early September) dismissed government pronouncements as irrelevant; those interviewed in later September, when details of the "Pact on Enterprises" were being revealed, were more positive about the government. However, the importance of "self-help" continued to be recognized.

When challenged to reconcile their statements that self-help was paramount, yet positive government pronouncements were important, managers clarified that the government was not being looked to for direct help; only for creating a better climate. Many felt that the only goal of past governments was to destroy SOEs; now, the attitude was described as more positive. Managers cited the following as molding their view (the first two were also cited before Pact details were available):

- reduction in dividend rate from 22% to 10% as of July 1
- proposed reduction in maximum PPWW rates next year
- proposed debt restructuring package as part of "Pact on Enterprises".

### **III.3.B Expectations from GOP**

Managers were clear and almost unanimous about what they expect from GOP:

- low inflation and interest rates
- stability in the rules of the game, especially with regard to taxes and import tariffs. They often cited cases where cashflows from prospective investments had changed drastically following a revocation of a tax credit (for ecological investments), or a sudden increase in an import tariff
- equality in treatment for all, private sector, state sector, cooperatives. Some raised concerns about the proposed debt write downs, fearing that GOP may not realize how long it takes to restructure large SOEs, and that it was always possible to hire a consultant to write a rosy report about restoration of viability in a few months. Some expressed doubts about the willingness of the commercial banks to engage in the debt cancellation/restructuring effort.

### **III.3.C Determinants of Credibility**

By and large, managers expect GOP to stick to the original Balcerowicz line. Most saw no alternative, and no chances of return to the old system (only 9 had any doubts, 4 of them from the beleaguered light industry). They were emphatic about the determinants of credibility:

- absolutely no room for subsidies or bailout
- no giving in to strikes<sup>17/</sup>
- control of deficit to avoid an increase in inflation and interest rates. Managers repeatedly stated that planning is very difficult if inflation stays high and volatile
- GOP should be consistent. There has been talk of needed bankruptcy of the state sector and its unviability. On the other hand, the state budget is based on the health of the state sector.
- the stop-go attitude towards mass privatization has considerably reduced its credibility. Managers of successful companies that were candidates for privatization were concerned that the proceeds would go to finance the deficit rather than restructure the company.<sup>18/</sup>

It is noteworthy that managers did not include in their list of expectations from GOP the need for higher import tariffs. Some even recognized the need for import competition, and most were confident about their ability to deal with it. The only plea for protection came from a sugar factory, motivated by the EC system for agriculture.

The above change in attitude towards the role of the government is significant. 1990 was a year of unsustainable performance and minimal adjustment; temporary favorable factors tided firms through. 1991 was the year of the CMEA shock and hoping for government help, a hope that quickly vanished. It marked the start of deeper adjustment. 1992 is a year of self-help and close to zero expectation of government help, the only plea being for stability in the rules of the game. This means that enforcement of announced penalties will be easier. Affected firms are not going to get much sympathy from other firms, which are paying the price for adjustment. It also means that the criteria for firms qualifying for debt workouts should be strict and clear. In short, SOE managers realize that many are adapting successfully, essentially behaving like owners of firms. Further, fears of end-game conspiracy type behavior (whereby managers act in concert to precipitate a crisis of such large size that GOP is forced to intervene) must now be regarded as hopelessly exaggerated. Since examples of successful adjustment can be pointed to, and since expectation of bailout is limited to a small number of dinosaurs, GOP can pursue a consistent policy without a fear of a systemic backlash.

### III.3.D Optimal Sequencing and Attitude to Privatization

Managerial attitudes towards sequencing were overwhelmingly in favor of commercialization (as opposed to remaining SOEs) and restructuring prior to privatization. Reasons given were straightforward: potential investors do not want to talk to Workers' Councils; the same applies to firms burdened with social assets, excess employment and unmarketable products.

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<sup>17/</sup>This statement was made in the context of strikes occurring in the summer of 1992, which at one point threatened to turn into a wave, but fizzled out, with GOP taking a hard line, e.g., in the case of the car company, FSM Tychy, which was in negotiation with Fiat. There was little sympathy expressed for strikers.

<sup>18/</sup>At present, privatization proceeds are treated as current revenue, even though sales of assets are involved. This artificially reduces the size of the deficit, putting less pressure on GOP to introduce fundamental spending and tax reform. Privatization is discussed further below.

Interestingly, managers of commercialized SOEs were more apt to signal an improvement in managerial compensation, while job stability was assessed about the same. Also, managers of commercialized SOEs reported more positive relations with TUs than managers of pure SOEs, where the Workers' Council complicates the relationship.

It is also noteworthy that managers without exception underlined the need for restructuring prior to privatization, especially in view of social assets, excess labor, enterprise division and in many cases, the debt overhang.

Regarding privatization tracks, skepticism was expressed about the MPP owing to:

- lack of clarity on the role of National Investment Funds (NIFs) in relation to a specific firm, and the division of responsibility and authority between firm management and NIFs
- unclear benefits to firms already deeply restructured
- the assets of the firms to be "given" to the NIFs even though the latter do not put their own money at risk
- perception that the main goal of MPP is to solve budgetary problems, not restructure firms.

### **III.3.E Managerial Compensation**

The system of managerial compensation remains unchanged in the state owned enterprises, at least on paper. Managers still receive a multiple (between 5 and 7) of the national average wage or the average wage in the firm and are hired by the Workers' Council (this refers to the non-commercialized units).<sup>19/</sup> This basic wage is determined by the Workers' Council. There is also a bonus payment, but the link of managerial compensation to profits is weak and has been diminishing with time: ironically, this link was the strongest (in terms of specified percentages of profits before tax minus PPWW) in 1990, when financial measurement was strongly biased by all sorts of temporary factors. Table 22 contains the bonus coefficients for different profit levels:

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<sup>19/</sup>One exception was encountered, where a manager had negotiated with the Workers' Council to receive only a percentage of profits.

Table 22: Profits and Managerial Compensation

Profits (zloty billion)	1990 (%)	1991 (%)
0-0.5	1	1
0.5-1	0.5	0.5
1-5	0.2	0.2
5-10	0.1	0.1
10-20	0.06	0.05
20-30	0.04	0.02
30-40	0.02	0.01
40-50	0.01	0.005
50-100	0.005	0.001
> 100	0.0001	0.0001

Note: The profit base for this calculation is Profit II - PPWW.

An example will show the extremely weak link between profits and managerial reward. In 1990, if the firm registered \$ 50 million of profits (before tax - PPWW), the manager would get about \$ 3800 for the year. In 1991, this drops to about \$ 2800 for the year. In a case where the manager's basic wage is 7 times the average wage in the firm, equivalent compensation can be obtained by a one-time rise in monthly wages of about \$ 45 per month in 1990 and only \$ 33 in 1991. Figure 13 plots this link, with profits in dollars shown on the x-axis and resulting bonus, also in dollars, on the y-axis. This weak link between profits and bonus (which reaches an asymptote of about \$ 3900 in 1990 and \$ 2900 in 1991) creates an automatic pre-disposition towards wage increases and emphasizes the short-run. This is obvious when contrasting the present system of managerial compensation (MC) in equation (1) with a system where the link to average wages is broken and that to profits is strengthened:

$$(1) MC = K.w + L.\text{profits}, K \text{ a given multiple, } w \text{ the average wage and } L \text{ some percentage}$$

$$(2) MC = B + C.\text{profits}, C \text{ a specified percentage greater than } L.$$

Regarding (1), it is obvious that if K is large enough and L is very small - the case obtaining in practice - an increase in wages will lead to larger managerial compensation. Adopting a scheme like (2), which completely de-links compensation from average wages, solves the problem of immediate compensation; but the issue of long-run compensation linked to maximizing firm value remains.

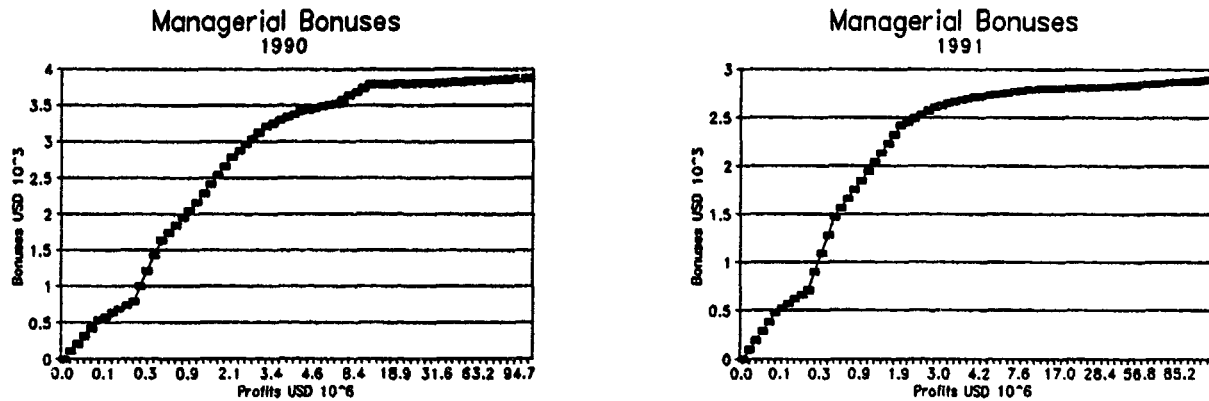


Figure 13

When managers who had clearly engaged in deep restructuring (new products, new markets, firms brought back from the verge of liquidation) were asked what motivated them to take a long-run view given the compensation system, they mentioned emotional reasons, patriotism, personal ambition and the like. However, a few candidly admitted that they expected to gain from privatization, hoping to acquire part of the shares at below-market prices. This would be their deferred compensation. Managers were secure about keeping their jobs after privatization; their reasoning is that they are the best repository of restructuring talent in this economy and even if fired, would easily find new jobs.

### III.3.F Suggested Package

The formal compensation package for managers, which emphasizes the short-run at the expense of maximizing the long-run value of the firm, needs to be remedied. First, there should be transparency of rules, not a vague hope that the Supervisory Board or Founding Organ will deem it fit to reward a good manager. Second, the need for a suitably designed management contract is of paramount importance, clarifying status after privatization and mode of compensation. In fact, privatization, the long-run health of the firm and managerial reward can be made congruent through such clarification and the increasing adoption of decentralized approaches to transformation such as MBOs and privatization through management contracts.

This view is reinforced by the observation that managers support privatization, perceiving it as an opportunity for themselves. Of course, the behavior of managers prior to privatization will depend on what they expect to gain from ownership change. There can be a positive impact if incentives are clear and rules of the game stable; but a negative impact when uncertainty prevails.

The delay in privatization, the need for restructuring prior to privatization and the need to capitalize on the big investment in managerial capital that has occurred through learning-by-doing during the ETP highlights the importance of designing suitable managerial compensation that emphasizes firm value maximization. The following could be part of a package:

- (a) dissolve Workers' Councils
- (b) strengthen significantly the link of managerial compensation to profits
- (c) clarify the position of managers following privatization as well as their reward, e.g., 10% of the shares at 50% of the price; include managers in the process of privatization through management buyouts and management contracts aimed at privatization
- (d) simplify the PPWW as discussed in section III.2.A
- (e) require auditing of accounts by certified external auditors to provide some checks.



#### IV CONCLUDING REMARKS

Reforming the state manufacturing sector in emerging market economies is a hotly debated topic, with prescriptions abounding but little systematic microeconomic evidence on actual developments. This paper tries to fill this gap. In contrast to the negative stereotype of SOEs that dominates discussion of the state manufacturing sector, the evidence in this study shows that there is encouraging news. Not only are success stories based on solid adjustment emerging, these are to be found in all sectors, indicating Poland's potential for a diversified manufacturing base.

Successful firms have improved efficiency in materials and energy usage, have maintained labor productivity and have shown restraint both in borrowing from banks and in setting wages. Further, firms paying the highest wages are the most profitable, but also the least decapitalized. These are the success stories, with their managers the most often stressing product mix changes as a factor stimulating sales.

Less successful firms are burdened with excess labor and are increasingly unable to service their debt. Any restructuring package for these firms is bound to involve at a minimum not only debt workouts, but drastic downsizing.

The quantitative evidence shows that the industrial recovery showing up in aggregate statistics has a solid microeconomic foundation and will therefore be sustained. Behaviorally, there has been a certain maturation since the big bang which is beginning to pay dividends in the third year of the ETP.

First, managers have learnt a great deal in the last two-and-a-half years of operating in a market environment. Second, there is a close to zero expectation of government-sponsored bailout. Third, end-game behavior (whereby SOEs operate in concert to perversely precipitate a bankruptcy crisis) makes sense only if the probability of a bail-out is high. With both workers and managers convinced that this will not be the case, firm horizons have lengthened. Fourth, the behavior of banks, which acted as a safety valve in 1990 and part of 1991, has radically changed. In short, the micro budget constraint has hardened. This has undoubtedly impacted firm behavior. Fifth, worker attitudes are also gradually changing. Managers of firms in difficulty reported that when faced with bankruptcy, worker behavior changes, especially when no bailout is in the offing. Managers from the less successful A firms reported more positive support from the unions and Workers' Councils than those from the successful AAA firms. Interestingly, managers of AAA firms were in a strong position because they had shaped the firm and it was unlikely that the Workers' Council would dismiss a competent manager in the present recession, especially when managerial talent is scarce. To the contrary, managers have been replaced only when the firm was in dire straits and the manager was blamed for not formulating effective restructuring plans. The turnover rate in managerial posts is visibly lower for AAA firms than in loss making firms.

The fact that SOEs, which are autonomous, are turning around bodes well for decentralized approaches to ownership transformation. However, the crucial issue of managerial incentives aimed at maximizing firm value en route to privatization has been neglected. It is important to design suitable incentive mechanisms to capitalize on the investment in human capital that has taken place during the last three years as SOE managers have learnt how to operate in a market system.

This priority is heightened by the observation that a restructured and eventually privatized

state manufacturing sector holds the key to medium run growth. While the new private sector and foreign investors have a crucial role, this must be in conjunction with the energy flowing from a reformed state sector.<sup>20/</sup> The state sector can achieve this in two ways: directly, as a result of the benefits flowing from a more efficient state sector; indirectly as a result of resources released for use by new entrants. However, the road is more complicated than initially believed and restructuring prior to privatization is all but inevitable. Table 23 summarizes the preceding discussion. It is worthy of emphasis that of all the instruments listed in the table, obvious progress has been made only on two counts: (a) clear signal that there will be no bailout of firms; (b) correct relative prices. There is a long way yet to go.

Table 23: Objectives and Instruments in Relation to SOEs

<u>Objective</u>	<u>Instruments</u>
1. Long horizon ("anti-myopia")	<ul style="list-style-type: none"> <li>○ No bailout (i.e., hard budget constraint)</li> <li>○ Managerial incentives</li> <li>○ Abolish Workers' Councils</li> </ul>
2. Efficient restructuring	<ul style="list-style-type: none"> <li>○ Debt restructuring</li> <li>○ Labor reduction</li> <li>○ Legislative support for divestment of social assets and worker housing</li> <li>○ Decentralized approaches to privatization</li> </ul>
3. Efficient resource allocation	<ul style="list-style-type: none"> <li>○ Correct relative prices</li> <li>○ Banking sector reform</li> </ul>
4. Monitoring	<ul style="list-style-type: none"> <li>○ Periodic reporting on key variables</li> <li>○ External auditing of accounts</li> <li>○ Banking supervision and control</li> </ul>

Note: The listed objectives are exactly what eventual privatization would hope to achieve.

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<sup>20/</sup>Even diehard private sector supporters agree that it would be romantic to believe that growth in the Polish economy is going to come from the new private sector and foreign investors alone.

**ANNEX I : Sample and Data Description**

The report is based on repeat visits in late August and September 1992 to 75 large enterprises, which were originally surveyed in mid-1991. These firms are from 5 manufacturing sectors: (a) metallurgy; (b) electromachinery; (c) chemicals; (d) light manufacturing (textiles, leather); and (e) food processing. The original criterion for selection was 1989 sales value as published in the LISTA 500 for 1989, the attempt being to select 15 from among the 21 largest firms in each sector. But obvious giants (the biggest steel mills and shipyards) were eliminated as these would dominate the statistical calculations.

The repeat visits of 1992 were made after sharing the first phase findings with the participating firms, which ensured a friendly reception. Out of the 75 firms, 73 were successfully re-visited (of the remaining, one was in liquidation and one under investigation). Eventually, 63 firms returned the filled-in questionnaires in time for this report, and there is good chance that more responses can be obtained with additional follow-up.

The SOEs in question employ 1500-6000 workers, although one exceeded 20,000. A typical sample firm is not a giant URSUS-type firm, which gets much media attention, but is no longer representative of the state sector. Annual sales of the sample firms are in the region of \$100 m. or more. Products sold by these enterprises include pipes, rails, metal sheets, wire, machine tools, transformers, electric engines, railway carriages, refrigerators, bicycles; fertilizer, plastics, organic and inorganic chemicals; fabrics, clothes, hosiery, shoes and leather goods, meat products, sugar, processed fruit, chocolate, cigarettes. Virtually all the firms were SOEs at the start of the ETP, with powerful Workers' Councils, two (or more) trade unions and management legally subordinate to the Workers' Council. By 1992, almost half had been transformed into 100% Treasury-owned entities ("commercialized") and 3 were privatized. The enterprises are located all over Poland, both in the big industrial centers (Upper Silesia, Krakow, Warsaw, Wroclaw, Poznan) and smaller cities (South-East Poland, Szczecin, Torun, Bydgoszcz, Radom, Piotrkow and many more).

Size indicators for the sample firms are summarized below. To some extent, the sectoral classification is artificial, convenient for statistical reporting, but not necessarily for a study of adjustment. In this respect, there is sufficient product and geographical variance in the sample to draw interesting conclusions.

**Size Indicators for Sample Firms**

Sector	Percentage shares (1990)		
	Sales	Employment	Exports
Metallurgy	38.0	41.4	25.9
Electromachinery	9.4	7.8	11.0
Chemical	32.2	30.1	39.8
Light	7.9	8.1	9.1
Food processing	9.1	8.3	2.4

**Data Description:** The data set from each enterprise comprised statistical information for the period June 1989 - Jun 1992 and answers to a qualitative questionnaire administered during visits to firm managers.

The **statistical** information covered: **monthly** information on value of sales, costs of sales, subsidies, turnover tax, extraordinary gains and losses, gross profit, tax payments, net profit, inventories (total and divided into inventories of raw materials, work-in-progress and finished goods), cash balances, credit outstanding, interfirm credit (payables and receivables), dollar deposits, employment, wage bill and popiwiek norm - a total of 42 variables; -quarterly **information** on total costs incurred, structure of costs, imports (not available in many firms) - a total of 24 variables; **yearly** information on value of fixed assets, investment expenditures, profit distribution, tax obligations and tax arrears - a total of 36 variables.

The **qualitative questionnaire** was modified to focus on the following: optimism and expectations from GOP, including the credibility of policy in the third year of the ETP; labor adjustment and reactions to the excess wage tax; the enterprise-bank relationship and the role of banks in the transformation of firms; the social assets problem and potential solutions; long-run strategy, including sequencing of restructuring and privatization. In addition, some questions from the previous survey were repeated: price policy, organizational changes, and different aspects of adjustment behavior in the firms.

## ANNEX II: Pact On SOEs

### Coverage

The Pact applies to all SOEs and commercialized enterprises 100% owned by the Treasury, while some draft laws (e.g., financial restructuring) also apply to companies where the public sector ownership exceeds 50%. The Pact consists of draft laws, amendments to existing laws and statements of issues and problems to be addressed.

### Objectives

There are two main objectives:

- (i) eliminate uncertainty facing enterprises
- (ii) involve management and workers in enterprise transformation and reform.

### Bill on Financial Restructuring of Enterprises and Banks

This law is essentially the same as that discussed in the context of the EFSAL, aiming at simultaneous restructuring of companies and banks. The law was discussed on September 18 in the Sejm for the first time and no major resistance was met.

### Privatization

Firms embraced by the Mass Privatization Program will be excluded from the purview of this law. So will the fuels/energy and arms sectors, and Railways and Post and Telegraphs.

Firms which are solvent can choose one of the following options:

- (i) sale to big investor
- (ii) public sale of shares
- (iii) transfer of controlling stake to a bank or pension fund<sup>21/</sup>
- (iv) buy-out by management or employees.

Insolvent firms can also choose the method of privatization, but must produce a draft of an arrangement with creditors (under Arrangement with Creditors Act of 1934, the Civil Code or the above-mentioned bill on enterprise restructuring) and a plan for enterprise rehabilitation. If arrangement with creditors is not sought or reached, bankruptcy will be declared.

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<sup>21</sup>Not clear whether this refers to debt/equity conversions.

### **PPWW Reform**

This is billed as the most important element of the Pact alongside privatization. The aims are to develop a system of wage growth negotiation and eliminate the dividend tax. Salient features:

(i) a National Negotiation Commission consisting of representative of the Government, employees and workers will determine norm wage indices every quarter.

(ii) wages can be paid from profits as well, provided a specified portion is set aside for enterprise development and if an amount equal to profits paid as wages is paid to the Treasury.<sup>22/</sup>

(iii) dividend will be cancelled.

Starting from January 1, 1993, wage increases free of PPWW can be paid provided (a) the ratio of profit to wages booked as costs is maintained; (b) tax payments are timely; and (c) following management-trade union negotiations, enterprises form a wage payments strategy which is agreed with local tax chambers, including possible relief and exemption.

### **Other Main Aspects of Pact**

In addition the Pact discusses softening of leasing terms of SOE assets, clarification of land property rights and the need to formulate solutions to unwanted assets and the burden of enterprise-owned worker housing. Further, there are proposals to amend sections of the Labor Code relating to collective bargaining and health and safety at work.

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<sup>22</sup>Although it is not specified, "profits" presumably refers to "profits after corporate income taxes". Essentially, bonuses will be taxed at 100%.

**ANNEX III: Recent Modifications to the Excess Wage Tax (PPWW)**

The amendments to the PPWW law and dates of effectiveness are as follows:

(a) **De-indexing (Effective October 1, 1992):** The Council of Ministers will specify the percentage wage norm increase for each month in every quarter before the 15th of the first month in that quarter. Thus, indexing to inflation is dropped.

(b) **Wage Norm Increase With Labor Shedding (Retroactive to January 1, 1992):** Those enterprises reducing average employment in 1992 are entitled to increase the yearly wage norm by half of the wage norm lost due to the employment reduction. In practice, this regulation was also effective last year bases on an MOF resolution.

(c) **Negotiations with tax chambers (Effective January 1, 1993):** Enterprises are allowed to negotiate payment schedules and allowances on PPWW with local tax chambers after presenting individual wage policy paths.

(d) **Lower tax rates:** The tax schedule as of January 1, 1993 will be as follows:

<u>Excess over norm</u>	<u>Tax rate</u>
0-3 %	100 %
3-6 %	200 %
> 6 %	300 %.

The above schedule incorporates two changes: first, the maximum rate kicks in only when the norm is exceeded by 6% (upto the end of 1992, the maximum rate kicks in after a 5% excess); second, the maximum rate is lowered progressively from 500% in the first 8 months of 1992 to 400% from September 1, 1992 and to 300% in 1993.

**Main proposals included in the "Pact"**

There will continue to be a norm for wages booked as operating costs ("cost wages"), exceeding which will be taxed as shown above. The "Pact" proposal is to abolish the dividend and PPWW paid on bonuses exceeding the norm for bonuses. Instead, profits after income tax and PPWW on cost wages will be equally shared among investment purposes and the rest could be split between bonuses and payments to the budget. Effectively, the tax rate on bonuses ("wages paid out of profits") will be 100%.

**Comment: Wage Maximization Under Pact Proposal**

Given an income tax rate of 40% and the above schedule for PPWW on cost wages, what would a wage maximizing strategy look like under the sharing proposal of the Pact?

Let  $P$  = profits before wages and taxes;  $W^*$  = the norm for cost wages;  $A$  = cost wages; and  $W$  be total wage payments (cost wages plus bonus). Under the pact sharing proposal,  $W$  is:

$$W = A + (1/3)[P - A - t(P-A) - \pi(A-W^*)S], \text{ where}$$

$t$  is the income tax rate = 40%,  $\pi$  is the relevant marginal PPWW rate and  $S = 1$  if the wage norm is exceeded and 0 otherwise.

The relevant derivative when choosing  $A$  to maximize  $W$  is:

$$dW/dA = 1 + (1/3)(-1 + t - \pi).$$

Since  $t=40\%$ , the above derivative is positive so long as the marginal PPWW rate is less than 240%. Given the above schedule of taxation, cost wages will therefore be a little less than 6% above the norm, as this will mean a marginal PPWW rate of only 200%.

The scheme is complex and could lead to surprises. The provision for negotiation with local tax offices is likely to lead to ad hocism and possible corruption.



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