

The issue of linking FDI and the natural environment reflects my concerns for China's long-term sustainable development. China needs to turn its achievements – in increasing market orientation, rapid economic growth, and strong administrative capacity – into advantages for improving its environment for future generations. The case of the PRD is unique in China for its extraordinary economic growth rate and heavy dependence on FDI for 20 years. However, as China gradually merges itself into wider global scene, it is going to promote more and more regional developments following the successful experience of the PRD. Therefore, the interaction between FDI and the environment in the PRD today, may be the tomorrow for a large segment of China.

My analysis of the two case study cities and the general PRD area shows that FDI is an essential factor embedded in the economic and environmental development of the PRD because it has catalyzed the economic changes, especially in the small to medium cities and the periphery between major metropolitan areas that have been recently urbanized. My analysis of the economic and environmental indicators of Guangzhou is consistent with Lin's observation of low

concentrations of industrial manufacturing facilities in the large cities of the PRD. While the impact of FDI on Guangzhou is demonstrated more now in the service industry boom, and in provincial revenue growth, Dongguan represents a rural economy revived and accelerated by FDI, with more emphasis on industrial manufacturing. However, my limited empirical data demonstrate that the interaction between FDI and environment is not direct, or in most cases, linear.

Implications

After the first two decades of rapid yet chaotic development, experts, professionals, and the local governments of the PRD have started to realize the importance of balancing the economy, environment, and social equity. My analysis suggests that to establish a healthy loop of economic growth and environment preservation, not only the government economic services such as Customs and tax incentives have to keep improving, but environmental services and regulations have to rise up to the new challenges as well. The ultimate goal of development is to improve the quality of life, of which environment quality is an essential indicator. The experience of Guangzhou's industry park shows that a positive relationship of FDI and the environment makes the economic development more promising. The traditional view that globalization only destroys the local environment is not necessarily true in the PRD case.

Environmental management at all levels of government and all sizes of localities should be strengthened. At the national level, this often means fewer investment controls but better

environmental regulations and standards, so the government can keep an eye on the environmental future yet provide enough flexibility to the local authorities to tailor their investment policies to their own needs. At the local level, it means better urban planning and better enforcement of regulations and standards (the World Bank, 1997b, p.108).

Some of my interviewees (Chen, L.; Chen, X.G., June, 2001) mentioned that they encountered problems working as independent outside experts with different local governments to obtain transboundary environmental data. The competition among cities in the PRD is preventing collaboration among local governments. Divided jurisdictions across municipalities have not worked to the advantage of the environment. However, pollution does not have a visible boundary like political divisions. Only through teamwork can the PRD achieve overall environmental improvements. Also, as the key stakeholders in a socialist market economy, the local governments should explore more the possibility of collaborating with other stakeholders, such as the foreign investors (private sector) and the local citizens (civil societies and NGOs), in the decision-making process.

Foreign investors should realize that there is not much “cheap” farmland left in the PRD to use. In order to maximize their profit, they should make the most of the new policies that promote high-tech and less pollution-intensive industries. The local citizens need leadership and less red tape to organize effective environmental NGOs to educate the wider population and work more closely with the public sector. Small grass-root actions have been taken by informal NGOs,

according to Mr. Lie Chen, one of my interviewees (June, 2001). A rural village in Dongguan volunteered to protect a few ancient trees in the village. The local government recognized their effort by awarding them quality trees. In the urban areas, on the other hand, it would be more difficult because of the high population mobility and the indifference caused by the size of the community.

Further Research

My analysis is largely built on secondary data from government resources. The economic and environmental indicators data are usually from separate government agencies that do not communicate with each other very often. Therefore, the data are generally independent of each other, which helps ensure the reliability of the data.

As for the validity of data, the indicators I used for demonstrating the relationship between pollution and FDI may need to be specified in further detail to verify that they do measure what I wanted to measure. Although some of the indicators of environmental quality can be witnessed by the naked eye and from personal experience, it would be difficult for me as an individual to be able to collect more extensive environmental data and conduct environmental experiments. If there were more interviews or sampling techniques applied, however, more first-hand materials could be obtained from stakeholders including foreign investors, additional government officials, and local citizens, to examine the collaboration levels among different sectors in the society, as well as their reaction to economic changes and policy transformations.

This type of qualitative information would strongly support the quantitative indicators.

As seen in the literature review, government regulations can significantly shift the spatial distribution of local business and pollution, especially in a country like China which is still operated as a partially planned economy. Thus, future analysis towards a more detailed view of how government environmental policies affect FDI in the PRD over a more extended period would help to understand the interaction between those two.