GEP Leverhulme Centre for Research on Globalisation and Economic Policy

The University of Nottingham

**GEP in Malaysia Research Paper Briefing**

# Foreign Direct Investment, Pollution and Economic Growth: Evidence from Malaysia

by Chew Ging **Lee**

**South East Asia's tiger economies should prize the long-term health of their environment above the ongoing short-term gains provided by foreign firms that pollute.**

Groundbreaking research from the Globalisation and Economic Policy Centre's new branch in Malaysia shows the flow of money from overseas will not necessarily guarantee the region's sustained economic growth.

The findings suggest policy-makers in the region could now tighten slack environmental regulations that have traditionally encouraged large-scale foreign investment.

Mr. Chew Ging **Lee**, an associate professor of quantitative methods, used Malaysian data to carry out what is thought to be the first-ever study into the links between Foreign Direct Investment (FDI), pollution and output.

Lee said: "FDI has been a major engine for the rapid economic growth of many South East Asian countries, but the success of these economies has been achieved at the expense of the environment.

"Lax environmental policies and lenient regulations have encouraged foreign investment in industries which pollute and damage the environment.

"But this does not have to continue. This research shows that the conventional wisdom that FDI is a key factor in sustained economic growth may provide an incomplete picture.

"It is clear from our analysis that the effects of FDI on the growth of Malaysian productivity may be transitory rather than permanent."

Along with Indonesia, the Philippines, Singapore and Thailand, Malaysia was one of the founding members of the Association of South-East Asian Nations - also known as the ASEAN-5 - in 1967.

**Key points:**

- Foreign Direct Investment does not necessarily guarantee long-term economic growth
- FDI is likely to attract polluting industries - especially if environmental regulations are slack
- ASEAN-5 countries can enjoy growth and a healthy environment if they tighten pollution laws and invests in their own people

Malaysia attracted 94-million US dollars' worth of FDI in 1970, 934-million in 1980, 2,611-million in 1990 and 3,788-million in 2000.

Indonesia attracted 145-million US dollars' worth of FDI in 1970, 300-million in 1980, 1,092-million in 1990 but lost 4,550-million in 2000.

The Philippines attracted 550-million dollars' worth of FDI in 1990 and 1,345-million in 2000.

Singapore attracted 93-million dollars' worth of FDI in 1970, 1,236-million in 1980, 5,575 in 1990 and 16,485-million in 2000.

Thailand attracted 43-million dollars' worth of FDI in 1970, 189-million in 1980, 2,575-million in 1990 and 3,350-million in 2000.

All of these countries have seen their GDP per capita rise, often considerably, in the same period. In Singapore it has increased 5-fold; in Indonesia, Malaysia and Thailand it has more than tripled.

But another common theme among prosperous ASEAN-5 countries has been rising pollution-levels - often as a result of the relentless inflow of FDI.

Academics argue that when FDI flows into a host country, it helps transfer new ideas, technologies and managerial skills to domestic firms. During this process, domestic firms may experience a step change in productivity. As the country becomes more productive and successful, and infrastructure is developed, even more foreign investment is attracted. But this new research shows that FDI inflows explain only the short-term adjustment of GDP per capita and not the long-term changes. It suggests that though FDI inflows may act as a positive stimuli for Malaysia and other ASEAN-5 countries, they may not be an engine for sustained economic growth because they may not always serve the long-term interests of host countries.

Lee, who is based at GEP's new Malaysian branch at the University of Nottingham's Semenyih campus, said his research suggested the ASEAN-5 countries could afford to turn their back on polluting industries and do more to power their own sustained growth.

He said: "Energy conservation and strict environmental regulations may temporarily harm the expansion of the economy. But it is now clear that the appropriate response to environmental problems will not prevent long-term expansion if these countries invest in their people, new technology and infrastructure rather than adopting weak environmental regulations and enforcement which may attract polluting FDI that has the potential to actually harm the country in the long-term.

### GEP in Malaysia

GEP, the Globalisation and Economic Policy Centre, based at the University of Nottingham, is one of the leading academic centres in the world for the study of the impacts of globalisation and economic policy.

GEP has an impressive international reputation, with its academics advising the World Bank, the WTO, the OECD and the Commonwealth Secretariat.

GEP opened its Malaysia research centre at the University of Nottingham's Malaysia campus, 30km from Kuala Lumpur, in January 2008.

*GEP in Malaysia* will open up exciting research opportunities for GEP staff to study new sources of data in South-East Asia that could shed light on issues that affect many other countries in Asia and across the world.

Lee published his study in a paper entitled *"Foreign Direct Investment, Pollution and Economic Growth: Evidence from Malaysia",* which will shortly be published in *Applied Economics.*

## Research paper author

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Chew Ging Lee is an Associate Professor of Quantitative Methods. His research interests include applied econometrics, sports economics, economics of development and the economics of tourism. He is based at the University of Nottingham's Malaysia campus, where he is the Director of Undergraduate Programmes. His work has appeared in a wide variety of publications, including the Journal of Applied Economics and the Journal of Sport Economics.

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