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**Manpower and Skill use
in the Transformation Process**

(The Case of the Post-Socialist Firms)

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Motto: "Aside from labour, almost all other factors that affect competitiveness - such as machinery or technology - can be directly imported and financed through international loans.

The only exception is workers' skill which is embodied in largely non-transferable human beings."

(Koike-Takenori, 1990: 4.)

Introduction

The debates in organizational sociology of the 1970s and the 1980s centered on issues like the effects of new technologies, particularly microelectronics and various innovations in information technology, on the content of work, organizational structures and methods of management. In more general terms, the debates were concerned with the new types of models and methods of manpower and skill use that appeared likely to emerge and become dominant in the economically advanced countries in the era of the so-called third industrial revolution. Today, the generally accepted view on this point can be characterized thus: the market positions of participants in global economic competition in the three important economic zones (North America, EU and South-East Asia) are influenced by the methods of human resource development and utilization to a greater extent (at least in the long term) than by the volume of input into other factors of production.

In connection with the changes indicated above, it is a matter of public record that few sociologists questioned the supposed relationship which suggested that the introduction of "high-tech" would generate radical changes. Changes were to occur both in the volume and structure of employment and in the pattern and functioning of work organizations and, concurrently, in the methods of manpower and skill use.

The findings of complex inquiries into the organizations operating in both manufacturing and services - as well as into the institutional environment in which they operate (including the system of labour relations

typical of a given country, performance of the educational and training system, organizations dealing with shaping the economy and industrial policy, convention, rutin and patterns of behaviour) - questioned several aspects of the forecasts relating to various types of technological and organizational determinism (Makó-Simonyi, 1992).

As regards the effects produced by the introduction of new technologies on employment and, more specifically, on job creation, the 1990s witnessed numerous forecasts in the most developed countries to the effect that the ratio of workers employed in manufacturing would be as low as 2% by the end of the first quarter-century of the second millennium. The advent of the so-called information society and its effects on workplaces in manufacturing can be predicted to occur with a decreasing time-lag (0-15) in the post-socialist countries of Central and Eastern Europe (this significant gap in economic and technological development is playing an important factor in the delay of these countries integration into European Union). This means also that we have time enough to explore so-called alternative job-creating solutions (the reduction of worktime, the spread of "atypical" (or interim) forms of work, the increased role of material and personal services, etc.) as well as upgrading the social status of activities traditionally seen as "non-work".

The situation is less favourable with respect to the assessment of the new trends which have been evident from the 1980s and to the formulation of the necessary answers and strategies for adjustment (or to use the fashionable term, modernization). Thus, for instance, the accomplishment of economic restructuring in global perspective requires the social actors of transformation to be able to think and act in terms of new models of manpower and skill use.

Among other things, the sizable savings in costs by Japanese car manufacturers in comparison with those of their American rivals cannot be said to derive from the use of more sophisticated machinery and equipment. The Japanese, too, employ technologies that are available on the world market and are also accessible to other car makers - including both American and European companies as well. Lower production costs can be attributed mainly to the special management systems prevailing in Japan.

A vice-president of an American automobile firm who had studied five Japanese automobile plants on the spot came to the following typical conclusions:

"Their accomplishments are the result of a totally dedicated workforce (top to bottom) rather than any unique skills, automation,

manufacturing techniques or innovative process... Although they are highly automated in their machining, engine assembly, body shop and frame manufacturing operations, etc., their robots, shuttles, conveyors, transfer machines, etc. are still either American-made or are produced by Japanese firms under U.S. manufacturers' license. The Numerically Controlled (NC) equipment, their side frame systems, body trucks, methods of gaging, etc. are practically 'photocopies' of our systems - but they are beating us at our own game... Neither their actual productive effort, assembly line rates, or metal fabrication line output is any greater than ours; they have merely eliminated the excess manpower, start-up and changeover losses, and the debilitating effect of excessive repair, inspection, rework and absenteeism." (Dohse-Jürgens-Malsch, 1985:116.).

The globalization of production links between different national economies is commonly known. Among its many indicators we refer to the fact that working capital exports in the period 1980 to 1990 grew nearly two and a half times faster than the volume of total world production (Balaton, 1994).

In the Hungarian context, researchers dealing with the structure and organisation of economic activities have so far shown little interest in the socio-organizational and cultural dimensions of "shifts" in production paradigms (Piore-Sabel, 1984; Alasoini et al., 1994). The first reliable reports, together with various descriptive assessments of the social consequences on work organization in the new era which has begun in the models of production systems, appeared in the early 1980s, centering on the transformation of the manufacturing paradigm. The conclusions of one of the most thorough analyses that gives food for further thought emphasizes "high-value production". While global competition between the different variants of high-volume production (e.g. "Fordism" versus "Toyotism") continues, the weight of economic activities (as represented by successful businesses) in the countries at the highest level of economic development is shifting to areas turning out products and supplying services "geared to buyers' needs". Limits to appearance on the markets of these goods are set, not by the quantity or price of the goods produced or services delivered, as in the case of standardized mass production, but by "special skill", the content of which is constituted by the ability to match different technologies to special market demands. The strategic reserve or source of firms representing the leading-edge practice in the world economy is no longer to be found solely in the capital embodied in machinery and equipment used for turning out products, but in the specifics of their skills and in the methods of human resource utilization employed for the

mobilization thereof. (In regards to this issue, it is worthwhile distinguishing between the "high-tech" road and the "high-engineering" road of development. In the latter case, countries adopting this road of development pay special attention not only to technological advancement but also to the integration of human or social organization in the course of economic development.)

A determinant role in work organizations conforming to the new type of "high-value production" is played by three interrelated types of skills (Reich, 1992:84):

- "Problem-solving skill", which is required for original combinations of different production factors. This skill can best be likened to the work of researchers and designers who, working in the laboratory or at the drawing-table, planning prototypes needed to start production. Characteristic of their work is the effort to find new applications and combinations and to solve any difficulties that may arise.
- "Problem-identifying skill", which helps for example to identify and satisfy consumer needs through "buyer-centered" production and services. The main challenge is to discover and identify new possibilities likely to facilitate the organization of buyer-centered activities. In other words, the "skill to convince buyers" is replaced by the "skill to identify and demonstrate possibilities" of the products and services.
- The "strategic-broker's skill" represents the third type of skill, namely the knowledge and aptitudes which create a link between the activities of people possessing "problem-solving" and "problem-identifying" skills. Those possessing such skill should be well familiar with the technologies required for entry into new markets. Also, they should have the skill to "make money" as they are expected to create the necessary resources for launching new projects and to locate the "problem-identifiers" and "problem-solvers" playing important roles in the implementation of projects and plans.

People of this type were formerly called "entrepreneurs", who set up businesses, "invented" new business activities and controlled them. At cutting-edge firms engaged in high-value production the occupational groups bringing into line the activities of problem-solvers and problem-identifiers are represented by the "strategic brokers" mentioned above. The product line of enterprises engaged in high-value production and services is

responsive to consumer needs and the resultant necessary solutions rather than to the quantity of the products manufactured and the services delivered. Thus, for instance, IBM, the well-known international firm, which figures on the annual lists as one of the largest industrial corporations in the United States, derived over one-third of its profit from software designs and an additional profit of over 20% from the integration of computer systems in the early 1990s. Most of the remaining profit came from sales and supporting activity (assistance to potential buyers in identifying the data-processing systems appropriate for the firm, selection of appropriate hardware and software jointly with buyers, etc.). Less than 20,000 out of IBM's 400,000 employees can be considered to be blue collar workers engaged in production in the field of manufacturing. As little as 10% of the price of the computers sold is accounted for by the costs of physical work (manufacture) (Reich, 1992:86).

The former socialist countries of Central and Eastern Europe saw the system of political and economic institutions of their state socialism collapsed spectacularly at the end of the 1980s. The shifts in political and economic structures are taking place amid a transformative economic crisis. The gravity of the economic crisis in Hungary and the other post-socialist countries can be attributed to the combined effects of "cyclical" and "structural" setbacks in production. The "cyclical recession" characterizes the economy, when "...the structure of the economy is more or less satisfactory, but a contradiction in output is caused by one or more factors affecting the retail cycle (i.e., sudden price changes, a disturbance in a financial system, disenchantment among investors or consumers, and so on). The utilization of capital stock falls substantially and high unemployment appears. After some time has elapsed, output increases again of its own accord/or with the help of state intervention. By and large capital stock continues to function in its old structure, and the labour force in its old occupational make-up, but at a higher level of utilization than previously... A recession that occurs for 'structural' reasons takes a different course. If recovery follows, the old structure does not persist. Some of the old capacity remains permanently unused or has to be converted, which entails a change in the occupational make-up of the workforce as well." (Kornai, 1993:1-2).

In the early 1990s, beset by the consequences of an economic crisis of such double nature, the post-socialist countries of Central and Eastern Europe (CEE) registered as little as half of per capita GDP compared with the economic performance of the countries in the present European Union. (Ehrlich-Révész, 1992:71-73). It is worth to mention, that the gap in the

level of economic performance between the countries of CEE and Western Europe rather increased than decreased during the period of state-socialism. For instance, the Hungary's GDP was 58.1 % of Austria in 1937, but the Austrian GDP twice as much compared compared to Hungarian in 1990. (Bekker, 1995: 105)

The need to deal promptly with the phenomena that caused the dramatic social tensions accompanying the creation of new political and economic institutions (a double-digit unemployment rate in a single year, skyrocketing inflation, etc.) diverted the attention of the social actors from the long-term social and cultural consequences of the paradigm shift of the character of society's modernization to the short-term effects of the transformation process.

The findings of research launched in the early 1990s allowed the following main conclusions to be drawn in connection with the socio-economic and cultural regulators of manpower and skill use at the one-time state-owned large enterprises that were in the process of transformation in several sectors of industry (e.g. energy, steel, electronical/electric, and clothing industries). (1)

1. The transformations gathering speed in the proprietary and organizational structures of Hungarian enterprises during the early 1990s bear the stamp of presumptions and conceptions of socio-economic development (modernization) as reflected in related approaches to manpower and skill use, presumptions and conceptions that are worth little today. These changes in the structures of economic organizations are well known not only to specialists, but also to public opinion. It will nevertheless be noted that 60 to 70% of state-owned firms were privatized by the end of 1995. The large-enterprise organizations formerly dominant in the economy were substantially dismantled.

At present there are some 1,050,000 business organizations in Hungary, their overwhelming majority (nearly 1,017,000) employing less than 11 workers. The number of firms employing 300 or more workers, a figure representing the peak of the organizational "size pyramid", is close to 1,100. One-half of enterprises that can be listed in this size category operate in the manufacturing sector. As a result of the changes briefly outlined above, enterprises are expected to show a more varied "organizational morphology" in comparison with the previous period. (2) These transformations allow the different types of production paradigms to be identified more easily in so far as sociologists will have opportunities to make empirical surveys. (3)

2. Inquiries into the paradigm shift which occurred in the organization of production and services (work organization) and into the consequent change in the models of human resource utilization have receded into the background. The interest of researchers studying the social characteristics of the operation of economic organizations as well as that of specialists in management science has been attracted by such undoubtedly important problems as patterns of management (leadership) and organization arising out of the changes in property relations or the adaptation of techniques of human resource management which are novelties in Hungarian practice (e.g. competence theory based practice, introduction and application of selection and performance assessment systems, project management techniques, social auditing, etc.). On the other hand, we have an extremely small body of systematized knowledge about the substance of interrelationships such as the pattern and functioning of the work organizations employed, as well as the adequacy and the mutually presupposed nature of human resource utilization. A further difficulty encountered in the study of these interrelationships lies in the fact that proponents of efforts to increase labour-market (external) flexibility (i.e., long-term contract employees being replaced by temporary employees) as well as its functional (internal) flexibility still conceptualize manpower use in a homogeneous, undifferentiated work organization.

In the next sections of this study which cover the findings of surveys of industrial and organization sociology, both international and Hungarian, we should like to call attention to the lack of foundation of proposals which, while having general popular appeal, argue that inputs into human resources and manpower training, in and of themselves are bound to produce - at least at long-run - favourable effects on economic performance. For instance, in the case of Fordist or neo-Fordist work organizations, these and similar propositions have been proven unfounded. Firms using these types of work organization employ unskilled or underskilled labour in the majority of posts to attend to recurrent, routine tasks. By way of compensation for "monotonous" work, workers are paid relatively high wages, under the labour market conditions characteristic of the given country, for their "unused" abilities. Of course, the local labour markets determine the extent of compensation not directly, but in the context of a larger region, for instance, in Hungary we may distinguish between "strong" and "weak" regions. (E.g., the firms which participated in survey carried out in Electric and Electronic Industry belong to the so-called "strong regions" of the country.) (4)

In what follows we shall give a brief overview of the international experience relevant to us in the search for and application of methods of human resource utilization - especially skill use - as well as of the emergence of the latest trends in Hungary.

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1. Changing "Key Notions" of Modernization. Increased Emphasis on the Combined Role of Flexibility and Stability

The surveys of industrial and organization sociology (e.g., the use of techniques designed to increase the autonomy of work, skill-centered incentive systems, high involvement working systems) made in the first part of the 1990s give us some idea not only of clearly visible and identifiable shifts in organizational and proprietary structures (actors), but also of a revision of the less visible models and methods of human resource utilization at Hungarian enterprises in the process of transformation.

Despite the noteworthy changes and efforts to develop a new practice in manpower and skill use, the thinking and attitudes of social partners (employers, employees and their representatives) are still haunted, at both national and enterprise levels, by the modernization concepts of the 1950s and the 1960s. It is in this spirit that, among other things, a notable number of specialists concerned with organizations and management methods try to understand and assess the changes in proprietary and organizational structures experienced in the late 1980s and the early 1990s, on the basis of the following presumptions:

- a) the nature of development as a trend, or in other words, the visibility of the future course of development;
- b) the continuity or discontinuity of development, but under evaluation of the re-combination of past and present structures in the economic development;
- c) the possibility for changes under way to be planned and hence controlled by local (national) actors.

These presumptions reflect the survival of models of thinking and action (and even habits) which clearly represented, up until the mid-1970s, the socio-political and economic interests and values that proved the methods of manpower and skill use to have been effective (in both economic and social aspects).

In the early 1970s, with the appearance of new information, communication, and transportation technologies, the projects of cooperation in research, development and production which assumed global dimensions - accompanied by significant shifts in the world economy - called for a new approach to modernization under the pressure of global economics.

For the different national economies "framed" as they are in economic, political and cultural relations of a global dimension, a guide to handling new or old problems or combinations thereof can be provided by such new "key words" as the following:

- a) the formation of systems are not linear, but dynamic and integrating components with temporal dimensions;
- b) the enhanced significance of the role of the factor of uncertainty due to the strong globalization of the national economies;
- c) a greater emphasis on self-organization and networked organisations;
- d) long-term planning of economic activities could be practiced only by a core groupe of the most developed countries (e.g. USA, Japan, Germany etc.) and the other countries have to follow them. (Wallerstein, 1991.)

(The above guide to understanding the changing substance of modernization does not point to the appearance of well known principles of human action, but signals an increased emphasis on factors playing a residual role and suppressed during the previous decades.)

In the context of socio-economic restructuring there has arisen a need, also in the world of labour, to revise the paradigms seen as dominant for a long period of time. The findings of international and national empirical surveys have clearly shown that the views suggesting a uniform picture of industrial and service activities, such as the overstated role of "mass worker" or "mass employee", are untenable. It is necessary to call attention the weakening importance of lifetime employment and the growing popularity of the notion and practice of "lifetime employability"; "This means telling workers that they may well lose their jobs if the company can no longer make effective use of them. But it also means giving them the skills they will need of they are to be able get another job elsewhere". (The Economist, 1996: 18.) Along with the formerly overemphasized "unification" of the "world leading practices" of production organization and management in practical work, the tendencies to differentiate emerge

and prevail on an increasing basis under the impact of economic restructuring and global competition on the market.

Apart from new forms of work organization and the increased emphasis on the role of information-processing and service activities, such as the spread of the most varied forms of flexible work allowed by the diffusion and accessibility of information and communication techniques on the one hand and from the example set by the Fordist variant of mass production for over half a century on the other, there have appeared in the course evolution of Fordist work organizations. The core components of this evolutionary process are the followings: mutation, selection and combination of new and old methods of human resource practices.

The differentiation of Fordism is well illustrated by distinctions like Fordism versus Toyotism. We are also naturally witness to an enrichment of work organization models not only in the field of production, but also in the world of services, which bear the stamp of such models (e.g. the McDonaldization of the service sector).

In this context we can distinguish, in the case of services, the following markedly different organizational and management methods and work organizations representing manpower and skill use (Reich, 1992:174-175).

1. "Routine" production services, including, inter alia, the responsibilities of lower- and mid-level managers who recurrently control the work of their subordinates and ensure the execution of appropriate operations. Such services are provided not only in traditional mass production, but also in high-tech sectors (computerized data entry feeding and recording, manufacture of printed circuits, etc.). The work organizations which provide a framework for manpower use in these sectors represent variants of the Fordist type to be discussed later. (In the United States 20% of all jobs belonged in this category in 1990.)

2. "In-person services", which may involve performance of either recurrent and simple or complicated tasks. Pay is related either to the hours worked or to individual or collective performance. In addition, like manpower use based on decentralized managerial decisions, these activities are characterized by tight control. Low-level professional skills are generally present together with both high-level qualifications and with the possession by providers of actual services of high-level competence in human relations ("social skill"). Individual jobs or team-work are typical. Here belong representatives of occupational categories like shop-assistants, waiters, health-care workers, social workers, air hostesses, etc., just as

security guards represent an occupational category which is developing at a most dynamic rate. The work organizations of manpower and skill use are varied, with work organizations of the Fordist type and their opposites based on "flexible specialization" to be equally found in the field of in-person services. (In the United States 30% of jobs belonged in this occupational category in 1990.)

3. Providers of "symbolic-analytic services" measure and exchange such services directly on the scale of world market. The services provided are not standard or routine, the content of work including manipulation of data as well as verbal and visual representations. Here belong, among others, problem-identifiers, problem-solvers and strategic brokers mentioned earlier or more specifically, representatives of jobs like engineers, research workers, software designers, investment planners, advisers, organization and system developers. The work organizations constituting the framework of manpower and skill use are characterized by 'esprit de corps'-type relations, team-work, weakness or lack of hierarchical relations. (In the United States 20% of all jobs belonged in this category in 1990. According to some calculations, a mere 8% of the American workforce provided symbolic-analytic services in 1950.)

In connection with the differentiation of forms of work organizations providing a framework for manpower use, we should like to call attention to the appearance of new methods of manpower and skill use and to the experience gained in their application.

Since the 1980s the strategic significance of the functional, or internal flexibility of manpower in enterprise management practice - more specifically in the employment of methods of manpower use - has risen, as it were, to the level of a generally recognized and accepted paradigm as a counterweight to the negative consequences of external, or labour-market flexibility. (For example, one of the most well-known negative consequences of the practice of external flexibility is the weak identification with the firm). The experience of international and national research indicates that the capacity of economic organizations for continuous adaptation in the long-run is guaranteed by the combined - although seemingly contradictory - presence of "flexibility" and "stability".

In addition to emphasizing the presence of the flexibility-stability duality, a distinction must be made between the structural (institutional) and subjective (individual) dimensions of flexibility. Under the pressure of global economic competition which grew in intensity at the beginning of the 1980s, and of the necessity of recovering from the structural and

cyclical crisis - in the ex-socialist countries of CEE - greater emphasis was laid on the structural-institutional regulators of workforce flexibility than on workforce capacity for individual (psychological) adaptation and renewal. Distinction between the structural and subjective features of workforce flexibility serves by no means as an abstract clarification of its orientational-methodological significance. This distinction profoundly influences the content of conclusions based on the evaluation of manpower and skill use and thereby the efficiency of human resource management at the enterprise level. Thus, for instance, there may ensue extremely unfavourable socio-economic consequences from trying - in identifying and assessing difficulties in the adoption of cutting-edge management and organization practices - to locate the source of problems solely in individual omissions, lack of skill, resistance to change, etc. of workers and from failing to probe the structural-institutional causes of such individual problems. To give an example, the productivity of the Hungarian affiliated firms of international multinational corporations amounts to 57% of the corresponding index for the parent company. The notable difference in productivity is often held to be due mainly to the incompetence, low motivation, etc. of the Hungarian workforce.

In reality, of course, performance is influenced by individual (subjective) and structural (institutional) factors alike, in a way similar to workforce flexibility, an important component. This statement is borne out by the survey of the Austro-Hungarian consulting firm on productivity, which analyzed the factors responsible for lower productivity rates at the Hungarian firms of multinational corporations (Balaton-Makó, 1995:9), namely:

- a) shortfalls in preparations for production, selectivity of the enterprise training system (over-rating management training, neglecting the training of several professional-occupational groups);
- b) a reimbursement policy centered on low wages;
- c) the technical standard of machinery and equipment installed at Hungarian plants is lower than that of equipment used at the plants of the parent company accompanied by failure to make the necessary renovations;
- d) lack of clearly formulated performance requirements for Hungarian workers (both managers and subordinates);
- e) mechanical adaptation (copying) of the parent company's organizational setup and management structure, with no allowance

made for the Hungarian social, organizational and cultural traditions;

- f) unfamiliarity of foreign managers in many cases with the laws and regulations governing labour and employment relations;
- g) overestimation of the importance played by the computer aided management system.

In summary, flexibility refers to the abilities and skills of agents of socio-economic change which is impossible to explain without the knowledge of effects produced by the structural-institutional conditions bringing influence to bear on their use. More specifically, workforce flexibility means an individual or collective ability or skill, the possessors of which are capable of breaking with their former habits and forms of behaviour, while adapting themselves to their changing environment. It is embodied in individual and collective qualities as socio-organizational skills or capacities for continuous learning and change, coupled with professional-technical skills. The structural-institutional conditions required for developing and maintaining workforce flexibility mean interest and power relations that encourage learning and sustain commitment to the organization. In lack of harmony between individual and institutional conditions determining the content of flexibility, the actors of an enterprise organization either support or oppose proposed change, depending on their momentary individual and collective interests and power positions. Moreover, in the case of change lacking the required institutional conditions, the individual and collective actors of economic organizations affected by projected changes will find it "pays" to reject them. The interrelated nature of the subjective (individual or collective) and institutional dimensions of manpower flexibility could have an important effect on extreme reliance to use "contract employees", instead of loyal ones having this contradiction, which in turn is similar to the tensions between the needs of business for perpetual innovation - due to global competition - and labour's need for stability. How to create, stabilize and change again the "new" and "old" elements in the practice of human resource management, would be one of the hardest challenge for the experts searching the new models of manpower and skill use in business organizations.

2. Models of Human Resource Utilization: An International Overview

The changes that have taken place in the product and service markets and in the development of technologies compelled managers (and entrepreneurs) in countries with advanced economies to seek and apply new strategies for manpower and skill use in order to improve competitive ability. A most important lesson offered by the quest for innovation during the 1980s is that neither neo-Fordism nor mass investments in new technologies were apt to actually ensure the long-term competitiveness of the firms involved unless change was introduced within the structures of the tasks performed and the methods of human resource utilization. This statement is particularly true of branches turning out consumer-oriented products, the goal of management being to develop some flexible variant of high-volume production, e.g. methods representing radically new approaches to production management like Computer-Integrated Manufacturing Systems (CIMS), which are gaining ground at a slower pace than anticipated. According to the latest analyses, the high investment costs characteristic of CIMS and the interface problems of computer systems, machinery and equipment were coupled with difficulties arising mostly in its organizational adaptation. For instance, the creators and operators of Toyotism, the so-called Toyota Production System (TPS) - regarded as a variant of Fordism and, in some assessments, even as a post-Fordist variant - made no effort at the maximum automation of assembly work (in contrast to the Japanese Mazda car factory). They automated almost exclusively the tasks requiring physical effort and dangerous to health, with workers continuing to do tasks requiring relatively little physical effort. Toyota uses less sophisticated, but multi-purpose machinery and equipment in manufacturing and assembling. One of the reasons is seeking to lower investment costs. The other reason, to which the techno-centric job designers devote relatively less attention, lies in continuous improvement and the refinement of the production process. This approach assigns the central role in production to man, who is capable of refining machinery, equipment and increasing the efficiency of work ("Kaizen"). By contrast,

machinery and equipment can only repeat operations "fed into them". So a machine is by itself incapable of refining manufacturing techniques, whereas the operator, who is in close contact with the machine, keeps watch on its working and is better able to identify more appropriate operations. (The CAMI Report, 1993.) In effect, it is the need of efforts to minimize interface problems that explains why the specialists of the Toyota car factory, for instance, look on "semi-automation" as an ideal form of "coexistence of man and machine". According to the management of the Toyota car factory, not more than 20 to 30% of assembly work is capable of automation in view of the present technical and cost limitations, while it is practicable to leave the remaining 70 to 80% to workers. This provides an explanation for the latest initiatives for "job enrichment" in the Toyota assembly shop, since without it the management is unable to hire a sufficient number of skilled, young workers (Nohara, 1995:5) or the recent introduction of the performance based incentive system instead of the well-know seniority-based (Nenko) wage formation.

Prompted by constant problems in the organizational adjustment of new technologies, some specialists in organization development question the techno-centric approach dominant among organization developers and planners. The substance of this approach is this: the key to solving problems of production and services is fundamentally of a technical-technological nature, so automation and hierarchically organized control structures have an important role to play and serve to reduce the significance of human labour. Another feature of it lies in upgrading the role of management and downgrading the contribution of middle and lower-level managers to the performance of the organization. Thus, for instance, Alfred Sloan, a prominent personality in modern management science, took over the management of General Motors in 1923. Unlike Ford, who had initiated and introduced significant innovations in the work organization of production and workshops, he also remodeled the work organization of top management. Like H. Ford, he treated the work organization of top management ("packing order") in the same way as mechanical processes. In his concept, top management has to perform three, clearly distinct functions (The Economist, 1995:65):

- 1) to define the firm's strategy;
- 2) to devise the enterprise structure;
- 3) to select the appropriate enterprise control system.

In Sloan's view, top management should develop an organizational and management structure that will minimize differences in human behaviour.

The past decade has witnessed a growing interest in alternatives to forms of management and work organization which have been dominant for a long time. As regards management techniques, present-day top management should, in the spirit of new approaches, encourage deviancy and should even rely on it for accomplishing enterprise goals, the tool being to formulate general goals for the organization instead of a single enterprise strategy and to allow scope for the personnel at the lower levels of the organizational hierarchy to fashion their own micro-strategies. Accordingly, top managers should lay greater emphasis on "human engineering" in their work. (For instance, Roger Enrico, Vice-President of Pepsi Co., devotes nearly half his worktime to building the team-work of top managers.) There are a great many new approaches to the work organization of production which represent more or less radical criticisms of scientific management (Taylorism, Fordism, etc.). (Drucker, 1995.) Next we shall focus on those issues which not only may attract interest in the Hungarian practice of enterprise management and leadership, but have also revealed some elements in various areas of research and consulting activities (sociology, psychology, etc.) which represent a more general lessons for those who are interested in the emerging new working and employment practice.

A popular approach among enterprise managers of Western Europe exploring new roads of development relates to the "Anthropocentric Production System" (APS), which draws mainly on the traditions of the "socio-technical" approach well known to the specialists of organization. In contrast to the much too abstract goals pursued by the work humanization programmes of the 1970s and the 1980s, such as creation of conditions for the humanization of work or improvements in the quality of work and life (QWL), the application of this concept is aimed at increasing enterprise performance through cost reduction, improvement in quality, etc.

Related enterprise management efforts are intended to achieve the above goals by employing new methods of manpower and skill use, upgrading the role of technical (professional) and social-organizational skills, whereas in respect to management the emphasis is shifted to "competence-building", developing "entrepreneurship", and the "flattening of organisations".

The APS-approach is a possible strategic response of West-European enterprise management in the field of human resource utilization in the

global economic competition with its American and South-East Asian rivals. The main characteristics of a work organization designed in the spirit of the APS-approach are as follows (Alasoini, et al., 1994):

- a) not separating the concept and execution of work as a central element of the work organization paradigm established in the spirit of Taylorism and Fordism, i.e. scientific management. (In other words, questioning the general validity of the "one-way feed-back" system, in which only execution, not the concept, is amenable to modification.);
- b) the shift to a decentralized (participation-centred) decision-making system, which leaves scope for rewarding, mobilizing and evaluating different types of skill for more groups of workers;
- c) "lean organization";
- d) cooperation between planners and organizers of the labour process and the staff employed in execution (e.g. workers); establishment of a promotion path (career) and an incentive (evaluation) system ensuring a certain degree of mobility between jobs;
- e) the practice of job design and manpower use encouraging skill use and skill-sharing (as against the phenomenon of skill hiding);
- f) close and interactive contact between representatives of areas concerned with planning and development, as well as with the manufacture of products and delivery of services.

The most important feature of work systems reflecting the APS-approach lies in the fact that efficient operation of the system is conditional on the professional competence as broadly understood of the workforce (professional-technical + social-organizational skills) on the one hand and on the continuous development of professional skills on the other. APS differs from the socio-technical approach, as indicated in the introduction, in the following features:

- 1) designing "user-friendly" technologies;
- 2) mobilizing users' knowledge through encouragement to participation in decision-making;
- 3) basing APS-principles not only the organization of the labour process (work organization), but also the setup and operation of the enterprise organization as a whole;
- 4) making allowance for the managerial-organizational and socio-cultural traditions of the countries adopting the work concept.

The other popular approach, which has provoked keen debates, is the so-called 'lean-production' system, which seeks to free production from all superfluous activities, stocks in hand, etc. Its only reserve is "man", who must take care of remedying any disorder in production. As the accentuated "troubleshooting" role of the human factor tends to greatly increase the intensity of work and work-related stress, the term "management by stress" is often used as a synonym of the "lean production system" (Nohara, 1995). The system of work organization and management, born in the Japanese socio-cultural environment and differing from the European one, is one of the possible alternatives to Fordism reflecting the techno-centric approach as described earlier. The specialists of the Toyota car factory in Japan have played a pioneering role in its development, a reason why the Toyota Production System is often considered to be a variant of post-Fordism.

An examination of this system finds that quality problems are to be eliminated where they arise rather than subsequently and that production should be increased. The preconditions for its operation are these: (a) a wide variety of professional skills are available at all levels of the enterprise organization; (b) jobs are based on team-work; (c) manpower and skill use is characterized by mobility between functions (functional flexibility) on the one hand and by active commitment to the organization's goals on the other. In connection with staff identification with enterprise goals we should like to stress that the conditions for creating an atmosphere of trust in the manager-subordinate relationship are ensured by rules mutually accepted by managers and subordinates for assessment of work and performance, along with a high level of cooperation and the unquestionable high professionalism of management. Where no such atmosphere exists, "Toyotism" fades out, and is degraded to the level of work organizations established in the spirit of the Fordist paradigm, where it has to do without individual (collective) thinking and action striving for constantly improved quality and reduced costs and attributable to workers' commitment.

The costs of the system's introduction in, or "transfer" to, another country may rise or fall depending on the specifics of labour relations prevailing in the given country. The determinant factor is by no means the strength of employers' or workers' representative organizations (e.g. trade unions), but cooperation between them or the role played by the models of 'conflict-solution' in orienting collective action of social partners.

In general terms, the main preconditions of APS include the following:

- an abundance of multi-valent workers or workers equipped with broad skill;
- workers' initiative and their increasing participation in workshop decision-making;
- a practice of constantly shifting and assigning workers to other jobs;
- a cooperative relationship between enterprise management and trade unions, or in the absent of trade union job-security based loyalty of employees to the firm.

The difficulties in the adaptation of Japanese management and business organization techniques in other countries are well illustrated by those of Hungarian Suzuki's operation, by problems relating to product quality. "...one of this factory's main problems is that a large number of cars (51%) must be sent back for immediate repair involving high additional costs. Since this is not a case of defect in the model, the fault lies with the quality of the workforce, which is of serious concern to specialists" (Zoltán Kovács, 1995:14). While "...the car factories of other countries operate a quality control organization that is highly expensive and is separated from production, Japanese workers take care, in addition to manufacturing, of controlling quality and repairing defective products", a distinctive feature of Japanese car manufacturers (Dohse-Jürgens-Malsch, 1985:120). This attentiveness to quality has yet yet to be found in the Hungarian context.

"Lean production", or "Japanese production management" has become an innovative management model of restructuring working practice in the mass production from the 1980's (Womack, Jones-Roos, 1990). Comparing traditional (Fordist) concepts with those of the lean version of mass-production yields the following list (The CAMI Report, 1993: 14-15.):

1. *Traditional (Fordist or neo-Fordist) mass-production system:*
 - high inventories,
 - large stockpiles between work-stations,
 - excessive work space,
 - large repair areas for defective products,
 - higher staffing (e.g. a reserve of relief workers is necessary to replace absentees).

2. Lean - production system:

- just - in - time (JIT=Kan-ban), or synchronous production manufactures only what is needed in the amount required at the necessary time,
- tight management control of production and work allocation (this practice is often called "management by stress")
- rigid standardization of human time and action,
- permanent efforts to reduce costs through eliminating waste and non value-added labour (Kaizen),
- flexible working system (changing workforce site following the fluctuations in production quotas).

3. Hungarian Experience: Differentiation in the Practice of Employment and Manpower use

3.1. An Attempt to classify production organisations

Before presenting the Hungarian data collected on the practice of employment and manpower use at firm level it is necessary to present one of the several classifications of patterns of work-organizations.

The following Table sums up the possible major combinations of different production and manpower use paradigms (Regini, 1994).

Table 1:

Paradigms of Production Organization

Type of Work Organization	Source of Competitiveness
A) Neo-Fordism	Low production costs (low wages)
B) Diversified quality production	Quality + assortment of products (wages of varying levels)
C) Flexible high-volume production	Wide scale of products (high wages)
D) Flexible specialization	Quick satisfaction of buyers' needs + outstanding quality (wages of varying levels)

The contents of the paradigms of production organization as summarized in the Table 1 are the following.

A) The competitiveness of a firm employing the neo-Fordist strategy of production is based on low prices. The methods of human resource management are guided by somewhat modified variants of the well-known Taylorian and Fordist principles. Simple tasks are largely carried out by

semi-skilled workers and, given the nature of such work, management has no need for workers' multiple skills and active commitment based on participation or on company loyalty. Enterprise management employs qualified labour mainly for jobs involving the organizing, preparing, supporting and supervising of production, while in other areas it makes no effort at stabilizing the workforce by permanent labour contracts. For instance, the proliferation of individual labour contracts for specified periods at Hungarian firms of multinational corporations engaged in high-volume production indicates, among other things, that enterprise management considers labour-market (external) flexibility to be more appropriate for them, compared to workers' professional skill and loyalty that is functional (or internal) flexibility.

B) Firms representing the strategy of diversified quality production wish to compete primarily on excellent quality in the first place, followed by a wide assortments of products, followed finally by price competition in the segments of the market chosen by or opening to them. They apply this strategy in order to ensure against the price-wage competition caused by countries paying low wages, a most important means of doing so being to explore and preserve the market segments that require outstanding quality and satisfying as fully as possible the individual needs of buyers. This strategy is accordingly characterized by wide scales of products and customer-tailored solutions, an approach prevailing among, and shared by, both managers and rank and file employees. Under this system, a decisive role is reserved for wide-ranging and competent skills of the workforce. For instance, workers are not only quick to learn new tasks, but also actively identify themselves with the enterprise management's customer-centered orientation referred to above. Human resource utilization responsive to the diversified quality production-strategy is characterized by the fact that a considerable part of the workforce is highly qualified (basic + enterprise-specific training). In addition, the workforce possesses "social skills" including a spirit of initiative, good problem-solving abilities, and a willingness to cooperate with enterprise management and to accept enterprise goals. In this type of human resource management, enterprise management attaches greater importance to the functional (internal) flexibility of the workforce and to the identification of its workers than to its labour-market (external) flexibility.

C) As opposed to neo-Fordism, flexible high-volume production means mass production of the most varied goods and is capable of meeting changing and manifold market demands at low prices. Depending on programming, automation allows the enterprise to compete in terms of price

and assortment. With respect to human resources, mass production of a wide range of goods calls for a workforce with intermediate or low qualifications. Since manpower is largely replaced by machinery and equipment, greater importance is attached to adaptation to change and the will to cooperate as well as to their development than to the technical-professional training of the workforce. On the other hand, holders of key jobs (engineers, technicians, managers, specialists in organization and marketing, etc.) possess high levels of professional-technical skills.

D) The content of flexible specialization is constituted by quick adaptation to changing market demands. Flexible specialization is a production strategy mainly of small firms, which are characterized by low costs of organization and management and are very quick to respond, on the basis of prior estimates of market demands, to variations in such demands in terms of quantity and quality. The decisive and determinant human resource is the entrepreneur himself, who alone performs various functions (organizing production, hiring, directing and dismissing workers, organizing administration and sales, etc.), generally employs few workers and, where necessary, temporarily uses the services of outside experts and advisers (e.g. for solving special problems of a technical or financial nature or relating to the market). From the point of view of human resource utilization it is worth noting that the entrepreneur and his subordinates possess an extremely wide scale and variety of technical-technological skills which are impossible to acquire in institutions providing formal training. (5) Such skills are provided to some extent by technical secondary and tertiary training institutes, but are based in a larger measure on the body of professional-technical and contact-building ("networking") knowledge accumulated for years at previous places of work prior to establishment of the business. What is involved is acquisition of types of knowledge and skill which cannot be treated as a "stock", but need constant renewal and development. (6)

3.2. Short Description of the Surveys and their Motifs

The empirical surveys made in the first part of the 1990s offer the general lesson that it is rare to find a single dominant variant among the different types of production organization paradigms and the methods of manpower use expressing the former more or less adequately.

As regards to the paradigms of organization, the enterprises participating in the surveys, represent the combinations of paradigms A and B, irrespective of the nationality of the new private owners.

With an ambition to learning and identifying the effects of change in proprietary and organizational patterns, in discussing our research findings we shall begin by describing the results of an international project which was launched in 1984 by Denki Rengo, the Japanese trade union federation in the electric and electronic industry, inquiring into workers' attitudes towards work, working conditions, enterprise management and trade unions. We repeated the research project ten years later (in 1994), using essentially the same techniques to measure the important firm-level changes in the economy and society. The project of ten years before had included three former socialist countries (Poland, Hungary and Slovenia), whereas in 1994 it covered five former European socialist countries (the Czech Republic and Slovakia in addition to those mentioned before) and China along with the advanced capitalist countries of Europe and Asia. This report will concentrate mainly on the Hungarian experiences and lesser extent on the data collected from the other former socialist countries of Central and Eastern Europe. (The reason of this kind of data use is according to a gentleman's agreement among the participants of Denki Rengo Project, that before the international publication in English language, individual participants can not publish comparative papers.)

The other project was carried out in 1995 on the national sample of the Hungarian business organizations. The core topic of this research - which was designed and initiated by the University of Rikkyo-Tokyo and Institute for Social Conflict Research Hungarian Academy of Sciences - Budapest is the firm-level training and skill-formation in the transformation process.

The motifs of the both projects were the followings:

1: In the period of state-socialism in the countries of Central Eastern Europe, in spite of the common, Soviet-type political and economic regimes, numerous studies revealed diversities in their practice of manpower and skill use and their patterns of industrial relations. (Ishikawa, 1992; Grabher, 1993.)

Following the collapse of the state-socialism (or self-management system in the ex-Yugoslavia), can we assist in forming appropriate patterns or paths of development in the field of employment practice at firm-level in the post-socialist countries, especially in Hungarian firms?

2: What changes in the organizational and proprietary forms and structures in the firms survey have been taking place and what type of impact on the methods of Human Resource Management in general and on the importance of skill use and firm-level training systems can be observed?

3.3. Main Characteristics of the Enterprises and Plants: Denki Rengo Survey

In the case of the Denki Rengo survey (1994) we used samples of 200 persons each at the two enterprises manufacturing electric and electronic equipment. Unfortunately it was not possible to reproduce the 1984 sample, mainly because the uncertainty accompanying the changes in proprietary and market structures, the unsettled configuration of management and the newly emergent set of labour relations that had resulted in new roles and relationships of the firm level social actors that manifested themselves in reluctance to meet outside observers. Despite these difficulties we succeeded in repeating the survey at such plants of the Hungarian electric and electronic industry, which are still regarded as "flagships" of the industry and which had participated in the international project of 1984 as well.

Enterprise "A", manufacturing consumer electronic goods is a former state-owned firm transferred to Hungarian private ownership, operating in one of the country's most gravely afflicted zones of crisis in the early 1990s (it produced mainly for the one-time CMEA-markets, three-fourths of its workforce were laid off, the unemployment rate in the immediate district of its operation was among the highest nationwide figures). By the time of the survey (1994) radical changes had occurred in the enterprise's immediate economic environment, with industrial output rising 45 % above the 1993 level. This region received has over one-tenth (US\$2 billion) of total direct foreign investments in Hungary and is now arguably the country's most dynamic region.

Enterprise "B" is a plant in Budapest, manufacturing various types of lighting fixtures which had participated in the international project and had followed a different course of development, became majority property of General Electric, a well-known American multinational company. The change in ownership a priori secured not only easier access for the Hungarian enterprise to the markets of the advanced economies, but also a

possibility for the renewal of enterprise management and technology in the form of management and technology transfer. As is also suggested by these brief introductory remarks, the indicators characteristic of the operation of the enterprises and plants surveyed reveal both different and identical tendencies.

The staff employed by the "TV factory" of enterprise "A" in 1994 amounted to a mere one-tenth of the figure from 10 years previous. The staff reduction has been marked by inequalities. For instance, the ratio of workers was considerably lower, while those of administrative employees and managers were higher. Since special attention was paid to the changing pattern of labour relations, it is worth noting that the degree of unionization reduced by 20% despite the establishment of an independent factory (in house) trade union. On the other hand, there was an increase in the numbers employed at the lighting fixture plant of enterprise "B". Within the overall staff increase, the ratio of workers rose and those of administrative employees and managers fell. The degree of unionization fell by some one-third despite the establishment and significant efforts of the trade union belonging to the first independent trade union federation (Democratic League of Independent Trade Unions-League), which was born at the end of the 1980s. For more detail, see Table 2 below.

Table 2:

Main Characteristics of the Plants Surveyed

Characteristics	Plant A		Plant B	
	1984	1994	1984	1994
Workforce	5329	519	1313	1604
Ratio of workers	82%	61%	83.3%	96.2%
Ratio of managers	2.6%	3.7%	1.4%	1.9%
Ratio of adm. employees	11.1%	19%	10%	3.8%
R & D personnel	2.3%	0%	2.1%	0.2%
Ratio of middle and top managers	2%	4%	3.2%	1.1%
Number of trade unions	1	1	1	2
Number of trade union members	4296	310	1274	1126
Degree of unionization	81%	60%	97%	70%

Source: *Makó-Novoszáth-Veréb, 1996:11.*

The figures in Table 2 clearly reflect the different product market positions of the two plants and their effects on staff size. The different market positions have a bearing not only on staff size (reduction or increase), but also on the patterns of work organization and management, or, in more general terms, on the methods of manpower use. The characteristics of the changing models of work organization and manpower use will be discussed in more detail at a later stage. It should nevertheless be pointed out at this stage that the manager-subordinate ratio allows the conclusion to be drawn that in the "TV factory" of enterprise "A" the dominant control is "administrative-technical" in contrast to "technical-organizational" control characteristic of enterprise "B" (in the lighting fixture plant"). (The following figures are a good reflection of our previous statements: the manager + administrative employee ratio rose from 11.6% in 1984 to 26.7% in the "TV factory", but fell by 50% in the "Light-source factory". The radical reduction in the staff of the non-worker category is due to the human resource policy of the new owner, the American multinational firm, which makes conscious efforts to reduce the administrative staff and even finds the present downsized staff to be too large; 17% of the current enterprise workforce of 10,000 falls into this category.)

3.4. Improving Job Mobility and Growing Participation in Work

Job mobility and participation in on-the-job training not only serve to improve workers' professional (technical) knowledge, but also create shared professional-social values which function as socio-cultural regulators "finer" and less visible than technical-organizational coordination within the workshop.

Ten years ago women managers were rarely encountered at the plants covered by the international survey, despite the fact that employment of female labour was characteristic in the sector manufacturing electric and electronic goods. That situation had considerably changed by 1994: though small in number, women managers appeared at the lower and middle levels of business management. Another noteworthy change can be seen in the operation of the promotion system. At the time of the survey in 1984 the ratio of managers who had started their careers as such at the firm (with no

previous managerial and practical-professional experience) was relatively high (15.6%). Ten years later we met with no single manager who had begun his career as such in the firm. For instance, more than one half (53.3%) of foremen had started as workers and another significant ratio (26.7%) had begun their careers as engineers or technicians at the enterprise. These brief examples indicate notable shifts in career models in comparison with the promotion system of one-time large socialist enterprises, which was characterized, along with the dominance of the "fast-track career" over the "slow-track career" system. (The differences arose mostly from the over-centralized organizational and decision-making systems of the former state enterprise management. After a time, of course, structural pressures worked their way into enterprise management's value-preferences and models of thinking.) In connection with the different types of career models it should be noted, furthermore, that the operation of the slow-track career system is also characterized by the fact that the members of an organization, moving through a series of jobs, acquire multiple professional and social skills, which facilitate to a great degree their higher performance of management-related tasks.

Another important change, pointing beyond the emergence of open-ended job mobility and the enrichment of managerial experience, consists of the performance of more varied, or "richer" work tasks compared with the earlier overspecialized type of work. Job enrichment is synonymous with the creation of manpower's functional (internal) flexibility and of the conditions for job rotation. We disclosed this tendency in all jobs, but it was mostly characteristic of supervisors and technicians. (The figures in Table 3 show the general shifts in job structure over the past ten years.)

Table 3:*Changes in Job Structure (Summary Figures)*

Nature of Job	1984			1994		
	Plant of			Plant of		
	Firm A	Firm B	Total	Firm A	Firm B	Total
Quality control	7.1%	4.0%	5.5%	15.3%	31.3%	23.7%
Programming	1.1%	0.0%	0.5%	2.8%	2.6%	2.7%
Product development	7.1%	5.0%	6.1%	10.2%	3.1%	6.4%
Organization of production	5.7%	9.0%	7.3%	6.8%	10.2%	8.6%

Source: *Makó-Novoszáth-Veréb, 1996:14.*

As it has been indicated earlier, the major changes in job enrichment occurred among technical employees. In 1984, for instance, a bare 3% of technical employees did maintenance and other work beside their principal production-related tasks. In 1994, however, one-seventh of technicians and nearly one-fourth of engineers performed tasks supporting production. In connection with job enrichment we found other changes worth mention, such as the enhanced significance of quality control, organization of production and programming in the performance of work. All these tasks without exception play an out-standing role from the point of view of plant and thereby enterprise performance records.

We should like to make special mention of the increased emphasis placed on quality control and assurance among the factors outlined above. At most Hungarian enterprises production of high-quality goods costs much more than would be justified by appropriate organization and preparation of production. The survey of the Austrian productivity-consulting firm "Czippin and Partner" covering 24 Hungarian industrial enterprises found that the vast majority (95%) of products were labeled Grade I, but this is dearly bought. Hungarian industrial plants waste 15% of the worktime on quality repair (subsequent repair, sorting out unsuitable raw materials and accessories, subsequent reparation of semi-finished goods manufactured in previous stages of work, etc.). The specialists of the aforementioned consulting firm are of the view that if Hungarian enterprise (plant) management paid greater attention to continuous quality control - the control of quality in the manufacturing process to prevent defects - the

additional costs incurred in connection with subsequent repair and mainly with enforced standstills could be saved. (7) According to the findings of organization sociology surveys made by ourselves and others, the relatively weak "quality sensitiveness" ("quality consciousness") is one of the legacies of the well-known shortage economy of the past decades, by all means to be included on the list of flaws in Hungarian enterprise (plant) management.

The failure of inquiries into work-related quality control to differentiate between the requirements of quality control systems and models may be a source of misunderstandings and confusion. The present analysis is not concerned with a detailed presentation of quality control models, but we should briefly discuss the development of models exerting a marked influence on quality control practices. Before describing the different models we wish to draw attention to the fact that replacement of one quality control system with another calls not only for intensive efforts by, but also for continuous cooperation between, enterprise (plant) management, technical employees and workers.

The models representing the stages of development in quality control are the following (Wallace, 1994:220).

- a) Quality Control System (QCS), one presupposing introduction and application of a system capable of testing quality in the process of production as well as of storage and feedback of data ensuring self-control.
- b) Quality Assurance System(QAS), one meaning both a quality control system and a guide to comprehensive quality assurance and attaching particular importance to Statistical Process Control and quality audits.
- c) Total Quality Management(TQM), meaning application of quality control principles at all levels of the enterprise organization and in all fields of its activity.

This brief outline of practical difficulties concerning the quality of products turned out by Hungarian enterprises and of the quality control models will probably suffice to indicate that care for quality has received increased emphasis, compared with the situation of ten years ago, in the former socialist-enterprises surveyed. In 1984, for instance, only 1% of foremen dealt with quality control, whereas in 1994 one-third of supervisor attended to quality-related tasks and an additional two-fifths of them were also engaged in maintenance and machine repair.

The shifts in job structure can be interpreted not only in a time-perspective ("time-space"), but are also comparable in respect of the plants covered by the survey of the former socialist countries. The figures for plants of the post-socialist countries participating in the survey of 1994 are contained in Table 4.

Table 4:

Comparison of Task Structure (Summary Figures)

Type of Task	Czech Rep. (n=380)	Hungary (n=411)	Slovakia (n=411)	Slovenia (n=635)
Machine operation + fitting	43.0%	43.6%	51.1%	33.7%
Maintenance + repair	11.7	12.9	13.6	7.9
Quality control	19.4	21.7	13.6	14.6
Marketing	8.5	1.7	9.0	3.8
Programming	7.3	2.4	3.6	8.0
Administration	27.2	8.5	18.0	13.9
Control	12.7	5.1	8.0	6.1
R & D product	6.2	5.8	10.7	6.9
R & D process	7.3	7.8	10.2	3.8

Source: *Makó-Novoszáth-Veréb, 1995.*

*Note: Responses could only be yes or no in each type of job.

The figures in the Table point to somewhat different task structures - concerning a predominantly blue collar workforce - at the enterprises carrying out similar activities in the former socialist countries covered by the survey. The jobs done by workers were said to be most varied in Czech Republic and Slovakia, followed by Hungary and Slovenia. Most frequent beside operation and setting up machines as basic activities were, by their nature, administration, quality control, supervision and maintenance, chiefly at Czech plants. The task structure at Slovakian plants was different from that of its Czech counterpart, with supervision mentioned first and followed by maintenance, quality control and developmental activities connected with the production process and products. Outstanding among Hungarian workers were tasks related to quality control and maintenance, but the ratio of administrative tasks was likewise noteworthy. Workers at

Slovenian plants were mainly occupied in quality control and maintenance along with machine operation and assembling as basic activities.

There was striking de-emphasis on tasks connected with development (product + process) at the Hungarian plants participating in the international project. For instance, development-related activities among workers' tasks connected with product development ten years ago fell to half (48.3%), whereas tasks supporting production, such as organization of production, maintenance and quality control, carried a greater weight. For more detail, see Table 5.

Table 5:

Current Tasks of Workers Originally Engaged in Product Development

Type of job	Enterprise (Plant)		Total
	A	B	
Machine operation	0.0%	22.2%	6.9%
Maintenance	35.0	44.0	37.7
Quality control	10.5	44.4	21.4
Marketing	5.0	0.0	3.4
Programming	15.0	22.2	21.4
Administration	25.0	11.1	17.2
Supervision	20.0	11.1	17.2
Product development	65.0	11.1	48.3
Organization of production	35.0	22.2	31.0

Source: Makó-Novoszáth-Veréb, 1995.

Note: The persons interviewed were free to indicate several jobs performed concurrently.

The de-emphasis of product development-related activities can be explained by different factors at enterprises "A" and "B". The de-emphasis as indicated at the plant of enterprise "A" is mainly attributable to purchases of foreign manufacturing licenses and to the management's strategy encouraging participation in the international "supplier network". The falling ratio of development-related jobs at enterprise "B" is due to quite a different type of factors. Participation in the global development, production and marketing system, embracing the entire world economy, of an international multinational corporation had brought considerable

influence to bear on the content and efficiency of previous R & D activities. There was a shift away from in-house (uncommercialized) research to exploitation by plants of applied research and development results. R & D activity was concurrently rationalized, with a notable increase in productivity. During the past five years, for instance, the number of products newly introduced from year to year rose three and a half to four times despite a sizable reduction in R & D staffs. The structural change and rationalization carried out with success in R & D activities as well as the available R & D specialists of excellent caliber combined to motivate the multinational corporation for transferring its R & D activity in illuminating (or light-source) engineering to a Hungarian factory research center (that of Bródy Institute in Ujpest-city, Budapest) with a notable history of development efforts. (8)

(It is worth noting that the share of R & D expenditure in the GDP decreased from 1 % to 0.5 % in the last half decade in Hungary.)

3.5. Heterogenization of Labour Contracts and Its Consequences

Numerous studies and political writings have dealt with the economic-social and even ideological consequences ensuing from the spread, perceivable from the early 1990s, of multinational, or global corporations. They pay little attention to human resource policies which, introduced by international firms, are designed to create external (labour-market) flexibility in manpower use. The concrete method used in related efforts involves elaboration of a system of fixed-term individual labour contracts. "As distinct from employment for an unspecified period, a generally known and accepted form of employment relations in Hungary, also used are fixed-term labour contracts and provisional-temporary (interim) employment relations as special forms, the difference between the two being essentially in the length of time". (Simonyi, 1996:12).

We have to note that not only the average duration of labour contracts is shorter and their form diversified but these short-term contracts are renewed only if the contract holder has met the performance requirements.

The ratio of workers employed under fixed-term individual labour contract was highest in the practice of Slovenian and Hungarian plants

among the former socialist countries participating in the international project.

The ratio of workers employed under fixed or short term individual labour contract did not reach 1% at the Hungarian plants covered by the survey of ten years before. That ratio increased severalfold (6.8%) by today. Such contracts were made with 8% of workers and administrative employees and with 5% of engineers.

Table 6:

Forms of Individual Labour Contract in the Central Eastern European Countries (1994)

Country	Contract for an unspecified period	Contract for part-time employment	Fixed-term contract	Non-response
Czech Rep.	93.0%	3.9%	1.6%	1.6%
Hungary	91.0	1.2	6.8	1.0
Slovakia	96.6	1.9	1.2	0.2
Slovenia	89.9	0.0	7.7	2.4

Source: *Makó-Novoszáth-Veréb, 1995:14.*

Table 7:

Shifts in Forms of Labour Contract in Hungarian plants: 1984-1994

Form of labour contract	1984	1994
Contract for an unspecified period	95.6%	91.9%
Contract for part-time employment	2.0	1.2
Fixed-term contract	0.2	6.9
Non-response	3.9	0.0

Source: *Makó-Novoszáth-Veréb, 1985:15.*

There were notable differences between the Hungarian plants surveyed in the forms of labour contract. At enterprise "A" labour contracts for an unspecified period continued to be dominant, whereas the management of enterprise "B" made fixed-term individual labour contracts with 13.4% of workers.

Fixed-term labour contracts were to be found mainly in the following occupational categories:

- machine operators;
- assembly workers;
- maintenance workers.

Though made mostly with young people, this latter type of contract was to be found among older workers as well. (For instance, 50% of workers under such contract were younger than 30 and 15% belonged to the 45-49 age-group. No appreciable difference was found in respect to sexes, but the number of cases was understandably greater among single than among married persons.) The ratio of workers employed under this type of employment contract rose steeply over the past years, as is well illustrated by the fact that 78.6% of workers with two years of length of service have labour contracts for an unspecified period while only tiny minority of new entrants (6.9 %) are employed on longer contracts.

The growing ratio of workers under short-term employment contracts represents a human resource policy of enterprises which is content with "labour market flexibility" and deems it unprofitable to develop functional (internal) flexibility among workers. This model of human resource utilization is consistent with the requirements of work organizations formulated in the spirit of the paradigms of both neo-Fordist and diversified qualitative mass production. Nor are the management's of work organizations of this type interested in the short term, especially in case of considerable oversupply on the labour market, to encourage development and stabilization of workers' commitment (loyalty) to the enterprise. This manpower policy of multinational firms operating in Hungary does not represent the adoption of the mainstream concept of 'employability', "... the idea that companies may not owe their *employees* a job for life, but they do have responsibility to train workers so that they have better chance of finding new job if the company sacks them".(The Economist, 1996: 85.)

As noted earlier, the differentiation of labour contract systems offers numerous short-term benefits to enterprise management, the most important being cheap manpower with weak bargaining positions (individual and collective) to organize their interest representation. This is clearly shown by the fact that over one half (56.5%) of the staff did not participate in training programmes provided by the enterprise. A much higher ratio (82.1%) of workers employed under short-term contracts did not participate in further training, which tends to weaken their position on both the internal and the

external labour market to a greater extent than that of their colleagues employed under longer labour contracts. As regards collective interest representation, the sort-term labour contracts tends to segment workers in this respect as well. At both enterprises there were newly established trade unions legitimate in the eyes of workers. (At enterprise "A" there was a factory trade union independent of national federations and at enterprise "B" there was a representative organization affiliated to the genuinely autonomous federation of Democratic League of Independent Trade Unions.) Nevertheless, there were considerable differences in the degree of unionization by type of labour contract: the overwhelming majority (75%) of workers under longer labour contracts and less than one-third of those under short-term labour contracts were unionized, meaning that notable differences occur also in the collective bargaining positions of workers employed under different types of labour contract. The regulation by labour law of employment relations does not offset these weaknesses of the collective representation of interests in Hungary. Moreover, not even regulation by labour law and collective agreements is able to duly recompense workers employed under atypical employment arrangements. (For example, under the French practice of employment, where the legal conditions for the introduction and application of other than general forms of employment were created from the 1970s onward, the experience of the past decades shows that "even if regulation by labour law and collective agreements guarantees similar wages and working conditions for similar categories of workers employed for an unspecified or a specified period or on a temporary basis, 'interim' workers are at a disadvantage on account of the instability of their employment relations. Income from unsystematic employment makes it difficult or almost impossible for families to plan investments, take up credit, change the place of residence, make plans for the education and schooling of children" (Simonyi, 1996:14-15)

It is worth mentioning that in the Hungarian system of labour relations, firm-level - or single-employer - bargaining is considered to be overwhelmingly dominant. 30-35 % of the firms are covered by single employer (firm-level) and only 10 % by branch level collective agreements. (Makó-Simonyi, 1996:30)

3.6. Patterns of Enterprise-Level Labour Relations and Work Organizations Based on Workers' Participation

In presenting various - internationally well-known - models of human resource utilization we have noted, in connection with the particularly efficient operation of the Toyota Production System, that cooperative relationships between enterprise management and workers (and trade unions), along with high skill levels of management and workers, have a decisive role to play in the elaboration and continued application of those models. In addition to cooperative labour relations, emphasis should be laid on the practice of manpower use based on workers' individual and collective participation. Workers' increased participation in work is consistent with management's significant skills and unquestionable power, coupled with commitment, in the enterprise organization. A major source of the latter is the role of managers in the systematic assessment of subordinates' performance and merit-rating and, through them, in the determination of earnings and promotion perspectives. The dual loyalty of workers, i.e. their support for both the trade union and enterprise management, makes it easier to delegate to workers decision-making prerogatives of management heavily influencing the operation of the work organization (quality assurance, saving in costs, etc.). What we have here is a practice of manpower use "on a mass scale" which, aside from the work organization reforms well known in American or European practice (e.g. experiments in work organization at the firms Volvo, Saab-Scania, Philips, etc.) or from attempts to devise, under the so-called anthropocentric approach, radically new work systems in comparison with Japanese arrangements, is inconceivable. (By way of illustration, it will also be noted that in the practice of Japanese car factories workers are free, almost without exception, to stop the assembly line at their discretion when detecting malfunctions in the manufacturing or assembling process; this is the so-called "Stop Cord System" (Nohara, 1993:338).

Next we should like to call attention to some features of cooperative relationships (e.g. dual loyalty, "micro-cooperativism") which are characteristic both of the past and of the present of Hungarian labour relations at the enterprise level and, when the social partners within enterprises are able and willing to make use of the possibility offered by cooperation, constitute an "organizational-cultural" resource, hardly replaceable by anything else, at an enterprise (plant) in transformation. For

instance, organizational commitment (or identity) based on workers' dual loyalty largely facilitates creation of functional (internal) flexibility, in addition to transformation of the training and incentive systems, which is indispensable at short term.

The end of the 1980s saw significant changes getting under way in the Hungarian system of labour relations today in accordance with legal and organizational regulations known to the democratic political systems and synchronized with the social institutions of a market economy. (For more detail, see the new Labour Code, 1992.) The post-socialist countries of Central and Eastern Europe (Czech Republic, Poland, Hungary, Slovakia, Slovenia) which participated in the aforementioned international survey follow the norms and recommendations of the Social Charter of the European Communities and the International Labour Office (I.L.O.) in this respect as well.

The inquiry into workers' participation (indirect representation) in the enterprise-level trade union organizations reveals the following developments in the countries mentioned above (in the absence of figures for Poland, which were not yet available upon writing). Grappling as they are with the lack of institutional autonomy, the representative functions of trade unions and local organizations have received increased emphasis and is recognized by membership, as compared with characteristics of labour relations under state socialism. At the same time, however, plant management invariably retains its significant role in affirming workers' interests, particularly in the case of Hungarian workers.

The responses to questions about workers' participation in decision-making by local trade unions and plant management reveal that the attitudes of Hungarian workers, unlike tendencies observed in the rest of the former socialist countries, are characterized by a dual identity (organizational loyalty), that is to say that an important role is played by the presence of workers' opinions in the decisions of both local trade unions and plant management.

Table 8:

Question: "How is your opinion reflected in the decisions of the local trade union and plant management?" (%) (1994)

Country	Very well+ Fairly well		Not very well + Not at all		I don't expect anything		No answer	
	Trade union	Plant manage- ment	Trade union	Plant manage- ment	Trade union	Plant manage- ment	Trade union	Plant manage- ment
Czech Republic	23.8	19.8	50.3	66.6	24.6	12.7	1.3	0.8
Hungary	54.5	55.7	30.7	35.0	12.9	7.5	1.9	1.7
Slovakia	28.2	24.1	54.5	61.6	17.0	13.9	0.2	0.5
Slovenia	19.5	40.6	39.7	43.6	29.1	13.9	11.7	1.9

Source: *Mako-Novoszath-Vereb, 1995.*

For Hungarian workers, the representative role of plant management is comparable in significance to that of the trade union, meaning also that plant or enterprise management is in a good position to devise and apply work systems based on workers' increased cooperation and participation. By contrast, Czech and Slovakian workers have less hopes of the trade union and plant management representing their interests. On the other hand, Slovenian workers are pro-management and rely more heavily on plant management, compared with trade unions, for representing their interests. Moreover, the criticism of independent trade unions activity is indicated by the fact that the ratio of answers "I don't expect anything" is much higher (about twice as high) for trade unions compared with plant management mainly among Czech, Slovenian and Hungarian workers. The refusal rates of trade union and management are almost equal among Slovakian workers.

Attention will also be drawn to the noteworthy change consisting in that the appearance of new owners of one-time state enterprises and the sharpening competition on the international market have upgraded the role of plant management through the decentralization of decision-making mechanisms at the enterprises. We tried to use indirect indicators for measuring the increase in plant management's role and influence. Instead of putting the well-known "direct questions" (e.g. "What is the influence of...?") seeking to identify managers' influence, we asked workers to name the fields in which they thought their interests were identical with those of

plant management. The level of identical interests indirectly shows, furthermore, the type of decisions in which management, in daily contact with workers, feels disposed to participate in official or non-official form. (Thus, for instance, a falling level of "identical interests" indicates, among other things, that operative enterprise decisions on production are also centralized, so the actual chances are minimal of identical interests emerging between workers and plant management.) A comparison with the 1984 patterns points to a growing influence of plant management. Perception by workers of shared (common) interests in the labour process related issues (e.g. job design, overtime etc.) at the plant is suggestive of the source of dual loyalty. (Table no.9.)

Table 9:

Question: "Are, in your experience, the interests of your immediate superior identical with yours in the areas indicated below?"

Areas of interest identification	Survey of	
	1984	1994
Work organization/job design	36.4%	66.2%
Dealing with overtime	54.0	60.0
Changes in amount of production	25.3	36.5
Introduction of new machinery and equipment	14.6	25.5
Transfer and allocation of personnel	39.6	50.9

Source: Mako-Novovoszath-Vereb, 1995.

Note: The Table includes "yes" responses only.

At the same time, contrary to public belief, dual loyalty verifiable at Hungarian plants does not imply workers' unconditional willingness to make maximum efforts to ensure enterprise success. Concurrent identification with the endeavors of plant management and the local trade union rests on compromise guaranteed by mutual toleration of the interests of those concerned and is free from any all-embracing and mutually accepted ideology that may be invoked in critical situations. This assessment is reaffirmed by opinions informing us of the degree of workers' identification with the enterprise. (For more detail, see Table 10.)

Table 10.

Question: "What are your feelings towards the company you are working for?" (1994)

Possible responses	Czech Republic	Hungary	Slovakia	Slovenia
I'd like to make maximum efforts towards the company's success.	36.6%	28.0%	43.6%	43.8%
I'm willing to give as much effort as is recognized by the company.	54.7	56.7	45.7	49.6
I don't have deep feelings about the company	7.0	13.1	8.8	3.6
Enterprise matters are none of my business.	0.8	1.2	1.9	0.8
Non-response	0.9	1.0	-	2.2

Source: *Mako-Novoszath-Vereb, 1995.*

Hungarian workers are less inclined than others in the former socialist countries to exert "unconditional" maximum efforts toward the successful accomplishment of enterprise goals. Instead, they are "performance regulators". Similarly, the ratio of workers indifferent to the enterprise is highest among Hungarian workers. This means, among other things, that the participation of Hungarian workers in the "social learning process" called into being by the changes over the past decades, together with the increasing role of short-term economic calculation, resulted in questioning numerous values associated with the importance of enterprise development and yielding long-term gains like the behaviour-orienting role of unconditional identification with the enterprise. In relation to "performance regulation", we have to note that this is not fully identical with the well known category of "quota or output restriction", although cyclical slowdowns do contain elements of "restriction" and also element of "maximisation of output". The Hungarian industrial and organizational sociologists have presented comprehensive analysis on performance tactics (e.g. "overtime game", "target bonus game" etc.) since the early 1970's. (Héthy-Makó, 1989)

Finally, we wish to call attention to the opinions of the Japanese workers - well-known for a high degree of identification with the enterprise - which are rather similar to those of Hungarian workers. Despite popular

opinion to the contrary, dominant among them, too, are "performance regulators" rather than "performance maximizers", and there is also a considerable proportion of those showing an attitude of indifference to the company.

Table 11:

Question: "What are your feelings towards the company you are working for?" (1994) (Opinions of Japanese workers)

Possible responses	Distribution of responses
1. "I'd like to make maximum efforts towards the company's success."	19.4%
2. "I'm willing to give as much effort as is recognized (recompensed) by the company."	54.2
3. "I don't have much feeling about the company."	22.2
4. "Enterprise matters are none of my business."	2.0
5. Non-response	2.8
Total	100.0%

Source: *Mako-Novoszath-Vereb, 1995.*

The views reflected in the above responses are supported by the latest survey, made and repeated every 4 years by Japan's National Federation of Iron and Steel Workers' Union, of attitudes to the enterprise and the trade union. The responses revealed that the activity of the company as a workplace was useful to society (72.6%) and contributed to the development of the region representing the environment of its operation (55.3%), but barely one-third (30%) of the respondents believed that the enterprise cared for its workers and a mere one-tenth said they would continue to work with their present enterprise if they had a choice. Discontent with trade union activities was likewise substantial. For instance, 50.9% of workers were satisfied, but 47.9% were dissatisfied with the performance of the local trade union. Also, the results of the survey call our attention to the fact that well-known institutions like "life-time employment" or the remuneration system based on seniority" (nenko-remuneration), which characterize Japanese large enterprises by generating and sustaining a high degree of workers' commitment, are in the process of transformation and the conflicts attendant upon the transformation make their effects felt in the attitudes described (Shiraishi, 1994:68). These

experiences are supported by the regular Japanese government survey to determine which is more important for the employees: company loyalty or job satisfaction. In 1995, unlike the first two, personal consideration won out. See the Table 12.

Table 12:

Employees attitudes towards company and personal growth

Answers	1987	1992	1995
1. It is OK to change jobs to fully exercise your talent and ability:	42.3 %	44.4 %	63.4 %
2. It is better to stay in one job as long as possible, even it is frustrating:	52.6 %	50.2 %	31.4 %

Source: *Wa Dunn, Shery (1996) 'Parting is Such Sour Sorrow' (Japan's Job-for-life culture painfully expires)*, International Heradl Tribune, 13th June, p. 13.

The data presented in the Table 12 illustrate well that after five years (1987-1992) of tight link between Japan's companies and its workers - symbolized by one of the well-known pillars of the Japanese employment system, the 'life-time employment' - is coming to end.

4. Company Training and Skill Use in the Transformation Process: An overview on the Firm-level Skill Formation

4.1. Training Costs within Labour Cost: Differences among the Post-Socialist Countries

In assessing the viability of the post-socialist firms on the market, continuous adaptation to the technological and organisational changes became extremely important challenges for the social partners in the company - especially for human resource managers - following the collapse of the socialist type economic system. The process of market restructuring - from the ex-CMEA countries into capitalist market economies - is taking place within the conditions of the global economic competition. In this complex restructuring process, the successful adaptation of business organisations requires - among others - incremental innovation and permanent improvement of operation. The incremental innovation is the result of diversified source of knowledge. In other words, the outcomes of the incremental innovation "... has become highly dependent on the capacity of firm to access and absorb new skills and knowledge. The important point about the innovation process is therefore, that it is a sequential learning process". (Schall, 1996: 6) Learning process refers not only the well-known technology and scientific systems (e.g. universities, company R and D units, etc.) but also the learning implications of the business organisations in itself.

In regards to the company training and skill formation system it is worthwhile to make distinctions among the international-patterns of the technology transfer. The methods or patterns of technology transfer can be divided into the following three major categories (Kasahara, 1995:14):

- 1) Where technology exists in an objectively and explicitly stated form, such as patents, diagrams and manuals, and these are used to transfer the technology.
- 2) Where machines and equipment are transferred and technology that is part of them transferred.
- 3) Where technology that is integral to humans (or human organisations) is transferred through direct On the Job Training (OJT), by using or dispatching people.

It is said that the Japanese firms' characteristic pattern of developing technology, along with the process of establishing a Japanese style production system, has had a great deal of influence on the fact that Japanese firms rely greatly on technology transfer which centers on the exchange of people and On the Job Training, rather than (or along with) manual based training.

Another - often underestimated - benefit of the On the Job Training brings significant improvements both in productivity and wages. "In-house training benefits companies, as well as workers. That is why firms do it. Intel, for example, an American chip maker, has a more or less continuous retraining programme enabling the firm to adopt the volatility of the chip business. Mass training schemes administered by civil servants cannot meet such needs. This is a reason employers prefer to take raw recruit and train them the company way, rather than take on training-scheme graduates." (The Economist, 1996.b.:25)

The share of the training costs within labour costs is an important indicator of the role of skill and knowledge use in the business organisation. According to the labour-cost analysis of the Hungarian Central Statistical Office, the share of the training costs within the total labour costs represents 1 %. Comparing the training practice among various types of manufacturing and service sectors, the following symptoms could be identified:

- 1: The share of training costs within the newly created service sector is much higher than in the manufacturing sectors. These new service activities are playing an important role in creating the necessary institutions for the well-functioning market economy (e.g. financial, insurance service related skill)
- 2: There are visible inequalities in the training expenditures not only between the economic branches but within the manufacturing sector, too. In the cases when foreign firms were carrying out

investments (e.g. car manufacturing, chemical industry), the training and re-training of blue-collar workers attracted particular attention, as well.

- 3: During the period of state-socialism, when publicly owned firms dominated the economy, almost all employees could participate in training courses. The management of the firm did not evaluate the participation of employees in the training course from the point of view of the interest of the firm. In the privatised large-size firm (over 300 employees), the management of the firm in general set the following priorities in relation with the training;
- a) in the units where the international quality assurance systems are introduced (e.g. International Standard Organisation (ISO) 9002, 9003) due to its requested professional requirements, the employees' participation in the training courses has got maximum support from the management;
 - b) the other group of employees supported by the company's management is represented by those whose ambitions are in harmony with the general trends of the firm's development and may count on the financial support, too;
 - c) the "residual category of trainees" are composed of the employees, whose individual ambitions are very special and individualized, therefore their aims are divergent from the company's strategy, and cannot count on the financial support of the firm.

The diversity of training practice in firms is well illustrated by the distribution of the training costs in the selected branches of the Hungarian economy. It is clear from the next table that in the new sectors, like financial services, insurance, the share of training costs within labour costs is higher than in the traditional manufacturing sectors, like clothing, chemicals, food, cars etc. The service activities were underdeveloped during the period of socialist planned economy and in creating market economy their importance is growing. This shift is well reflected in the costs of training within the labour costs.

Table 13:

*Share of the training within labour costs
(in selected sectors, branches - 1993)*

Sectors	Share of training within labour costs
1. Mining	0.34
2. Food industry	0.45
3. Clothing industry	0.47
4. Wood and printing industry	0.53
5. Chemical industry	0.60
6. Computer and office machines	0.96
7. Electric and electronic industry	0.43
8. Vehicle (car) industry	0.83
9. Industry together:	0.49
10. Financial services:	1.50
11. Insurance:	1.75

*Source: Adler Judit-Papanek Gábor-Vértes András-Viszt Erzsébet (1995):
Az ipari foglalkoztatás várható alakulása, (Industrial Employment Forecast),
Budapest: Gazdaságkutató Rt. (Economic Research Co.), April, 1995, p. 18-19.*

Looking at the table illustrating the share of training expenditure, it is necessary to note that according to the experts dealing with training, the present outcome of the Hungarian training-system does not well satisfy the requirements of the developed market economy, neither in quantity nor in quality. For instance, in spite of the double-digit unemployment rate in Hungary, in the most dynamic regions of the country (in the capital, Budapest and its economic zone, Western Hungary) it is difficult to find skilled and motivated workers.

According to the recent overview of the skill supply on the labour market, more than 50 % of the manual workers are unskilled, and even nowadays 35-40 000 unskilled young people are entering into the labour market annually. (Adler, et. al. 1995:10) After the presentation this dark picture of skill-formation situation, it is evident that the Hungarian employees are quite unsatisfied with the training opportunities. Among others, the latest sociological survey (1994) made in two leading electronic

firms in Hungary, the majority of workers surveyed (50.1 %) were dissatisfied with the training;

Question: "How far are you satisfied with training and re-training?"

Answers:

(1) Very satisfied.....:	1.7 %
(2) Fairly satisfied.....:	10.5 %
(3) More or less satisfied.....:	26.5 %
(4) Fairly dissatisfied.....:	29.9 %
(5) Very dissatisfied..... :	20.2 %
No answer.....:	11.2 %

Total:	100.0 %

Source: *Denki Rengo, Hungarian Survey, (1994)*

The recent largest survey dealing with economic forecast - carried out in 1995 - informs us also that the low priority of training and skill formation is among the factors influencing the development of the firms. The survey of opinions of managers in more than one thousand (n=1048) firms, " ... reveals that problems with keeping and training workers rank quite low on the list of problems facing companies: only 8.5 % of managers reported that labour questions of any kind limited development of their firms (as compared with 50.3 % complaining of the limits of the domestic market)" (Ellingstad, 1996:11)

Another recent survey (1996) focused on the transformation process of governance structure in the selected groups of the Hungarian firms (large firms operating in the machine industry) also supports the result of the earlier presented nation-wide survey. During the 1996 survey the following question was used: "What are the main problems affecting the business today?" (Three factors were chosen in order of their significance). According to the answers collected, the "sharp competition in the market" (13.0 %), "lack of capital investors" (11.7 %) and the "high-interest rate" (16.2 %) got the highest score in the evaluation of top-managers

questioned. The “lack of skilled employees” was mentioned only by tiny minority (2.9 %) of the top managers interviewed . (Yamamura, 1996.) See Table 14, in which problems of management concerned with labour were in italics.

Table 14:

The three greatest problems affecting business (weighted average)

Problems	(1996)	(%)
High interest rates	16.18	
Sharp competition in the market	13.02	
Lack of capital or investors	11.74	
High prices on materials and inputs	7.31	
Unpredictable government policy	6.99	
Decrease in demand	6.37	
Other	6.36	
Govnt. bureaucratic regulations	5.08	
Obsolete technology and equipment	4.47	
Cash flow problems du to late payments	4.46	
Heavy taxes	4.17	
<i>Lack of skilled employees</i>	2.90	
Narrow market	3.19	
Inadequate management skills	0.97	
Weak marketing activities	0.00	
<i>Surplus of workforce</i>	0.00	
<i>Employees unmotivated or lazy</i>	0.00	
<i>Heaving financial burdens of in-house welfare</i>	0.00	
<i>Resistance of intervention of the trade unions</i>	0.00	

Source: *Hokkaido Project: Hungarian Case (machine industry), Project leader, Yamamura, Richito, Hokkaido University - Slavic Research Center.*

In spite of the general underestimation or low-priority of the role of "humanware" compared to the other factors influencing the economic performance of the firms in the thinking of Hungarian managers surveyed, we have to call the attention to another problem revealed by a recent survey showing the key role of human factors in the productivity. The productivity survey was conducted by a Salzburg, Austria based consulting firm "Czippin and Partner" (1995) on the productivity at the Hungarian subsidiary of the international companies. The results were based on a 500 - 1000 hour study (or observation) carried out in eight Hungarian subsidiary firms and the units of the mother (international) companies. According to the survey results, the productivity at the Hungarian subsidiaries of international companies reaches only 57 % of that of their parent companies, in tons per hour. In spite of the fact that the equipment used at the firms participating in the survey was similar to that of the parent companies or, in other cases, the productivity figures of equipment dismantled at the parent factory and installed at the Hungarian plant were compared. The investigation found that the productivity gap was the largest in capital-intensive industries, which seems to suggest that the factors responsible for the huge difference in productivity is to be found mainly in organisation (or in "humanware") and not in the insufficiency of investment, or in capital shortage - which were found in the earlier mentioned surveys. According to the diagnosis of the "Czippin and Partner", foreign companies are making a series of typical mistakes when they launch their operations in Hungarian subsidiaries. The following ten traps Western firms make when they start business activity in their Hungarian subsidiaries (Népszabadság, 1995:4)

- 1: Most often, they move operation (production) to Hungary in order to reduce their expenditures. Therefore, they usually do not have enough time to preparation, and training of their Hungarian managers and staff is often inadequate;
- 2: They deliberately pay low salaries, saying, productivity must be enhanced before salaries can rise. However, they do not create the organisational conditions necessary for that;
- 3: In most cases, they simply dismantle the equipment used in their home plants, and install it in Hungary without carrying out maintenance or upgrading;
- 4: Technicians and top company officials come to Hungary along with the equipment, causing a great deal of difficulty in communication, not only in the linguistic sense;

- 5: Foreign company leaders coming to Hungary encounter a great number of problems previously unknown to them;
- 6: Employees are not told clearly what is expected of them. Opening ceremonies are often followed by the everyday disappointments of the employees;
- 7: There is no clear division between the tasks of the foreign managers and those of the Hungarian management, so the Hungarian leaders often become unwilling to make significant decisions on their own;
- 8: The organisational structure of the western parent company is copied although the staff and the personnel required for that may not be present in Hungary;
- 9: Uncertainty concerning legal matters prevails: nobody knows exactly what regulations apply for Works councils - introduced in 1993 in Hungary - the protections of workers, and working hours. (in brief, they do not know well the Hungarian Labour Code);
- 10: Foreign managers have far too much confidence in their company's computer systems, and there are too many visitors from the parent companies, driving up travel expenditures. Even the very good advice and the most advanced computers are futile without adequate transfer of know-how and concrete working-methods.

Among the elements of diagnosis of the Austrian consulting firms - listed above - it is easy to acknowledge the decisive importance of the "humanware" and the related key role of the training and know-how transfer in the introduction of management and organisation in the Hungarian subsidiaries of the international companies. In other words, in the case of almost identical equipment, methods of human resource management, including adequate transfer of know-how, the non-selectivity of training and re-training of the employees are playing important role influencing the level of productivity.

Putting the issues of training and skill formation in a wider perspective, the briefly presented Hungarian situation is not so unique or dark comparing it to the Western European or to the other Central Eastern European countries, from the point of view of training expenditures. The share of the training costs within the labour costs is similar - but the level of expenditure, in the case of the Western European countries is much higher due to the several times higher wages. The following table informs us on

the share of training expenditure within labour costs - in manufacturing sector - among the "core group" of post-socialist countries (according to the political vocabulary, this is the group of the so-called "Visegrad countries") in Central and Eastern Europe.

Table 15:

Composition of Labour Costs in Manufacturing Sector (1993)(%)

Type of labour costs	Czech Republic	Hungary(x)	Poland
Direct remuneration	47.8	44.5	47.3
Premiums, bonuses	13.1	7.9	8.1
Payments for time not worked	7.7	8.3	4.2
Benefits in kind	0.0	1.9	0.4
Direct costs:	<u>68.7</u>	<u>62.6</u>	<u>60.0</u>
Statutory social security costs	0.8	0.1	...
Non-statutory social security costs	0.8	0.1	...
Social security costs:	<u>26.2</u>	<u>30.4</u>	<u>25.8</u>
Other costs	4.1	6.0	11.0
Vocational training costs	0.7	<u>1.0</u>	0.2
Taxes	0.3	-	-

Source: Elisabeth Lindner (1995): Labour Cost in Central Europe and Eastern Europe, International Symposium on "Wages, Efficiency and Social Cohesion: Towards a Negotiated Wage Policy in Central Eastern Europe", Budapest, 29th November - 1st December, p.19.

Looking at the table, we may identify significant differences in the share of "vocational training costs" between the post-socialist countries. Hungary has the highest training expenditure within the various elements of the labour costs among the post-socialist countries of Central and Eastern Europe. For instance the training expenditure within labour costs in Hungary is higher compared to the Czech Republic. The gap is largest comparing Hungary to Poland: the Hungarian share of training costs is 5 times higher than in Poland. To evaluate realistically the differences in the "vocational training costs" within the labour costs, it is necessary to mention that the "compensation costs in real terms" (that means the deflated compensation costs by consumer price index) is still the highest in

Hungary among the above mentioned post-socialist countries. This means that the training expenditure in the firms is even higher due to the larger, but also declining wages.

Table 16:

Compensation costs in real terms (deflated by consumer price index)

Countries	1989	1990	1991	1992	1993
Czech Rep.	100.0	93.6	69.0	65.1	64.7
Hungary	100.0	96.1	90.7	75.1	98.3
Poland	100.0	71.3	68.7	80.8	84.0
Slovakia	100.0	93.2	68.5	73.3	70.8

Source: Elisabeth Lindner, 1995: 24.

Note: The term "compensation cost" according to the definition of the International Labour Office (I.L.O) is composed of the following elements:

- a). direct remuneration, b). payments for time not worked, c). premium, d). bonuses and other types of benefits.

According to the data presented in the Table 16 in the majority of the post-socialist countries, an important decline was registered (e.g. in the Czech Republic, in Slovakia), but in Hungary, only slight decrease in real compensation costs could be observed. This means that the amount of the money available for training within the labour costs is still important. (However, we have to note, that an extremely severe economic austerity package was introduced in Hungary in spring 1995, which probably decreased the financial resources available for training, too.)

Coming back to the lower priority of training, education, it seems to us that not only in the thinking of managers but also in that of the employees, these issues have the lowest priority, too. In an international survey on the employees' attitudes towards company management and trade unions, employees were asked on the priorities of the trade unions' policy in relation with the interest representation of employees. The opinions of employees are presented in the following list:

Question: "Which of the following aspects of the trade union policy should receive priority?" (Please choose the three most important items!)

Answers:

1. Wage increase:	87.8 %
2. Job security:	54.5 %
3. Employment creation:	27.5 %
4. Social Welfare facilities:	17.5 %
5. Methods and amount of work:	16.8 %
6. Education and Training:	15.3 %
7. Influence on management:	8.8 %
8. Working time:	7.5 %
9. Holiday and leave:	7.5 %
10. Participation in management:	6.8 %
11. Work-hazards and disease:	6.6 %
12. New technology policy:	3.2 %
13. Work-environment:	2.3 %
14. Cultural, sport ... activities:	1.9 %
15. Work-organisation:	1.2 %

Source: Denki Rengo Survey, Hungary (1994)

It is clear from the list of answers that education and training as priorities in the trade union policy expressed by the employees is ranked behind the following items: wage increase, job security, employment creation, social welfare facilities and methods/amount of work. *It is necessary to note that for the employees, training and education are representing higher priorities compared to the opinions of employers.*

After this overview of the weight of the training within the labour costs and the opinions of managers and employees on the importance of the training from the point of view of operation of firm, in the next part, we intend to focus our attention on the training and skill formation practice in the Hungarian firms.

4.2. Survey on the Firm-level Training and Skill Formation Practice

4.2.1. Questions and firms investigated

The key questions elaborated for the survey were designed to understand the key features of knowledge creation and utilisation in the firms functioning in the transformation process in Hungary. In relation to that, the following questions dealt with the various dimensions of the skill formation;

- What types of skill formation do exist in the post-socialist firms?
- How can we describe the systematic, comprehensive character of the various types of training schemes in the firms?
- Can ownership (public versus private) create any significant shift in the importance of the firm-level training and skill formation?
- “Knowledge-hiding” as well-known organisational phenomenon in the socialist firm, is still present in the privatised firms, too?
- Are “knowledge or skill-hiding” more important bargaining tools for white-collar or blue-collar groups in the firms?

The above-listed and other related questions were used in a nationwide survey in the first half of 1995 on the training and skill utilisation practice in the Hungarian business organisations. A statistically representative stratified sample was created using the following variables for the stratification of the population of the firms;

- a) Regions, reflecting the inequalities in the economic development of the country;
- b) Legal forms of business organisation: limited liability company, Co. Ltd., state owned firms;
- c) Classification of the economic activities, adopting the Hungarian standard classification came into force in 1994.

The basic population of the firms employing 300 or more employees was composed by 1072 companies, after using the statistical method of stratified random sample we surveyed the sample of 158 firms. Due to some plant closures during sampling design and the field work, finally we

eventually succeeded in surveying 149 firms. (See in detail the sampling design and description of the sample in Annex No.1.)

The majority of the firms (80 %) participating in the survey did change their organisational forms, from state-owned companies into limited liability companies (Co.) and company limiteds (Co. Ltd.) in the last half decade. In spite of this important organisational shift, the share of the state ownership is still rather significant, two-fifths (41.8 %) of the firms surveyed belong into this category. This relatively high share of state-owned firms indicates that in the case of the large firms (firms having more than 300 employees) the process of privatisation has not yet finished. (It is worth noting that at the end of 1995, the state energy sector was so radically privatised, that in this sector the share of the private ownership became higher than in several countries of the European Union.)

The ownership structure of the firms surveyed is represented by the following forms:

1) State owned firms:	41.87 %
2) Foreign owned firms:	13.30 %
3) Co-operatives:	8.40 %
4) National private investors:	14.43 %
5) National institutions:	11.20 %
6) Employee Stock Ownership:	4.12 %
7) Local governments:	5.99 %
8) Other:	0.96 %

4.2.2. Forms, stability and participation in the training

It is extremely difficult to treat the complex nature and effects of the skill formation system (and process) both at national and firm level. For the purpose of the research dealing with firm level skill formation system, we would like to stress - among other characteristics - the following features of the skill formation in the Hungarian firms.

The differences in the level of education (qualification) between members belonging to various job-categories (e.g. technical employees, administrative employees, blue-collar workers) was not narrowed by the

help of further education and training organised by the firms itself (in the forms of "Off the Job-Training, Off-JT and "On the Job Training", OJT). Before presenting the survey data (1995) concerning the main features of the skill formation system in the firm, it is worth mentioning the main characteristics of skill formation in the ex-socialist firms operating in the second half of the 1980's.

The previous research experiences on the comparison of skill formation and manpower use, the following symptoms were found in the socialist firms. (Makó-Novoszáth, 1995.) The importance of the formal schooling is overestimated and the practical knowledge underestimated in the training and career policy of the ex-socialist (or state-owned) firms. Despite the fact that the formal educational system produces an important but a incomplete set of the desirable skill necessary for the smooth operation of the firms operating both in manufacturing and service sectors, as shown by international experiences. In regards to the importance of the OJT, it is worth mentioning that workers and other professional groups have undocumented "tacit skills" and invisible experiences which are accessible mainly in the form of professional co-operation in the labour process. This way the "informal ties" and good-relations with the "workshop community" for the management play a particular role in guaranteeing the smooth functioning of the production system. But the overestimation of formal schooling (Off-JT) and the systematic underestimation of OJT in the training and promotion policy adopted by Hungarian firms have resulted in substantial difficulties for the co-operation between technical (production) employees and managers. Different types of knowledge and work-related experiences, as well as the patterns of social relations developed around them did not homogenise, but rather served to heterogenize the social-ties in the firm's society. For instance, in solving their daily conflicts in the shop-floor both professional-occupational groups, the blue-collar workers and engineers, followed quite different approaches or methods to solve them. (E.g. engineers preferred more hierarchy in skill use through the centralisation of important decisions from the shop-floor, workers on the other side stressed the importance of the combination of theoretical and practical skills and less separation and hierarchy.)

In relation with the importance of the OJT in solving non-routine problems arising during manufacturing or servicing, it is worth mentioning the lesson drawn from a comparison of the worker's performance in the Japanese, Thai and Malaysian automated cement plants. The experiences of

the survey and observation made in these three countries called attention to the fact that, "The cross-national discrepancy in the proportion of production workers who are capable of handling unusual operations is substantial, particularly when it comes to dealing with problems. Most of the production workers can perform such work in the Japanese case, but no more than 10 - 20 % can do so in the Malaysian and Thai cases" (Koike-Takenori, 1990:22). It is worth noting that in the Hungarian Power Plants 30 to 40 % of the production workers were able to handle non-routine cases compared with the Japanese ones. (Ishikawa-Honma-Makó-Novoszáth-Shiraishi, 1992.)

Unfortunately, in the firm-level training and skill formation survey it was impossible to use research tools (e.g. job observation) which could supply us with qualitative information on the role of different social-occupational groups investigated. In the case of further prolongation of this research, it would be necessary to test - among other methods - the technique of the so-called "job-map" to collect qualitative information on the complexity of experiences of the shop-floor workers. In the cross national comparison mentioned earlier (Japanese cement plants compared to Thai and Malaysian plants) the researchers developed two types of "job-maps" to depict the horizontal experiences (or span of experience) across jobs and the depth of experiences for the unusual (or critical) operations. (Koike-Takenori, 1990: 68-69.):

Table 17:

Job span map developed for the usual operations

	Usual operations			
	Job N°1.	Job N° 2.	Job N° 3.	Job N°4.
Worker A	c	c	c	b
Worker B	c	b	b	a
Worker C	b	b	b	a
...

Note:

a= worker can perform function temporarily when others are absent,

b= worker can perform functions by himself,

c= worker teach fellow workers how to perform functions

Source: Koike-Takenori, 1990: 68.

Table 18:*Job Depth Map*

	Unusual operations			
	Operation N° 1	Operation N° 2	Operation N° 3	Operation ...
Worker A	b	b	c	...
Worker B	b	b	a	...
Worker C	a			...
...				

Source: Koike-Takenori, 1990: 68.

According to the designers of the “job-map”, this tool of investigation could be used - in its updated version - “... to survey the levels of skill in a situation of flexible job deployment ... and the assessment of each worker; the extent of a worker’s job experience should be related to his remuneration or promotion prospects. Without their assessment few workers will make an effort to evaluate their skills.” (Koike-Takenori, 1990: 69.)

In the survey carried out in the middle of 1990’s on the national sample of the Hungarian business organisations, the following dimensions of the firm-level training and skill formation were analysed:

- a) Familiarity, forms and nature of participation in the training;
- b) Functioning and comprehensive character of the performance assessment system (PAS);
- c) Organisational phenomena of the “knowledge hiding”;
- d) Changing governance system and the company level decision making system.

Before evaluating the various dimensions of the training system organised and developed by the firms, introductory questions were used to collect information on the familiarity (popularity) of the training possibilities for the future clients of the training system. According to the opinions of the human resource managers interviewed, both “in-house” and “out-house” forms of the training are more or less well-known among the employees.

Looking at the various level of participation in the forms of “out-house” and “in-house” training, the following tendencies could be identified. In the case of the “out-house” training, almost everybody in the managerial category (98 %) take part in these courses, the second largest group is represented by the administrative employees (74.5 %), followed by the technical employees and the blue-collar workers, having the same participation rate (63.8 %). There is a reverse-type rank (hierarchy) in participation regarding the forms of “in-house” training courses. Blue-collar workers have the highest participation rate (67.4 %), followed by the administrative and technical employees (63.4 % and 50.7 %), finally less than half of the managers are attending the “in-house” training courses.

According to the data collected during the survey, the training courses organised outside the company are the most popular form of the management training, while in the case of the blue-collar workers the “in-house” training courses are more appropriate. In relation with the attractivity of the different training courses, it would be an interesting research task to describe the content of the curriculum of the courses and its relations with the performance assessment in the cases of the “in and out house” training.

The double-pattern of participation in the training (management dominance in “out-house” training and the blue-collar worker dominance of “in-house” training) and skill formation is partly inherited from the past, when the “documented ability” and the “location of document” were more important in the career than the “proved value of the skill”.

From the 1990's, one of the most important “in-house” training program was designed and organised for the blue-collar workers is the training required by the implementation of the International Standard Organisation (ISO) 9002, 9003. Hungarian firms, not having this international quality assurance system, have difficulty selling products on the markets of the developed countries. The ISO 9002 or 9003 accreditation do require from each blue-collar worker a certain level of qualification related to the job. For instance, during preparation of the ISO-type quality assurance system, the firm is obliged to prepare a list of trainees and evaluate the jobs from the point of view of its impact on the quality. Annually, management has to organise a personnel evaluation of workers using the following criteria;

- a) level of qualification;
- b) length of service;
- c) types of training courses.

According to each listed criterion, workers are evaluated on a three-point scale: (1) fully-accepted, (2) limited-acceptance, (3) not-accepted. If worker got the "fully-accepted" evaluation, he or she can keep employment, in the case of "limited-acceptance" he or she has to attend training course to keep the job, but in the case of "not-accepted" worker is laid-off. The increased market competition forced the Hungarian managers to improve quality through the introduction of the international quality assurance system, and these changes have had a positive impact on the importance of the "in-house" training designed for the workers. (To illustrate the importance of the export for Hungarian firms, it is worth mentioning the results of a nation-wide economic survey made in 1995. According to the survey data - 1048 firms participated in the survey - more than half of the managers interviewed said the limited nature of the internal market is the main obstacle of the firm's development. *Heti Világgazdaság*, 1996: 65.)

The stability, obligatory versus voluntary and comprehensive versus selective character are the other important features of the firm training systems. In relation with the stability or regularity of the training programs, in the majority of firms investigated (two-thirds) training courses were not regularly organised. Evaluating training courses according to the various occupational categories, the highest rate of regularity was found in the groups of blue-collar workers (31.4 %) and managers (30.1 %). In the case of the blue-collars, the high-rate of regularity in training could be explained by the obligatory character of the training on safety instructions, and skill requirements of the Quality Assurance System etc.

In the group of managers the nature of training is different, the reasons of the regularity in training could be explained by the necessity of various types of development programs (e.g., team building to create common values and patterns of management), implementation of the new method of management and organisation (e.g. lean-production) or to acquire new types of skill not available during state-socialism (e.g. marketing, cost-control and savings, technical and organisational development). In relation to the training of the top managers in the machine industry sector, it is worth mentioning the type of training used by them since 1990 and the collapse of the state socialist system. (Yamamura, 1996.)

Table 19:*Type of management training for top managers (1996)*

Host country of the training	Rate of participation (%)
1. USA	2.9
2. Germany	5.7
3. Other OECD country	11.4
4. Hungary	60.0
5. Other country	5.0
He/she did not participate any training	14.3

The overwhelming majority of top managers did participate in training courses organised in Hungary. But a significant group of them (20 %) attended management courses offered by the OECD countries. Among the European OECD countries, Germany plays a leading role.

Evaluating the obligatory or non-obligatory character of the training courses, the obligatory character is dominant in all job-categories.

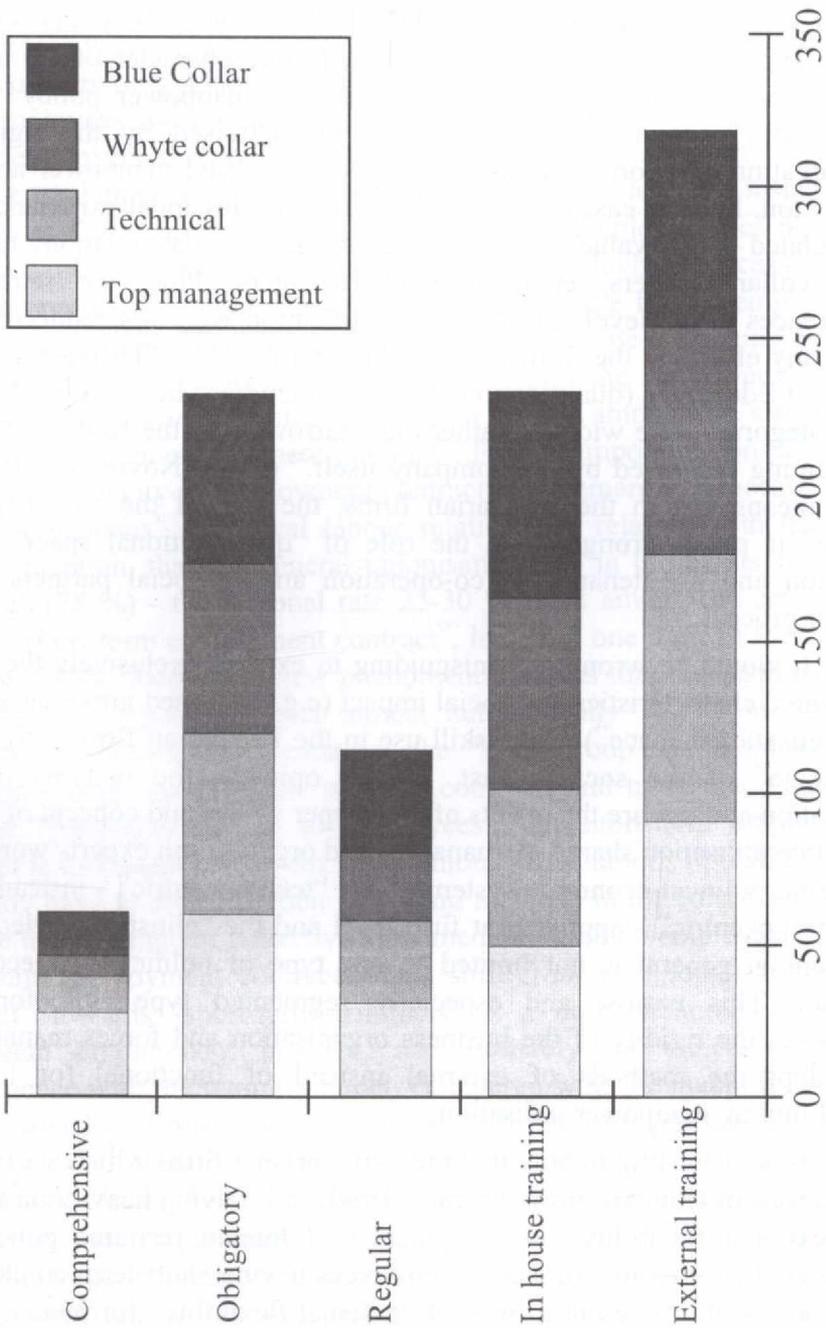
The "comprehensive" versus "selective" character of the training courses speaks to whether everybody (that is comprehensive) or only selected members of various social-occupational groups in the organisation could attend the courses. The selective character of participation in training was identified evaluating the training practice of the firms surveyed. The rates of comprehensive or non-selectivity of the training are the following: the group of managers represents the highest level (28.1 %); followed by the technicians (15.1 %); and technical employees (12.3 %). The highest degree of selectivity in training participation occurred in the job-category of administrative employees, where only 7.9 % of them said that there is no selectivity in the training participation. In connection with the comprehensive versus selective character of the company training, two extreme models could be distinguished. The first one is the so-called "selective skill (knowledge) use model", where the key-job holders - mainly managers and professionals - are the main clients of the training and re-training. People belonging to this category have been recently labeled as "symbolic workers" and "strategic brokers". In societies where this model is functioning, the large segment of workforce, represented by the so-called "routine-workers" both in manufacturing and service sectors are excluded from the training and re-retraining. (Reich, 1992:81-109.) The other

extreme model of skill utilisation stresses the comprehensive or non-selective character of participation in training and skill formation. According to this approach of human resource utilisation, "... by its nature, economic efficiency rests not on management ability, but on our capacity to enlist the support of larger and larger masses for small but ceaseless changes; ... it would be advisable to shift emphasis to the expertise of the masses, in readiness even for some neglect of efforts to build up management elite." (Koike, 1991:70.)

The figure on the following page summarizes the above described features of the training system in the firms surveyed:

Figure: 1

Main characteristics of training system in the firms surveyed



These characteristics and possible impacts of the firm-level skill formation system are supported by the results of an international comparative survey - carried out in the Czech, Hungarian and Japanese power stations - in the middle of 1980's. In this survey, the patterns of skill and manpower use reflected the highly selective character of the training system in the Hungarian firms. The skill and manpower policy in the surveyed Hungarian power-plants was characterised by the rigid job-demarcation and correspondingly an over specialised manpower and skill utilisation. In most cases, the shared common professional experiences and the related social values were missing in the everyday relations between blue collar workers, engineers and managers. Plus, the remarkable differences in the levels of official qualification were not reduced by the company efforts in the forms of "Off-JT" or of "OJT". "Differences in the level of education (qualification) between members belonging to various job categories were widened rather than narrowed by the further education or training organised by the company itself." (Makó-Novoszáth, 1995:24) This means that in the Hungarian firms, the role of the "organisational space" is much stronger than the role of "qualificational space" in the creation and maintenance of co-operation among social partners of the labour process.

It would be wrong and misleading to explain exclusively the earlier presented characteristics and social impact (e.g. increased importance of the "organisational space") of the skill use in the Hungarian firms only by the "heritage" of the socialist-past. In our opinion, the patterns of skill formation and use are the results of the deeper values and concept of human resource utilisation shared by managers and organisation experts working in different political-economic systems. This "techno-centric" - instead of the "anthropocentric" - approach at firm level and the "elitist" knowledge use concept in general is not limited to one type of political and economic system. This narrow and especially segmented type skill formation increases the rigidity of the business organisation and forces management to adopt the methods of external instead of functional (or internal) flexibility in manpower utilisation.

It is interesting to note that the multinational firms which started their operations in Hungary from the early 1990s, are relying heavily on the tool of "external flexibility" in the practice of human resource policy. For instance, the growing number of employees having short-term employment contract would represent a form of "external flexibility" (or labour market flexibility). According to the earlier mentioned Denki Rengo Survey

(Makó-Novoszách-Veréb, 1996) in 1984, the share of "employment for a definite period of time" represented less than 1 % of the all-types of employment contracts in the firms investigated. Ten years later, its share reached 7 %. These forms of working contract have been growing rapidly in the recent years. For example, their share among the employees having only two-years of service represents 78.6 %, and only 6.8 % of the newly hired employees succeeded in securing a long-term employment contract. For the employers, the obvious advantages of this kind of working contract could be explained with its extremely "flexible character", for instance in the case of the expired employment contract, the employer does not give severance pay and could hire new employees which is necessary for changing production requirements. Another advantage for the employer is its cost-saving effect. For example, the participation rate in training courses in the firms surveyed represents 43.6 % among the employees having permanent employment contract, and only 20 % among the employees having "short-term employment contract". Further important consequences of the heterogeneity of employment contract is the emerging "mosaic-type" or "heterogeneous" firm-level labour relations. In relation with that, we have to mention, that the general unionisation rate in the plants surveyed was high (75 %) - the national rate 25-30 % - but among the employees having "short-term employment contract", less than one third of them were trade union members. This new phenomenon means that the distinction in the type of working contract almost automatically results in unequal positions in interest representation: the "core group" of employees is characterised by having stable working contracts and trade union support, but the "peripheral" group of employees with short-term employment contract is less supported by the trade union. Trade unions operating in the company have to diversify their recruiting methods in the future and try to enlarge the coverage of collective agreements to include employees having short-term employment contracts. This shift from the "long-term labour contract" towards "short-term contracts" is a new phenomenon in the Hungarian employment practice, and probably an indicator of the convergence with the western-model. Compared with the manpower use in the ex-socialist firms, the multinational firms are placing a greater importance on labour market (or external) flexibility than functional (internal) flexibility. Using this employment policy, the multinational firms are paying certain premium - about 20-25 % more - over the average domestic wage to attract employees in the local labour market. There is nothing surprising in this wage policy, because multinational (or in general foreign) firms operating in Hungary have a very significant wage-cost

advantage compared to their mother company's units. For instance, the well known Swiss-Swedish multinational, "...ABB pays its German worker DM 24.30/hour, the Polish or Czech ABB worker earns less than DM 2/hour; while the German employee works 1433 hours/year, the Czech works 1910. When one adds all wage and benefit-related costs, the differences are even greater". (Ellingstad, 1996:10), we may add that the situation in the Hungarian case is very similar.

4.2.3. Evaluation of training and performance assessment in the firm

Motivating members of business organisations to participate in training systems and to use their skills is one of the most important elements of process-oriented human resource policy. In regards to the role of performance assessment and monetary reward system in the skill (or knowledge) accumulation system, we fully share the following opinion: "...with monetary compensation, it is critical that the merit rating system recognise and give high preference to those who can handle the unusual operations Japanese workshops unanimously emphasise this element in merit assessment ..." (Koike-Takenori, 1990:26)

In the companies investigated, special attention was paid to the relation between participation in the training and compensation (in the forms of wage-increase, premium or promotion). According to the data collected, participation in the various forms of training in itself is not rewarded by the company. Evaluating the effects of participation in training on wage increase, premium and promotion a 5-point scale was used (1 = no influence, 5 = strong influence). In the case of promotion and wage increase, the "3" - or the middle point of the scale - was the median, but in the case of premium median was "1". For instance, in relation with premium for participation in training, one human resource manager during the interview noticed: "Why should we - the company - have to pay a premium for the participation in training and for acquiring new skill by employees? ... The 'profit of learning' belongs to the individual employees. Having better skills, the employee could stabilise or even improve his position within the company or perform his task easier."

The effect of participation in training in the case of 'promotion' and 'wage-increase' is more visible compared to the premium, but still rather weak. See the next Table.

Table 20:

*Participation in the training and its effect
(Influence evaluated on a 5-point scale)*

Influence of training on the following factors	Intensity of influence	
	Average	Median
(1) Promotion:	2.5	3
(2) Wage-increase:	2.6	3
(3) Premium:	1.9	1

Note: The data presented in the table, cover both "in-house" and "out-house" training organised by the company surveyed.

The rather weak direct effect of participation in training on wage increase, promotion etc. is acceptable if their effects on performance are evaluated and rewarded by the company. The Performance Assessment System (PAS) functioning in the firms investigated could inform us not only of the evaluation of "proved effects of participation in training" (e.g. on performance) but also of the systematic or spontaneous character of the human resource policy in the firms concerned.

Describing the functioning of the PAS, the key dimension investigated was its regular (comprehensive) or irregular (selective) nature in relation with various occupational groups. The basic feature of the PAS was its very selective nature, which is similar to the pattern discovered during the description of the training system in the firms. The intensity of regular versus irregular character of the PAS was measured again on 5-points scale (5 = regular, 1= never). In the firms investigated, the highest level of regularity of PAS was found in the groups of managers and blue-collar workers. In the first group, every second manager's performance is regularly evaluated, in the group of the blue-collar workers, two-fifths of them (39.4 %) are subject to the performance assessment. The groups of managers and blue-collar workers are followed by the groups of technical and administrative employees concerning the regular or systematic character of the PAS.

Table 21:

*Regularity of the Performance Assessment System (PAS)
(measured on 5-point scale)*

Job categories	Regularity of PAS	
	Average value	Median
Managers	3.69	4.5
Technical employee	3.35	3.0
Administrative employee	2.66	2.0
Blue-collar worker	3.51	4.0

How can we explain the hierarchy in the regularity of PAS? Why are blue-collar workers and not administrative employees following managers from the point of view of regularity of PAS? In the last half decade, the radical changes in the ownership and organisational structure of the Hungarian economy, have produced important changes in the composition of management. The significant changes and the increased competition on the labour market of managers have resulted in diffusion of the various PAS. In the case of the blue-collar workers, the following two phenomena may explain the relatively high level of regularity of PAS. Firstly, the regained popularity of the piece-rate (or performance-centered) wage systems, which require performance evaluation and assessment. Secondly, the growing importance of internationally accepted quality assurance systems (e.g. ISO) also require systematic (annual) evaluation of the skill level of workers concerned. The PAS is less popular among the administrative employees. In regards to that, it is necessary to note that in the firms participating in the survey, the management was not interested to use or implement any kind of performance evaluation system designed for the administrative employees; the lowest rate of the PAS was registered in this job category. This situation illustrates well that the performance assessment and evaluation are relatively developed and use in the supervisory work or production related jobs (e.g. technical employees) and much less elaborated and used in the case of office-related jobs.

4.2.4. Transfer and hiding of knowledge in the organisation

There is a great variety of knowledge classifications, in relation to knowledge and skill transfer, the classification of Hayek seemed useful to us. (Koike-Takenori, 1990.) Hayek distinguishes two types of human knowledge, one type is general in its nature, the other type is particular in character. The general knowledge is general, rule-based, and formalised and is widely known as scientific knowledge. The particular type of knowledge is unorganised, unformalized and embedded in a social-fabric of the organisation and changing in time. Nowadays the scientific or general knowledge is highly evaluated but "... with respect to coping with change in economic activities, the second type of knowledge dominates as the really substantial element in economic organisation."(Koike-Takenori, 1990:48.) Knowledge transfer in the turbulent market conditions facing post-socialist firms, solving problems related to the transfer of the particular (or second type) of knowledge or knowledge transfer has a strong influence on the adaptive capacity (or organisational flexibility) of the firms. In connection with the transfer of the particular knowledge, we intend to focus our attention to the phenomena of knowledge sharing versus hiding in the firms surveyed. In relation with the knowledge hiding, it is useful to distinguish the following two dimensions of knowledge hiding: the first is its individual-psychological nature, the second is the product of the social-organisational relations of the firms. During the survey dealing with the firm-level training and skill formation process, it was impossible to distinguish these two dimensions of the knowledge hiding, but the main concern was to understand the social and organisational factors responsible for this phenomenon in the business organisations.

Among the interviewees, almost every second human resource manager (46.4 %) noticed that he or she already has met the phenomenon of knowledge hiding in his or her company. In connection with the sources of knowledge hiding, the most frequently mentioned motifs were the following:

- 1: Fear from the job loss or from the weakening of position in the firm;
- 2: Effect of the past-heritage of the secrecy reflex in the organisation, due to the over-centralised decision making system,
- 3: In the case of the joint-venture, the unclear-requirements create an atmosphere of suspicion which helps to develop the knowledge hiding to strengthen position of the organisation member concerned.

Human resource managers who denied the practice of knowledge hiding in firms often explained it with the role of the "very detailed and sophisticated working manual." The frequency of this practice - evaluating on a 5-points scale - is varying according to different job-categories. The knowledge-hiding is more frequent in the groups of managers and technical employees (2.42 - 2.57) in comparison with the groups of administrative employees and blue-collar workers (2.07 - 2.09). To create and maintain flexible and adaptive organisations in a turbulent economic and political environment, it is crucial to eliminate or diminish this phenomenon. Fortunately, we are in a position to compare data collected from the Hungarian survey with the results of a survey made at the "Maruti Suzuki" plant in India on the knowledge-hiding phenomenon. (Kasahara, 1995:15-16.)

The factors playing roles in eliminating knowledge hiding are listed below:

- A:** Stable employment system;
- B:** Wage system based on seniority;
- C:** A promotion system based on seniority;
- D:** The introduction of job-rotation;
- E:** Emphasis and sharing of management ideas and goals;
- F:** Flexible employment system;
- G:** Group decision making system;
- H:** A group responsibility system;
- I:** Independent labour union;
- J:** A high level welfare (e.g. housing, sport facilities);
- K:** Emphasis of the principle of equality;
- L:** Introduction of Quality Circle activity.

In the Hungarian firms surveyed, the most influential factors to eliminate knowledge hiding in the organisation are the following: a) stable employment system, b) emphasis and sharing of management ideas and goals, c) flexible employment system. The other research used mainly qualitative data (un-structured interviews) to describe managerial learning process in the post-socialist firms, stressed the importance of 'sharing managerial ideas and goals'. In their absence, the pattern of 'knowledge hiding' and 'wait and see' attitudes are developing within the management. (Simon-Davies, 1996: 175). The emphasis on the principle of equality, independent trade unions and a high-level of welfare are less

important factors to overcome this organisational symptom. In the case of the "Maruti-Suzuki" plant in India, the most important factors eliminating knowledge hiding are very different comparing to the practice of the Hungarian firms in the machine industry. The introduction of job-rotation, group responsibility and group decision making are the most important factors to fight against the phenomena of knowledge-hiding in the organisation. Less important factors helping to eliminate knowledge hiding in the Indian plant are the following: a) introduction of Quality Circle activities, b) emphasis and sharing management ideas and goals, c) high level of social-welfare.

4.2.5. Changes in ownership and in the decision making system

After the Second World War, a particular system of economic, political and ideological monopoly was introduced in the ex-socialist countries of Central and Eastern Europe. Economic monopoly was based first of all on the almost full nationalisation (ironically called 'socialisation') of private and community ownership in the industrial, service and agricultural sectors of the Hungarian economy. To illustrate the extent of nationalisation, it is worth noting that before the Second World War only 10 % of the industrial assets were state owned. The situation in the other former socialist countries was similar.

Table 22:

The percentage of state or public ownership in selected countries

Czecho-Slovakia	97.0 %
G.D.R.	96.5 %
USSR	96.0 %
China	73.6 %
Hungary	65.2 %
France	16.5 %
Italy	14.0 %
F.R.G.	10.7 %
Spain	4.1 %
U.S.A.	1.3 %

Note: The share of the state and public ownership in production in different years. (in) Richet, X. (1992): Restructurations industrielles et transformation économiques en Europe Centrale et Orientale, Association Internationale des Économistes de Langue Française, Tunis, 21-23, Mai

(The nationalisation of private ownership touched not only the industrial and service sectors but also agriculture. As a result of the forced campaigns of collectivisation (in the first half of the 1950's and at the end of the 1950's) and organisational concentration in this sector the majority of agriculture co-operatives and the state farm's activities embraced more than one village. The concentration of economic power in the hand of the co-operative presidents (whose nickname today is 'green baron') produced the following social impact: the key political actors in the Hungarian villages were not the local government presidents or local party secretaries but the presidents of the agricultural co-operatives.)

The economic monopoly was based not only on the dominance of the state ownership and on the well-known centralised planning but also on the extremely concentrated organisational structure and decision making of the economy. The following table illustrates the degree of organisational centralisation in the Hungarian economy compared to a sample of the capitalist firms in the manufacturing sector.

Table 23:*Size distribution of firms in manufacturing sector*

Indicators	Hungary	Sample of capitalist firms
Average no. of employees per firm:	186(x)	80
Percentage distribution of employees by size categories:		
10 - 100 persons:	14 %	35 %
101 - 500 persons:	26 %	33 %
501 - 1000 persons:	19 %	13.5
more than 1000 persons:	41 %	19 %

Note: The figures refer to average of various years in the 1970's. The capitalist economies sampled are Austria, Belgium, France, Italy, Japan and Sweden. (in) Kornai, J.(1989): The Hungarian Reform Process, (in): Nee, V.-Stark, D.(eds.)(1989): Remaking the Economic Institutions of Socialism: China and Eastern Europe, Stanford: University of Stanford Press, p.47.

(Note: In the ex-USSR, the average number of employees per firm, according to the survey covered 47 000 industrial firms was over 800 persons.)

The briefly presented structural components of the economic monopoly with the attempt to completely replace market regulation by the bureaucratic regulation was completed by the political and ideological monopoly of the Communist Party. This bureaucratic and over-centralised decision-making system was well reflected in their personnel policy of the firms, too. For instance, in the case of the companies having strategic importance (e.g., large employment concentration, military production), the selection and nomination of the general directors had to be approved by the highest decision making organ (Politburo) of the Hungarian Socialist Workers' Party (Communist Party).

Evaluating the changes in the firm-level decision making - through the degree of influence of the members of organisation - in the post-socialist period, one of the most important shift is the articulation of differences between the roles of owners and managers. Measuring the influence of managers and owners on the various types of decisions was used as a tool to describe the re-structuring of the governance process in the firms. To evaluate the level of influence of various social actors (e.g. top-managers, plant-managers, trade-union, works council and owners), the following types of decisions were evaluated:

- A, Strategic investment;
- B, Appointment of top-manager;
- C, Merger of organisation;
- D, Wages;
- E, Profit sharing;
- F, Lay-off of workers;
- G, Working conditions;
- H, Work-organisation of the workshop.

Table 24:

Influence distribution in the firms surveyed (%)

Type of decision	Top manager		Plant-manager		Trade-Union		Works council			Owner
	Min. (1)	Max. (5)	Min. (1)	Max. (5)	Min. (1)	Max. (5)	Min. (1)	Max. (5)	Min. (1)	Max. (5)
Strat-inves	2.1	<u>67.1</u>	26.4	6.4	71.3	1.7	64.2	3.7	4.3	<u>80.1</u>
Appoint. top manag	20.3	<u>56.5</u>	72.9	0.8	66.9	2.5	71.0	0.9	5.3	<u>79.3</u>
Org.merger	15.0	<u>53.4</u>	49.6	1.7	52.2	0.9	48.6	0.9	6.1	<u>74.2</u>
Wages	0.7	<u>71.4</u>	13.0	22.1	20.8	7.2	40.7	4.4	22.7	<u>38.6</u>
Profit sharing	22.1	26.0	76.1	0.9	75.1	5.5	74.8	4.9	5.0	<u>91.5</u>
Lay-off	2.8	<u>74.1</u>	4.4	<u>34.8</u>	23.6	4.9	35.4	3.5	46.1	25.8
Work. -condit.	1.4	<u>70.3</u>	5.0	<u>48.6</u>	28.0	6.1	38.8	5.2	45.6	14.4
Work -organ.	8.8	<u>48.0</u>	5.6	<u>60.3</u>	40.4	3.7	44.6	5.0	66.7	9.3

Note: The influence of the social actors in the firms on the various types of decisions was measured on a 5-points scale, where 1 = weakest influence, 5 = strongest influence.

Looking at the decision concerning 'strategic investment' we found that - as we expected - the owners and top managers have had the strongest influence and the trade unions and works councils had the weakest. It is necessary to mention that in the case of state ownership, the state as an owner had weaker influence on the 'strategic investments' compared to the owners of the firms functioning in the forms of 'limited liability' or 'company limited'.

In relation with the 'appointment of top managers', again owners have the strongest influence, especially in the firms operating in the form of Co. Ltd. The top managers' influence in this question is even weaker than on the 'strategic investments'. Both trade unions and works councils have no say in the selection and nomination of top-managers - but we have to note, that the works council have relatively stronger influence on these issues, compared to the trade unions.

Organisational mergers attract the core attention of the owners, and among top managers only every second has maximum influence on this very important phenomenon in the firm. Trade unions and works council again have no significant influence on the decisions related with the important organisational changes.

The above presented type of influence is different in the case of the 'wage' issue, in this case the top managers and plant-managers are the key players in the firm-level decision making. It is interesting to note, that in the still state-owned firms, the plant-managers and trade-unions have stronger influence on the wages in comparison with the 'limited liability' and 'company limited'.

'Profit-sharing' belongs exclusively in the influence sphere of the owners and even top-managers have very limited influence on this topic. Only every fourth of them (26.0 %) have strong say on decisions dealing with profit sharing compared to the owners, where the rate of answers expressing strong influence was 91.5 %. But in the state owned companies the influence of top-managers on the profit-sharing is stronger compared to the owner's.

In the field of 'lay-off workers', the strong influence of top-managers (74.1 %) is followed by the significant role of the plant-managers (34.8 %), but the owners are not really interested in intervening in this problem. Trade unions and Works councils functioning in the firms surveyed have much weaker influence compared to the plant-managers. In this respect we could not notice differences in the distribution of influences according to the legal-status of the firms investigated (Co. Ltd., Co., state owned). (To

illustrate the weak presence of the trade unions in the firms in Hungary, it is worth mentioning the results of the latest survey made by the "Labour Centers". 7600 firms were surveyed and in 10 % of the firms, the management could not sign Collective Agreement because there was no trade union organisation in the firm. *Népszabadság*, 1996:1)

Another earlier mentioned representative survey carried out in the Hungarian machine industry (Yamamura, Hokkaido Project, 1996.) found trade union role evaluated by senior managers is largely irrelevant. For example, on questions over improvement in working conditions, dismissal of workers and privatization, over 50 % of all respondents replied that trade unions at their companies have absolutely no influence whatsoever. The same survey revealed that labour related problems of any kind are hardly a factor, and the only labour-related concern expressed was over the lack of skilled employees.

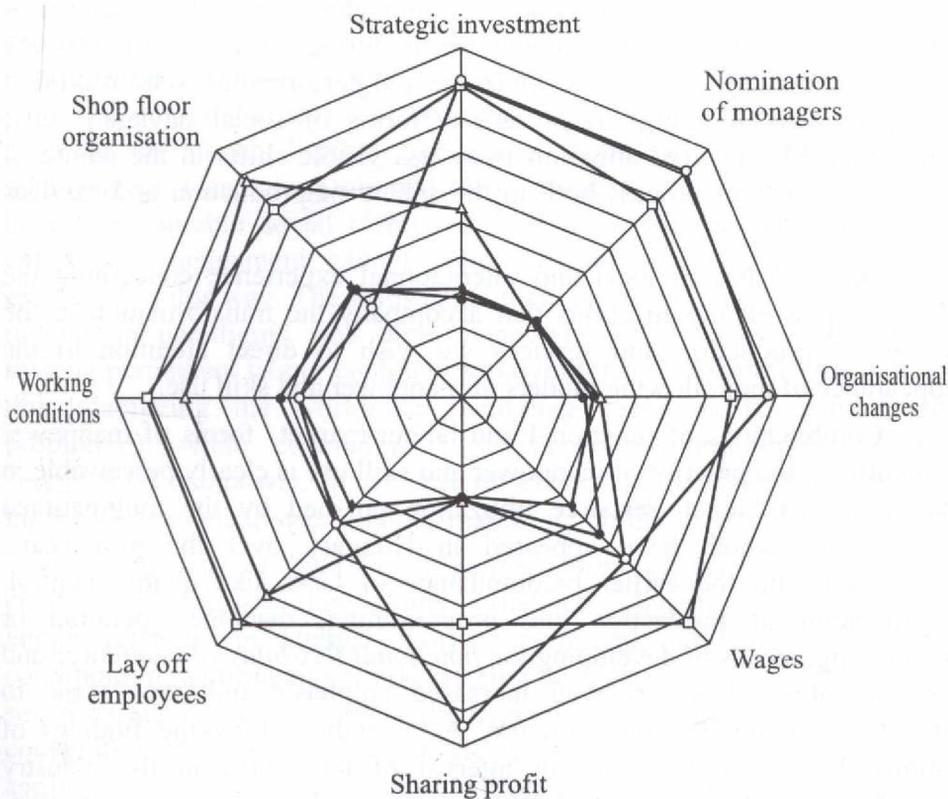
Shaping 'working-conditions' belongs to the influence sphere of the top-manager (70.3 %) and plant-management (48.6 %) and the owners of the firms do not deal with those problems. The influence of trade union and Works council is much weaker, compared even with the plant-managers. One noticeable exception: in the state-owned firms, the trade union influence is stronger than the average.

The pattern of influence is very different from the above presented ones in the case of 'work-organisation at shop-floor level'. In this case the plant managers have the strongest influence (60.3 %), followed by top managers (48.0%) in controlling the labour process. Among all types of decisions, the owners of the firms investigated are less interested in controlling the work-organisation of the shop-floor. But in the case of firms operating in the legal-form of 'company -limited', owners have stronger than average influence on the work-organisation in the work-shop. (See the next Figure on the influence distribution related to the decision making system in the firms surveyed.)

Figure 2:

Influence of social actors on the decisions in the firms surveyed

- Top management
- △— Plant management
- Trade Unions
- ◆— Works Council
- Owners



Summary of the main results

Experience concerning changes in manpower and skill use in the world of economic organizations points to several new approaches to and practical initiatives for work organization and management to which both the social actors and researchers of the economy paid relatively little attention during the last five years in the post-socialist countries of CEE. The economic-financial, political and social effects of privatization (quick enrichment, unjustifiably wide income differentials unrelated to actual performance, emerging new or "re-newed" political and economic elit, etc.), just as its other clearly visible and perceptible unfavourable social consequences attending economic and political restructuring (marked discrepancy between extremely wide scales of income and performance, stabilization of unemployment at a high rate, various forms of social deviancy, etc.) understandably diverted attention from less visible shifts in the nature of managerial labour process both in the sphere of production and services (Szelényi, 1995:19).

On the basis of local and international experience concerning the changes in work organizations that accompany the transformation in the sphere of production and services we wish to direct attention to the appearance of the following models of manpower and skill use.

Combinations of functional and labour-market forms of manpower flexibility in the practice of manpower and skill use is clearly perceivable in the policy of human resource utilization pursued by the multinational corporations which have appeared in Hungary over the past years. Compared with the earlier predominance of tasks like quality control, organization of production and programming, machine operation or assembling, means of developing the *functional flexibility of manpower* and job enrichment have received increased emphasis and have come to prevalence within the job structure. As is indicated by the findings of empirical research spanning an interval of ten years, in the industry manufacturing electronic and electric equipment, this is more characteristic, for the time being, of the tasks of managers directly controlling production or of technical employees, although the trend can also be observed among

workers. The described methods of increasing manpower flexibility often result in an increase in workload. From the viewpoint of the activity of workers' representative organizations this points to the need for greater attention to be paid, in the process of performance and wage bargaining, to shifts in the work organization which bring considerable influence to bear on workers' labour market positions (and, through them, on their interests) in both the short and (mainly) long term. The shifts call for replacement of the distribution-centred trade union strategy by an integrative trade union strategy assuming responsibility for the enterprise's economic performance as well.

Only a few years have passed since methods of increasing *labour-market flexibility* like "labour contracts for a limited period" appeared, together with the well-known methods of increasing functional flexibility as indicated above. Their application accelerated the process of differentiation in labour contracts. This type of labour contract, first used in the labour market practice of the multinational firms in Hungary is supposed to play a growing role in general enterprise practice. In the short term "labour contracts for a limited period" will yield significant financial and social gains (saving in the costs of training, no severance pay on expiry of contract, no labour disputes because of dismissal, etc.) for enterprise management. Generating minimal commitment to the enterprise, they will have unfavourable social effects at long term, for in critical situations enterprise management cannot count on initiatives by the workforce employed in this way. The firms using them represent types A and B of the production paradigms, and their manpower policy is characterized by making permanent labour contracts with workers in a "central" position and thus stabilizing the workforce (including prospects of training and promotion), while concluding contracts for a limited period with "peripheral" manpower, in which case enterprise management attaches a higher value to manpower's labour-market flexibility than to its loyalty.

The pattern of *"mini"-cooperation (cooperativism)*, which may be created on the basis of dual loyalty, a distinctive feature of enterprise-level labour relations in Hungary, offers favourable organizational-cultural conditions for introducing work systems of a new type. For instance, the social partners of the enterprise (management and trade union), preferring cooperation to confrontation, can create favourable preconditions for the application of leading methods of work organization and management (e.g., quality circles, team-work, the most varied forms of autonomous groups of

workers) which rely on workers' increased participation and their commitment to enterprise goals.

In the companies participating in the survey on training and skill formation, the 'external training programs' ("out-house" training) are dominant, but in the case of the blue-collar workers and administrative employees, the "in-house training" has the same importance. The company's training system lacks 'regular' character as they are selective. The key or dominant pattern of training system at the Hungarian firms is its 'obligatory' and 'selective' nature. The latter mentioned feature of the training means that the firms surveyed are using incentives for training only in to fit better the employees to the job-requirements (e.g. international quality assurance systems).

In the great majority of the companies, almost all managers and technical employees are *supported by the firm* in participating in external training courses, this is true also for the administrative employees (75 %) and for the blue-collar workers (66 %). The "in-house" training is more important for the *administrative employees* (63 %) and for the *blue-collar workers* (68 %), and relatively less important for managers and technical employees - for the latter mentioned job-category, only every second firm supports the participation in "in-house" training.

Looking at *branches and sectors*, it is possible to identify significant differences related to the "in-house" and "out-house" (external) training practice. For example, in the following branches, the participation of the blue-collar workers and administrative employees participating in the "out-house" training have no company support:

- agricultural and food processing companies;
- textile industry;
- chemical industry;
- machine industry;
- trade and catering industry.

It is necessary to note that the above listed branches even managers and technical employees have weaker than average support to participate in external training courses. In the case of the wood-processing industry, the support of management training is stronger than average, but the support of technical employees and other rank-and-file employees are lower than the average. The participation "in-house" training programs for the rank-and-file employees has the weakest company support in the following industrial branches:

- agriculture and food processing industry;
- textile industry;
- pulp/paper and printing industry;
- electric and electronic industry;
- catering industry.

For *managers and technical employees*, the external training programs are more important compared to the programs offered in the form of “in-house” training. In the case of the administrative employees and blue-collar workers, both the “out-house” and “in-house” programs have similar importance.

During the survey another important aspect of training was evaluated, namely the degree of ‘popularity’ (or level of information) on the various training programs organised or supervised by the firms investigated. In every second firm, were well-known but in the case of 40 % of the companies, the training programs were only “more or less known”, and in 10 % of them, the training possibilities were not known for the members of the organisation.

Participation in the training programs has some degree of *influence on the promotions and wage increases* - in function to the character and type of the training - but has no effect on premiums.

In every second company participating in the survey, the phenomenon of the so-called “*skill and knowledge hiding*” was discovered. It is necessary to mention that “knowledge hiding” is a ‘*managerial syndrome*’ and less wide-spread in the category of the blue-collar workers. There is a very interesting phenomenon related to skill and knowledge hiding: two thirds of the companies who did not change their organisational-legal structures following 1989 are characterised by the “skill and knowledge hiding”. If we focus our attention on the firms undergoing significant organisational changes, we may identify the following symptom; in the firms functioning as ‘corporations’ this phenomenon is less developed compared to both the state-owned companies obliged to privatise their state-assets and with the firms functioning in the forms of Co. Ltd.

Analysing the factors which would have an influence on the degree of “skill and knowledge hiding”, the following factors should be distinguished;

- 1) Trade union presence or lack thereof;
- 2) Managers working in different positions;
- 3) Level of information on the training programs;
- 4) Firms operating in the most dynamic economic zones or in the less developed regions of the country;
- 5) Types of branches and sectors in which the company operating;
- 6) Size and trend of annual turnover.

The intensity of "skill and knowledge hiding" has no relation with trade union activity; the presence of 'militant' versus 'passive' trade union does not influence the degree of this phenomenon. Managers assigned to different jobs have various opinions on this problem; the human resource managers have more experiences on this issues compared with managers dealing with finance and business related other responsibilities.

There is no link between the level of information on the training program and the rate of "skill and knowledge hiding". But it is interesting to note that this phenomenon is important in the firms where the training program are either well- or less-known.

In relation to the regional location of the firms, it is interesting to note that this organisational problem is more frequent in the firms operating in the Hungarian capital and the central county (Pest) and less often mentioned in the less developed Eastern and the most developed Western parts of the country.

Regarding the branch and sectorial distributions of the firms, the sectors where the "skill and knowledge hiding" is less frequent compared to the average follow:

- agriculture;
- textile industry;
- chemical and machine industry;
- building industry;
- catering industry.

This organisational phenomenon is very frequent in the firms belonging to the below listed branches:

- mining and energy sector;
- electric and electronic industry;
- transport and community service companies.

The size of turnover has strong impact on the degree of “skill and knowledge hiding”; in the firms producing higher annual turnover this phenomenon is more frequent. But, this symptom is less frequent in the firms in which the annual turnover has declined in the last two years, with only one-fifth of firms belonging to this category where this problem was mentioned. In the case of the stagnant companies, “skill and knowledge hiding” is an important problem: in every second firm (58 %) we were informed about the existence of this organisational syndrome.

A half decade following the collapse of the socialist political and economic system, the following issues are in the focus of political debate on the economic role of the state. To what degree is it necessary to control the conditions of operation of the firm by the state? How much profit could be used for the purpose of the state by the tool of taxation? Is it possible to privatise, if yes, to what degree in the energy, telecom, transport sectors, etc.? Today, the majority of the Hungarian firms are privatised and controlled by Hungarian or foreign owners. (9)

An overwhelming majority of the firms survey (89.1 %) are functioning in new organisational forms and the institutions of the market economy are well established in Hungary. But due to the dispersion of the former state ownership, even today, the state still has the largest ownership share in the country. The sample of firms investigated (n=149) is represented by the following ownership structure;

Type of ownership	%
1. State:	42.0
2. Private (national + foreign):	38.0
3. Local government:	6.0
4. Co-operatives:	8.0
5. Employee Stock Ownership (ESOP):	4.0
No answer:	2.0
Total:	100.0

In relation to the changes in the ownership and legal form of the firms, it is necessary to mention the development of the more-balanced division of labour between various level of management and owners. For

example, in the case of the various types of decisions (e.g. strategic investment, nomination of top-managers, merger of organisation, wages, profit-sharing, lay-off of workers, working conditions, work organisation of the shop-floor), the roles of owners, top-managers and plant-management are differentiated according to the type of decisions. The influence of the owners is rather strong on the following issues: strategic investments, selection of top managers, organisational merger and profit sharing. But, owners have minimum influence on decisions related to the plant or shop-floor level organisation, working conditions and lay-off of employees. Top managers have the strongest influence on almost all kinds of decisions, especially on the following topics: investments, lay-off of employees, wages and working conditions. They have minimum influence on the questions related to the division of profit and plant-level work organisation. Plant managers, have strong role in solving problems related to the plant-level work-organisation, working conditions, wages and lay-off of employees.

Trade unions have only a modest influence on wages, working conditions and employees lay-offs. Looking at the decision making situation in the firms surveyed, it is necessary to note that the trade union's partner is the plant-manager, and both social partners have strong influence on wages, working conditions and lay-offs. But trade unions have no influence on the decisions belonging to the authority of top-managers and owners. (Or more precisely, the trade union influence on top-managers is not direct but rather transmitted by the collective agreement and supported by the Labour Code.) Another interesting result is that the trade union influence on wage and salary issues is stronger in the state owned firms compared to the firms operating in the forms of 'corporation' or 'company with limited responsibility'.

In the context of Hungarian labour relations, it is necessary to pay special attention to another institution of labour relations, namely to the role of Works Council. This institution is a tool of employee participation, in spite of the fact that the majority of their members belonging to the trade unions or even they are trade union officials. Works Councils have stronger influence on management in state-owned firms under the process of re-organisation (privatisation) compared to the firms functioning as Co. or Co.Ltd. (We have to stress again, that the influence of the owners is stronger in the firms having legal status of Co. Ltd. and Co., compared to the state owned firms.)

In the case of the employee lay-offs, both trade unions and Works Councils have weaker influence on decisions in the firms operating in the forms of Co. Ltd., than state owned firms under the process of privatisation. In the field of re-organisation of the shop-floor or plant, both trade unions and Works Councils have minimum influence in the firms having form of Co.Ltd - but stronger influence in the state owned firms.

Summing up the changes related to the influence distribution of the social partners in the firms representing different forms of ownership, the most visible lesson is there is clear and distinctive division of roles between owners and managers. The owners are interested in controlling the strategic elements of the company's power relations and in delegating other types of decision to the various levels of management. These experiences on the changing influence structure in the firms surveyed question the wildly accepted view among the sociologists of the "stronger managerial class" compared to the "class of owners" in the post-socialist countries.

Notes

1. In our analysis we have drawn on the following empirical research results:

a) survey through questionnaire, made under OTKA sponsorship (registration number 3140), of "socio-cultural and economic aspects of the technics-work relationship" at "TV Ltd." of Videoton Holding, Inc.; "DWA Ltd.", "Steel-Works Ltd.", "Transport Ltd." of Dunaferr, Inc.; and plants of Tisza Thermal Plant (1993);

b) microeconomic survey, made under the EU-supported project of EC/ACE, of shifts in enterprise decision-making patterns at local clothing firms (Zako, Inc., Styl, Inc.) (1992-1994);

c) survey through questionnaire, made under the research programme on "Manpower and skill use in the post-socialist firms", of the forms and role of training at enterprises, using a nationwide sample of Hungarian economic organizations (142 enterprises) (1995);

d) survey, made under the EU-supported project "Corporate culture in Transition to the Market Economy" (In the Case of Joint Ventures in Hungary, Poland and Bulgaria), of stable and changing elements of corporate culture at one-time state enterprises now in German or Austrian ownership (1993-1996). (Covered by the survey carried out in Hungary were Siemens, Inc., DWA Ltd., Plus Ltd.);

e) international survey of workers' attitudes, covering 11 countries and initiated by Denki Rengo, the Japanese Trade Union Federation of the electronic industry. The first survey was made in 1984 and repeated with the same sample in 1994 to identify the effects produced on workers' attitudes by the changes that had taken place in the meantime. (The Hungarian enterprises participating in the survey were "Light-Source Ltd. of Tungfram, Inc. and "TV Ltd." of Videoton Holding, Inc.)

2. The radical shifts in the size structure of one-time state enterprises are well illustrated by the following Table:

Number of Business Organizations with Legal Status and their Size Structure in Hungary (in number and %)

Year	Less than 11 employees	11-20 employees	21-50 employees	51-300 employees	more than 300 employees	Together
1991	-	36.809	6.169	5.372	2.396	50.746
1992	-	52.823	6.970	5.773	1.937	67.505
1993	39.772	28.447	7.637	6.055	1.624	83.535
1994	57.752	25.784	8.041	6.127	1.340	99.044
1991	-	72.5%	12.1%	10.6%	4.7%	100.0%
1992	-	78.3%	120.2%	8.6%	2.9%	100.0%
1993	47.6%	34.1%	9.2%	7.2%	1.9%	100.0%
1994	58.3	26.0%	8.1%	6.2%	1.4%	100.0%

Source: Teréz Laky (1995): Munkaerőpiaci helyzetjelentés (Labour Market Review), Budapest, Institute of Labour Research, (in Hungarian) p.90.

3. Since the process of privatization got under way in the early 1990s sociologists have been unwelcome "observers" at one-time state enterprises now in private ownership or at newly established firms likewise in private ownership. There are various explanations, the most important factor being the sharpening power struggle accompanying the proprietary and organizational structures in the relationship between different segments of enterprise management and between the new owners and the social partners of enterprises. A significant factor of the reserved stand taken towards sociologists is the fear that rivals might obtain important information about the enterprises surveyed. Finally, another important aspect is the pattern of labour relations characteristics of a given enterprise and the relationship between enterprise management and the trade union. The conflicting nature of such relationships often causes delays in empirical research.

4. At Székesfehérvár, a town declared to be a zone of crisis in 1988-1990, where "TV Ltd." of Videoton Holding, Inc. (often covered by our surveys) is operating, industrial output rose by 45 % in 1994 over the previous year's level and attracted more than 10 % of working capital inflows to Hungary (over 1 billion out of 9 billion US dollars) was invested in the town and its environs. The local mayor, who has resigned recently and has played a large part in creating investment conditions attractive to foreigners, said this of the reflection of change in the public mind: "The means of subsistence are ensured at Székesfehérvár today... However, citizens have lived through the past period with very bad general feelings. It goes harder with them now. A factory worker attending to an assembly line under the previous regime earned more, compared with the prices of the time, than he does today" (Krajczár, Gyula-Tóth, Ákos: Székesfehérvárra bementek a nagyok /The Big Ones Have Made Their Way into Székesfehérvár/, Népszabadság, 20 December 1995, p. 20.
5. These changes are clearly expressed by the emergence of new enterprise management concepts and practices. For instance, personnel management (PM) is replaced by human resource management (HRM). PM consists of a series of activities which not only facilitate employees' agreement with organizational goals, but also secure their accomplishment. PM and HRM represent two models of manpower and skill use. Their components are summed up in the following Table.

Components	PM	HRM
Employer-employee relationships	confrontation	cooperation
Managers' orientations	subsequent and occasional reactions	forward-looking and centred on economic activity
Organizational position	separate activity	integrated function
Client	the management	the management and subordinates
Values	order, equity, consistency	centred on clients and problems
Experts' role	regulation, registration	problem-solving
Role of production control	passive	active
General performance	isolated, section-centred	integration of human resources to accomplish enterprise goals

6. West-European and American experts maintain that the cooperative management system, which is characteristic of Japanese plants employing mass production methods and relies on workers' participation, tends to end the separation of work concept and execution at long term (in perspective). The work organization as applied by Japanese plants points, in the view of the aforementioned experts, beyond the Fordian paradigm of production and represents the post-Fordian model (Nohara, 1993:330).
7. Drága a minőség (Osztrák szemüvegen keresztül) (Quality Is Expensive /Through an Austrian Prism/), Új Magyarország, 21 November 1995, p. 6.
8. A good overview of the shifts in R & D activities and their results at Enterprise B (after the buy-out of Tungram, Inc. by General Electric) is given by the following writings: Zoltán Ötvös (1995): *Világhírű elődök árnyékában (Kutatás és Fejlesztés a Tungramban)* (In the Shadow of World-Famous Predecessors /Research and Development at Tungram/), *Népszabadság*, 28 September, p. 8; Zsuzsa Regős (1995): Csak nálunk fejleszt a GE (Tungram: amerikai tőke, magyar műszaki kultúra és képeségek) (Development Efforts by GE only in

Hungary /Tungsram: American Capital, Hungarian Technical Culture and Skills/), *Népszabadság*, 4 December; Anthony Robinson (1995): *GE and Tungsram: Worthwhile Investment*, *Financial Times*, 21 November, p. IV.

9. Privatization in Central and Eastern Europe

<u>Countries</u>	<u>Share of the private ownership in GDP (%)</u>
Albania	60
Croatia	45
Czech Republic	70
Hungary	60
Latvia	55
Poland	60
Slovakia	60
Belorussia	15
Bulgaria	45
Russia	55

Source: *Ortutai, Gy. (1996) 'Privatizacio a szamok tukreben' (Privatization in numbers)*, *Népszabadság*, 6th June, p. 12.

Appendix No.1.

Sampling Method and the Sample's characteristics (1)

The accuracy of the estimated based on random samples can be improved at will by increasing the sample size. However, the increase of the sample size goes hand in hand with the increase of the expenses associated with the sample survey. The question naturally arises if we are able to decrease the standard error for a fixed sample size. The answer is yes. If we are using a stratified random sample, more precise estimates can be realized for the same sample size. The stratified random sampling requires that the register contain, beside the list of the sampling units, certain auxiliary information as well. The essence of the procedure is the "artificial" improvement of the sample's inner structure. In the case of simple random sampling the law of large numbers guarantees the similarity between the sample and the population. Stratification as an external "intervention" improves the sample's representativeness without violating the principle of the random selection.

To obtain a stratified random sample the population is first divided into relatively homogeneous sub-populations called strata, then a simple random sample is selected from each stratum.

1) How did we implement the stratification and what sort of variables were used?

The first question is justified by the fact, that the distribution of the variable of interest is usually not known. If it were known, there would be no need for the survey. The problem can be solved by selecting the auxiliary variable such that it is correlated with the variable of interest and at the same time the necessary information is available for the variable. Classifying the companies this way, smaller, homogeneous groups of companies are reached.

2) How to divide the fixed sample size among the strata?

The most obvious way to allocate the sampling units to the strata is to make the sample proportion exactly equal to the population proportion. This is called proportional stratification. In other words, proportional stratification provides a self-weighting sample. This way the i -th stratum is proportional with the population's true weight.

For the 1072 companies giving employment to 300 or more workers, the following information were available:

- the exact address of the company
- the classification code of economic activity
- the forms of business organization (i.e. Co. Ltd, Do., Cooperative etc.)

For this reason, the variables used for stratification were: Regions, Forms of Business Organization and the Classification Code of the company's economic activity. Diversity of categories required grouping of the distribution of the respective variables.

The addresses were first classified by counties than by regions (Central-Hungary, North Transdanubia, North Hungary, North and South Plain of Hungary). Because of the small number of sample units in some groups, further classification was necessary to reach the following final regional division: Central Hungary, Transdanubia and East Hungary.

Table No.1.

Regional Division of the Original Sample

Value label	Value	Frequency	Percent	Valid percent	Cum percent
Central Hungary	1.00	356	33.2	33.2	33.2
Transdanubia	2.00	342	31.9	31.9	65.1
East Hungary	4.00	374	34.9	34.9	100.0
Total		1072	100.0	100.0	

According to the Hungarian Standard Industrial Classification of all economic activities coming into effect in 1994, the companies were divided into 52 groups. This meant that the number of occurrences in certain categories was too small. At first, larger groups, divisions were used for classification, but even this turned out to be inadequate and categories had

Table No.3.*Forms or Status of Business Organizations*

Value label	Value	Frequency	Percent	Valid Percent	Cum Percent
Cooperative in transformation	7.00	159	14.8	14.8	14.8
Co. Ltd.	113.0	306	28.5	28.5	32.4
Co. Limited by shares (Co.)	114.0	607	56.6	56.6	100.0
Total	-	1072	100.0	100.0	-

Working with the above mentioned variables with only a few reasonable categories, our starting point was the three dimensional joint distribution of the population.

Table No.4.

Economic branch and Forms (status) of Business Organization in the Center Region

	Coop. in transformation	Co. Ltd.	Companies limited by shares (Co.)	Row Total
Agriculture	1		5	6
Food industry	1	7	18	26
Textile/Garments	2	10	12	24
Wood/Paper/Printing	1	8	9	18
Chemical/Machine industry		15	25	40
Mining/Metallurgy/Energy		3	14	17
Electric/Electronic industry	1	14	22	37
Construction industry	1	8	15	24
Trade	8	13	41	62
Transport/Storage/Post/ Telecommunication	3	4	18	25
Hotclery/Financial/Real estate service	11	16	50	77
Column:	29	98	229	356
Total (%):	8.1	27.5	64.3	100.0

Table No.5.*Economic branch and Forms(status) of Business Organization in Transdanubia*

	Coop. in transformation	Co. Ltd.	Companies limited by shares (Co.)	Row total
Agriculture	10	5	24	39
Food industry	1	8	39	48
Textile/Garments	6	13	17	36
Wood/Paper/Printing		6	10	16
Chemical/Machine industry		17	18	35
Mining/Metallurgy/Energy	9	17	16	42
Electric/Electronic industry	3	16	6	25
Construction industry	1	9	7	17
Trade	21	5	25	51
Transport/Storage/Post/Telecommunication		2	15	17
Hotelery/Financial/Real Estate Services		9	7	16
Column:	51	107	184	342
Total (%):	14.9	31.3	53.8	100.0

Table No.6.

Economic Branch and Form(Status) of Business Organizations in Eastern Hungary

	Coop. in transformatio n	Co. Ltd.	Companies limited by shares (Co.)	Row total
Agriculture	23	1	22	46
Food industry	1	17	48	66
Textile/Garments	9	15	16	40
Wood/Paper/Printing	4	5	9	18
Chemical/Machine industry	5	19	27	51
Mining/Metallurgy/Energy	6	10	22	38
Electric/Electronic industry	1	8	6	15
Construction industry	1	10	6	17
Trade	25	4	15	20
Transport/Storage/Post/ Telecommunication	1	4	15	20
Hotelery/Financial/Real Estate Services	3	8	4	15
Column:	79	101	194	374
Total (%):	21.1	27.0	51.9	100.0

The sample was selected from among the companies found in each cell of the cross-table of the population. The sum of these sampling units forms the sample size itself. This sample will be a good representation of the population both in terms of Region, Form(or status) of Business organization and the Economic branches.

Table No.7.*Sample composition by Regions*

Value label	Value	Frequency	Percent	Valid Percent	Cum Percent
Centrum	1.00	52	32.9	32.9	32.9
Transdanubia	2.00	52	32.3	32.3	65.2
Eastern Hungary	4.00	55	34.8	34.8	100.0
Total		158	100.0	100.0	

Table No.8.*Sample Composition by Economic Branches*

	Value	Frequency	Percent	Valid Percent	Cum Percent
Agriculture	1.00	14	8.9	8.9	8.9
Food industry	4.00	21	13.3	13.3	22.2
Textile/Garments	5.00	15	9.5	9.5	31.6
Wood/Paper/Printing	6.00	7	4.4	4.4	36.1
Chemical/Machine industry	7.00	18	11.4	11.4	47.5
Mining/Metallurgy/Energy	8.00	13	8.2	8.2	55.7
Electric/Electronic industry	9.00	12	7.6	7.6	63.3
Construction industry	11.00	10	6.3	6.3	69.7
Trade	12	23	14.6	14.6	84.2
Transport/Storage/Post/ Telecommunication	14	10	6.3	6.3	90.5
Hotelery/Financial/Real Estate Services	16	15	9.5	9.5	100.0
Total (%):		158	100.0	100.0	

Table No.9.*Sample Composition by Form(Status) of Business Organization*

Value label	Value	Frequency	Percent	Valid Percent	Cum Percent
Cooperative in transformation	7.00	23	14.6	14.6	14.6
Co. Ltd.	113.00	46	29.1	29.1	43.7
Companies limited by shares (Co.)	114.00	89	56.3	56.3	100.0
Total:		158	100.0	100.0	

Table No. 10.*Form(or status) of Business Organizations in the Center Region of Hungary*

	Coop. in transformation	Co. Ltd.	Companies limited by shares (Co.)	Row total
Agriculture			1	1
Food industry		1	3	4
Textile/Garments		2	2	4
Wood/Paper/Printing		1	1	2
Chemical/Machine industry		2	4	6
Mining/Metallurgy/Energy		1	1	2
Electric/Electronic industry	1	2	3	6
Construction industry		1	2	3
Trade	1	2	6	9
Transport/Storage/Post/ Telecommunication		1	3	4
Hotelery/Financial/Real Estate Services	2	2	7	11
Column:	4	15	33	52
Total (%):	7.7	28.8	63.5	100.

Table No.11.*Forms(or status) of Business Organizations in Transdanubia*

	Coop. in transformation	Co. Ltd.	Companies limited by shares (Co.)	Row total
Agriculture	2	1	4	7
Food industry		1	6	7
Textile/Garments	1	2	2	5
Wood/Paper/Printing		1	2	3
Chemical/Machine industry		2	3	5
Mining/Metallurgy/Energy	2	2	2	6
Electric/Electronic industry		2	1	3
Construction industry		2	1	3
Trade	3		4	7
Transport/Storage/Post/ Telecommunication		1	2	3
Hotelery/Financial/Real Estate Services		1	1	2
Column:	8	15	28	51
Total (%):	15.7	29.4	54.9	100.0

Table No.12.*Forms of Business Organizations in Eastern Hungary*

	Coop. in transformation	Co. Ltd.	Companies limited by shares (Co.)	Row total
Agriculture	3		3	6
Food industry		3	7	10
Textile/Garments	1	2	3	6
Wood/Paper/Printing		1	1	2
Chemical/Machine industry		3	4	7
Mining/Metallurgy/Energy		2	3	5
Electric/Electronic industry	1	1	1	3
Construction industry	1	2	1	4
Trade	4		3	7
Transport/Storage/Post/ Telecommunication		1	2	3
Hotelery/Financial/Real Estate Services	1	1		2
Column:	11	16	27	55
Total (%):	20.0	29.1	50.9	100.0

Note No.1. The stratified sample was constructed by Zoltán Szendrő, Assistant professor in Statistics, Department of Sociology, University of Miskolc

Appendix No.2.

Rikkyo University – Tokyo
Communication and Consultation Co. Ltd. – Budapest

QUESTIONNAIRE

Firm Level Skill Formation in the Transformation Process

Budapest
1995. January

A. Background Information of the Enterprise

Case ID Number: _____

Introduction: What is the legal status of your company?

- Limited liability company: _____
- Company limited by share: _____
- State company or co-operative: _____

Regional location of the company?

- Central region: _____
- Transdanubia region: _____
- Eastern Hungary region: _____

To what sector and branch of the national economy does your company belong?

(See the Coding instruction!)

Question No.1.

How much is the value of the assets of property of company based on the book registration? (Please mark the right category!)

1. 0.5 billion Hungarian Forint (HUF)
2. 0.5 - 1.0 billion HUF
3. 1.0 - 3.0 billion HUF
4. 3.0 - 4.0 billion HUF
5. over 4.0 billion HUF

Question No.2.

Please indicate the type of ownership of your company (in %)

- A - State
- B - Co-operative
- C - Local government
- D - Individual private entrepreneur from Hungary
- E - Private company (with legal entity) from Hungary
- F - Employees' stock ownership
- G - Others (i.e. foundations, associations etc.)
- H - Foreign

Question No. 3.

In which year was the company created (in its present organisational and legal form)?

Year: _____

Question No.4.

*How did the gross turnover change comparing it with that 3 years before?
(Please circle the right answer!)*

1. Increased
2. Unchanged
3. Decreased

Question no. 5.

Number of employees in the company?

_____ persons

Question No.6.

How do you evaluate the Trade Union activity in your company?
(Please circle the appropriate answer!)

- 0 - Doesn't work
- 1 - Very active
- 2 - Active
- 3 - Moderately active
- 4 - Rather little active
- 5 - Not active at all

B. Firm Level Training System

Question No.7.

Is there any support for employees to take vocational training outside the company?

(Please mark with X the appropriate answer!)

- | | | |
|-----------------------------|-----|----|
| 1. Managers | Yes | No |
| 2. Technicians | Yes | No |
| 3. Administrative employees | Yes | No |
| 4. Blue collar workers | Yes | No |

Question No. 8.

Is there any vocational system for employees in your company (in house training)? (Please indicate with X the appropriate answer!)

- | | | |
|-----------------------------|-----|----|
| 1. Managers | Yes | No |
| 2. Technicians | Yes | No |
| 3. Administrative employees | Yes | No |
| 4. Blue collar workers | Yes | No |

Question No.9.

In your opinion, these training systems (both outside or inside the firm) are well known among the employees?

(Please use a five-point scale for the evaluation!)

- | | |
|----------------|---|
| Yes, to all | 1 |
| | 2 |
| | 3 |
| | 4 |
| Almost unknown | 5 |

Question No.10.

The training systems (both inside or outside in the firm) have "systematic" or "non-systematic" character at your company?

(Please encircle the appropriate answer!)

- | | | |
|-----------------------------|------------|----------------|
| 1. Managers | Systematic | Non-systematic |
| 2. Technicians | Systematic | Non-systematic |
| 3. Administrative employees | Systematic | Non-systematic |
| 4. Blue collar workers | Systematic | Non-systematic |

Question No. 11.

Participation at the training (both inside or outside in the firm) is has "obligatory" or "optional" character? (Please encircle the appropriate answer!)

- | | | |
|-----------------------------|------------|----------|
| 1. Managers | Obligatory | Optional |
| 2. Technicians | Obligatory | Optional |
| 3. Administrative employees | Obligatory | Optional |
| 4. Blue collar workers | Obligatory | Optional |

Question No. 12.

Does your training programs encompass (or concern) the following categories of employees? (Please encircle the appropriate category!)

- | | | |
|-----------------------------|-----------|-----------------|
| 1. Managers | Everybody | Selected groups |
| 2. Technicians | Everybody | Selected groups |
| 3. Administrative employees | Everybody | Selected groups |
| 4. Blue collar workers | Everybody | Selected groups |

Question No. 13.

Successful participation in the training courses, could have influence on the factors listed below? (Please encircle the appropriate level of influence in the case of each factors!)

	Rather weak (1)	(2)	(3)	(4)	Rather strong (5)
Career	1	2	3	4	5
Wage	1	2	3	4	5
Premium	1	2	3	4	5

C. The Performance Assessment System

Question No.14.

Does your company use any "Performance Evaluation System" (PES) in the following groups of the employees? (Please encircle the appropriate level of influence of each factors!)

Groups of employees	Seldom (1)	(2)	(3)	(4)	Often (5)
Managers	1	2	3	4	5
Technicians	1	2	3	4	5
Engineers	1	2	3	4	5
Adm.emplo-yees	1	2	3	4	5
Blue collar workers	1	2	3	4	5

Question No. 15./a.

In your company did you meet with the practice of "knowledge hiding" phenomena?

Yes: -----

No: -----

Question No. 15./b.

If yes, how often did you meet this practice on the part of the below listed employees groups in front (or during working) with younger and less experienced employees? (Please encircle the appropriate number in the following table!)

	Very seldom (1)	(2)	(3)	(4)	Very often (5)
Middle managers	1	2	3	4	5
Supervisors	1	2	3	4	5
Technicians and engineers	1	2	3	4	5
Blue collar workers	1	2	3	4	5
Adm. employees	1	2	3	4	5

Note: During the field-study, we explained to the interviewed the notion and the content of the "knowledge hiding" phenomena in the business organisation.

Question No. 16.

In Your opinion which kind of management policy or methods could reduce the extension of "knowledge hiding" phenomena in business organisation? (Please evaluate with the help of 5 - points scale each factors aimed to eliminate "knowledge hiding" in the organisation, writing the appropriate number into the brackets!)

(Please use the following scale: (1) One of the least important

(5) One of the most important

(Factors for evaluation are listed in the next page!)

- A.- Stable employment system ()
- B. - Seniority-based wage system ()
- C. - Seniority-based promotion system ()
- D. - General use of the “job-rotation” system ()
- E. - Clear company philosophy and mission ()
- F. - Flexible jobs and lack of over-specialisation ()
- G. - Collective decision making system ()
- H. - Collective responsibility system ()
- I. - Independent company trade unions ()
- J. - Generous social welfare system ()
- K. - Egalitarian incentive system ()
- L. - Implementation of Quality Control Circle ()

D. Decision Making System

Question No. 17.

We wish to ask your opinion on the “actual” level of influence of several groups and organisations in different fields of the company's activity. (To evaluate the influence, number (5) means the strongest and number (1) the weakest influence.)

	Top management	Plant management	Trade union	Works Council	Owners
Investment					
Appoint-ment of top managers					
Major organisational changes(merger)					
Wages					
Division of profit					
Lay off workers					
Working conditions					
Shop floor level work organisation					

E. Personal and Professional Background

Question No. 18.

Sex

Male: -----

Female: -----

Question No. 19.

Age

_____ year

Question No.20.

Level of Education

- 1 - Secondary school
- 2 - Technical High school
- 3 - Commercial High school
- 4 - Financial High school
- 5 - Technical University
- 6 - University of Law
- 7 - University of Economics
- 8 - University of Humanities
- 9 - University of Agriculture
- 10 - Other, please specify; _____

Question No. 21.

What is your present position? (Please specify the field of activity managed by yourself!)

- 1 - General manager (director, president)
- 2 - Financial manager
- 3 - Human resource manager
- 6 - Other

Question No. 22.

How did you get this job?

- 1 - Nominated by the owner(s)
- 2 - Through competition
- 3 - Appointed by the Director of this company
- 4 - Other, please specify

Question No. 23.

How many years did you spent at this company?

- 1 - more than 4 years
- 2 - 4 years
- 3 - 3 years
- 4 - 2 years
- 5 - 1 year
- 6 - half a year
- 7 - less than half a year

Question No. 24.

Please indicate your previous and first job!

a). Last job before appointed into the present job:

b). First job: _____

Question No. 25.

How many different companies have you been employed including this company in managerial position?

Question No. 26.

Your company does belong to which national federation of employers?

- 1 - GYOSZ (National Federation of Hungarian Industrialists)
- 2 - MOSZ (National Association of Agricultural Co-operatives)
- 3 - VOSZ (National Association of Entrepreneurs)
- 4 - MMSZ (Hungarian Employers' Association)
- 5 - No membership
- 6 - Other, please specify; _____

Question No. 27.

According to your opinion, in which field has to reach agreement of the national employers' confederations (associations) with the trade unions?

- 1 - Minimum wages
- 2 - Annual average wage increase
- 3 - Employment policy
- 4 - Length of working time
- 5 - Others, please specify; _____

Question No. 28.

In which degree are you satisfied with the work of employers associations?

1 - Very dissatisfied

2 -

3 -

4 -

5 - Very satisfied

Thank you very much for your co-operation!

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