

Book review

SUSTAINABLE GROWTH AND RESOURCE PRODUCTIVITY

Raimund Bleischwitz, Paul J. J. Welfens and Zhongxiang Zhang (eds). Greenleaf Publishing, 2009, ISBN 978-1-906093-28-0, £32, 360 pp.

The book comprises a series of papers, covering a wide range of subjects at different levels of depth and from international authors. These were presented at a colloquium which accompanied a German government-funded research project 'Material efficiency and conservation of resources' coordinated by the Wuppertal Institute from where the editors originate.

The book begins with the general theme of the social, economic and environmental aspects of natural resource exploitation and considers: (a) the increasing exploration costs by companies as higher-grade deposits of metals become rarer or less accessible; (b) the use of input-output models to predict large global increases in materials extraction, with a doubling of total resource use by 2030 from a 2000 base; (c) an examination of trends in trade flows; and (d) a consideration of the concept of materials' criticality where metals and minerals of low substitutability, but high importance, present strategic concerns to individual countries. In the second section, focus is on economic concerns, including research on the existence of the 'resource curse' – the negative association between natural resource abundance and economic growth. Also in this section is a report exploring research on resource efficiency improvement in organisations, and

why such improvements are often ignored. The paper relates these attitudes to different typologies of organisation, including those most likely to be successful managers of resources. The final two sections examine empirical changes in resource productivity at a country level and policies that may contribute to them.

The book does not address the well-known environmental implications of the resource consumption described, despite the likelihood of these being substantial. Moreover, the improvements in resource productivity to address these environmental implications appear difficult to attribute to specific policies. For example, in a paper on country comparisons, Finland appears to perform poorly in resource efficiency improvement, but this is surely due to its high reliance on an extractive economy rather than a neglect of resource efficiency by business. The arguments in the papers are conventionally framed (for example there is no questioning of the assumption of growth in developed countries), and the papers are essentially descriptive rather than prescriptive. Nevertheless the breadth of papers presented makes stimulating reading for the professional researcher in the sustainable use of natural resources, while some of the shorter papers, such as Professor Graedel's paper of materials' criticality, make useful introductions to aspects of the subject. The book does not try to give a comprehensive overview, but these generally well-referenced papers do give a taste of the many themes within this important subject.

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