

Such limitations to the scope of the data and the interpretations diminish the worth of the study. If careful academic analysis is to illuminate the nature of public policy choice in this area, it must work on a larger canvas. For an international market, on what grounds can one justify any conclusions from a study that measures progress only on historical relationships? Has Australia been gaining market share in the Asian region or does the growth mask a decline in relative strength? Basic measures of firm-level behaviour provide some alternative clues about causality. Unless they are included - with care, for they are notoriously slippery - the historical, sector averages are likely to create illusions that are at best a distraction and at worst a harmful misdirection of policy.

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Measuring the Impact of Information on Development *edited by Michel J. Menou*, (International Development Research Centre, Ottawa, Canada, 1993), pp. xii + 188, US\$18.95, ISBN 0-88936-708-6

This volume is a comprehensive report on an experiment conducted by the International Development Research Centre (IDRC) based in Canada. It covered a number of developing countries but none in the Asia Pacific region. Follow up case studies, however, are now being conducted. It is a very important contribution to development studies because it shows how far information indicators can be relied upon for measuring development. The book is equally important for the reason that policymakers can justify investments being undertaken in information-intensive infrastructure activities in the allocation of scarce resources. For debt-laden economies, with a shortage of hard currency reserves, such justification is critical.

The study consists of two parts: the first was a computer conference in which a group of fifteen information specialists brainstormed for seven months and the second part was a workshop in which the computer participants and professionals and policymakers from developing countries discussed issues concerning the benefits and costs of information technology as well as its content. At that point in time no empirical work was done but is now being undertaken in the form of five case studies.

The report addresses such concerns of significance as who are the beneficiaries of the dynamic changes in infrastructure? Are they the information elite or the common person? Are the participants in the information revolution convinced about its long-term relevance? Is there sufficient evidence to assure policymakers that the returns on their investment will be in the form of macroeconomic development? Measurement of the information sectors of ten Pacific Rim developing countries was done by the East West Center and the University of Queensland a decade ago. The contribution of the information sector to the Gross Domestic Product of these countries was estimated, but it still needs to be proved that there is a linkage between infrastructure investment and overall development for the majority of citizens. We still find telephone penetration ratios of two per 100 persons in countries of Africa, in China, India and Indonesia.

In the IDRC study the computer conference examined the validity of theoretical models and assessment methods which makes this study unique and its results reported in the vol-

ume shed significant light on short-term benefits and costs. The causality question still remains to be solved but the large investments taking place currently in obtaining technology from multinational corporations, whether through foreign direct investment or through joint ventures and privatization of state-owned monopolies indicate that policymakers want to participate in the global information highway and integrate their countries with global markets.

This IDRC study report rightly shows that no specific indicator could be singled out as causing development. A "knowledge-based economy" could be used to quantify economic development but when it comes to measuring human development or quality of life, the problem becomes complex and increasingly difficult for identifying indicators. The volume contains an extremely useful chapter on Cost-Benefit analysis and its applicability to information intensive projects in developing countries. In fact the discussion sheds light on the ambiguity of the term information itself. Some of the assumptions made are also subject to question such as those of perfect information and costless information. We all know that information has a direct cost to users and that the owner of the information does not lose it, when he parts with the information he has sold. Information is indeed a catalytic resource that feeds on itself and empowers the owner. But the major issue is equality of access and the breaking down of barriers. The low income countries contend that in the information society they become the suppliers of raw data which is unfairly used against them by the rich countries. Be that as it may, one has to appreciate the fact that political boundaries are fast breaking down and CNN and Star TV have captured audiences in the developing world. Rapid rates of growth in Asia, China, and Latin America have brought these countries into the fold of technological advancement. All these countries are racing to own and operate their own domestic satellites even if the base cost is \$250 million and above. They are all investing in cellular telephones and fibre optic cables leading to a growing gap between the larger middle classes and the stagnant rural dwellers. The case studies now in process at the IDRC will bring even more exciting results than what Dr. Menou has so lucidly described in his report.

This volume has carefully and in depth described the risks and opportunities of information-intensive investment. Recent events have somewhat dimmed future prospects of growth and in the words of *The Economist* (28 January 1995, p. 13) destroyed the fallacy that "all emerging markets will grow consistently and continuously."

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Historical Analysis in Economics edited by Graeme D Snooks (Routledge, London and New York, 1993) pp. xvi + 249 AUS\$59.95 ISBN 0-415-08825-9

Despite its undoubted success as an academic discipline over the last forty years, economics has always had its critics. They are as likely to come from inside as outside the discipline and they flourish when economic fortunes are low as they have been in the World economy during the last ten years or so. The success story in economics is its climb to become, up to recently, the fourth most popular discipline in the upper school curriculum ('A' level in Britain), the presence of an Economics Department in every University throughout the World and the high demand by employers for economics graduates. Many economic historians