RESERVE BANK OF INDIA

Third Chintaman Deshmukh Memorial Lecture

STATE-OWNED FIRM, BUREAUCRACY AND MARKET: HUNGARIAN EXPERIENCE

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WELCOME ADDRESS

Shri R. N. Malhotra
Governor, Reserve Bank of India

Prof. Kornai, Dr. Lakdawala, Ladies and Gentlemen

I have great pleasure in welcoming you all to the Third Chintaman Deshmukh Memorial Lecture. As many of you are aware, this series of lectures was instituted to commemorate late Chintaman Dwarkanath Deshmukh who passed away on October 2, 1982. He was the first Indian Governor of the Reserve Bank of India and was later Union Finance Minister.

Chintaman Deshmukh was born on January 14, 1896 at a small place called Nata, near Fort Raigad in Maharashtra. After a brilliant educational career, topped by a tripos in sciences from the Cambridge University, he joined the Indian Civil Service. The major part of his outstanding civil service career of 21 years was spent in the then Central Provinces and Berar. He was one of the Secretaries to the Second Round Table Conference in which Mahatma Gandhi participated. Shri Deshmukh joined the Reserve Bank in 1939 and quickly rose to become its Governor in 1943, a post he held with great distinction till the middle of 1949. He presided over the transformation of the Reserve Bank from a private shareholders' bank to a nationalised institution and secured enactment of a comprehensive legislation for the regulation of banking companies and the establishment of the first financial institution for the provision of long-term credit to industries, viz., the Industrial Finance Corporation of India. He initiated several steps to build an adequate set-up for rural credit. Shri Deshmukh played an important role in the Bretton Woods Conference of July 1944 which led to the establishment of the International Monetary Fund and the International Bank for Reconstruction and Development. He was closely associated with the organisation of the Planning Commission which was established in April 1950. Shri Deshmukh then joined the Union Cabinet as Finance Minister and held that office with great ability till July 1956.

His stewardship of the country's finances was characterised by vision and a human perspective. He formulated policies aimed at growth, social justice and economic stability.

After leaving the government, Chintaman Deshmukh remained active in the field of education and social services. He was Chairman of the University Grants Commission, Vice-Chancellor of the University of Delhi, President of the Indian Statistical Institute, and founder of the India International Centre, New Delhi. He was intimately associated with the Administrative Staff College, Hyderabad, the Indian Institute of Public Administration, New Delhi, the Indian Council of World Affairs and the United Nations Institute of Training and Research. Along with his wife, Shrimati Durgabai Deshmukh, Chintaman Deshmukh participated actively in several social service activities, especially the functional literacy and family planning programmes undertaken by the Andhra Mahila Sabha of which Smt. Durgabai Deshmukh was the founder President.

Chintaman Deshmukh was fond of horticulture and gardening. He had a deep interest in Sanskrit and had published a volume of his poems in that language in 1969. He was also proficient in several foreign languages. With his rare combination of idealism and objectivity, culture and science, integrity, application and imagination, Chintaman Deshmukh ranks high among the eminent sons of India. It is, therefore, not surprising that this series of lectures has attracted very eminent speakers. The first lecture was delivered by Professor Nicholas Kaldor in 1984 which was followed by the second lecture in 1985 by Professor James Tobin. For the third lecture, we are happy to have amongst us today Professor Janos Kornai, the famous Hungarian Economist who is a member of the Hungarian Academy of Sciences, Budapest, and a professor of economics, Karl Marx University of Economic Sciences. Professor Kornai is known world-wide. He has been a visiting professor in the London School of Economics and in the Universities of Sussex (England), Stanford, Yale, Stockholm, Princeton and Harvard. Honours have been heaped on him by numerous academies, associations and government. He has contributed to the theory of socialism and planning, in particular, through his work on multi-level planning and hierarchial control, centralisation and decentralisation, non-price signals and quantity adjustment, and has elaborated a general theory of the shortage economy. His writings on economics and on economic methodology have been greatly appreciated. He has pioneered mathematical programming of long-term plans in Hungary. Prof. Kornai has authored several books and important papers. Some of these are: Anti-equilibrium, Economics of Shortages, Contradictions and Dilemmas, and Rush Versus Harmonic Growth. Many of his works have been translated into several European languages. Prof. Kornai has been an eminent student of the Hungarian economic scene and, I dare say, an important participant in the economic activity in that country. As you know, Hungary has been conducting for several years now, a fascinating experiment of liberalisation in the context of a socialist economy. Going through some of his articles, one is impressed by the spirit of enquiry and by his boldness to see facts as they are. His writings are marked by great orderliness of thought and mathematical precision. In his book entitled Contradictions and Dilemmas', Prof. Kornai has written, and I may quote, "What I have undertaken to do is not to gloss over the conflicts or reassuring to resolve the dilemmas. I have tried to trace 'small' contradictions that show on the surface back to 'big' contradictions hidden in the depths. Thereby, I have also tried to trace the small every-day dilemmas back to choices between ultimate values". These words to my mind epitomise Prof. Kornai's approach to economic and social phenomena and best characterise his search for truth. And yet one also finds in his work a great sense of realism and total lack of dogmatism. He does not seek to pronounce by way of final answers to the multitude of questions he raises and analyses with such masterly insights.

He has chosen to talk this evening on the subject "State-owned Firm, Bureaucracy and Market: the Hungarian Experience". To us, in India, a mixed economy, where the public sector also plays an important role and faces major issues with regard to efficiency, this is a subject of great topical interest and relevance.

We are very fortunate to have in the chair Prof. Lakdawala, a distinguished scholar and a renowned economist. As you all know, Prof. Lakdawala has had a long association with the University of Bombay where he rose to be a Professor of Economics and later Director, Department of Economics. He has been a National Fellow of the Indian Council of Social Sciences and Research and also the Founder Director of Sardar Patel Institute of Economic Research, Ahmedabad. He was Deputy Chairman of the Planning Commission of India in the late seventies.

We are indeed grateful to you, Prof. Lakdawala, for agreeing to grace this occasion and offer comments on Prof. Janos Kornai's talk this evening.

I once again welcome all of you to this function. May I now request Prof. Kornai to deliver his talk?

C. D. DESHMUKH MEMORIAL LECTURE

STATE OWNED FIRM, BUREAUCRACY AND MARKET: HUNGARIAN EXPERIENCE

Prof. Janos Kornai

I feel honoured to have been invited to give this year's C. D. Deshmukh lecture. It is a great honour because of the invaluable merits of Chintaman Deshmukh who will be remembered for his outstanding accomplishments in public service and in academic life. It is a great honour to address such a distinguished audience which is gathered here today. And finally, it is a great honour to follow such predecessors as Professor N. Kaldor and Professor J. Tobin, two of the most eminent economists of our time. I feel a certain national pride that two out of three lecturers happened to be Hungarians.

The topic of my lecture is a timely one in Hungary, and perhaps not without interest in India. Your country has a huge state-owned sector. I guess there is also a large bureaucracy. Nevertheless, exactly because parallelism and analogy exist, a warning will be in order: there are important differences between the situations of our two countries. In the context of my theme, the main difference is in the relative weight of the state-owned sector. This is much larger in Hungary, where state-owned enterprises are producing about two-thirds of the total national income. All large firms, without exception, are owned by the state. The medium firms are either in state or in co-operative ownership. The private sector is composed exclusively of very small units. Many private craftsmen or merchants are working on their own or aided only by their families. Some private businessmen have employees, but the upper legal constraint on the number of hired employees is seven. In contrast, India's public sector is surrounded by a large private sector. Even if it is controlled by bureaucratic means, in most areas it is operating in a competitive environment. In many segments of the economy state-owned and private businesses, including large private firms are directly competing with each other.

In our analysis, we apply two theoretical categories; we distinguish two pure, abstract forms of the coordination of economic activities.

Form No. 1. Bureaucratic coordination. This is characterized by the *vertical* relationship between superiors and subordinates. There are various information flows between the levels of the bureaucratic hierarchy, the most significant part being the *commands* given by the higher level to the lower level of the hierarchy. As for motivation, obedience and discipline are obtained by administrative coercion, frequently (but not always) supported by material incentives.

Form No. 2. Market coordination. This is characterized by the *horizontal* relationship between seller and buyer. There are, again, various information flows between the agents, the most significant one being the *prices* co-determined by seller and buyer. Motivation is rooted in the strive for profit and other forms of financial gain.

These are "ideal types", using Weberian terminology. Real economies, like India or Hungary, cannot rely exclusively on one or another pure coordination mechanism, but apply complex combinations of the two pure systems.

In Hungary a reform process is going on since 1968. The reform movement has many goals. Perhaps the most important one is to move away from the predominance of bureaucratic coordination and to give more room for market coordination. The *Leitmotif* of my lecture is the following question: how far has Hungary gone in that direction?

Let me clarify my position in advance. I am not a Friedmanite, nor a "new classical economist" who would be satisfied only with a pure No. 2 economy. In my opinion, government and central planning should play an active role. There are many areas in which such activity is indispensable. To mention only a few examples, in social policy and income redistribution aiming at social justice and the assistance of the poor; in fiscal and monetary policy; in overcoming adverse externalities; in reallocative measures as a correction of regional disparities; in long-term planning on the national level and so on. The desirability of all these activities notwithstanding, even after 15-20 years of reform the administrative apparatus is still hyperactive. We witness excessive bureaucratic intervention time and again. The influence of market forces has increased, but it is still rather weak.

There are two parallel currents in the Hungarian reform process. The first one is the change in the control of the state-owned sector; the second one is the increasing role of sectors operating under other forms of ownership, namely cooperatives, private business, the informal "second economy" and various mixed forms, combinations of state and non-state ownership. Important as it might be, my lecture does not discuss the second current. I will focus only on the transformation of the state-owned sector. Accordingly, without any explicit reference to ownership, the term "enterprise" always means a *state-owned* firm in the forthcoming part of the lecture.

Many outstanding results have been achieved here. Output and productivity grew at impressive rates, while full employment has been maintained all the time. All foreign observers agree that the supply to the domestic consumer improved in a highly visible manner. Nevertheless, my lecture will focus on the unresolved issues. The praise of achievements can be left to others; the economist's obligation is to put his finger on the problems and try to find their explanation.

I am going to survey the issues at three levels. First, the determination of short-term targets of the enterprise. Second, the determination of the long-term position of the firm. And third, the formation of the enterprise's permanent behaviour.

2. The determination of the firm's short-term targets

Input and output. In the "classical" command economy input and output of the enterprise are determined by the higher authorities. The national plan is successively disaggregated, as the plan figures are passed down from the higher levels of the hierarchy to the lower levels. Finally, the firm gets a set of plan indicators, composed of hundreds or may be thousands of output targets and input quotas up to the finest details. Strong incentives are coupled to the fulfilment of the annual plan. A process called "plan-bargaining" is going on: the higher authority wants to set higher output targets and to grant lower input quotas; the enterprise is fighting for the opposite cause. To improve the bargaining position the firm is motivated to conceal its true capabilities. This includes certain restrictive practices, since a spectacular overfulfilment of the plan would lead only to tighter targets next year. The detailed determination of input and output is associated with the lack of genuine market contacts between producer and user. There is an overall rationing of intermediate goods; supplier and user are assigned to each other by the higher authorities.

There is an ongoing debate in most socialist countries, how far one should go in relaxing the rigid command system. Hungary was the second country after Yugoslavia to abolish the whole mandatory annual planning system in one stroke. There is not yet a third socialist economy, to have gone so far as these two countries. After many years, experience has clearly demonstrated that this was an important change for the better. The economy is running without detailed bureaucratic mandatory planning. The initiative of enterprise managers has become more vigorous: the adjustment of production to demand is smoother than before.

Unfortunately, the implementation of the decentralization measure is not quite consistent. True, there are no more formal, legally binding instructions, concerning the short-term determination of output and input. What we find instead, are informal "requests". The minister or some other top ministerial officer calls the enterprise manager and asks him politely to accomplish a certain task. And since the manager is highly dependent on the top ministerial leaders, he feels it will be better to fulfil the courteous request. We can see this kind of intervention in many areas, especially in the domain of foreign trade, constraining import demands or pushing certain exports. This way the enterprise can be forced/not by brute, but by gentle force/into activities which hurt its own financial interest.

Price. In the "classical" pre-reform socialist economy price determination was highly centralized. Most of the prices were fixed by central authorities usually for an extended period.

As a consequence of the reform the scope of free pricing has been substantially expanded. Out of all transactions between state-owned enterprises, 76 per cent are based on prices agreed upon by the seller and the buyer; out of all transactions between producers and the households, 56 per cent are based on free prices.[1/] The present procedures of price determination are undoubtedly more flexible than were those before the reform. Yet many distortions remained.

1/ See B. Csikos-Nagy: "Arpolitikank idoszeru kerdesei, 1985-1988"/*The Timely Questions of Price Policy*, 1985-1988/, Budapest: KJK, 1985, p. 74.

In the domain of administrative prices, which is still rather large, there are many goods and services with quite arbitrary prices. It is not required in a consistent manner, that prices should assure market-clearing; there are many important prices much above or below the market-clearing level. There are contradictory principles of administrative price setting. The attitude of the price control organs is permissive in many cases. Under the pressure of the producing firm they are willing to passively adjust the price to the ever-increasing costs, tolerating inefficiency and maladjustment.

The whole relative price system is distorted by arbitrarily determined interest rates and exchange rates.

There is an extremely complicated taxation system at work, which contributes to the distortion of prices.
We come back to that issue.

Of course, the free-price segment of the economy cannot be insulated from the fix-price segment. It is well-known, that prices constitute an interdependent system. If a large number of important prices are distorted, their impact will spill over to all other prices.

Taxation. This is nowadays a favourite territory of bureaucratic intervention. We are very far from a uniform, simple and transparent taxation system. There are no less than 290-300 kinds of different taxes and subsidies.[2] The state-owned sector as a whole is a net taxpayer. In contrast to the public sector of many capitalist countries, in Hungary the state-owned sector is not a burden on the government budget, but a source of budgetary revenues. We arrive, however, at the final amount of net tax payment after netting out a hundred types of taxes against a hundred types of subsidies. The grand total of all subsidies is about the same magnitude as the total of gross pre-tax, pre-subsidy profits. The grand total of all taxes is 20-25 per cent higher; the difference provides the net tax payment. These very large amounts of total tax and total subsidy show the large size of fiscal redistribution. It means an extremely complicated re-shovelling of profits across all enterprises.

Each important branch of the economic administration has

2/ See V. Falubiro "Szabalyozas es vallalati magatartas 1968-tol napjainkig"/ Regulation and Enterprise Behavior from 1968 up to Now/, *Gazdasag*, 1983, Vol. 18, No. 4. pp. 31-49.

some power of taxing away profits or of granting subsidies, i.e. each acts as a "redistributor". Each redistributor has his own goals and accordingly, his own principles of favouring some enterprises and discriminating against others. The preferences and priorities of the various redistributors do not coincide. The discrimination applied by Redistributor No.1 is counter-balanced by the discrimination applied by Redistributors No. 2, 3 and so on. They mutually suppress the impact of each specific intervention. The joint outcome of the different interventions is random and capricious. What makes things worse, the rules of redistribution are changing all the time. As a consequence, the enterprises feel insecure. They cannot be sure, what will happen with their pre-tax profit or loss. Will the extra high profit be skimmed away? How much can be retained? How much subsidy can they expect?

Table 1

Distribution of the number of state-owned firms according to profitability in 1982 (in percentage)

Categories of profitability	Distribution according to	
	pre-tax, pre-subsidy profitability	post-tax, post-subsidy profitability
1. Very low profitability or loss-making /profitability less than 2%/	14.3	2.4
2. Low profitability /2-6 %/	21.9	75.8
3. Medium profitability /6-20 %/	40.2	17.1
4. High profitability /More than 20%/	23.6	4.7
All state-owned firms	100	100

Source: The calculation was made within the framework described in Footnote 3.

Not that this terribly complicated redistribution has not any regularity. Perhaps the final outcome is not quite deliberate, but there is a clear tendency of levelling off profitability. This is demonstrated in *Table* 1.[3] First, a brief explanation of the Table. Each row shows the transition from a certain pre-tax, pre-subsidy position into a certain post-tax, post-subsidy position of profitability, because of fiscal redistribution, i.e. taxes and subsidies.

The most remarkable entries are in the first and in the last row. A closer look at these two rows clearly shows the tendency of levelling.

To sum up, the system of fiscal redistribution rewards and compensates the loser and penalises the winner. This is the sad outcome of the redistribution process. It undermines the competitive spirit and weakens the profit incentive which was thought of as a centerpiece of the reformed economic mechanism.

Credit. In the pre-reform economic mechanism a "monobank" system was operating. It unified two roles, usually separated in private market economies: the function of a central bank and the function of a large number of commercial banks, and other financial intermediaries. Commercial banks and other intermediaries compete with each other in capitalist countries. There was, of course, no such competition within the framework of a monobank system. Even if there were seemingly autonomous banks specialized in certain areas /e.g. an investment bank, a foreign-trade bank, a savings bank for transactions with households, etc./, in practice each of them had a perfect monopoly in its own domain. They operated under tight control of the central bank, and acted, practically, as branches of the monobank system.

3/ The author, together with A. Matits, directed a research project, investigating the fiscal redistribution of profits in the state-owned sector. The data contained in the annual balance sheets of all Hungarian state-owned enterprises have been collected and fed into the computer. This data-bank served as the source for computing a large set of special indicators, reflecting different categories of pre-tax and post-tax profitability, tax burden, the proportions of re-distribution, investment activity and so on. With the aid of mathematical-statistical methods, first of all with multivariate statistical analysis, we studied the inter-relations between these indicators in the period 1975-1983. The research team described its experiences in a series of unpublished reports. This is the source of Table 1, and some more references in the present lecture. The first journal publication is J. Kornai - A. Matits "Softness of the Budget Constraint - An Analysis Relying on Data of Firms", *Acta Oeconomica*, 1984, Vol.32, No. 3-4, pp. 223-249.

There was persistent excess demand for credit. Interest rate did not play a significant role in equilibrating supply of and demand for credit. Under such circumstances, the monobank was not a genuine bank, but rather a credit-rationing bureaucratic authority. It had the obligation to finance / in practice unconditionally/ all activities prescribed by the mandatory plan or occurring in the course of plan-overfilment. The true constraint of a purchase was the availability of the *real* good or service, and not the availability of *financial* resources. If a firm was able to acquire an input, because it got the purchase permit from the rationing authority, and the good was actually available in the warehouse of the supplier, the availability of the necessary money to pay for the acquisition was never a serious problem. The bank was obliged to finance all transactions which were feasible in the above described sense.

The reform in the Hungarian banking sector proceeded rather slowly. After long delay, there are now more definite resolutions to introduce substantial changes. A "two-level banking system" will be organized; the central bank constitutes the upper level and a set of commercial banks and other financial intermediaries constitute the lower level. The central bank maintains overall control, but the autonomy of the lower level institutions will be increased. According to the blueprints of the new system there will be some competition between the units of the lower level. Together with the organizational changes, the influence of interest rates should be increased.

This banking reform is not yet fully implemented. There are many unresolved problems. Nowadays, Hungary is half-way between the "old" bureaucratic monobank system and the "new" half-commercialized two-level banking system.

Perhaps the most important litmus-test is to look at the criteria of granting credits to state-owned enterprises. According to the officially declared criteria, the bank, when considering the acceptance or refusal of a credit application, would take into account the usual market-criteria. We mention here only the most important ones: past experience with the reliability of the applicant in debt service; past and future profitability; past and future dynamics of market-share; liquidity and indebtedness. In other words, the bank should carefully consider the creditworthiness of the applicant and the risks involved in granting the credit. Of course, credit to applicants in a weaker financial position must not be denied automatically. Under certain harder conditions they may have access to credit as well. But one would expect that firms which are in a stronger financial position due to their long-lasting high profitability, and which are the more reliable customers of the bank, have easier access to credit. A closer look at the data shows just the contrary. Firms in financial trouble have a better chance to get credit, than the more profitable enterprises.[4] The heavier the loss, the higher the probability to get credit. This means, that the credit system is used to bail out ailing enterprises. And that is done not as a rare exception in certain dramatic situations. No, that is the rule. If a firm is in a healthy financial position, credit will be frequently denied to it, with the tacit understanding that such a firm can manage without the aid of the bank. But if a firm is in chronic financial trouble, the bank will rush to assist the loser. It will ruch to do so, either voluntarily or under the pressure of the administrative and political apparatus supporting the application of the weak firm. The credit is granted under permissive conditions. If the sick enterprise is unable to fulfil its promises, the obligations will be rescheduled repeatedly. Under such circumstances the credit-contract does not command high respect among the debtors.

3. The determination of the firm's long-term position

Entry. There is no free entry. Let us consider a branch of production where at least one state-owned enterprise is working already. A significant private firm cannot be established in the same branch. There is a narrow upper limit on the number of hired employees, as mentioned earlier and, therefore, only minuscule private units can exist. And, in any case, it is rather difficult to get a licence for entering a branch dominated by state-owned firms.[5] / There are less barriers for cooperatives, but even they face quite a number of difficulties. And finally, the creation of a new state-owned enterprise is preceded by a

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4/ These phenomena are demonstrated by many data in the study of E. Varhegyi, prepared in the framework of the project described in Footnote 3.

5/ Yet it is not quite impossible. For example private taxis were allowed in the last few years, whereas previously two large state-owned companies had the privilege to run taxis. The entry of private taxis immediately improved the supply of this important service.

rather lengthy bureaucratic procedures.[6]

The hindrances to free entry largely explain to the sluggishness of adjustment to new opportunities.

Competition. This is closely related to the problem of entry. Free entry is one way of introducing competition into the system. But even without newcomers, already established existing firms could compete with each other, provided, that several producers supply the same or at least mutually substitutive goods. Unfortunately, that is rarely the case. Industrial policy has taken care that in many areas each firm has a clear "profile", i.e., a certain set of products which does not overlap the "profile" of other firms. The state-owned sector is highly concentrated in a relatively small number of firms. *Table* 2 presents international comparison. It is remarkable, how much more concentrated Hungarian manufacturing is than the

Table 2
Size distribution in industry

	Hungary	Smaller capitalist economies
Average number of employees per firm	186	80
Distribution of employees in size-categories (in percentage)		
10-100	14	35
101-500	26	33
501-1000	19	13
more than 1000	41	19

Note: The figures refer to intertemporal averages of the seventies. The right column covers a sample of small and medium European countries.

Source: Ehrlich, E. Enterprise Structure in Manufacturing of 18 Countries. *Gazdasag* 1985. Vol. 19, pp. 81-114.

6/ Some relaxation has been permitted. Large state-owned firms can establish semi-autonomous subsidiaries without too much bureaucratic intervention.

same sector in capitalist economies. The table covers only manufacturing, but the situation is rather similar in the other branches. The reform process has not changed the situation radically. On the one hand, mergers are going on interruptedly. On the other hand, there are repeated official resolutions about the necessity of breaking up huge enterprises into smaller units, but the implementation is not consistently enforced.

Excessive concentration and reluctance on the part of the apparatus to give more room for decentralization are strongly interrelated phenomena. The bureaucracy and the powerful large firms are closely intertwined. There are foreign analysts, mainly political scientists, who like to draw a sharp dividing line between the "bureaucrats" and the "managers". That is an arbitrary classification. At a certain moment, of course, some people actually work in the administrative apparatus, and some others are employed by the state-owned firms. But these people belong to the same social group of the bureaucratic-technocratic elite. A look at their career reveals that they move back and forth between the different positions of both areas: today a man works in the management of a large state-owned firm, tomorrow he is appointed to a higher ministerial position, the day after tomorrow he goes back to a top managerial job in a very large firm and so on. These people know each other well, they used to be class-mates, or colleagues, or participants in the same series of meetings. The bureaucracy feels, rightly, that it is much easier to reach out to firms, when there are only few of them. And similarly, top managers in the enterprise feel, rightly, that their bargaining position is stronger, if there are only few, but large firms. The higher the concentration, the easier the vertical bureaucratic coordination, and the larger the number of rival units, the more indispensable the horizontal market coordination will become.

Even without this special inclination toward the preservation of excessive concentration, it is inevitable in a small country to have quite a few branches, where production is concentrated in a few enterprise or may be in only one. Considerations of economies of scale can make such concentration necessary. At this point the problem of import competition must be mentioned. We can admit that some protectionist measures defending domestic infant industries can be reasonable. But I am afraid that in our case we have too many aged "infants"—domestic producers protected eternally. It would stimulate technical progress, the improvement of quality, the flexibility of adjustment, if these Hungarian enterprises were exposed to import competition. The usual argument against such competition refers to the difficult situation with our balance of payment. I am convinced that excessive protectionism back-fires. It retards the improvement of Hungarian products, which ultimately hinders the expansion of our exports and, together with it, the long-lasting solution of our balance of payment problems.

Exit and survival. It is a rare event that a state-owned firm goes out of business. And if exit occurs at all, it is the consequence of an administrative decree and not of a financial failure. The bureaucratic tendency toward forced mergers for the sake of decreasing the number of subordinate units is a stronger explanatory factor of concentration, than the absorption of loss-makers by profit-makers. Long-lasting deficit or insolvency does not lead to exit. This is illustrated in *Table 3*. Profitability of the firms that have gone out of business was considerably higher than that of those which have stayed in. A genuine competitive market process enforces "natural selection": the survival of the fittest according to market criteria. That is not the case in Hungary. According to this important test, selection is done not by the market, but by the bureaucracy.

My book "Economics of Shortage"7/ introduced the concept of "hard" or "soft" budget constraint. The budget constraint of an enterprise is getting soft, if the financial position of the enterprise does not put an effective, binding upper constraint on its outlays. Overspending and chronic deficit does not lead to bankruptcy, or to falling victim to some aggressive takeover, or to any other form of drastic exit; on the contrary, the loss-maker will be bailed out by the state. If one bail-out is not enough, it will be repeated several times. There are different ways and means of softening the budget constraint: subsidies, tailor-made tax-exemptions or the postponement of due tax-payments, lax enforcement of credit contracts, repeated rescheduling of debts, permissive "cost-plus" administrative pricing and so on. Each of these softening methods is regularly applied in Hungary, as it has been shown in the paragraphs discussing prices, taxation, credit and exit.

7/ Amsterdam, North-Holland, 1980.

Table 3

Comparison of profitability of surviving and liquidated state-owned industrial firms

Industrial sector	1978		1979	
	Permanently functioning	Firms liquidated or absorbed	Permanently functioning	Firms liquidated or absorbed
Mining	18.10	12.92		
Electric energy	7.26	8.12		
Engineering industry	17.43	30.50		
Building industry	8.20	16.42		
Chemical industry	13.02	18.52		
Light industry	8.76	21.47	9.13	12.02
Food industry	1.26	4.82	6.19	−3.45

Note: The table refers to pre-tax, pre-subsidy profitability. Only those sectors are shown in the table in which liquidation or merger/absorption occurred in the years under examination.

Source: The calculation was made within the framework of the research project described in Footnote 3. The Table was published in the paper J. Kornai – A. Matits /1984/. /See Footnote 3./

Following the reform, the impact of the profit motive has increased. A state-owned firm is now not so indifferent toward profitability as it used to be in the pre-reform mechanism. But, due to the softening of the budget constraint, profitability is still not "dead-serious"; it is not a matter of death and life. To earn more profit is helpful, because it makes the life of the enterprise easier by reducing its dependence on the bureaucracy. If, however, loss occurs, and persists, that is not a great tragedy either.

Investment. Who decides, which enterprise is to grow and how much? That is one of the most important aspects of the "centralization versus decentralization" problem. In pre-reform Hungary, as in most socialist countries, this was a highly centralized decision. With small exceptions, such as certain renewals financed from depreciation funds, investment was allocated at the central level. Allocation was based in the first place on the future input-output balances determined in the course of medium-term planning. The future input-requirements of the user or consumer, /calculated with the aid of the rather crude and aggregated balance-system/ indicated the necessary capacity-expansion of each sector or sub-sector. Beside these *more or less "objective" signals*, there were also "subjective" ones: "lobbying", or political pressures exerted to support the investment proposals of certain branches, sub-branches or certain large enterprises.

It was hoped that the reform would allow more room for market signals: expectation of future sales and future profitability should play a more decisive role. With this in view reform measures permitted a substantial profit-retainment in the firm. A smaller fraction of retained profit was allowed to be used for welfare purposes, the larger fraction was to be accumulated and could be used for the financing of investments.

Unfortunately, the original aims have been only half achieved. The enterprise's discretion has increased somewhat. There is a not negligible part of total investment, used mostly for small projects, which is allocated of the firm's own decision and financed from its own savings. However, each medium or large-size project requires some form of credit or subsidy. Since the banking sector is under the tight control of the general economic administration, this means that the bureaucracy has all the necessary instruments to deeply interfere in investment allocation. This could be reasonable /although a smaller share would certainly be sufficient/, if the only aim of intervention were the *occasional correction of price and profitability signals*, e.g. counterbalancing adverse externalities not taken into account by the firm's decision, or the development of non-profit sectors, infrastructure, etc. Yet bureaucratic involvement in investment allocation goes much beyond that. What actually happens is the straight counterbalancing of all *market signals*.

It is, of course, not required of any well-functioning market that only those enterprises can invest which have always been highly profitable in the past. A well-chosen new project can serve as a vehicle to drive out an enterprise from financial trouble to profitability. But at least the enterprises which have had a solid profit for years, should have better chances to finance their investment plans not only by self-financing, but also by getting long-term credits. Statistical investigation shows the opposite situation in Hungarian investment allocation: almost zero correlation between different indicators of profitability /pre-tax, pre-subsidy profitability and also post-tax, post-subsidy profitability/ on the one hand, and investment activity on the other hand.x/

In a banking system which applies commercial considerations seriously, the creditor must carefully consider expectations of future profitability of the debtor, otherwise it remains totally uncertain what will happen with the service of the debt. *Table* 4 shows that this is not the case in Hungary. The table compares investment activity in 1980 with profitability two years later in the same firms. Against legitimate requirements we see a negative relationship: the higher the investment activity, the lower the profitability will be at a later date, that is the worse are the chances of correct repayment. In my opinion, this is one of the most striking tests, to show that the budget constraint is "soft". There is no tough enforcement of the pay-off of investment.

Table 4
Relationship between investment activity and profitability in state-owned industrial enterprises (in percentage)

	Profitability in 1982	
Investment activity in 1980	Pre-tax, pre-subsidy	Post-tax, post-subsidy
0–5	14.2	6.0
5–10	12.1	7.3
10–15	11.6	5.9
15–20	8.0	4.9
more than 20	5.2	2.3

Note: "Investment activity" is the ratio of net fixed capital formation and the value of fixed assets.

Source: The calculation was made within the framework of the research project described in Footnote 3. The Table will be published in a forthcoming paper of A. Matits and J. Temési.

x/ This has been demonstrated by the research reported in Footnote 3.

bargaining is the more decisive one - this again shows that Hungary is only half-way toward a higher degree of decentralization and market coordination.

The situation leads to a peculiar combination of activity and passivity in behaviour. If results on the market are fine, due to good performance or good luck, the firm keeps silent, becuase it does not want extra profits to be taken away and to become the subject of additional pressure for more output, more exports, etc. If results on the market are poor, because of bad performance or bad luck, the best strategy is to start crying and ask for assistance and compensation. In my appraisal, this is perhaps the most harmful consequence of dual dependence. It has an adverse educational effect, since it favours passivity. Instead of fighting against bad luck, unfavourable external conditions and its own earlier mistakes, a firm can resign itself to fate and beg for help. Here is one of the most important factors explaining slow adaptation to changes on the world market or in technology or in domestic demand and also the tolerance toward inefficiency.

As a conclusion, I want to join those Hungarian economists who urge a more consistent and faster implementation of the reform ideas. That implies more autonomy of firm, much less bureaucratic intervention, greater role of price and profitability signals, more intensive competition, in sum: much stronger influence of the market.

As indicated in the introduction of my discourse, I do not sufficiently know the situation of the state-owned enterprises here in India. Superficial direct conclusions drawn from the Hungarian experience might be misleading. Nevertheless I hope, that the frank discussion of the problems of the Hungarian state-owned sector can give some food of thought to my Indian colleagues.

PRESIDENTIAL REMARKS

Prof. D. T. Lakdawala

I feel grateful to the Reserve Bank for giving me this opportunity to be associated with the Third Chintaman Deshmukh Memorial Lecture. I am specially obliged because the lecture is on a subject about which we know little and about which we are very curious to know, namely the Hungarian experience in a field where we are also experimenting. We had a very instructive lecture, telling us what the Hungarian experiments and experience have been. Naturally we ask ourselves the question as to how far these lessons are useful to us. What are the similarities, and what are the differences? As Dr. Kornai told us, the first major difference between India and Hungary is that in Hungary, practically every major enterprise is state-owned and nobody is allowed to employ more than seven people. That sets a very severe limit to the environment in which the competitive market can operate even if it is allowed to fully operate by itself. In India, on the other hand, the number of people whom you can employ, is almost limitless, provided you have got the money, and provided you can get the licence to run your business. And now-a-days even the need of licence is being dispensed with. So that, in a way, it is a different world in which you are operating. The second major difference is that our public enterprise is set up with a different view-point. It is more in basic industries and intermediate goods and it operates in a highly mixed economy, the nature of the mixture being, that about 80 per cent of the national production is in the private sector and only 20 per cent is in the public sector. So that, whatever the public sector produces, has very often to be sold in the market. There is already some sort of a market discipline. The third point to be borne in mind is that we have always had this problem that whatever you do, though you may call it in the nature of a planned economy, has also to satisfy the market criterion. One of our major problems in embodying our equity ideas has been that the purchasing power is the major criterion in deciding what consumption goods we produce, and the purchasing power itself is being decided outside state control. These three largely major differences in the structure have a fourth consequence, viz., unlike many of the eastern-European countries, we are always shy about our new experiments. We do something but always ask ourselves the question as to whether we are not going in a direction which may land us into some trouble or we are not going too far in that direction, whereas many of the other countries which have largely solved the problem of equity, solved the problem of poverty, are in a position to take bolder decisions because they are not so much worried about the secondary consequences of their actions on equity as they are not likely to be very disturbing. As far as many of the other features are concerned, I think, more-or-less, the Indian economy has the same characteristics as the Hungarian economy has. We have the same type of relationship between the Government and the public firm. In theory, the public firm may be free to take decisions. I am not sure even in theory if it is so here, in practice, there are requests which are almost like orders, and if you don't obey, there are consequences, and the consequences are of a stricter nature because the top manager is not protected by the same labour laws as many of the other people down below are; so that, the same sort of relationship persists in India as in Hungary. Freedom of entry and exit in India has a very different meaning because, there is a large private sector and there are industries to enter in which you do not need a licence; you may not need any capital from the bank, you may float your own loans in the market which you are allowed to do and start an industry. But as far as exit is concerned, it is a problem. A firm is allowed to die, provided it can die quietly. And it can die quietly, if it does not employ too many people. But if it employs people, the freedom of exit hardly exists. And that is why, in India, we have the special category of persistently sick units, which it is the business largely of the banking sector to protect and look after, partly in order that they may become more efficient and become more profitable, but also to ensure that even if they do not do so, they survive. The Indian experience, in many respects, thus, partakes of the same characteristics as the Hungarian experience and, therefore, Sir, your lecture today has been very interesting and profitable to us. We are experimenting with greater introduction of the market forces. Our greatest fears are not so much on the internal side, as on the side of the international trade and balance of payments, because, there we are afraid, that if after so many years of a relative policy of rigid import substitution we do try the forces of competition. They may have an unwelcome effect on industry. But that is a very different question. As far as internal competition is concerned, we have allowed that in unlicensed industries. Wherever there was licensing, expansion was only by permission. But now we are trying to relax these rules and we are watching the experiment with bated breath, because we are not sure it will work out well. Your own description of the Hungarian economy today is a source of encouragement to us. Because, if the socialist countries are experimenting, we also may be bolder in experimenting, though the general environment is such that we will have to be more cautious. Indeed, Sir, we are very thankful to you for this lecture on a very interesting and instructive topic, and we are very thankful to the Reserve Bank for arranging this lecture.

VOTE OF THANKS

Dr. C. Rangarajan

Deputy Governor, Reserve Bank of India

Prof. Kornai, Prof. Lakdawala, Governor Shri Malhotra, distinguished invitees and colleagues. We are indeed greatly honoured and privileged to have had with us this evening, Prof. Kornai to deliver the Third Chintaman Deshmukh Memorial Lecture. Dr. Chintaman Deshmukh was not only a brilliant administrator, but also an incisive thinker and scholar. It is for this reason that we in the Reserve Bank of India felt that the best way of perpetuating his memory and remembering him was to institute a series of lectures to which can be invited an outstanding scholar every year, to share his thoughts on the very vital problems of the day. Lord Kaldor, who delivered the first lecture and Prof. James Tobin who delivered the second lecture focussed attention on issues that fell within the province of monetary and fiscal economics. Today, Prof. Kornai, has taken us to a different plane and focussed attention on the problem of improving the efficiency of the public sector enterprises, an issue that is of importance not only to Hungary, but also very much to us in India. Improving the efficiency of the public sector enterprises, has been a recurring theme in the writings of Prof. Kornai. In many of his works, he has dealt with at great length the functioning of the socialist system and had been courageous enough to point out in some of his books that the criteria for efficiency can come into conflict with the social and ethical values of the socialist State. And he has, therefore, pointed out in some of his works, as he did today the need for harmonising the set of values relating to efficiency and those with which a socialist State was primarily concerned. His message this evening is very clear. If the public sector enterprises are to move on to become efficient units, they have to move away from what he called vertical co-ordination to horizontal co-ordination · or, to use one of his own expressions, public sector enterprises must move from a regime of soft budget constraints to hard budget constraints; this could imply that the public sector enterprises will have to become price-takers rather than price-makers, and this could inject the compulsion to become more efficient. These are lessons which are of importance not only to Hungary, but also very much to us in India. We are indeed very grateful to him for bringing out these compulsions quite clearly. Herbert Levine reviewing his book on 'Economics of Shortage', concluded his review by saying that "we have from Prof. Kornai, the Treatise. When will the General Theory come?" We are looking forward, Prof. Kornai, to your General Theory. It is indeed a great honour to have had a scholar of the eminence of Prof. Kornai with us. May I, on behalf of the Reserve Bank of India and all those assembled here convey to you, Sir, our most grateful thanks for accepting our invitation to be with us this evening and giving us an intellectual treat.

We are equally grateful to Prof. Lakdawala for agreeing to chair today's session. If I may say so, Prof. Lakdawala is the doyen of the Indian economics fraternity. For the last three decades and more, successive generations of students of economics in this country have grown up reading his writings and works, particularly in the area of public finance, which have always been marked by extreme lucidity and logic. His presence this evening has added to the significance of this function and may I, on behalf of the Reserve Bank of India, convey to you, Sir, our most grateful thanks for accepting our invitation.

To the member of the Deshmukh family, and all the distinguished invitees, our grateful thanks are due and may I thank one and all of you for honouring us by your presence this evening.