WORK-PERFORMANCE, INTERESTS, POWERS AND ENVIRONMENT
(The case of cyclical slowdowns in a Hungarian factory)

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I. The theoretical problem

Contemporary sociology can exercise its most useful activity in economic life perhaps by contributing through its empirical findings to the overcoming of certain illusions. Illusions in general are not merely the suppositions of presumed relations, having no base. They rather stem from the fact that effective and in many cases firmly based indirect relations are conceived as direct ones. Thus they are uprooted from the complicated system of relations of productive activity and are made absolute. Such illusions have been widespread in Hungarian economic thinking especially for the past few years, as a natural by-product of the introduction of Economic Reform, the establishment of a somewhat decentralized model of the centrally planned economy in 1968. The measures of the Reform called attention to a multitude of new or formerly overshadowed relations, the validity and limits of which are difficult to be judged in the short run. Some of them have been absolutized. By means of industrial sociology, if properly implemented, these relations can be put in their due places and their indirect character can be revealed in the process of their confrontation with reality. Of course, along with the application of sociology the natural risk is incurred that newly absolutized relations and inadequately founded generalizations will emerge, to be added to the already existing illusions.

In our study, refraining from the attribution of an unduly general validity to our observations gained through modest means, we wish to challenge some absolutized ideas concerning the relations between workers' behaviour and material as well as non-material incentives. In Hungary, generally speaking nearly everyone agrees that frequent troubles on the shopfloor in factories—slowdowns, work of poor quality,
high manpower turnover etc.—can be attributed to the improper systems of incentives. Views are, however, completely divergent as to the origin of the systems' shortcomings.

(1) Business managers, engineers and economists (in conformity with the Theory of Scientific Management, widespread also in Hungary although never called by this name) seek the roots of troubles almost exclusively in the disfunctioning of material incentives. According to them workers are physiological beings, interested individually and without preconditions in increasing their earnings. Thus for the insufficiencies of shopfloor discipline, of the speed of work, the systems of material incentives must be blamed: material rewards are not closely enough related to work performance, the employees cannot get their extra payments, on the basis of objective rates, for their extra efforts. From this standpoint a general and mostly justified criticism is that wages in Hungarian factories are not differentiated enough and their distribution is not very often in line with the work done.

(2) Social leaders, sociologists, psychologists, however, are inclined to pass over material problems and believe that the major reason for difficulties lies in the neglect and refusal of workers' non-material demands. The worker, they emphasize, is a social being, who can work efficiently only in a good collective, is responsive to appreciation from his fellow workers and managers, requests a say in the conduct of his own lot, and so on. This approach (which recalls that of the school of Human Relations) criticizes, and mostly also in a justified way, the lack of cohesive 'socialist' collectives, the autocratic style of the leadership of economic organizations, the exclusion of, or the merely formal participation of labour in company decisions. Thus in Hungary of today the old lasting argument between Scientific Management and Human Relations is reproduced. To a certain extent both approaches are justified, the relations presented by them have been proved. According to our findings the errors of both material and non-material management have contributed, though in different degrees, to the emergence of the present-day workshop uneasiness, as they are of a complementary character. The two approaches however, presume that there is a direct relation between the workers' behaviour and the factors alternately emphasized by them. They disregard the fact that productive activity corresponding to the Marxist definition is a social process, the participants of which
respond through their actions to their overall environment in and out of the factory, to a complete set of economic and social factors which make themselves felt through complicated transmissions. The effects of the overall environment take shape and are realized in the dynamic movements of workshop and company relations of interests and powers. Therefore workers' behaviour, in our assumption, always reflects a given state of relations of interests and powers, that of the social-economic environment, including also the state of certain important, perhaps dominating, but by no means absolute factors like material or non-material incentives. By describing the findings of an empirical study we endeavour to demonstrate the complicated mechanism through which all these factors influencing the workers' actions make themselves felt.

The investigation has been carried out (since 1969) in a unit belonging to one of the best run, well organized and dynamically developing Hungarian engineering companies. The workshop is a small part of the business organization with its 400 employees of a total of fifteen thousand. The unit, manufacturing railway coaches, is subject to gradual reduction of its production. Its activity is not characteristic of the whole of the company: its rudimentary technology that has undergone only minor changes during the past twenty years, its noisy and gloomy workrooms are in clear-cut contrast to the neighbouring huge, calm and bright Diesel engine unit, implementing the most up-to-date achievements of modern technology.

In the aforementioned unit of the company the 'naked' iron bodies of railway coaches, the so called 'casings' are manufactured. Sheet metal workers and welders are working in three work-rooms. In the first of them the angle bars and metal sheets, serving as basic material, are cut, formed and prepared. These are assembled in the second workroom: this is where the neatly curved frontal parts and the long side parts (with the empty openings of windows and doors) as well as the arched covers of coaches are manufactured, out of which the casings are assembled on the ready made chassis with the assistance of cranes. The last phase of the unit's work—levelling of the sheets of casings—is accomplished in the third workroom. Our research has been complex: it comprised all the workers and supervisors in the unit. Being pressed by the limits of space we concentrated our attention on the activities of only one branch of sheet metal workers, working in the levelling shop of the unit.
These sheet metal workers are a group of about sixty men, all of them sturdy, hard working employees, part of them under, some of them over thirty, but only a few above forty years of age. They make bumps and dents on coach sheets disappear by warming and hammering them flat in the workshop often called 'concert-hall', or 'conservatory' because of its ear-splitting noise. The constant noise of sixty hammers is increased to an extreme of causing pain by the 'sound-amplifiers' of empty iron casings. People work here with pieces of cotton in their ears. It is impossible to talk and to make oneself understood. The workers indicate by handwaves if they happen to need the large size hammer or the water pot. 'Our joints, nerves, eyes and ears are being spoiled.' 'Our eye-nerves are sometimes so much exhausted that our sight fails us. You wipe your forehead, go around the shop and come back to realize that the ruler shows a completely different result from before.' 'Sometimes when I go to bed in the evening I'm unable to fall asleep, because my nerves are all on edge. I continue to hear a chirrup.' 'I have been here for ten years and I'm becoming hard of hearing.'—said the workers being always at the end of their tether. In one word: levelling of sheets requires enormous efforts. The job itself is judged like this: 'Professional knowledge is of no significance here. Only skill, instinct and practice are wanted. People say: there is one rule for levelling sheets: to beat in the bumps and to beat out the dents. But it is not so simple as it seems to be. One must know where to put heat in the metal. Every sheet is different. There are some people who learn it in two or three years, but others will not learn it even after some twenty years.'

At the time of our field work (1969) sheet metal workers, because of the physical demands of their job and for other reasons to be analyzed later, belonged to the best paid employees of the company. The workgroup was paid according to a piece-rate system: the collective earnings of the group were dependent on 'how many pieces they produced', that is, how many coaches they levelled during a given period. The only privilege accorded to them, in comparison with skilled workers on other jobs in the unit, was the progressivity of their wage plan which meant increased pay after having produced a certain quantity of coaches. The level of group wages was primarily regulated by the level of piece rates. Two types of products were alternately manufactured. One of them fell under a tight piece rate and workers
could earn by producing it only a sum enough for 'a glass of cold water'. The piece rate of the other type was rather loose, whereby there was 'more money in this type'. Within the group the fund of collective earnings was divided on the basis of personal wage rates of members. Individual earnings were greatly influenced by the quantity of overtime done, varying individually, and by periodical incentive bonuses of inferior importance.

II. Slow-downs followed by speed-ups—a special type of workers' behaviour

The events starting from January 1968 (which we reconstructed from the material of unstructured interviews carried out one year afterwards as well as from the data in the files of the company) do not by themselves present an unambiguous evidence. They do not firmly contradict the widespread belief about the role of material incentives in the formation of workers' behaviour. Nevertheless this belief is challenged by the events which raise delicate questions, to which the proper replies, if we manage to find such ones, make it possible to understand the motives of labour's conduct in the workshops much better.

In the first quarter of 1968, that is, just after the introduction of the Economic Reform, company managers 'restricted earnings'. From the two types of coaches, the production of which was relatively freely alternated within certain natural limits, the management stressed the production of 'low-paying' type in February and March. Overtime was gradually reduced and no incentive bonuses were set. There was an overall drop in the output of the unit, covering all workshops and there was a corresponding drop in earnings too. The hourly wages of sheet metal workers diminished by one Forint in January and by two Forints in February and March (averaging only 10-11 Forints) in comparison with those of the last quarter of the previous year.

In April the situation improved: a bigger share of production was ensured by management from the 'well-paying' type of coaches. Workers, especially in the workshop producing components, managed to speed-up output and reach high earnings again. The output in the workshop of sheet metal workers (in the workshop occupied in levelling) however fell unexpectedly to a minimum of 66.7 per cent and hourly wages to an extremely low level of 6.80 Forints. Despite that people at least seemingly were working industriously with calm diligence: they
warmed up and hammered the bumps and dents on the sheets of coaches, from time to time they fitted their rulers to the sheets thus controlling the result. Under a surface of tranquillity the nerves of workers were overstrained. Younger people (below the age of 30 years) were affected catastrophically by the anticipated extremely low level of earnings, since—in accordance with their low personal wage rates—they received a considerably smaller share of the group's collective fund than their 'older' colleagues (those over 30 years of age). The 'older' workers, on the other hand, were scolding younger people, saying that they could not work. The foremen, the shop-steward and some professionally outstanding older workers were called upon in the office of the unit's management to promote or do overtime work. They refused it. 'At an hourly wage of 6.80 Forints we should not be expected to work an additional two to four hours in the ear-splitting noise'—the workers declared. The younger workers, who had also been offered this possibility by the unit managers, however, undertook overtime. The tension between the two strata of workers was increasing. 'Youngsters are more highly esteemed by managers than older workers. Young people are unmarried, they can do overtime. By doing overtime, one can conceal here the fact that he cannot work'—complained workers above 30. Nevertheless output did not increase and it seemed as if production 'had stopped'. The Communist party and trade union secretaries were trying to wheedle party members and union functionaries into the involvement of 'older' workers into overtime. Six outstanding workers, each with high seniority gave in their notices and another two requested their transfer to other units (there were several party members among them). Several younger people also left the company. While others making use of their constant joint and nerve complaints stayed at home on sick pay (in case of such slowdowns sick pay is higher than actual earnings, as it is paid on the basis of wages got in previous months). Thus things were getting worse and worse: the bottle-neck threatened the continuity of the entire coach production, of several units. Unit managers and workshop supervisors lost their head: they delayed transfers urged by the health conditions of workers, they telephoned to the consulting room pressing the doctors 'not to let sheet metal workers go on sick pay, for they are only simulating complaints'. Tension in the unit reached its climax.

In the second half of April the management of the company found
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it advisable to intervene: it took radical incentive measures in order to ensure continuous coach production. Considerable sums of special incentive bonuses were set up with a deadline of June, later prolonged till September and ultimately till October. In May, June and July almost exclusively the well-paying type of coaches were produced. Output and earnings ran up steeply in the levelling room as well as in the other workshops of the unit. The ‘older’ sheet metal workers (working in a separate group since May because of their conflicts with the younger) reached a fantastic 170 per cent output index with hourly wages of 17.51 Forints in September. Now they were ready to do overtime (overtime was paid on the basis of hourly wages reached in the normal working hours). Overtime work became regular. Its annual quantity in case of a dozen ‘older’ sheet metal workers exceeded five hundred (!) hours, that is, their workday under the almost unbearable circumstances was extended to about an average of ten hours. Labour turnover dropped to a minimum level after May.

A change came in January of 1969 again. The management of the company started the new year, similarly to the previous one, with wage restrictions. On the pretext of labour’s increased practice in the duties of the types produced (no technological or organizational changes had taken place) the company carried out two piece rate cuts, on 1st January (14.3 per cent) and on 1st April (5 per cent). Simultaneously overtime was reduced, and no special bonuses were set. The coaches under production, however, came mostly from the well-paying type. Piece-rate cuts were called ‘bloody’ in the unit, causing considerable losses in wages, except for sheet metal workers of the levelling shop, who reached the highest level of hourly wages in the previous year. The degree of the tightening of piece-rates varied in accordance with the output index (per cent) reached by the workgroups and workshops in two months that preceded the cuts. Thus the output indices of October and November (1968) served as a basis for the measures taken on the 1st of January (1969) and those of January and February (1969) for the cut on the 1st of April. Rejecting scientific methods, the management ‘threw back’ the production indices to 108 per cent in all groups and shops mechanically by the resettings of piece-rates. But the output index of sheet metal workers (excluding the effect of progressivity) did not exceed this standard in the first period and it was far below 108 per cent in the second one. Consequently these workers in the first quarter of 1969 avoided the scope
of piece-rate cuts and suffered losses in their wages only because of the lack of overtime and special incentive bonuses.

In terms of numerical data the events of the fifteen months (from January 1968 to March 1969) look as the following:

**TABLE 1**

<table>
<thead>
<tr>
<th>Date</th>
<th>Group performance</th>
<th>Ratio of well paying type in prod.</th>
<th>Hourly wages</th>
<th>Over-time hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'older' workers</td>
<td>%</td>
<td>'older'</td>
<td>'younger'</td>
</tr>
<tr>
<td></td>
<td>'younger' workers</td>
<td>%</td>
<td>workers</td>
<td>workers</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>Ft.</td>
<td>Ft.</td>
</tr>
<tr>
<td>Jan.</td>
<td>109.4</td>
<td>80</td>
<td>11.16</td>
<td>3115</td>
</tr>
<tr>
<td>Feb.</td>
<td>105.2</td>
<td>39</td>
<td>11.03</td>
<td>1941</td>
</tr>
<tr>
<td>March</td>
<td>102.0</td>
<td>19</td>
<td>10.11</td>
<td>1596</td>
</tr>
<tr>
<td>April</td>
<td>66.7</td>
<td>72</td>
<td>6.80</td>
<td>1654</td>
</tr>
<tr>
<td>May</td>
<td>152.4</td>
<td>99</td>
<td>20700</td>
<td>15.61</td>
</tr>
<tr>
<td>June</td>
<td>146.0</td>
<td>100</td>
<td>36800</td>
<td>14.94</td>
</tr>
<tr>
<td>July</td>
<td>148.2</td>
<td>87</td>
<td>14.98</td>
<td>13.00</td>
</tr>
<tr>
<td>Aug.</td>
<td>151.0</td>
<td>73</td>
<td>14.50</td>
<td>9.87</td>
</tr>
<tr>
<td>Sept.</td>
<td>170.6</td>
<td>97</td>
<td>23740</td>
<td>17.51</td>
</tr>
<tr>
<td>Oct.</td>
<td>161.0</td>
<td>63</td>
<td>6000</td>
<td>16.50</td>
</tr>
<tr>
<td>Nov.</td>
<td>134.0</td>
<td>50</td>
<td>13.74</td>
<td>9.60</td>
</tr>
<tr>
<td>Dec.</td>
<td>114.5</td>
<td>89</td>
<td>11.74</td>
<td>13.27</td>
</tr>
<tr>
<td>Jan.</td>
<td>102.7</td>
<td>94.6</td>
<td>10.47</td>
<td>10.36</td>
</tr>
<tr>
<td>Feb.</td>
<td>103.4</td>
<td>95.8</td>
<td>11.57</td>
<td>10.57</td>
</tr>
<tr>
<td>March</td>
<td>104.6</td>
<td>80.3</td>
<td>11.71</td>
<td>8.59</td>
</tr>
</tbody>
</table>

At the first glance the data of the table seem to prove the correctness of the conviction of the majority of Hungarian managers and economists that material incentives are of paramount importance: if workers have a chance to get extra rewards they will respond with the maximum performance they are physically capable of, that is, there is a direct relation between incentives and labour's behaviour in production. Indices calculated from the data of the table above present the power of money with dramatic force:

<table>
<thead>
<tr>
<th>Description</th>
<th>Average Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>in months with special bonuses</td>
<td>137.1%</td>
</tr>
<tr>
<td>&quot; without special bonuses</td>
<td>101.1%</td>
</tr>
<tr>
<td>&quot; with overtime above average</td>
<td>119.2%</td>
</tr>
<tr>
<td>&quot; with overtime below average</td>
<td>98.1%</td>
</tr>
</tbody>
</table>

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After thorough scrutiny of the data in the table it appears, however, that the relation between wages and workers' behaviour is neither direct, nor one-way in many cases. In other words: labour does not react with increased performance to the possibility of getting increased wages without preconditions. In April 1968 the 'older' sheet metal workers collectively considered the possibility of doing overtime and decided that under the given circumstances it was not profitable for them. Moreover instead of automatically reacting to incentives they initiated and pressed the management to change the course of its incentive policy and measures. As the shopfloor supervisors stated: 'the sheet metal workers made production slow down in order to extract more money from the company'. And that was true. In April 1968 the workers, though having a majority of well-paying type coaches in production, reduced their output to a point of endangering the continuity of the whole railway coach manufacturing.

The output indices for the periods of October and November 1968, of January and February 1969 are equally illuminating. Regarding other workgroups and workshops on the basis of the output indices of these periods severe piece-rate cuts were carried out. The performance of sheet metal workers in these months, after some very high peaks, was low enough to avoid the measures taken by the company. The indices in January and February are especially interesting, since during this period the levelling shop performed at a considerably lower level by the production of the well-paying type than in several months (July, August, etc.) of the previous year, when the composition of products was less favourable. 'Sheet metal workers were unwilling to pay the "tax" for their uniquely high earnings'—it was said in the unit.

The swaying of labour's output and earnings, as it is obvious from the events, was followed by changing relations, on the one hand, among labour, company management and unit management, on the other hand, among the separate strata of workers ('older' and younger ones etc.). The initial tension (February, March 1968) was followed at first by an acute conflict (April), then by a relative harmony and cooperation (from May to October) and by an increasing tension again at the end of the fifteen months period discussed in the present paper. Beyond these changing relations, beyond this dynamic process, in our assumption, there was a struggle of divergent interests, a clash between opposing centres of powers.
The following question arises: what economic and social factors determine the contents of divergent interests, the strength of power centres of the participants of production within the business organization?

III. Labour-management and intra-labour relations of interest

The course of events in the unit at the company was basically determined by the conflicts between management and labour, the main issues being the level of wages and (what is closely related to it) the level of performance.

The Economic Reform made the two major participants in industrial production materially interested in achievements by partially confronting their interests. Since 1968 a part of the companies’ profits has been used for differential incentive bonuses, the biggest share of which was paid to top managers. Labour, because of its low share in profits, remained to be motivated by wages. This confrontation of interests, resulting from the opposing nature of profits and wages, was strengthened in its intensity by the special conditions of the business organization discussed. (We would like to note that the profit sharing system was part of a series of national measures intended to produce a decentralized and more flexible industrial structure with increased emphasis on market requirements and efficiency.)

The management of the company, stimulated by its share in profits, using prices in the international market as a guide, tried to choose a profit-maximizing scheme in its production-possibility set. The decision was made to withdraw from manufacture of railway coaches and undertake production of heavy-duty Diesel engines for buses and camions. The company’s antiquated technology for railway coach manufacture made the operation unprofitable and state subsidies were being withdrawn. In addition, demand for coaches is limited and several other companies produce them under more favourable circumstances. However, since immediate cessation of production was not possible, withdrawal was to take the form of gradual reduction of production. Accordingly, management felt that cuts in production costs were necessary. Since investment in new equipment or processes was not indicated under the circumstances, management decided to cut labour costs by decreasing wages per unit of output. The incentive policy of management, the cyclical restriction of wages, was aimed at that. But workers, motivated primarily by wages, were naturally
opposed to the managers' goal and regarded it as directed at 'sweating' labour.

Responsibility for the divergence of management and labour interests cannot be fixed, however entirely on the profit sharing system, on the high level of production costs, on backward technology, or on the withdrawal of government subsidies. A prominent part was played in the continuing confrontation by the control of central agencies over the level of wages and by the state of labour market as well.

The central regulations pegged wages per capita on a roughly equal level in all engineering companies owned by the state. Any increase had to be covered from the share of profits to be divided among the participants in production, a sum that was considerable in relation to the salaries of managers but extremely small in relation to the total amount of wages of employees. Thus the management made attempts to cut wages per unit of output and at the same time to keep wages per capita unchanged; it required from its employees extra efforts without being willing to or, in fact, capable of giving them extra rewards.* Top management pressed labour for more work and stricter workshop discipline because of the large scale turnover and lack of manpower as well. As a result of the factors mentioned and of the liberalization of the labour market (1968) about 25 per cent of skilled workers and an even greater ratio of unskilled and semiskilled workers left the unit during the first one and a half years after the introduction of the Economic Reform.

Only on the basis of the conditions of the company and the specified central rules the management was obliged to follow, can we understand the contradictory features of its incentive policies. Management encouraged production on one hand, but when productivity and earnings rose appreciably, it took restrictive measures (arbitrarily reset piece rates, decreased overtime, etc.).

The employees in the workshops, mostly of agricultural origin, were hard-working people, in whose thinking wages were fundamental in relation to their families’ living standards and also as a measure of

* The control of central agencies over wages was intended to avoid certain undesirable effects of the Economic Reform. Total freedom of managers, motivated by their share in profits, to regulate wages might have led to rapidly growing earnings for some workers, while causing unemployment for others and/or to a high rate of inflation and disequilibrium of supply and demand in the market for consumer goods. Such a process would have been followed by sharp and open social conflicts instead of concealed ones described in this paper.
their importance in relation to others in and out of the factory. They were ready to make extra efforts for extra pay and aimed their activities at maximising earnings. Sheet metal workers told us 'There are rather "hungry" people here, if they make a lot of money they want even more.'—'We do not come here to produce railway carriages, but to earn a living.'—'Money comes first.' Thus each worker considered management's incentive policies hostile to his interests and protested against the efforts to cut labour costs. As workers' devotion to money was general, labour-management conflicts over the level of wages were of the utmost gravity.

Labour, however, was divided into separate strata with various types of interests. Personal wage rates, seniority within the organization, professional skills, household expenses, structure of consumption, traditions and other factors produced a compartmentalization within them. The two major factors responsible for the division of workers into strata with divergent interests (and various powers) were the following:

1. The current level and the future prospect of the individual's earnings, that is, his actual and expected economic position in the organization. Disregarding extra sources of income like overtime and special incentive bonuses, both were dependent on wages per capita in the workgroup to which the individual belonged and on his personal wage rate. As wages per capita in the long run were likely to be pegged by the company, differences in the actual and expected positions could be caused only by personal wage rates. These rates, set primarily on the basis of length of service in the company or job experience, moved rapidly upward until the age of 30 and then stopped. As a result, workers above 30 years of age earned a relatively good living, while their fellow workers below 30 years were doing rather poorly. But the reverse of the medal was that workers over 30 years ('olders') had no prospects of further wage increase, and management policies put them in a hopelessly deteriorating position, while younger workers enjoyed rapidly growing wages and, in this way, were partly compensated for losses caused by piece-rate cuts.

2. The style of living of the worker and his family. This factor is closely connected with the previous one as the main source of a worker's income is his earnings. People over 30 years old usually had a well-balanced household budget. They generally had their own homes, well-furnished and mechanized. They had ended debts
connected with building or purchasing their homes, and had acquired durable goods such as television sets, refrigerators, washing-machines and motor cycles. To the earnings of the head of the family the earnings of the wife were added. She might also have a job as their children had reached school age. Workers of this strata spent money also on prestige consumption. For example, being villagers, they have iron fences constructed around their houses, to which a special prestige was attached by the society of the villages. Younger workers (below 30 years), on the other hand, carried the burdens of fundamental investments connected with the establishment of family life. They were indebted to the savings bank for money to build or buy a house and to furnish it. Moreover, as their children were small, their wives could not take a job. (In the differences of the economic positions of families a dominant role was played by the housing shortage in the country, which exerted a strong pressure on young people before marriage and after marriage for several years.)

Thus the age of 30 seemed to be the economic (not demographic) dividing line. On the basis of the two major economic factors and some other ones, workers were divided into two major strata with divergent interests: those of 'older' people in getting money was intensive but flexible, those of younger workers strained and inflexible.

In addition to the two strata of workers there emerged a third one that was more obscure in its outlines and peripheral from the point of view of conflicts. This stratum consisted of unmarried young men, living in the household of their parents, who had for the moment no financial cares and reserved their energy for the evenings and the week-ends. It contained also elderly people who after having brought up their children desired to spend the few years they had until pension in a comfortable way. Some others in the stratum had special sources of income out of the factory (they did repair-work without licence, etc.). These people, however, represented a minority in the unit.

Under the influence of the contradictory features of the management's incentive policies workers over and below 30 set up radically different goals for themselves, as manifested also in the events of the fifteen months described. The 'older' sheet metal workers wanted to extract more money out of the company in order to ensure economic prospects for themselves and at the same time they strived to maintain the ratio between their 'inputs' (efforts) and 'outputs' (wages).
end they were ready to make sacrifices in the short run. To make the company increase payments (in April 1968) and to avoid the jeopardy of piece-rate cuts (in January and February 1969) they decreased their output, though simultaneously they suffered from very low hourly wages. Considering the circumstances given they rationally optimized their output. 'We work hard and very much, but one cannot become like a machine'—one of them said 'I don’t like people who speed up without thinking and believe that they earn the big money for the group. They cause only troubles for the others with their greediness, that’s what they really do. They live from hand to mouth.' These ‘greedy’ people were the younger workers living under the pressure of great financial burdens. They also wanted to extract more money from the company, but they did not care a bit that the ratio of their inputs and outputs was constantly deteriorating, the work done was becoming more and more ‘unprofitable’ for them. So they limited their output. ‘If the company wants to cut money, it’ll do so. We work as long as we can. We do our best to increase output and if piece-rates are tightened again, we go away from the factory.’ The younger workers were incapable of bearing any, even momentary, losses in wages required by the optimization of output. For this reason the interests of ‘older’ and younger workers clashed in April 1968 and the conflict caused the division of the so far united group into two groups, the group of ‘olders’ and that of youngers. To support our argument we show below the composition of the two groups according to the social-economic background of members:

<table>
<thead>
<tr>
<th>Group and Number of workers</th>
<th>Average of personal wage rates Ft.</th>
<th>Variaton of personal wage rates Ft.</th>
<th>Ratio of skilled workers %</th>
<th>Workers with seniority above 10 years %</th>
<th>Workers of age above 30 %</th>
<th>Workers married %</th>
<th>Workers having own homes %</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘older’</td>
<td>27</td>
<td>9·10</td>
<td>0·87</td>
<td>88·8</td>
<td>55·5</td>
<td>74·1</td>
<td>81·5</td>
</tr>
<tr>
<td>‘younger’</td>
<td>27</td>
<td>7·58</td>
<td>1·27</td>
<td>81·5</td>
<td>00·0</td>
<td>14·8</td>
<td>40·7</td>
</tr>
<tr>
<td>Gap</td>
<td>. .</td>
<td>+1·52</td>
<td>–</td>
<td>+7·3</td>
<td>+55·5</td>
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Lower managers, shop-floor supervisors, senior foremen and foremen had a specific position in the conflict of interests between company management and labour on the one hand, and among various strata of labour on the other. These ‘men in the middle’ were neglected (for reasons to be described later) by top management. Nothing had been done to ensure their cooperation with company efforts. Foremen received salaries inferior to those of the best-paid workers and this state of affairs remained unchanged regardless of their special efforts or negligence. Their share in profits was very small. As a result, management’s efforts to encourage workshop and group output, as well as, labour’s attempts to maximise earnings were a matter of indifference to shopfloor supervisors. They neither aided nor hindered their success, but restricted their activities to the performance of routine tasks. They felt hurt by their neglected position and they wanted peace. Senior foremen and foremen, however, bitterly opposed both workshop slow-downs and piece-rate cuts as the major direct trouble-makers in the unit.

The description of the relations of interests within the unit and the company will no doubt bring home to us the problems on the shop-floor so that we can understand them better. It throws light on the background of workers’ behaviour, on the sources of tension among top-managers, shop-floor supervisors and various strata of labour. But it does not explain everything. How did the small group of ‘older’ sheet metal workers, 27 men, succeed in forcing its will upon the dissident younger people, in opposing the top managers of the powerful business organization with the result of getting extremely high wages? The answer to this was still in obscurity.

IV. Labour-management and intra-labour relations of powers

Hungarian economists, social leaders and sociologists, who accept the theoretical possibility of labour-management conflicts over wages and production within a centrally planned economy, consider relations of powers in the business organizations as double centred: company management safeguards its own interests and the trade union those of the workers. The former one has considerable powers, since through the channels of the mechanism of control (incentive systems, etc.), of formal rules and regulations it can influence the environment and consequently the behaviour of employees to a significant degree. The latter, the trade union, on the other hand has a legal right to participate
in all company decisions, and even to veto certain decisions considered to be harmful to the interests of employees. In the unit and in the company in general the structure of powers was radically different from this desirable theoretical model and it worked through multiple centres instead of only two.

To avoid misunderstanding it must be emphasized that the Trade Union Committee of the company did its utmost to cope with its tasks under the very difficult circumstances. A good example for that was given by its attitude to the two piece rate cuts in the first quarter of 1969 (January and April).

‘Prior to accepting the January measure taken at the time of the reduction of weekly working hours to 45, a prolonged discussion developed between topmanagers and trade union leaders. Management was not satisfied with the degree of tightening approved by the Trade Union Committee and declared: piece rates would be loose even after the cut. Trade union leaders replied: they would not be. Top managers seemingly gave in by saying: All right, but should piece-rates turn out to be loose, that is, if output in January and February were to exceed 108 per cent in the unit, another cut would come. An agreement was reached on that. In January the cut was carried out and afterwards in the first two months of the year output moved rapidly upward. Thus management was right and according to its original intentions carried out a second resetting of rates on the 1st of April.’ Foremen gave such a report on the events in full harmony with the records held by the company.

During the period between the two cuts some displeasing events took place in the unit. ‘Management knew that the resetting of piece rates was a matter of little importance for some workers: they did not bother themselves about it, they speeded up as much as they could, because they needed a fixed sum of money for their household expenses and were determined to get it. To this end in January and February they jumped over necessary phases of work, violated technical prescriptions and pushed up their quota. It was tolerated by management in the two months, but afterwards piece-rates were cut again and then the control of quality became very strict too’—reported a technician. A foreman told us: ‘After the first piece-rate cut in January our unit was given such an overstrained plan that the utmost had to be pressed out of the workers. I was fully aware of the forthcoming new tightening, but the majority of foremen did not envisage it.’
What about the trade union at the company? The organization was unfit, by its structure and traditions, to deal with the problem efficiently. The union, a heritage of a previous period, united in its ranks all sorts of members of the business organization from unskilled workers to top managers. Several trade union positions were occupied by shop-floor supervisors and even by managers. The union’s executive had a share of roughly the same size in company profits as top management. In case of labour-management conflicts the most confusing question arose for the trade union: Whose interests should be defended against whom? In the solution of this problem trade unions usually chose a traditional and wrong alternative: they viewed conflicts as basically undesirable, accidental and glossed over them. As to the events in the unit in the first quarter of 1969, the top leaders of the union had no proper information about them at all. The post of the secretary of the unit trade union committee (a position of vital importance) was held by a foreman. A senior foreman acted as president and together with several administrative employees there were only two or three workers in the committee. (The composition of the local party committee playing an important role was similar: all its five members came from among shop-floor supervisors.) Thus the Trade Union Committee of the company was obliged and in fact willing to accept the seemingly correct explanation of top management which referred to the improved job experience of workers as the cause of piece-rate cuts. ‘Piece rates of sheet metal workers and welders cannot be fixed so accurately as those of machine production. These jobs have a knack and if someone picks it up, they are easy to do. It can be put down to this fact that piece rates periodically loosen up, output and wages go up in the unit. So piece-rate cuts are necessary and fully justified.’ Workers, on the other hand, told us: ‘One can pick up the knack of the job in a short time and that’s all. Afterwards labour can only be robbed by the repeated ‘trimmings’ of piece-rates.’ In fact, top union leaders and top company managers, despite occasional spectacular confrontations, seemed to be a monolithic group to the workers. Following the events described even those workers lost their faith in trade union who had any of that sort before. ‘At our company the trade union functions only nominally. It comes to zero.’—‘The great trouble is that trade union functionaries are also paid by the company.’

Despite the failure of union intervention, sheet metal workers in the
levelling shop, as mentioned before, did not suffer from the effects of piece-rate cuts and there were several other groups that were little affected by them. The dominant push from labour came through the informal organization of workers, which sometimes had substantial powers, rival those of management. The 'older' group of sheet metal workers were described as 'people living in unity. They are strong because they keep together. It does not matter how much they quarrel among themselves, as they always act in unity towards the outside world. They always know what to do and they do so.' By help of a sociometric test we managed to draw up the relations of cohesion, of willingness for the and practice of cooperation (mutual choices) in the group of 'older' workers, that is, we succeeded in discovering their informal organization based on the integration of individual interests, representing a strong centre of powers. The group of younger workers had no such organization.

The group of older workers:

![Diagram of relations in the group of older workers](image-url)
Work Performance, Interests, Powers and Environment

The group of younger workers:

[Diagram showing mutual choices and rejections among group members, with concentric circles indicating functions in the work organization or social organizations (group leadership, trade union functions, party membership or functions etc.).]

Keys to the signs used:

--- mutual choice
==== mutual rejection
○ —group member. Further concentric circles mark functions in the work organization or social organizations (group leadership, trade union functions, party membership or functions etc.)

The lack of cohesion among people below 30 years of age resulted from a set of interacting factors. The majority of them had pressing need for money and on the basis of inflexible individual interests no lasting compromise or integration could come into existence. The pressure exerted by the policies of the company on them was relatively weak: they enjoyed rapidly growing personal wage rates, compensating them for losses. In addition the period they worked together in was rather short: they had no time to get profoundly acquainted with each other and their environment. The lack of cohesion prevented these workers from building up a stable protective informal centre of power.

The slogan of 'older' workers was that 'principles or money can be...
defended only by collective efforts’. Their cohesion originated from the compromise and integration of their homogeneous and flexible economic interests. The nucleus of the group consisted exclusively of skilled workers, between 30 and 40 years of age, with well-balanced household budgets (all of them owned family houses or flats) and with maximum personal wage rates. Except for one man seniority was above ten years in the nucleus. Their informal bonds based on the principle of ‘one for all and all for one’ had considerable powers. When the six most popular men, the ‘collective leadership’, plunged themselves for some goal, they were followed by the whole of the group. To the informal means of power some formal ones were also added. Among nucleus members there were the group-leader, a shop-steward, party members and workers’ Militia men. The informal organization that comprised (in a composition similar to that of the sheet metal workers in the levelling shop) about half of the workgroups of the unit, represented the interests of workers above the age of 30. The appreciation of environment and of their own needs by these people reached a degree at which the rational consideration and evaluation of the conditions given could result in well-founded, coordinated and flexible joint actions aimed at the control of powers directed against their interests. Their informal (or to put it a more correct way: non-official) organization optimized workshop output in order to ensure the highest possible earnings for members in the long run, while maintaining a favourable ratio between workers’ efforts and profits. They got the necessary information through formal and informal channels and constantly and collectively evaluated them. Thus informal organization became an important factor of everyday activities at the company, capable of influencing workers’ behaviour and at the same time challenging the endeavours of top management.

(We would like to note that Hungarian managers and social functionaries either refuse to believe the existence of informal organization, or recognize it but consider informal actions as a kind of ‘plotting’ on the part of workers and try to gloss over them. The group of ‘older’ sheet metal workers in the levelling shop paradoxically had the title of ‘socialist brigade’ received for its ‘outstanding efforts’ in the ‘socialist work competition.’)

It must be stressed that the stratum of labour united in the ranks of informal organization had not been selected on the basis of its inherited welfare and powers, but on the basis of the physical and mental abilities
and refined intelligence of members gained in the lasting struggle in
defence of their interests. It is not a closed grouping, since the afore­
mentioned various strata, in a sense age-groups, follow each other as
time goes on. The young man of today, who has initially a prospect
at the business organization and is pressed by the material needs of
his out-of-factory environment, will soon improve his economic
conditions but lose his prospects as well and, as a part of the
reproduction process of generations, will join the ‘older’ workers.

The struggle of the informal organization of ‘olders’ was successful
in maximising earnings. It was illustrated by the fact that during a
period of one and a half years only 30 per cent of its membership
gave notice to the company, while this amounted to 60 per cent among
the rest of the workers. Its struggle was many-sided and started long
before the danger of piece-rate cuts or other measures of wage
restriction. The personnel department’s head reported: ‘Formerly
piece rates were set on the basis of previous experience, gained in the
process of railway carriage manufacture. Taking into account the
piece-rates of previous types, the department of technology set reliable
rates for new types, unless there were baroque ornaments on it. Today
it is not like that. As soon as there comes a new type the workshop
starts bargaining with the department of technology. Let’s take the
example of electricians. They have very complicated tasks: they have
to install a lot of numbered wires, those belonging to the lighting,
heating and air-conditioning equipments. When the production of a
new type starts, the installation is carried out from drawings, so it
needs a lot of time. Therefore people will fight out more time than
necessary. Piece-rates consequently will be set loose, so they ought
to be cut down somehow. But there is no period in the year that
could serve as an objective basis for doing so. Workers slow down
if they get wind of the intentions of the company. And at the end of
the year the company has to deliver products to get money from the
bank. Then there is a rush and nobody cares whether quality meets
the prescriptions or not. Once piece-rates seem to be very tight because
of workers’ tactics, other times they look loose, due to the rush towards
the end of the year.’ Thus, as a result of workers’ making use of the
circumstances, piece-rates are set in accordance with a process of
bargaining. It can be added that rates will be loose in workshops and
workgroups having a strong informal organization and using tactics
and they will become tight in shops and groups without cohesion and
rational production-tactics.

The privileges of 'older' sheet metal workers resulted from tactics. The progressivity of their incentive plan was given in 1967, in the period of a slow down. Their next slow-down in 1968 (described in the present paper) brought them much overtime and incentive bonuses. The third slow-down in 1971 resulted in the loosening up of the piece-rates of a new type, set originally very tight by the department of technology. It appears that the powers of the group that rendered all these possible surpassed those of other informal units at the company. Sheet metal workers in the levelling shop were in a monopolistic position. They might not be pinned down: 'Levelling of sheets is a type of job, in which the worker produces as much as he wants to. Each sheet is different, needing various amounts of time to be levelled.' Workers in the shop were irreplaceable. 'The secret of their successes is that such kind of sheet metal workers are hard to be found. If someone among the welders speaks too much or doesn’t undertake overtime, he is replaced.' 'New-comers are being cast off and they are not explained the knack of the job.'—the foreman complained, being himself also as skilled in the job 'as the workers in astronomy'. (That was the reason why 'unreliable' younger people 'could not work', as proved by the events in April 1968.) Their significance was further increased by the fact that the last phase of work in the unit was accomplished by them. 'The world’s eyes are on the sheet metal workers.'—one of them claimed. 'It is up to them whether the coach leaves the unit or not.' If the group slowed down it threatened not only the program of the unit and the incentive bonuses of the unit managers and shopfloor supervisors, but sooner or later it caused a bottleneck in the production of units performing further operations as well. 'Workers in the levelling shop are the only group that can make railway coach manufacture turn upside down. There is a backlog and workers still put down the hammer at two o'clock. What can I do?'—their foreman declared. Having such a monopolistic position one can successfully use tactics and the 'older' workers of the shop have been doing so consistently and deliberately for many years.

Unit managers and shopfloor supervisors had a prominent, though passive part in the successes of workers' tactics. The 'man in the middle' had substantial power to influence the production and wages of work groups. The functional departments of management were
incapable of controlling production problems, including supply of material and maintenance, and their solution was up to foremen and senior foremen. (This situation originated in the primitive level of technology.) But top managers, believing in the efficiency of centralization within the company, did not take into consideration the influence of foremen and, as proved, neglected them, and did nothing to ensure their cooperation. In order to maintain ‘peace’ within the unit, shop-floor supervisors helped workers in their tactics in numerous though hardly traceable ways. The only reason why relations between workers and their supervisors deteriorated were slowdowns and other demonstrative actions, as in the case of the levelling shop, which threatened the superficial harmony.

Thus beyond the events of 1968 and 1969 there were ultimately the dynamic movements of labour-management and intra-labour relations of interests and powers. The conflicts sometimes appeared with overwhelming intensity, sometimes they were solved by transitory compromises (but in all cases the happenings were disguised by the most suitable ideologies). The differences in the level of wages of the workers of the levelling shop and the rest of labour always reflected the outcome of this dynamic bargaining process.

V. Theoretical conclusions

As it has turned out from the argument above the business organization faced serious problems, shortcomings in the field of applying both material and non-material incentives. Instead of summarizing these insufficiencies which are obvious, we intend to support our standpoint with two additional examples:

(1) The grave violation of the principle of wage distribution related to the work done is well reflected in the state of piece-rates. Piece-rates, as pointed out, were uniformly cut back in all workshops and workgroups on the basis of their output indices to 108 per cent. But where did the production indices reach a very high level and a very low level? Very high indices of output were reached in the months, serving as a basis for tightenings, only in shops and groups, where workers were capable and maximised individually their efforts without preconditions. Low indices of output, on the other hand, always reflected the fact that the relevant shops or groups either could not work or they were tactful and defended themselves by arbitrarily reducing their efforts in due time. Thus high indices, in contrast to the
conviction of top managers, did not necessarily indicate loose piece rates and low indices tight ones. Thus the methods of piece-rate cuts employed by the company were basically wrong. Management rewarded helplessness and the usage of tactics and sanctioned diligence by them. The same level of wages in some shops and groups required disproportionately intensive efforts related to other units.

(2) The majority of workers (60 per cent) did not gain any sense of quarterly ‘production conferences’, being destined for realizing workers’ participation in company decisions, for functioning as a kind of non-material incentive for employees. Among the duties of these production conferences were declared ‘the inclusion of workers in the running of the company and its units, in working out the most reasonable and profitable solution of production targets’ and ‘their involvement in decisions related to technology, organization and material as well as non-material incentives’. Apart from discussing the most primitive problems of the organization of production process and apart from the formal approval of the evaluation of the ‘socialist competition of work’, no matters of serious concern to labour were discussed in such meetings. ‘Those delicate matters which are not to our liking, such as the problems of piece-rate cuts and the level of wages, are simply dismissed from the records of the production conferences and from the reports for the upper organs as well.’—complained the workers. Consequently workers tried to slip away from production conferences, usually held in a hurry between two shifts. Yet workers were far from being passive. According to the findings of our survey about 90 per cent of them wanted to have a say directly or indirectly in company decisions affecting their interests. And the majority of them, being perfectly informed in such matters, could have done so.

The shortcomings of material and non-material incentives, regarded as a scapegoat for shopfloor problems by Hungarian managers, social functionaries and sociologists, render us assistance in explaining the phenomenon of transitory or permanent discrepancy between labour’s behaviour and the goals set by the business organization. It must be stressed, however, that causal relations are not that unambiguous and simple: inadequacies in incentives, though closely connected with difficulties in the workshops, are not the basic cause of disciplinary problems and restriction of output, but primarily they themselves are symptoms on the surface as well.
If we want to scrutinize troubles on the shop-floor in due depth, we have to analyse the relations of interests. From this approach it can be stated that the gap between the rules of the formal organization and labour's behaviour originated from the conflicts of interests, from the state of labour-management and intra-labour structure of interests within the company. The conflict situations were permanent and latent and from time to time they appeared in a sharp form. Though harmony seemed to be possible in the short run, there was a lack of lasting compromise and integration of interests. Labour (the ‘older’ workers) demanded, among other things, economic prospects from the company which management could not offer. Simultaneously, management required increased efforts and loyalty that labour was unwilling to give in the conditions given. Instead of a ‘good bargain’ ensuring reciprocal advantages for the partners, a ‘poor bargain’ was produced, in the terms of which the parties tried to promote their own goals by violating formal rules and hurting arbitrarily each others’ interests. Compromises were regarded by them as temporary and consequently the terms were unstable. As we have seen sheet metal workers were usually given by management concessions (special incentive bonuses, overtime work, etc.) that were revocable at any time. In principle a lasting agreement could have been concluded between the parties on the basis of less inhuman conditions, because sheet metal workers, as they put it themselves, could have done their work as intensively as required by the company for proper wages in normal working hours, without the extremely tiresome overtime or any special incentive bonuses. But everyday practice took an entirely different course. ‘Poor bargains’ determined not only the relations between management and labour, but those of various strata of labour, including ‘older’ and younger sheet metal workers as well. Young people with their ‘greediness’ endangered the positions of ‘older’ ones, and therefore the latter were reluctant to give them professional advice.

The possibility of compromise or integration of interests was basically determined by the relations of powers. The distribution of means of power within the business organization was extremely disproportionate. Although company management in many cases successfully pressed workers for more intensive work, it was hamstrung by central regulations, especially by the control of central agencies over the level of wages per capita. Managers complained that the company was unable to reward and sanction labour's behaviour and had to pass
over large scale slow downs reminiscent of strikes in their character. Under the pressure of central regulations the company had to reach its production targets by the overemployment of workers earning 'average wages' instead of the employment of necessary limited number of diligent and well-paid employees. Workers resisted this state of affairs if their non-official organization was strong, tried to break through the limits of average wages, though sometimes by endangering the continuity of production. If their informal positions were weak and doing the job became too 'expensive' for them because of the company's incentive policies, they left the unit. The great demand for workpower in the labour market made it possible at any time. However even workers backed by considerable informal powers could not exert a continuous influence over the incentive policies of the company, because the Trade Union Committee of the company was unable to support their claims. The trade union could not take actions contradictory to the regulations by the central agencies, and it could not claim the increase of level of wages per capita pegged by the central organs. Consequently, the trade union could not claim a bigger say in company affairs than offered by the power concentrated at the level of the company. That is why questions connected with the level of wages could not be put on the agenda of production conferences, the most important institutions of democracy in business organizations. Nevertheless, if the problems most deeply concerning workers' interests were not discussed at these meetings they became formal as a necessity.

Taking into consideration the findings of our investigation it seems to be worthwhile to ponder the would-be effects of the loosening or abolition of the system of central control over average wages per capita. Such an action could create at the company discussed an initial step of the process leading to the establishment of a workable model of powers, to the concentration of the necessary decision making authority in the business organisation. On the basis of such an amount of power lasting conflicts of interests, at least theoretically, could be eliminated. The possibility of putting conflicts to an end, however, does not mean the actual end of conflicts. The loosening or abolition of control over average wages would result in preponderant power for top managers and would not change the defencelessness of certain strata of labour. Thus this (autocratic) distribution of power would not solve the present problems in itself. On the contrary, it would reproduce the difficulties of today in a more intensified form, as the compromise of interests
could be established only on the basis of bargaining, that is of a relative balance of power between the parties involved. This compromise cannot be replaced by any unilateral measures taken by the company in a position of overwhelming power. The solution ensuring green light for further development requires an increase of power at company level (more decentralization), but at the same time it does require a proper distribution of powers among the participants of production, among the various strata of labour and management as well. The process should be carried out in such a way that the aforementioned strata and groups could dispose of enough power for the defence of their interests. The formal organization of the trade union is destined for an important part in the process, as the ‘formal’ powers of management can be counterbalanced only by those of trade union leaders and the disequilibrium of power among the strata of workers, resulting from the existence or lack of a strong informal organization, can be replaced by a balance only with the help of a formal organization, recognizing existing realities. Thus the trade union must be independent of the administrative apparatus of the company, and its structure must be submitted to profound reforms. Moreover informal organization, as a force in the necessary change of formal organization, as a protection of individual and group interests springing from the structured economic and social environment, must be, at least theoretically, recognized and practically counted on. The actual participation of workers should comprise not only labour in general, but all their groups and strata. Labour’s actual participation in decision making could provide a basis for the elaboration of the efficient systems of material and non-material incentives and could also contribute to the elimination of the present ‘negative’ types of behaviour on the part of workers.

On the basis of our experience it appears that the solution of the present shop-floor problems requires complex modifications in the present structure of micro- and macro-economic and social environment, in accordance with the ideas of the Economic Reform introduced in 1968. Modifications at company level (among others, the introduction of new incentive systems, the elaboration of new institutions for workers’ participation in decisions) should be in harmony with corrections at upper levels. The latter, on the other hand, should flexibly comply with the conditions of the various business organizations: macro modifications should take into account more flexibly
than so far the specific features of companies working under completely different circumstances. In such a way the relations of interests and powers within the organizations could be formed so that their relatively free play would result in a compromise and integration of particular interests, and negative types of behaviour of labour as well as shortcoming in incentives would disappear.