Post-Socialist Transition and Environmental Protection

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ABSTRACT

This article examines the institutional characteristics of market and centrally planned economies and their impact on the environment. It argues that while the planned economies are utilising market mechanisms in environmental protection, their market counterparts are facing more and more environmental problems that require governmental intervention. Using the latest statistical information, the records of sulphur dioxide emission under market and planning over the past twenty years are compared. The findings show that while planned economies generated more pollution due to energy inefficiency, they were nevertheless quite effective in reducing pollution under centralised coordination. This is particularly true at the initial stage of pollution control. Although the industrialised market economies were capable of diverting resources into pollution control, they were equally capable of causing environmental disruption, especially at their early stages of industrialisation. Finally, it is argued that environmental protection in post-socialist societies is likely to experience a downturn in the near future. This is due to the decreasing role of government coordination, the lack of a legal system, and the difficulty of developing a well-functioning market.

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How are market reform and political decentralisation in the formerly planned economies affecting the environment? To answer this question, one has to examine the institutional characteristics of market and planning that are related to the environment. In recent years, as a large number of horrifying stories about pollution and environmental disasters transpired from the Soviet Union, Eastern European countries and China, a consensus has been formed in the West and among the reform-

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ers in these countries that central planning has failed to protect the environment (Feshbach and Friendly, 1992; DeBardeleben, 1991; Singleton, 1987, pp. 149–168; Kramer, 1983; Lester, 1989; Volgyes, 1974; Ziegler, 1987; Slama, 1986; Sobell, 1990; Kinzelbach, 1987). It is believed that only market reform can save the environment (Chandler, Makarov and Zhou, 1990). This study will first examine the mechanisms under central planning that may lead to environmental destruction and how they can be overcome under a market economy. Second, it will also scrutinise the factors in a market economy that may bring negative consequences to the environment and how they can be avoided under government planning. Third, the environmental records of the past two decades under central planning and market, as reflected in air pollution, will be compared. Finally, the impact of further market reform on the environment in the formerly planned economies will be evaluated.

Problems of Planning

Problems of central planning that contribute to environmental pollution fall under four general categories: forced industrialisation, energy inefficiency, media censorship, and lack of socio-political pressure.

Forced industrialisation

The Stalinist model of central planning emphasised rapid industrialisation. One of the advantages of central planning, as argued by Soviet economists, is its ability to allocate resources nationwide and to concentrate on the priorities of economic development. These priorities include industry over agriculture and heavy industry over light (consumer) industry. Consequently, the Soviet Union experienced rapid industrialisation before World War II. Other planned economies which followed the Stalinist model, such as those in Eastern European countries, China and North Korea, also managed to grow faster than a long list of capitalist countries (Kornai, 1992, p. 202). Industrialisation, particularly heavy industrial development, is energy-intensive. With high levels of energy consumption, environmental pollution, particularly air pollution, is unavoidable. Furthermore, as most of the financial resources were drawn into industrial production, little was left for pollution control. Accordingly, industrialisation under central planning tends to lead to high levels of pollution.

Energy inefficiency

Pollution in central planned economies is not only due to high levels of energy consumption by heavy industry, but also to very inefficient