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The New Economy in Development

ICT Challenges and Opportunities

Edited by

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Foreword by

Matti Pohjola

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*To my father, Camille, and Olivia
who unwittingly live in the new economy*

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Foreword

The global distribution of income and wealth is highly unequal and the gap between the rich and poor is growing. The *Human Development Report* states that 2.5 billion people live on less than \$2 a day while 10 per cent of the world's richest population receives 54 per cent of global income. In the last 20 years over 80 per cent of the world's population has experienced rising inequality. Notwithstanding measurement difficulties, it is clear that the divide between rich and poor is real within and between countries. Genuine global efforts such as Millennium Development Goals to reduce poverty and inequality are not making much headway either. Paradoxically, the benefits of greater global integration and an explosion in new information technologies are captured mainly by the OECD economies and a few developing countries.

The development process is no doubt complex. History and institutions matter; as do good macroeconomic and social policies. A favourable international environment is equally important if effective global participation is to be realised. In the contemporary context an additional factor for economic development has been identified, namely technology. The history of economic development is a story of rising productivity. Notwithstanding the structural and institutional barriers to access to innovations, developing countries desire new technologies on the assumption that productivity growth could lead to greater social welfare in terms of income and wealth. Today, the availability of information and communication technologies (ICT) has raised new hopes of many poor countries of extricating themselves from the low-productivity, low-growth trap. This optimism is not without merit. After all many East and South East Asian economies, India and Brazil, among others, have been successful in developing and deploying innovations in ICT. Not only is there greater production and exports of ICT but there is also the growth in consumption and the use of such technologies across many sectors, including government. But what of the other developing countries, which have neither an old economy industrial foundation nor the knowledge base to participate effectively in the globalised new economy of services and ICT? What are their possibilities for economic development using new technologies?

Anthony D'Costa has put together a set of chapters that includes contributions to a UNU-WIDER conference on the New Economy in

Development, held in Helsinki in May 2002, which examine theoretically and empirically both opportunities and challenges faced by some of the lesser-studied developing countries and regions in their production and consumption of ICT goods and services. At the macro-level the volume addresses several issues. Because ICT is integral to the new economy, which also includes the service sector, there are theoretical and conceptual challenges to measuring it and thus policy implications. At the same time, the new economy operates in a global setting, which means that changing international governance mechanisms are critical for global information infrastructure. While some poor countries can proactively adapt foreign innovations, they often remain peripheral to the global economic engine. The adoption of ICT in developing and transition economies is hampered by the lack of physical and human capital and appropriate institutions. These are quintessentially old economy development problems. Simultaneously, micro-studies on ICT production and deployment suggest that the ICT-based productivity growth strategy is not completely closed. Some of the chapters broach the issues of export competitiveness in ICT goods and services, the deployment of ICT in small and medium-size enterprises and the significance of spreading the benefits of the new economy to agricultural populations for broader development. No doubt challenges remain but these chapters suggest that the new economy need not be alien to poor countries nor should the old economy problems be ignored in the pursuit of economic and social welfare.

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List of Abbreviations

ABT	Agreement on Basic Telecommunications
ACMA	Automotive Components Manufacturers' Association
AHDR	Arab Human Development Report
AISI	African Information Society Initiative
APEC	Asia-Pacific Economic Cooperation
B2B	business-to-business
B2C	business-to-consumers
BPL	below poverty line
BPO	business process outsourcing
C2C	consumer-to-consumer
ccTLDs	country code top level domains
CEE	Central and Eastern Europe
CEER	Central and Eastern Europe and Russia
CMIE	Centre for Monitoring the Indian Economy
CRM	customer relationship management
DCSSI	Development Commissioner Small Scale Industries
DGP	Director-General of Police
DNA	domain name authority
DOT force	Digital Opportunity Taskforce
DRDA	District Rural Development Agency (India)
DTI	Department(s) of Trade and Industry
ECA	United Nations Economic Commission for Africa
ECASA	Electronic Commerce Association of South Africa
ECD	electronic data interchange
ECLAC	Economic Commission for Latin America and the Caribbean
ERP	enterprise resource planning
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FDI	foreign direct investment
FSIA	Faridabad Small Industries Association
G2C	government-to-citizen
G7	Group of Seven industrialised countries
G8	Group of Eight industrialised countries
GAC	Government Advisory Council
GCC	Gulf Cooperation Council
GDN	Global Development Network

GII	Global Information Infrastructure
GIS	Global Information Society
IC	intellectual capital
ICANN	Internet Corporation for Assigned Names and Numbers
ICC	International Chambers of Commerce
ICT	information and communications technology
IFPRI	International Food Policy Research Institute
ILO	International Labour Office
IMD	Institute for Management Development
IP	Internet protocol
ISAD	Information Society and Development
ISIC	International Standard Industrial Classification
ISO	International Standards Organisation
ISP	Internet services providers
IT	information technology
ITA	Information Technology Agreement
ITR	International Telecommunications Regime
ITU	International Telecommunication Union
JIT	just-in-time
KIBS	knowledge-intensive business services
LDCs	least developed countries
LINK	Learning, Information, Networks and Knowledge Centre, University of Witwatersrand
LP	labour productivity
MIEM	Ministerio de Industria, Energía y Minería (Argentina)
MNEs	multinational enterprises
MPCICs	multi-purpose community information centres
MSN	Microsoft Network
NC	numerically controlled (machinery)
NECTEC	National Electronics and Computer Technology Centre (Thailand)
NGOs	non-governmental organisations
OAP	old age pension
OECD	Organisation for Economic Cooperation and Development
OEMs	original equipment manufacturers
OLS	ordinary least squares
PCs	personal computers
PDS	public distribution system
PITs	public information terminals
PMP	phased manufacturing programme
PMRY	Prime Minister's Rozgar Yojana

PTO	public telecommunications operator
PTT	post, telegraph and telephone
R&D	research and development
RoW	rest of the world
S&T	science and technological
SADC	Southern African Development Community
SADoC	South African Department of Communications
SAMOS	South African Multiple Option Settlement
SARB	South African Reserve Bank
SARS	South African Revenue Service
SIDBI	Small Industries Development Bank of India
SIS	software and information services
SMEs	small and medium-sized enterprises
SMMEs	small, medium and micro-sized enterprises
TARA	Technology and Action for Rural Advancement
TFP	total factor productivity
TFPG	total factor productivity growth
TIGER	Transformation, Integration, and Globalisation Economic Research, Poland
TNCs	transnational corporations
TPRC	Telecommunications Policy Research Conference
TQM	total quality management
TRIPS	Trade-Related Aspects of Intellectual Property
UAE	United Arab Emirates
UNCITRAL	United Nations Conference on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UN-DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organisation
UNU	United Nations University
USA	Universal Service Agency
USP	unique selling proposition
WDI	World Development Indicators (World Bank)
WEF	World Economic Forum
WIDER	World Institute for Development Economics Research, of the UNU
WIPO	World Intellectual Property Organisation
WITSA	World Information Technology and Services Alliance
WSIS	World Summit on the Information Society
WTO	World Trade Organisation