**United Nations Conference on Trade and Development** 

Technology for Development Series

# **INVESTMENT AND TECHNOLOGY POLICIES FOR COMPETITIVENESS:**

## **Review of successful country experiences**



United Nations New York and Geneva, 2003

#### NOTE

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This series of publications seeks to contribute to exploring current science and technology issues, with particular emphasis on their impact on developing countries.

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#### PREFACE

This paper discusses the role of foreign direct investment in transferring technology, building technological capabilities and enhancing competitiveness. It highlights the important role that foreign direct investment can play in the transfer of technology, but also emphasizes that the latter should be maximized and complemented by appropriate country policies. The paper examines competitiveness in its contextual setting of globalization, growing integration and rapid technical change, before developing an analytical framework with which to consider technology and capacity building. On the basis of its evaluation of the case studies of South-East Asian countries, the paper considers the strategies used successfully to build domestic capabilities, providing a broad set of policy options from which to choose.

This paper was prepared for the United Nations Commission on Science and Technology for Development by Sanjaya Lall, Professor of Development Economics, Oxford University. Comments were received from Mr. Mongi Hamdi, Mr. Shin Ohinata, Ms. Philippa Biggs and Ms. Dong Wu of the UNCTAD Secretariat. Production assistance was provided by Ms. Laila Sède. The cover page was designed by Mr. Diego Oyarzun-Reyes. It draws on and synthesizes work carried for UNCTAD and other United Nations entities.

Comments were also received from Professor Slavo Radosevic, of University College London.

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## ABBREVIATIONS AND ACRONYMS

ASEAN	Association of South-East Asian Nations
CETRA	China External Trade Development Council
CPC	China Productivity Centre
CSTD	Commission on Science and Technology for Development
ERSO	Electronic Research and Service Organization (Taiwan Province of China)
FDI GDP	foreign direct investment gross domestic product
HAN HT	Highly Advanced National Project (Republic of Korea) high-technology (exports)
ICTs	information and communication technologies
ISI	import substituting industry
ISO	International Organization for Standardization
ITRI	Industrial Technology Research Institute (Taiwan Province of China)
KDB	Korea Development Bank
KIST	Korea Institute of Science and Technology
KOTRA	Korean Overseas Trade Agency
LAC	Latin America and the Caribbean
LT	low-technology (exports)
M&A	merger and acquisition
MENA	Middle East and North Africa
MIMOS	Malaysian Institute of Microelectronics Systems
MT	medium-technology (exports)
NAFTA	North American Free Trade Area
NIEs	newly industrialized economies
NSF OECD	National Science Foundation Organisation for Economic Co-operation and Development
OEM	original equipment manufacture
PC	personal computer
RB	resource-based (exports)
R&D	research and development
SMEs	small and medium-sized enterprises
TNC	transnational corporation
TSMC	Taiwan Semiconductor Manufacturing Company
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization

- VCR video cassette recorder
- VSLI very large integrated circuits
- WTO World Trade Organization

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