BERICHTE UND MITTEILUNGEN

THE ADAPTATION OF INDUSTRY AND ITS LABOUR FORCE TO THE CHANGING ECONOMIC SYSTEM IN POLAND

With 4 figures and 8 tables

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Zusammenfassung: Die Anpassung der Industrie und ihrer Beschäftigten an die Veränderungen des Wirtschaftssystems in Polen

Das Wirtschaftsprogramm, das Anfang 1990 in Polen eingeführt wurde, wird aufgrund seiner drastischen Maßnahmen auch als „Schocktherapie" bezeichnet. Die Resultate dieses Programms werden bisher unterschiedlich bewertet. Als Erfolge dieser „Schocktherapie" können die Überwindung der Hyperinflation, die innere Konvertibilität der nationalen Währung (Zloty), die Wiederherstellung des Marktes sowie die Privatisierung des Handels angesehen werden. Demgegenüber sind große ökonomische Probleme wie der anhaltende Rückgang der Industrieproduktion, die wachsende Arbeitslosigkeit sowie der sinkende Lebensstandard bis heute ungelöst.

Die Anpassung der Industrie an die neuen Wirtschaftsbedingungen ist bisher nicht gelungen: Der Unterschied zwischen dem wirtschaftlichen Erfolg der staatlichen und der privaten Industriebetriebe wird immer deutlicher. So kann die Verteilung der privaten Unternehmen (Abb. 3) als Indikator der regionalen Unterschiede unternehmerischer Initiativen gewertet werden. Dabei zeigt sich eine ausgeprägte Teilung Polens in einen eher dynamischen Westen und einen schwerfälligen Osten. Die Außenhandelsbeziehungen der polnischen Industrie sind durch eine rapide Reorientierung geprägt, in deren Verlauf die ehemalige Sowjetunion ihre führende Position als Handelspartner an Deutschland verlor. Immer größere Bedeutung als Strategie sowohl der Regierung als auch mancher Unternehmen gewinnt der Versuch, ausländisches Kapital zu Investitionen in Polen zu ermutigen.

Die Bewältigung der sozialen Kosten ist eines der schwierigsten Probleme des wirtschaftlichen Transformationsprozesses. Die Arbeitslosigkeit zeigt starke regionale Unterschiede. Dabei umfaßt das Gebiet mit der höchsten Arbeitslosenquote die rückständigen und schwach industrialisierten Woiwodschaften Nordostpolens, während das niedrigste und am langsamsten wachsende Niveau in den großen Ballungsgebieten (mit Ausnahme von Łódź) zu beobachten ist. Bemerkenswert ist, daß zwischen der Arbeitslosenquote, dem Rückgang der industriellen Produktion und der Höhe der Industrielöhne keine signifikanten Beziehungen bestehen. Dies bestätigt, daß in Polen noch kein echter Arbeitsmarkt existiert.

Gegenwärtig scheint sich in Polen eine neue industrieräumliche Struktur herauszubilden: Auf der einen Seite stehen die Regionen Warschau und Posen mit relativ modernen Branchen, gut ausgebildeten Arbeitskräften, unternehmerischer Initiative und schneller Anpassung an die neuen wirtschaftlichen Bedingungen. Auf der anderen Seite finden sich die traditionellen Gebiete der Schwerindustrie, wie z. B. das Oberschlesische Industrierevier, mit großen, veralteten, ineffizienten und umweltbelastenden Fabriken und einer wenig flexiblen Arbeiterschaft. Die Regierung ist gefordert, anstelle der bisherigen, vornehmlich sektoral orientierten Wirtschaftspolitik, wie sie für die kommunistische Periode typisch war, eine aktive Regionalpolitik zu entwickeln.

1 Introduction

Among several problems facing the countries transforming their centrally planned command systems into market economies, industrial adjustment to the new economic conditions is particularly difficult. There is no valid theory of the period of transition. A 'trial-and-error' method is therefore adopted. The present economic position of Poland seems to be somewhat similar to that of an underdeveloped country confronted with highly advanced market economies. According to SADOWSKI (1991a), there are two basic similarities:

a) it is not integrated into the global economy, and
b) it is faced with the need to launch mechanisms for sustained growth based on a market system with all its institutions. "The important difference is that Poland, as well as other former 'socialist' countries, is industrially developed in the sense of having a sizeable and diversified industrial apparatus, which served it in the past to go through a long period of quite impressive sustained growth. But this growth was based on autarky rather than competitive strength, which led to a distorted industrial structure. Therefore the issue for determining the policies of transformation is, to what extent use can and should be made of the existing industrial potential. Can it be reconstructed and modernized or should it rather be scrapped in order to have economic growth restarted on an entirely new basis?" (SADOWSKI 1991a: 86).

2 Directions of the economic transformation, its achievements and costs

The first non-Communist government which came into power in September 1989 totally rejected the rules of the socio-economic system existing hitherto.

Its stabilization program launched at the beginning of 1990 has come to be called a 'shock therapy'. Its main short-term objective was to beat hyperinflation (by the end of 1989 the annual inflation rate soared to nearly 2,000%). To achieve it, many drastic measures were introduced. They included price decontrol (with the doubling of the average price level over a single month in effect), curtailing most government subsidies, a sharp devaluation of the zloty and making it internally freely convertible at a uniform exchange rate, the liberalization of foreign trade, and a tough deflationary set of policies concerning incomes, credits and budget expenditures (cf. SADOWSKI 1991b: 104, DOMAŃSKI 1991: 5-6). The government program also introduced many institutional changes aiming at:

a) the privatization of the economy,
b) the demonopolization of the economic structure, and
c) attracting foreign capital.

Several new institutions have been set up, such as the Ministry for Property Transformation or the Anti-Trust Office. The former command/redistributive centre - the Planning Commission affiliated to the Council of Ministers - has been replaced by the Central Board of Planning with no direct power. Its task is to prepare analyses, development programs, forecasts, etc.

The evaluation of the results of the shock therapy is not unequivocal. The monetary policy seems to be the biggest success so far. Hyperinflation has been defeated (hopefully for good) and the annual inflation rate has been brought down from a four-digit figure to about 70% in 1991. Confidence in the domestic currency (the zloty) has been restored. Banking infrastructure has been quickly developing. Other achievements include restoring market equilibrium and revitalizing the trade sector. The economics of shortage has disappeared, at least as far as the availability of goods is concerned. The producer-oriented economy has been evolving towards one increasingly customer-oriented. The 1990 export boom brought about a positive trade balance with the West (3.8 billion US dollars) and the East (4.8 billion roubles), which is particularly important for the repayment of the Polish debt. The results of privatization in trade are also very impressive - in June 1991 about three fourths of retail trade were in private hands. There have appeared some previously unknown kinds of services, e.g. advisory agencies or a stock exchange. Many formal obstacles in foreign contacts have been removed. Generally, by international standards, the industrial 'environment' is becoming more and more favourable. Unfortunately, the evaluation of the position of industry itself is quite different.

Both economic and social costs of the transformation are very high. The most important are the following (cf. SADOWSKI 1991b: 108):

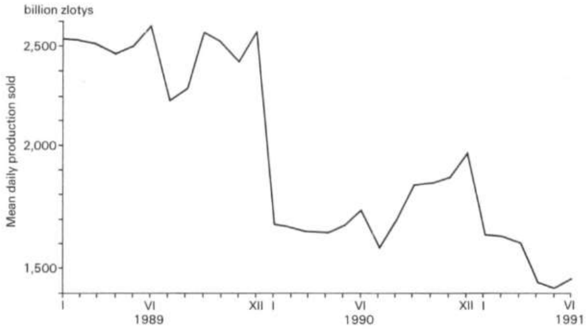

Fig. 1: Mean daily industrial output, 1989-1991

Durchschnittliche industrielle Tagesproduktion 1989-1991

a) a rapid and massive decline in the output of industry, construction and agriculture and a lasting recession; e.g. in the first six months of 1990 the industrial output decreased by 29.7% in comparison with the same period of the preceding year and, despite some seasonal fluctuations, is still falling (Fig. 1);
b) a reduction in real wages by 1/3, a decline in domestic demand, and a sinking standard of living; the best indicator may be the average share of food expenses in the family budgets exceeding 50%;
c) increasing unemployment: on 31 December 1991 there were about 2.2 million unemployed (11.4% of the labour force), i.e., 91,4% more than on 31 December 1990.

3 Problems of industrial adjustment to the economic changes

The adaption of industry to the changing economic system is not successful. One of the most important reasons is an unfavourable industrial structure still dominated by torpid, large, state-owned firms (mostly in the heavy industry). In 1989-1990 state-run enterprises employing over 1,000 workers produced 71% of the total industrial output (production sold), as against 0.4% produced by those with less than 100 employees. Out of the 10 enterprises with the highest 1990 figures of production sold, half were steelworks employing together more than 100,000 workers.

Industrial adaptability to the new economic conditions in particular branches and regions can be defined, among others, by the index of recession, i.e. per cent decline in industrial output (see Table 1 and Fig. 2). In 1990 the recession primarily resulted from a fall in the demand for consumer goods and from the competition provided by imported goods. Hence, the most affected branches were the textile and food industries and - regionally - the Łódź

Table 1: Dynamics of production sold (at constant prices) as compared with the same period of the preceding year

Entwicklung der Produktion (in konstanten Preisen) im Vergleich zur gleichen Periode des Vorjahres

Industry	Period	
	1st half of 1990	1st half of 1991
TOTAL	-30%	-9.4%
Fuel and energy	-23%	-6.6%
Metallurgy	-21%	-16.2%
Engineering	-26%	-20.2%
Chemical	-28%	-7.6%
Mineral	-32%	-3.0%
Wood and paper	-32%	3.9%
Light	-42%	-11.3%
Food	-38%	4.5%

Source: Statystyka Polski (Poland's Statistics), Rzeczpospolita 8 (29), 1991

region (called 'Polish Manchester'), where production declined 41% over a year. In 1991 the main causes of recession, apart from a further drop in domestic demand, have been the dissolution of the COMECON and its agreements as to specialization in industrial production, a reduction in armament supplies, and above all the breakdown of the Soviet market towards which many firms have been oriented[1]. Hence, engineering and metallurgy are the branches with the steepest decline in output. The manufacturing of means of transport is particularly strongly affected, as evidenced by a decrease of 32% in production and 90% in exports. So are its main centres, i.e. Starachowice, Nysa, Sanok, Jelcz, Lublin, and Ursus. Positive trends can only be observed in the wood, paper and food industries. The Poznań region, with its diversified industrial structure, seems to have been the one most resistant to recession so far. To date the spatial distribution of recession (Fig. 2) does not allow any significant regularities or clusters to be identified.

The difference between the economic results of state-run and private industry is becoming ever more pronounced. Declining output ist not the worry of the private sector, as Table 2 illustrates. This is mainly due to the setting up of new private businesses. The quickly differentiating property structure of industrial units is shown in Table 3.

The location quotient index for private industrial firms shows very distinct spatial regularities (see Fig. 3). If treated as a peculiar measure of people's entrepreneurship, it reveals a clear division of Poland

[1] For about 100 big enterprises the Soviet Union was the sole foreign partner. There are many large firms (e.g. "Zastal" in Zielona Góra, "Meraster" in Katowice, "Polmo" at Praszka, or "Mera" at Błonie) which used to sell more than 90% of their output to the USSR.

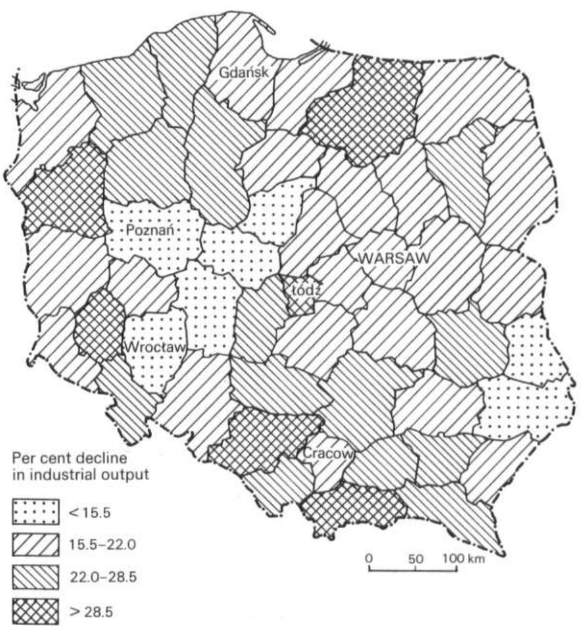

Fig. 2: Spatial pattern of recession (1990 in relation to the previous year)

Räumliches Muster des Produktionsrückganges (1990 im Vergleich mit dem Vorjahr)

into a dynamic west and a stagnant east. Apart from historical and cultural determinants (the former Prussian versus Russian partitions), two factors can be held responsible for these differences:

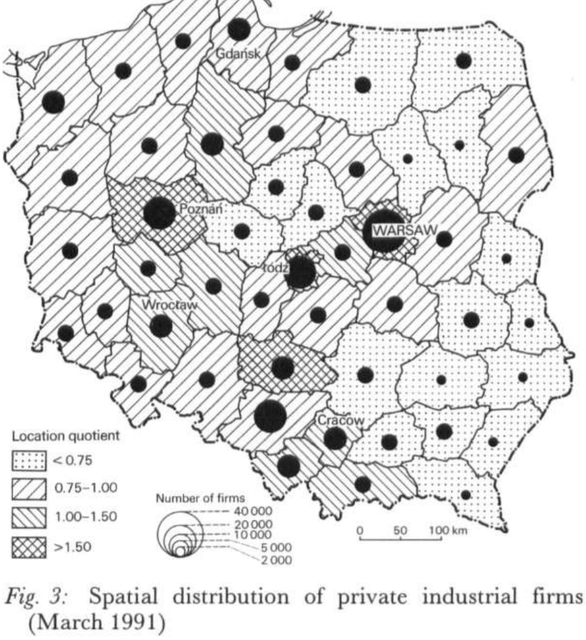

Fig. 3: Spatial distribution of private industrial firms (March 1991)

Räumliche Verteilung der privaten Industrieunternehmen (März 1991)

Table 2: The public and private sectors in Polish industry
Öffentlicher und privater Sektor in der polnischen Industrie

	Industrial output (%)				Growth (+) or drop (−) in production sold in 1991 as compared with 1990 (in %)
	1st half of 1990	2nd half of 1990	1st half of 1991	2nd half of 1991	
TOTAL	100.0	100.0	100.0	100.0	− 11.9
Public sector	83.0	82.6	80.6	75.8*)	− 19.5
Private sector	17.0	17.4	19.4	24.2*)	+ 25.4

*) Estimates
Source: Statystyka Polski (Poland's Statistics), Rzeczpospolita 8 (29), 1991 and 1 (35), 1992

a) the demographic structure (a younger population in the west vs. an older, rural one in the east), and
b) the proximity of the German border facilitating individual contacts, material procurement and trade, and the establishment of joint ventures; hence, promoting the diffusion of market-oriented models of behaviour.

There are two areas that can be identified as the growth poles in the present Polish economy: the Warsaw and Poznań voivodeships. The position of Warsaw is mainly connected with its status as the capital (in all the post-Communist countries the most important functions shaping the industrial 'environment' are concentrated in their capital cities). The case of Poznań is more interesting. What seems to play a very important role here is its cultural background, although its explanation demands further investigation. During the Prussian partition (1793–1918) the local population competed successfully for a very long time with the powerful German economic machinery, simultaneously taking over some of its standards. This competitive spirit, lulled during the Communist period, has now awoken, and the courageous, though risky, government stabilization programme has found strong support here. This is also proved by the fact that Poznań was the only large Polish city where the former Prime Minister Tadeusz Mazowiecki (who introduced this austerity plan) won the presidential election of 1990. The leading role of Warsaw and Poznań in the process of property transformation is shown in Table 4 against the background of the total country and the most industrialized Katowice voivodeship with its now antiquated industrial structure. Furthermore, the table shows that the organizational structure of the state sector in the Warsaw and Poznań regions is less concentrated (and also less monopolized) than in the Katowice region. In consequence, their recession indices are 2–3 times lower (Warsaw 16.6%, Poznań 8.7%) than those of Katowice (28.9% in 1990).

Table 3: Changes in the property structure of industrial units
Veränderungen der Eigentumsstruktur im industriellen Sektor

Type of property	Number of industrial units		Dynamics index 31 Dec. 1990 = 100
	31 Dec. 1990	30 June 1991	
Public sector			
State-run enterprises	2,861	3,000	104.9
Communal enterprises	2	39	1950.0
Other	353	393	111.3
Private sector			
Private companies	7,014	7,698	109.8
Joint ventures	853	1,431	167.8
Co-operatives	2,411	2,531	105.0
Firms belonging to foundations	20	19	95.0
Foreign firms of small manufacture	739	734	99.3
Firms run by individuals	334,615	339,300	101.4

Source: Statystyka Polski (Poland's Statistics), Rzeczpospolita 8 (29), 1991

Table 4: Number of state-run enterprises, private companies and joint ventures per 10,000 population in selected areas (30 June 1991)

Zahl der staatlichen Unternehmen, der privaten Gesellschaften und der Joint ventures auf 10 000 Einwohner in ausgewählten Gebieten (30. Juni 1991)

Voivodeship	State-run enterprises	Private companies	Joint ventures
Warsaw	2.6	31.9	4.1
Poznań	2.6	16.9	1.9
Katowice	2.0	9.7	0.4
POLAND	2.3	10.1	0.7

Source: Own calculations on the basis of: Statystyka Polski (Poland's Statistics), Rzeczpospolita 8 (29), 1991; Rocznik Statystyczny (Statistical Yearbook) 1991

Table 5: Dynamics of Polish export (1st half of 1990 – 1st half of 1991; constant prices)

Entwicklung des polnischen Exports (1. Halbjahr 1990 – 1. Halbjahr 1991; konstante Preise)

Countries	Dynamics index (1st half of 1990 = 100)
EEC	128.3
Former COMECON	60.3
Other	91.3

Source: Statystyka Polski (Poland's Statistics), Rzeczpospolita 8 (29), 1991

4 Strategies of enterprises and the government response

In 1990, for the first time in the post-war period, Polish enterprises faced a real demand barrier and foreign competitors on the domestic market. This took their managements by surprise, as their thinking and activity was oriented neither towards competing globally nor at home. Thus, strategies of strengthening their competitive position such as the introduction of new technologies, the lowering of input costs and prices, or the improvement of quality did not occur at a massive scale. Having in mind many former short-lived attempts at economic reforms (or rather semi-reforms), the most common principle state-run firms seemed to adopt was to 'wait it out'. The result, especially initially, was a headlong decline in production, much steeper than expected, without any significant structural change. Some enterprises reduced their employment, but most adopted the strategy of 'hoarding' workers until the difficulties were over. This explains why the 30% drop in output in the first half of 1990 was accompanied by only a 7% reduction in employment.

Another strategy was to increase exports, especially to the Western countries. It was successful not because of growing competitive power, but mainly because of a very serious devaluation of the zloty in relation to the hard currencies. This strategy, followed mostly by the newly established companies and joint ventures, resulted in the Polish foreign trade surplus mentioned above. However, in the words of PORTER (1990: 642), "devaluation rarely leads to long-term productivity growth". From a geographical point of view, worth noting is a re-orientation of international economic relations (see Table 5). The former Soviet Union has lost its first position to Germany (Table 6). So far, however, this re-orientation has not been able to fill the gap left by the collapse of the Soviet market and the dwindling home market; hence the Polish efforts to become associated with the EEC.

The most recent investigations conducted by the Institute of Economics, University of Łódź, supervised by Professor W. CABAN identify some other strategies, such as:

a) modernization of the marketing organization;
b) changes in the production patterns: reducing the assortment in large plants and expanding it in small ones;
c) the sale or lease of parts of productive fixed assets and social facilities; and
d) the establishment of permanent links with foreign partners.

On the other hand, however, a mere 36% of enterprises went into the manufacturing of new and modernized products, while new technological processes were introduced in only 9%.

Generally speaking, passive strategies, especially pressing the government for subsidies, keep predominating in the behaviour of the still predominant state-run firms. One has to agree with SADOWSKI (1991b: 104–106), who stated that it was perhaps too optimistic to expect that a change of rules governing the system would quickly lead to the infusion of the competitive approach into the economy, and to a desirable supply response from producers. However, the creation of competitive behaviour requires much more time. Hence the problem arises of how to overcome the dangerous slump and invigorate the economy before it begins to respond to institutional changes or before toughening wage demands bring about re-acceleration of inflation. The year 1992 promises to be particularly difficult.

Equally difficult and debatable is the role of the government in the process of transformation. PORTER (1990) does not overestimate it, assigning the government the role of a pusher and challenger. But what is to be done if the dominant state-run sector is not willing to respond properly, whereas the private sector is too weak to 'take the blow'? This is the reason why *the privatization of industry* seems to be the most crucial among the government strategies. The notion

Table 6: Changes in the geographical structure of the Polish foreign trade (%)
Veränderungen der geographischen Struktur des polnischen Außenhandels (%)

Export				Country	Import			
1988	1989	1990	1st half of 1991		1988	1989	1990	1st half of 1991
12.4	14.2	25.3	26.0	Germany	13.0	15.7	22.0	26.3
24.5	20.8	15.3	11.1	USSR	23.3	18.1	18.7	16.9
5.0	6.5	7.0	8.8	UK	4.2	4.5	5.5	3.7
2.3	2.3	3.1	5.6	Italy	3.3	4.1	7.2	5.1
6.0	5.5	4.0	5.3	Czecho-Slovakia	6.4	5.7	3.3	2.8
3.1	3.5	3.9	5.0	Austria	4.4	6.0	5.7	6.3
2.6	2.6	4.6	4.5	Switzerland	4.5	5.3	5.9	4.1
2.2	2.6	3.2	3.7	Netherlands	2.7	3.0	3.0	4.5
2.3	2.4	3.3	3.7	France	2.5	3.1	2.9	3.2

Source: Statystyka Polski, Rzeczpospolita 8 (29), 1991; Informacja o sytuacji społeczno-gospodarczej kraju, 1990. GUS, 1991

of privatization has three main aspects (cf. SADOWSKI 1991b: 156):

a) de-nationalization, i.e. transfer of state property into private hands;
b) reinstating the previous private owners of what was nationalized during the Communist period; and
c) establishing new private firms.

The targets of privatization are:

a) the identification of proprietors with economic benefit and risk;
b) the acceleration of restructuring of the existing enterprises interested, under market conditions, in productivity growth as the price determinant of their stocks; and
c) the abolition of monopolies.

There are two principal obstacles to privatization:

a) The lack of a conception of 'real value'. It is very difficult to estimate the actual value of factories and capital goods.
b) The lack of domestic capital. As MAGALA observes (1991: 56), it is unacceptable "to sell state enterprises to private owners considering that only the former Communist party bosses have enough money to purchase shares and it is exactly this group that society at large would rather not see emerge as the dominant one". The experience of privatizing the first five firms by free sales of their stocks (" Exbud" in Kielce exporting construction services, the Silesian Cable Factory in Czechowice-Dziedzice, the Krosno Glass Factory, the "Próchnik" clothing plant in Łódź, and "Tonsil" in Września producing hi-fi equipment) shows a wide scatter of the stocks as a result of the lack of real capitalists.

Demonopolization is another important government strategy. The 1990 law against monopolistic practices belongs to the most radical anti-trust acts in Europe. It allows a division or dissolution of those economic units whose activities hinder the creation of a competitive environment. The newly founded Anti-Trust Office has compiled a list of 169 monopolistic producers. It mostly contains chemical plants, paper mills and steelworks. The biggest clusters of monopolists are Warsaw (16 Firms), Łódź, Wrocław and Katowice. In 1990 about 50 combinates were divided into smaller units. However, the anti-trust policy is not always successful due to the network of informal connections among the former monopolists.

The lack of consulting agencies makes the government deeply involved in various analytical functions, since another of its tasks of primary importance is the formulation of *programs of branch restructuring* (usually with the help of foreign experts). One of such programs has been worked out with the participation of the World Bank and the Boston Consulting Group for the Polish textile industry. According to it, a further development of the Polish textile industry has to be very selective. Only knitwear, clothing, combed wool and linen are able to compete successfully on international markets, under the condition, however, of rapid computerization allowing the shortening of series and a quick change in pattern designing. The government's task would be to ensure Western credits for the purpose and to negotiate bigger export quotas, especially on the EEC markets. PORTER seems to be correct saying: "By lifting trade restrictions in such sectors as textiles and agriculture, which contain many industries that should be the early export industries (...), advanced nations would probably do more good than all the foreign aid programs combined" (PORTER 1990: 675).

From an economic point of view, a strategy that can be defined shortly as 'choose the best, finish off the inefficient' should be adopted consistently towards all industrial branches and sectors of the economy. Its *social context,* however, is one of the most difficult issues in the government policy. The opinion polls taken in May and June 1991 by the Centre for Social Opinion Research and the Centre for Public Opinion Studies show that the difficult program of economic transformation has ever less proponents, and that a considerable portion of society does not understand the nature of changes taking place. As many as 70.5% of respondents see the present economic situation as bad, and only 8.3% as good. Two thirds have a negative opinion about the government policy towards enterprises: they think it may only lead to their definite collapse. The strength of 'the old awareness' manifests itself in a surprisingly high percentage of affirmative answers to the questions:

1) Should the state have control over prices? - 76%.
2) Should there be an upper limit on the highest wages? - 61%.
3) Should foreign capitalists be prohibited from buying Polish property? - 58%.

This awareness seems to be a very significant 'cultural' limitation on the process of reconstruction. The large-industry working class that initiated the process of changes has begun to see the threat of self-liquidation instead of expected benefits.

5 Labour force in the process of transformation

Labour resources, and especially the cheapness of labour, may be seen as those which can potentially determine the Polish national competitive advantage. The question is, to what extent it applies to the industrial workforce, which amounts to 37% of the total in 1991. One has to bear in mind that during the period of forced industrialization (especially in the 1950s) in many industrial regions and centres it was created by rapid, artificially stimulated shift of peasants to hurriedly built factories with obsolete technologies. Very limited intersectoral and interregional mobility (resulting, among others, from workers being 'adscribed' to the plant-owned flats, health service, community centres, allotments, holiday homes, etc.) has helped to develop a rather parochial view of the world, the deficiency of production- and innovation-oriented entrepreneurship, and little adaptability to changes.

The rapidly growing *unemployment* - a phenomenon unknown in its open form in the system of feasible socialism - has a strong negative influence on people's attitudes towards the process of economic transformation. On 31 December 1991 there were 2.2 million officially registered unemployed (i.e. 11.4% of the total workforce) coming mostly from industry. By comparison, on 30 June 1991 their number amounted to 1.6 million (8.4%), whereas on 30 June to 0.6 million (3.1%). Young people predominate (33.3% are aged 18-24). About one third are those with 8 or less years of school completed, while 3.0% have university education. There is a dramatic drop in the number of jobs offered to women. In December 1991 there was 1 job offer per 115 unemployed women.

Fig. 4: Spatial distribution of unemployment (31.12.1990)
Räumliche Verteilung der Arbeitslosigkeit (31.12.1990)

The spatial distribution of unemployment (Fig. 4) is relatively stable. There emerges an area with the highest unemployment rates (more than 13% in June 1991) in backward, poorly industrialized north-eastern Poland. Moreover, voivodeships with high unemployment occupy also the western part of the country (with the exception of the shipbuilding centre of Szczecin). There is a particularly difficult situation in regions and towns depending for employment on a single or a few large factories which are now either going bankrupt (e.g. Starachowice dependent on the "Star" truck plant, and Zambrów, a centre of the textile industry created 'artificially' by the Communists), or changing their form of property (e.g. in Chełmża, where the local sugar refinery has transformed into a joint venture, the massive lay-offs demanted by the foreign partner have boosted the unemployment rate to 25%). The lowest unemployment rates and their slowest growth can be observed in the largest urban agglomerations: Warsaw, Cracow, Katowice, Poznań, and Wrocław. The only exception is Łódź, where the unemployment rate reached 12.9% in June 1991.

Worth noting is the lack of any significant relationships between the levels of unemployment, recession and industrial wages reflected in correlation coefficients (r) calculated for the 1990 data for the 49 voivodeships. It can be presented as follows:

Table 7: Employment, wages and productivity of labour in selected industrial branches as compared with their output
Beschäftigung, Löhne und Arbeitsproduktivität in ausgewählten Industriebranchen im Vergleich zu ihrem Output

Industry	Growth (+) or drop (−) in 1st half of 1991 as compared with 1st half of 1990 (in %)				Payment for productivity of labour*)	Average monthly wages (in 1000 zlotys)
	Output	Employment	Wages	Productivity of labour		
TOTAL	− 9.4	− 7.2	+ 101.3	− 2.4	1.81	1,708
Fuel	− 13.6	− 1.4	+ 106.1	− 12.4	2.29	2,737
Iron and steel	− 17.7	− 6.8	+ 106.2	− 11.7	15.45	2,213
Means of transport	− 31.7	− 8.7	+ 95.1	− 25.2	2.51	1,586
Textile	− 12.0	− 9.6	+ 99.4	+ 9.5	1.62	1,347
Wood	+ 5.0	+ 4.9	+ 101.4	+ 0.1	1.33	1.414
Food	+ 4.5	+ 4.1	+ 100.7	+ 0.4	1.62	1,622

*) Per cent increase in monthly wages to per cent increase in labour productivity (1st half of 1991)
Source: Statistical Bulletin, GUS, 6, 1991

unemployment rate —— -0.276 —— industrial wages

0.188 0.247

decline in output

The discrepancy between the unemployment rate and the level of recession reveals the problem of *disguised unemployment* estimated at some 1 million persons. It refers primarily to the 'heavy' industrial branches (see Table 7) and the main area of their concentration, viz. the Katowice voivodeship. In 1990 the almost 30% index of recession in this region was accompanied by a mere 3.4% unemployment rate and a level of wages still the highest in the country.

Regional *wage structure* in Poland has a very conservative, stable character (the coefficient of correlation between the levels of industrial wages in 1989 and 1990 calculated in the voivodeship pattern is r = 0.95). In the state sector the structure of earnings still remains irrational and very flat, in contrast to the private sector (Table 8). As a result, the state sector is being drained of highly qualified employees. Table 7 shows that in the state-run industry the level of wages is still only weakly related to the economic effects obtained.

All these facts indicate that a real labour market does not exist in Poland yet. To explain the slow pace of its creation, let us refer to some findings concerning the final period of the Communist system in Poland (the 1980s) emphasizing the role of powerful pressure groups in the economic apparatus formed by the heavy-industry lobby (cf. Matykowski a. Stryjakiewicz 1989). Now these pressure groups are strengthened by the large-industry working class (coming mostly from shipyards, steelworks and mines). The government, which has come to power thanks to this very class, seems to be too weak to undermine its traditionally privileged position. In turn, the management of state-owned enterprises is incapacitated by the so-called 'deadlock triangle' formed by the director, the workers' council and one or two trade unions. All strategic decisions have to be approved by all the partners of the triangle. This is still another reason for quick privatization, as in private firms this inefficient management system does not exist. It may be no accident that among the 400 enterprises the Ministry for Property Transformation has selected for privatization over the next

Table 8: Mean official earnings in May 1991 in million zlotys (1 US$ = 11,300 zlotys)
Durchschnittliche offizielle Löhne im Mai 1991 in Mio. Zlotys

Profession	Earnings
AVERAGE MONTHLY WAGES	1.7
General director of large company or foreign firm	about 20–30
Director of largest state-run plant in Poznań, H. Cegielski Metal works (10,000 employees)	8.5
The President	8.4
Minister	5.7
Canvasser in private trading firm	about 5.0
University professor	2.5
Privately employed worker installing window shutters	2.0
Physician with over 10 years of practice	1.7
Worker in H. Cegielski Metal Works	1.5
Teacher with 12 years of practice	1.3
Statutory minimum wages	0.7

Source: Authors' findings

two years, as many as 68 (i.e. 17%) are located in the Katowice voivodeship and 26 (6.5%) in the Łódź voivodeship. The Katowice voivodeship is becoming the most serious problem area not only in Poland, but also at the European scale. Another such region, though not quite as grave, is the Wałbrzych Coal Basin where all the mines are being shut down due to their low efficiency.

6 *Poland's newly emerging industrial space*

Up to now, industry does not seem to have been the growth engine in Poland. The most dynamic sectors are trade and banking, the quickest to adapt to the new economic reality ('finance and insurance' is the sector with the highest, i.e. 5% increase in employment in 1990–1991). The burden of the heavy industry is very heavy indeed for both economic and social reasons. That is why the establishment of a lot of small and medium-sized, competitive and flexible private firms is of primary importance. They could create a more favourable environment for the process of transformation threatened now by the struggle between the egalitarian and the market orientation.

A new shape of industrial space seems to emerge in Poland (cf. Kukliński a. Szul 1990): (1) on the one hand, the Warsaw and Poznań regions with modern branches, highly skilled labour, entrepreneurship, and high adaptability to the new economic conditions; and (2) on the other hand, old, heavy-industry areas (e.g. the Upper Silesian Industrial District) with large, obsolete factories and inflexible workers striving, nevertheless, to retain their privileges at any price, even that of breaking down the process of the economic reform in the country.

Hence, the government is demanded to adopt an active regional policy, rather than the sector-oriented one prevailing so far (e.g. tax reductions or cheap credits for investment spending, funds for the development of infrastructure, etc.). The possibility of temporary tax exemption for foreign investments located in the regions of high unemployment, created in June 1991, is a good but still rare example of this policy.

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