Market Failure and Government Failure

Mrinal Datta-Chaudhuri

The Journal of Economic Perspectives, Vol. 4, No. 3 (Summer, 1990), 25-39.

Stable URL:
http://links.jstor.org/sici?sici=0895-3309%28199022%294%3A3%3C25%3AMFAGF%3E2.0.CO%3B2-3

The Journal of Economic Perspectives is currently published by American Economic Association.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/aea.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

http://www.jstor.org/
Tue Apr 26 13:31:23 2005

Journal of Economic Perspectives—Volume 4, Number 3—Summer 1990—Pages 25–39

Market Failure and Government Failure

Mrinal Datta-Chaudhuri

For several decades a debate has been raging in development economics on the relative virtues of the free market as opposed to state intervention. With the help of analytical models of a market economy, the interventionists demonstrate what they consider serious instances of "market failure"—that is, the inability of a market economy to reach certain desirable outcomes in resource use. The protagonists of free markets, on the other hand, compile impressive lists of ill-conceived and counterproductive policy measures implemented by the governments of different countries at various times, leading to wasteful use of resources in their economies.

This debate inevitably remains inconclusive. The analytical results on "market failure" do not disappear in the face of the evidence that most governments (or for that matter most economies of less developed countries, with or without state intervention) have performed rather badly. When there appears to be scope for improvement over the market outcome, the search for the appropriate corrective measures goes on. Some protagonists of "government failure" question the significance of such market failures; others voice skepticism about the ability of governments to take any action in the economy which is not counterproductive; but none of them seems to be able to explain why a less developed country like India failed to grow during the first half of this century under a non-interventionist colonial administration. Thus, while the debate goes on, neither side succeeds in convincing the other.

■ *Mrinal Datta-Chaudhuri is Professor of Economics at the Delhi School of Economics, University of Delhi, Delhi, India. He wrote this article while a Visiting Professor of Economics, Harvard University, Cambridge, Massachusetts.*

While this sterile debate continues, experiences accumulated from research and action in the real world during the last 40 years have led to important new thinking on the roles of market and non-market institutions in the process of economic growth. The planned economies of the socialist world have learned that market institutions are not exclusive to the capitalist mode of production, and that the threat of entry and the fear of exit remain irreplaceable stimuli for cost and quality consciousness in production. Researchers in market economies have learned that price quotations on marketed commodities do not always carry sufficient information for economic decisions, and that institutions matter. This paper pieces together some lessons from the development experiences of the last four decades to enrich our understanding of the role of the state in the process of economic development.

Theories of Development

Development economics as we know it today, as a distinct discipline within the economics profession, came into existence in the 1940s. Economists like Rosenstein-Rodan, Nurske and Kuznets tried to identify the major causes of economic backwardness, and thereby suggest strategies for economic progress for the backward economies. These economists, like many others in the profession, assumed that the state would have to play an important role in raising an economy out of its backwardness. The success of Keynesian activism in fighting the Great Depression in the western countries, the success of the Marshall Plan in engineering the quick reconstruction of the war-damaged economies of western Europe, and the achievements of the Soviet industrialization drive in the 1930s had created a virtual intellectual consensus in the world on the power of the "visible hand."

On the basis of the newly constructed time series data on the national products of different countries, Kuznets (1955) showed that the process of economic development was always accompanied by a shifting of the labor force from low-productivity agriculture to high-productivity manufacturing. But industrialization required a higher rate of capital accumulation. Nurske (1953) wrote about the problem of capital accumulation in a poor country. In his famous doctrine of the "vicious circle of poverty," he said that poor societies remained poor because with low per capita income they could not supply enough savings to increase their stocks of reproducible capital.

Rosenstein-Rodan (1943) analyzed the demand side of capital formation. According to him, the structure of these backward economies was such that there were not enough incentives for investors to choose the right pace or pattern of capital accumulation. Rodan said that in a poor economy the size of the market for industrial products was small and people need to spend most of

their incomes on necessities.[1] Moreover, he argued that the production processes in modern industries were subject to great indivisibilities and economies of scale. He particularly identified one category of physical capital for special attention: the social overhead capital like transport, communication, power, urban infrastructure, and so on. These activities were not only bedeviled by nonconvexities, but they had to be in place before private entrepreneurs could decide to install directly productive capital. Borrowing an expression from Allyn Young (1928), Rodan characterized the entire phenomenon as generalized external economies.

It was left to Scitovsky to give a rigorous analytical meaning to Rodan's concept of external economy. Using the framework of the competitive equilibrium and the associated welfare theorems, Scitovsky argued that externalities arose only when interdependence among economic agents was not mediated through market transactions. In his highly influential paper, Scitovsky (1954) concluded that only the externalities arising from intertemporal dependence amongst firms (which he called "pecuniary external economies") presented a serious impediment to the growth of a backward economy, if it were to be propelled by a price-guided system. The implication of the Scitovsky formulation was that the market mechanism could be relied on to take care of the production problems of an economy, but investment allocation required state intervention.[2] Thus, the state emerged in the role of an investment planner in a developing country. It was implicitly assumed that once the productive capacities were created through investment planning, the subsequent problems of getting output, employment and income out of these investments would resolve themselves automatically.

This line of analysis led almost every developing country to set up a planning agency to formulate investment plans based on economy-wide quantitative models. These models varied from country to country in terms of their levels of disaggregation and their computational techniques, but they were similar in certain important aspects. They were rich in their specification of technology and interindustry linkages, but hopelessly deficient in their specification of behavioral and institutional issues. Therefore, the economic and the statistical analysis embodied in these planning exercises did not provide much

[1]Although, following Scitovsky, latter-day development economists focussed their attention on externalities and the resultant suboptimality of the competitive equilibria, Rodan himself was primarily worried about the inadequate working of the price mechanism in the absence of strong substitution effects.

[2]Externalities occur when a complete set of Arrow-Debreu markets do not exist. Pecuniary externalities result from the absence of future markets. Recent researches on the working of economies with incomplete markets (and imperfect information) show that in such situations even competitive markets fail to optimally perform the required risk-sharing functions. Competitive equilibria for such an economy are not constrained Pareto-efficient and there exist schemes of government intervention which can induce Pareto-superior outcomes (Greenwald and Stiglitz, 1986).

guidance as to how these investment plans were to be implemented.[3] It was left to the ingenuity of individual countries to design appropriate mechanisms for implementation, and different countries drew on their own cultural and historical experiences in designing their regulatory systems. It is possible to argue that the performance of the different developing countries can, to a large extent, be explained by the nature of the regulatory mechanisms they adopted.

This body of theory proved deficient both because of deficiencies due to their empirical projections based on historical experiences, and because of the analytical shortcomings of their models of resource allocation. On empirical matters, the assumption that large productivity gains could not be realized in agriculture though technological progress proved to be wrong when the fruits of research in plant genetics became available in the 1960s. Secondly, the stagnant scenario of world trade, experienced throughout the first half of the twentieth century, dramatically changed in the 1950s. The phenomenal economic growth in the OECD countries during the two decades following the Korean war led to massive expansion in world trade. Rising wage rates in the developed countries led to substantial changes in the pattern of the international division of labor. Many poor countries, such as South Korea and Taiwan, could take advantage of the new trade opportunities to become industrialized in a short period of time.

A more lasting consequence arose from the analytical shortcomings of the Nurske-Rodan-Scitovsky framework of development economics. Later researchers in the field of economic growth seriously undermined the importance attached to capital formation in the growth process of an economy. Solow's (1957) seminal contribution demonstrated that only a small part of the growth performance of an economy can be explained by the increment in its stock of reproducible physical capital (or by the employment of a larger number of workers). Most of the economic growth seems to come from technical progress, which is essentially the ability of an economic organization to utilize its productive resources more effectively over time. Much of this ability comes from the process of learning to operate newly created production facilities in a more productive way[4] or more generally from learning to cope with the rapid changes in the structure of production which industrial progress must imply.[5]

[3]In the field of development planning one often hears people talking about "a good plan implemented badly." This dichotomy between the formulation and the implementation of a plan is usually false. If a plan is supposed to be a feasible action program, then it must have been designed on the basis of realistic assumptions regarding the expected behavior of economic agents. Difficulties regarding implementation should arise only from unanticipated exogeneous shocks.

[4]Arrow (1962) analyzed the implications of acquiring skill through the actual process of operating production capacities over time.

[5]Stiglitz (1987) analyzed the importance of "the frame of mind which is associated with asking 'how this task can be performed better?'" This has implications not only for decision-making at the firm and the industry levels, but also for choosing a policy framework in which the industrial economy can learn to take better advantage of its economic environment.

Traditional development economics paid little attention to such learning processes and implicitly assumed that whatever technical progress was possible would automatically come with capital accumulation. The development experiences of the last three decades show that economies differ considerably with respect to their abilities to learn how to assimilate new techniques and how to adjust quickly to new lines of production. Moreover, the nature of the industrial organization and the policy environment in which it functions have a considerable impact on the ability to acquire these learning capabilities. To illustrate these points the next section will outline the working of the policy regimes in two economies of Asia—India and South Korea.

Policy Regimes in India and South Korea

At a superficial level, there is a great deal of similarity between the planning and the regulatory frameworks adopted by these two countries.[6] Both countries adopted the framework of investment planning with five-year plans computed on the basis of demand projections and interindustry linkages. In the 1970s, the size of the public sector as a percentage share of the gross domestic products of the two countries was roughly the same. The composition of the public sector in both countries was similar: commercial banking, steel, power, and many heavy industries were nationalized in India as well as in South Korea. Both governments intervened heavily in the private sector, using a mixture of direct and indirect controls. However, the manner in which the planning and the regulatory mechanisms worked in the two countries was different in crucial respects. Later, I shall try to explain these differences in terms of the socio-political characteristics of the two countries. But before doing that, it is useful to look at the evolution and the working of the two systems.

In the 1950s, India adopted a development strategy which gave investment planning a dominant role. In certain areas the investment targets were implemented by direct public investments; in others, entrepreneurs in the private sector were supposed to be induced to make the required investments. In both fields—managing the public sector as well as regulating the private sector—India relied on the impressive structure of bureaucracy it had inherited from the past. The Mughal empire in the Middle Ages had built an elaborate structure of imperial bureaucracy; the British colonial administration introduced vast improvements in that model of civil administration. In managing the turmoils of Partition during Independence and in the subsequent task of

[6]Starting from comparable levels of poverty in the early 1960s, the economies of South Korea and India charted widely divergent growth paths for the next three decades. In 1961 India had $73 per capita income at current prices, while the corresponding figure for South Korea was $180. In 1987 the per capita incomes at current prices for these two countries were $300 and $2690 respectively (World Bank, 1989).

national building, the established bureaucracy had performed in an impressive manner.

This bureaucracy had a good deal of experience in implementing rationing schemes in situations of scarcity. Thus, implementation mechanisms were designed on the logic of rationing a homogeneous commodity to needy users in situations of scarcity.[7] The Five Year Plans produced aggregate investment targets for the different sectors of the economy. A number of choice problems still remained to be solved, such as technique, product mix, location and scale of individual plants, as well as the class of entrepreneurs to be entrusted with the job. Moreover, the choice problems were to be solved while keeping in mind a multiplicity of developmental objectives: growth, employment, interregional equity, self-reliance and control of monopolies. The entire implementation mechanism was based on the hope that civil servants would use their discretion in an enlightened manner, and thereby meet the plan targets while satisfying the various objectives of development.

János Kornai (1982) had spelled out some of the classic syndromes of investment planning under bureaucratic management. Investment planning creates shortages, partly because of the deliberate efforts to raise the overall rate of capital accumulation and partly because of the inevitable uncertainties in synchronizing planned activities. With assured markets, producers step up supplies in certain sectors of the economy. The managers of public sector enterprises produce for the captive market. Given the "soft budget constraint" under which they operate,[8] they are not unduly worried about making losses. Producers in the private sector also have assured markets. With the legal barriers to entry instituted by the licensing system, they do not have much incentive for either cost reduction or quality improvement. Their perceptions, as businessmen, become more and more fixed towards cornering the rents associated with the distribution of licenses.[9] It seems one needs an environment of competition even to design an effective organizational structure within a business enterprise. Over time, the industrial economy becomes wasteful. It neither generates enough surplus for reinvestment, nor is it able to derive sufficient dividends in terms of the growth and the equity objectives of the

[7]For example, when a famine occurred in any part of the country, officials in charge of the famine relief instituted rationing schemes for distributing foodgrains to well-defined target groups of victims on the basis of established need-based norms.

[8]Losses incurred by the public sector enterprises are automatically borne by the government. As such these enterprises are not disciplined by any fear of bankruptcy. Kornai described this situation as one of decision-making under a "soft budget constraint."

[9]Krueger (1974) saw the rent-seeking phenomenon as a shrinking of the production possibility set due to the withdrawal of resources from production to rent-seeking. Perhaps more important than the resource cost of rent-seeking are the effects of the policy environment on the perception of economic agents. In such an environment, producers tend to become obsessed with the short run gains associated with cornering the licenses at the cost of the long run benefits connected with technological and managerial improvements.

society on its investments. The industrial economy settles into a modest growth path.

While bureaucratic rationing became the predominant mode of regulation for the manufacturing industries in India's private sector, India adopted a market-oriented form of regulation for agriculture. Since it was not practicable to introduce licensing schemes for the millions of farmers in the country, the Indian state essentially relied on fiscal measures to raise the prices of crops and to lower costs of inputs, thereby increasing the profit opportunities in the farms. This meant giving up on the objectives of interregional and interpersonal equities in the context of agricultural development, because only large farms in favorably located regions could take maximum advantage of these market incentives. This difference is rather ironic, because nearly 80 percent of India's population lives in rural areas and the scope for promoting equity is so much greater in the field of agricultural development than in the context of modern industries.

The Republic of Korea had a different historical experience to draw upon, when it came to designing an implementation mechanism. Under the Japanese occupation before the Second World War, Korea had achieved an impressive level of industrialization. Much of the produce of these industries was sold abroad. In fact, it was only in the late 1960s that South Korea's industrial economy and its export performance (as measured by the shares of manufacturing and of exports in the GDP) reached the levels attained by Korea in 1940. Of course, these industries were then owned and managed by the Japanese; but Koreans at junior levels acquired valuable skills in managing industries and trade. By contrast, the Japanese occupation did not use Korean personnel in running its civil administration. Thus, President Park Chung Hee had to rely on the new emerging business elite to form his team for development administration in the 1960s. Park and his team used a variety of means—financial incentives, persuasion and sometimes coercion—to influence the behavior of industrialists and traders.[10]

Another important difference between South Korea and India relates to the extent of direct control wielded by the state over the economy's investment resources. With the resources mobilized through the nationalized banks, foreign aid and the public sector, the Korean state in the '70s had direct control over about two-thirds of the aggregate investment funds available to the

[10]Jones and Sakong (1980) describe in some detail how President Park forged his alliance with the Korean business community. Under the "Special Law for Dealing with Illicit Wealth Accumulation" most of the country's prominent businessmen were arrested and threatened with confiscation of their assets. Eventually a deal was struck, whereby the government withdrew criminal prosecution and the businessmen agreed to set up some basic industries approved by the government. Later on they were sent abroad under government auspices to negotiate for foreign loans for a number of investment projects. These businessmen later formed the powerful Federation of Korean Industries (FKI) which became a partner of President Park's government in fashioning the growth of the Korean economy.

economy. Korea used credit policy, with differential interest rates ranging from 8 to 34 percent, to channel investments in the desired directions. With this level of command over the capital market, there was not a great deal of need for direct intervention in the sphere of commodity production and exchange. Nevertheless, direct controls, like licensing of production and quantitative restrictions on imports, were widely used. However, the procedures were prompt, and the decisions were made by a high-level committee, a feasible method in a small country (Datta-Chaudhuri, 1981a).

At the enterprise level, the public sector units in Korea had autonomous management, not burdened with a multiplicity of objectives. In the absence of any consideration for regional equity, economies of scale were never sacrificed. Although the producers were given generous protection in the domestic market, the incentive structure encouraged expansion on the basis of export demand. In short, the Korean state was highly interventionist; but the intervention schemes were geared towards developing and supporting the market economy. The market environment encouraged quick learning as well as cost and quality consciousness.

Market Institutions and the State

Let us now turn to an aspect of industrial development outside the scope of investment planning. One of India's success stories has been the development of the handloom and other products of cottage industries. This came about largely in response to sales outlets for these products being set up in different Indian cities by the central and state governments. These state-run sales establishments, in addition to providing market outlets for small producers from rural areas, started to interact with their suppliers in a variety of ways. They started disseminating new techniques of production and new designs to the producers. They introduced some quality control, and advanced credit. They also helped to set up a market network which could supply the required inputs (buttons, dyes, and so on) to the producers in a regular manner. Independent producers in remote villages could rely on these organizations for their informational and other market-related needs. To the extent that these organizations handled all the various links with the outside markets (both domestic and foreign) reliably and effectively, small producers had little difficulty in producing the required supply.

In the case of South Korea, the trading companies perform a similar role for independent producers in widely different lines of production. These trading companies integrate (horizontally) a large number of exchange-related activities, such as marketing, transport, communication, credit, insurance and the transfer of technology. In the late 1960s, the government of South Korea took the first initiative in setting up these organizations. It is said that following

the Japanese example, the government of South Korea set up exactly ten trading companies as there were in Japan. The phenomenal success of Korea in exporting manufactured goods cannot be fully understood without appreciating the role played by these trading companies.

What these examples suggest is that important externalities do exist in information processing and other exchange-related activities. There also seem to be significant economies of scale and scope in these activities. The emergence of the trading companies in East Asia, which horizontally integrated several exchange-related activities to service the needs of independent producers, explains the greater success of these economies in promoting labor-intensive industrial growth. In many other parts of the world, the typical response of an industrial organization to these externalities has been one of vertical integration, which led to increased supervision costs, which in turn induced a substitution of capital for labor (Datta-Chaudhuri, 1981b). We do not fully know why trading companies do not play as important a role elsewhere as they do in East Asia. However, the case of South Korea suggest that the promotional and supportive role of the state in creating these institutions may be an important factor in their development.

The state-run sales organizations for cottage industry production in India and the state-promoted but privately held trading companies of South Korea provide examples of the need for a certain kind of market organization to support the industrial progress of an economy. These organizations can be said to constitute the "soft" infrastructure of an industrial economy, which is different from the "hard" infrastructure emphasized earlier by Rosenstein-Rodan. The "soft" infrastructure can take a wide variety of institutional forms, with varying degrees of involvement on the part of the state, to serve the function of catering to the informational and marketing needs of an industrial economy (Datta-Chaudhuri, 1981b).

Perceiving and Creating New Markets

Abba Lerner (1972) warned economists against the dangers of assuming that market institutions sprang up automatically in every place. He correctly saw the modern economy as the end product of a time-consuming process of development. In this development process, societies progressively created appropriate institutions so that interpersonal conflicts could be resolved through economic transactions.

However, producers and traders do not always correctly perceive the various trade or technological possibilities open to them. There is scope for imaginative intervention to alter their perceptions and thereby improve the performance of an economy. Although it is impossible to arrive at general

conclusions of universal validity in this field, it is pertinent to examine some instances of noteworthy success with government intervention.

Perhaps the best known examples come from the activities of the Ministry of International Trade and Industries (MITI) in Japan. It is doubtful whether the phenomenal success of Japan in many lines of industrial production would have been possible without the initial promotional efforts of MITI. For example, in the 1950s MITI organized, in collaboration with the Japanese industries, a massive research and development effort aimed at identifying the best areas for future action. These efforts led to the creation of a technological and economic base for the future expansion of industries such as optics, electronics and automobiles. Eventually Japan came to dominate the world market in these lines of production. This example illustrates that foreign trade transformation possibilities are not there for everyone to see and to take advantage of. Sometimes, as in Japan, the state can play a crucial role in shaping the perception of producers and traders leading to hitherto unforeseen possibilities. Without state initiatives such outcomes might have remained beyond the reach of agents in a free market economy.

An even more dramatic example of the effects of this kind of intervention comes from Tanzania in the 1960s (Sabot, 1988). Before Independence in December 1961, most wage-earners in Tanzania were employed in plantations, where wage rates and productivity of labor were low. These wage-earners were migrant workers, who usually returned to their villages after a period of work in the plantations. The plantation owners repeatedly turned down the suggestion that higher wages would create a permanent labor force with higher productivity. They argued that the supply curve of labor was backward-bending and higher wages would make African workers work even less. However, after Independence, the government decreed a drastic increase in wage payments in the organized sector of the economy, which led to a three-fold increase in the wage rate faced by the plantations. This forced the plantation owners to introduce major changes in their system of management. Between 1961 and 1968, aggregate employment in the sisal industry declined from 129,000 to 42,000, but production increased by about 400 percent, without any addition to the stock of physical capital. This dramatic demonstration of the efficiency wage hypothesis was the result of changes forced upon unwilling entrepreneurs from outside.

Naturally, all the various intervention schemes designed by the government of Tanzania did not yield positive results. Neither was the government of Japan successful with all its grand schemes of economic regulation. For example, the New Township Development Scheme of the early '60s, which was to disperse industrial activities away from the Osaka-Nagoya-Tokyo complex, became an expensive failure. Whether a particular government in a particular situation will be able to take the correct course of action is a difficult question, to which, perhaps, there is no context-free answer.

The State and the Polity

In an earlier era Mao Zedong had introduced China's statist development strategy with the slogan: "Put politics in command." This formulation is analytically helpful, because it recognizes that the state is a creation of the polity. The point is obvious in the case of a democratic polity, where the activities of a government are circumscribed by the preferences of the dominant interest groups. But even an authoritarian regime can never be indifferent to the questions of legitimacy and popular support.

This point is perhaps best illustrated by an example from Taiwan in the early 1970s (Datta-Chaudhuri, 1981b). At that time, Taiwan had had the lion's share of the lucrative market for bananas in Japan. The production of bananas was organized in small firms using labor-intensive techniques of production. Soon it became obvious that for selling a perishable commodity like bananas to a distant market, large firms (whose production, grading, handling, and packaging were mechanized) had a clear advantage over the traditional methods of production and distribution. A number of multinational farms went to the neighboring country, the Philippines, and established giant mechanized banana plantations, after displacing thousands of small farmers. Taiwan saw this development in the Philippines but prevented any attempt at the creation of large mechanized farms at home, and thereby willingly allowed its market share in Japan to fall drastically.

The example is especially significant because Taiwan was—and still is—one of the most aggressively market-oriented economies in the world and it also had an authoritarian government. Nonetheless, the government of Taiwan did not allow the logic of free market to operate where the livelihood of a large number of farming families were at stake. The usual argument that "sooner or later" the displaced workers would find alternative employment in other efficient industries was politically unacceptable to the society at large.

While political compulsions are important determinants of state action, it is not always easy to recognize the true nature of those compulsions. Actions of a government are never solely dictated by economic considerations, although economic arguments are often employed to legitimize actions which have different intents. Outside observers often reach misleading conclusions because they are unable to see through the strategic behavior of politicians.

For example, the People's Action Party (PAP) of Singapore introduced repressive measures to control trade union activities with the argument that they were necessary for attracting foreign investments and for competing successfully in export markets. But Hong Kong did not repress its labor movement, nor did it suspend the institution of collective bargaining. This did not affect Hong Kong's ability either to attract foreign capital or to perform successfully in export markets. In recent years, South Korea has seen the emergence of active trade unionism, which is often noisy and sometimes

militant; but it does not seem to have affected the performance of the South Korean economy adversely. The government of Singapore obviously moved towards a repressive regime to ensure the political survival of the party in power, but it sought legitimacy for its action by invoking economic arguments which had some measure of popular appeal. It, of course, had the unfortunate by-product of confusing many outside economists.

These matters make political economy a difficult subject. Nonetheless, it is possible to identify a few broad features of a polity that crucially influence the relationship between the state and the economy. For example, to explain the evolution of the successful relationship between the state and the economy in South Korea, it is important to consider the land reform imposed on that country (as well as in Japan and Taiwan) from outside after the Second World War. Land reform destroyed the political power of the landed aristocracy and helped the emergence of the commercial and industrial middle classes as the dominant elite in the country. The homogenous social base of the military and the business elite in the early days of President Park paved the way for a system ("Korea Inc.") where the power of the state was brought to control the economy through formal as well as informal channels (Jones and Sakong, 1980).

The importance of this phenomenon becomes apparent when one compares the performance of the South Korean economy with that of the Philippines. The two countries have remarkable similarities geographically as well as in demographic terms. In the early 1960s, per capita incomes in the two countries were very similar.[11] Both countries had close relationships with the United States in military, political and economic matters. The government of each country had a strong ideological commitment to capitalism. Park Chung Hee and Ferdinand Marcos were not dissimilar in their political values and in their willingness to use repressive measures. Yet, the two economies had very different records of economic growth. Social scientists do not as yet have the tool-kit to explain these differences satisfactorily, but it is not difficult to see how the dominance of the landed aristocracy in the political economy of the Philippines hindered the creation of a dynamic capitalist economy. The same factors were also responsible for the Philippines not trying to achieve a greater measure of distributive justice in the society (Datta-Chaudhuri, 1981a).

In the case of India, the size and the heterogeneity of the country prevented a single homogeneous group from dominating the polity and the state. A few dominant classes, fragmented by regional differences, exert collective control over state machinery.[12] Such a coalition had to rest on implicit understandings regarding the manner in which the state could control and

[11]According to the World Bank, per capita GNP at current prices in the Philippines went up from $210 in 1967 to $590 in 1987. During the same period in South Korea it went up from $240 to $2690.
[12]For an analysis of India's political economy as a bargaining equilibrium of dominant classes, see Bardhan (1984).

regulate the economy. In India, these understandings can be summarized as follows:

First, the affluent peasantry, who constituted perhaps the most powerful group within the Indian coalition, successfully imposed three conditions on economic policies: land reforms should not be pushed beyond a certain point; there should be no taxation of agricultural income and wealth; and the state should maintain high prices for outputs and low prices for major inputs and thereby maintain a budgetary policy with heavy subsidies.

Second, the big industrialists, the second group in the dominant coalition, wanted the state to create profitable opportunities for their expansion in the home market. This meant public sector outlays in social overhead capital, subsidized intermediate goods produced by the public sector, and protection from foreign competition.

Third, the working classes and other employees in the organized sector wanted legal and procedural guarantees ensuring employment security. This reduced the ability of the industrial organization to make quick adjustments in production processes and to create an environment for quick learning.

Fourth, the backward regions of the country demanded a mechanism of investment allocation, whereby new industrial units would be located in those states.

The Indian industrial organization and the policy environment in which it operates are the results of these implicit understandings, which support the equilibrium of group interest in the country's political economy. This is why the Indian state cannot acquire direct control over a larger fraction of the economy's investable resources, as is the case in South Korea. For over a decade, successive governments in New Dehli have tried to reform the existing regulatory mechanisms, which do not encourage either cost and quality consciousness or fast learning and quick adjustments. They have not succeeded, because they could not disturb the old equilibrium in the polity which supports the power of the state.

Summary and Conclusions

Market failures present serious obstacles to the growth process of a backward economy. Unfortunately, development economists in the 1940s and 1950s focussed their attention on a rather limited class of market failures; those associated with investment decisions. In the field of development policy, this led to a strong emphasis on investment planning with the naive belief that once the physical capital was installed, the subsequent problems of production and productivity improvement would automatically be resolved.

Subsequent research and development experiences discovered serious market failures associated with the operation of installed capacities. The problems arise from the various facets of the learning process, which is of crucial

importance to a developing economy. Learning occurs at several levels: how to operate new techniques of production; how to introduce cost-reducing and quality-improving innovations; how to change the product-mix quickly in response to a changing environment. The state can play an important role in helping the economy to acquire those skills. However, in designing an appropriate role for the state it is important to remember two things.

First, although the market operates inadequately in many spheres, it performs an important function in disciplining producers against wasteful use of resources. Secondly, in a changing world, the required institutional changes in markets do not always take place automatically. The state can play an important role in promoting and supporting the right kind of market institutions.

The principal function of a market organization is to institute rewards and penalities around economic activities. It is important to remember that any economic system must have such schemes of rewards and penalities to guard against wasteful use of resources. Therefore, an activist government needs to strengthen the market institutions so that it can influence the behavior of economic agents effectively. In those spheres where market signals alone are not effective guides to desirable action, appropriate non-market institutions are required to be created. Thus, the market-versus-government dichotomy is a fake one.

The performance of a market economy depends on the perception of economic agents regarding the technological and market opportunities available to them. In some cases, unaided market mechanisms were unable to realize potential economic gains, because economic agents had failed to perceive those options. There are also instances where the state influenced the behavior of producers and traders in a positive direction either through coercive regulations or by cooperative action.

Can a government be relied upon to do the "right" thing and avoid doing the "wrong" thing? It is impossible to give a context-free answer to this question. Economists, as outsiders, tend to believe that it is all a matter of knowing what is right and what is wrong. If that were the case, many tricky problems would have disappeared a long time ago. A government's policies reflect the interests of the dominant social groups which control the state. Changes in the economic policies almost invariably hurt some of these interests, which makes changes difficult within a gradualist framework. Economic analysis can be very useful in identifying areas of potential gains and thereby helping to create new constituencies for change. Such analysis can also identify methods of adjustment which are politically acceptable.

The important question for developing societies is how to develop a mutually supportive structure of market and non-market institutions, which is well-suited to promote economic development. This makes normative development economics a difficult art.

■ *I am grateful to János Kornai, Louis Lefeber, Stephen Marglin, Roderick McFarquhar and Amartya Sen for useful discussions. Pranab Bardhan, Richard Eckaus, Carl Shapiro, Joseph Stiglitz and Timothy Taylor made valuable comments on an earlier draft of this paper. I am, of course, responsible for any errors that may remain.*

References

Arrow, Kenneth J., "The Economic Implication of Learning-by-Doing," *Review of Economic Studies*, June 1962, *29*, 155–173.

Bardhan, Pranab, *The Political Economy of Development in India*. Oxford: Basil Blackwell, 1984.

Datta-Chaudhuri, Mrinal, "Industrialization and Foreign Trade: The Development Experiences of South Korea and the Philippines." In Lee, E., ed., *Export-Led Industrialization and Development*. Bangkok and Geneva: ARTEP-ILO, 1981a.

Datta-Chaudhuri, Mrinal, "Labor-Intensive Industrialization and the Organisation of Trade," *Indian Economic Review*, July–September 1981b, *16*, 199–212.

Greenwald, Bruce C., and Joseph E. Stiglitz, "Externalities in Economies with Imperfect Information and Incomplete Markets," *Quarterly Journal of Economics*, May 1986, *101*, 229–264.

Jones, L. P., and I. Sakong, *Government, Business and Entrepreneurship in Economic Development: The Korean Case*. Cambridge: Harvard University Press, 1980.

Kornai, János, *Growth, Shortage and Efficiency*. Oxford: Basil Blackwell, 1982.

Krueger, Anne O., "The Political Economy of the Rent-Seeking Society," *American Economic Review*, June 1974, *64*, 291–303.

Kuznets, Simon, "Towards a Theory of Economic Growth." In Levachman, Robert, ed., *National Policy for Economic Welfare at Home and Abroad*, Bicentennial Conference Series. New York: Doubleday and Co., 1955, pp. 12–85.

Lerner, Abba P., "The Economics and Politics of Consumer Sovereignty," *American Economic Review*, May, 1972, *62*, 258–266.

Nurske, R., *Problems of Capital Formation in Under-Developed Countries*. Oxford University Press, 1953.

Rosenstein-Rodan, P. N., "Problems of Industrialization of Eastern and South-Eastern Europe," *Economic Journal*, June–September 1943, *53*, 202–211.

Sabot, Richard H., "Labor Standards in a Small Low-Income Country: Tanzania," mimeo, Overseas Development Council, Washington, D.C. 1988.

Scitovsky, Tibor, "Two Concepts of External Economies," *Journal of Political Economy*, April 1954, *62*, 143–151.

Solow, Robert M., "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics*, August, 1957, *39*, 312–320.

Stiglitz, Joseph E., "Learning to Learn, Localized Learning and Technical Progress." In Dasgupta, Partha, and P. Stoneman, eds., *Economic Policy and Technological Performance*. Cambridge: Cambridge University Press, 1987.

World Bank, *World Development Report 1989*, Washington D.C., 1989, pp. 164–165.

Young, Allyn, "Increasing Returns and Economic Progress," *Economic Journal*, December 1928, *38*, 527–542.