View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by Research Papers in Economics

ECONSTOR

WWW.ECONSTOR.EU

Der Open-Access-Publikationsserver der ZBW – Leibniz-Informationszentrum Wirtschaft

The Open Access Publication Server of the ZBW – Leibniz Information Centre for Economics

Stolpe, Michael

Book Review

[Book Review of] Barro, Robert J. ... : Economic growth : New York, McGraw-Hill, 1995

Weltwirtschaftliches Archiv

Provided in cooperation with:
Institut für Weltwirtschaft (IfW)

Suggested citation: Stolpe, Michael (1996) : [Book Review of] Barro, Robert J. ... : Economic growth : New York, McGraw-Hill, 1995, Weltwirtschaftliches Archiv, ISSN 0043-2636, Vol. 132, Iss. 3, pp. 586-587, http://hdl.handle.net/10419/2216

Nutzungsbedingungen:
Die ZBW räumt Ihnen als Nutzerin/Nutzer das unentgeltliche, räumlich unbeschränkte und zeitlich auf die Dauer des Schutzrechts beschränkte einfache Recht ein, das ausgewählte Werk im Rahmen der unter
→ http://www.econstor.eu/dspace/Nutzungsbedingungen
nachzulesenden vollständigen Nutzungsbedingungen zu vervielfältigen, mit denen die Nutzerin/der Nutzer sich durch die erste Nutzung einverstanden erklärt.

Terms of use:
The ZBW grants you, the user, the non-exclusive right to use the selected work free of charge, territorially unrestricted and within the time limit of the term of the property rights according to the terms specified at
→ http://www.econstor.eu/dspace/Nutzungsbedingungen
By the first use of the selected work the user agrees and declares to comply with these terms of use.

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Mitglied der Leibniz-Gemeinschaft

Literatur – Literature

Rezensionen – Book Reviews

Barro, Robert J., Xavier Sala-i-Martin, *Economic Growth.* New York, St. Louis, San Francisco, Auckland 1995. McGraw-Hill. XVIII, 539 pp.

The encompassing title of this graduate level textbook on economic growth and the authors' famous names raise high expectations, on which the text itself only partly delivers. The authors, who are both very active at the frontier of growth research, set out to present the state of the art in the theory and the empirics of economic growth and to suggest an agenda for further research. Yet, while the text largely succeeds in its assessment of old and new growth theory, especially in its exceptionally clear treatment of the mathematical methodology of model building, the book's chapters on the empirics of growth fail to give a balanced account of research advances in recent years.

The excellent exposition of recent strides in the craft of modelling economic growth provides a compelling reason even for the experienced researcher to add this text to his bookshelf. The central ideas behind the new models of *endogenous* growth are elegantly traced to their historical roots in the older neoclassical theory of growth, in particular to the Solow-Swan model, the Ramsey growth model with intertemporal consumer optimization and the overlapping-generations model. The analysis of endogenous growth logically proceeds from one-sector models, with special attention to the role of government services, via two-sector models, with special attention to the role of human capital, on to models of endogenous technological change, which is interpreted in one chapter as an expanding variety and in another as a rising quality of products. This tour de force on growth theory is supplemented by two smaller chapters which analyze the diffusion of technology across countries and sketch several ways of endogenizing an economy's supply of labour (namely via the choice between labour and leisure, via labour migration and via families' choice of fertility, thus endogenizing population size).

While the technical exposition of these models is generally excellent, their economic interpretation sometimes suffers from being obsessed with the question whether per capita income levels of countries will converge in the growth process. It is almost as if no empirical implications other than convergence could be derived from growth theories. Moreover, the authors say surprisingly little about the models' policy implications, almost as if governments could not do much to enhance or obstruct growth. In selecting models for inclusion in their book, the authors seem to have screened a vast literature for those models which either directly predict convergence or can conveniently be made compatible with the convergence hypothesis. Obsession with convergence, it seems, has led the authors to ignore dissenting theoretical developments and some of the important controversies of recent years. For example, the authors ignore both the critique of Maurice FitzGerald Scott (1989) who rejects the practice of describing an economy by an aggregate production function, which underlies all the models in Barro and Sala-i-Martin's text, and the work of Steven Durlauf (1993) on nonergodic growth and path-dependence in aggregate output.

Even more one-sided is the empirical part of the book. Here, the authors choose to put their own, methodologically controversial work into the foreground and ignore other approaches which emphasise that growth is essentially a time-series rather than

a mere cross-section phenomenon (see Quah 1993a). The time-series dimension of economic growth is given some attention only in a relatively brief review and critique of growth accounting. But the two major empirical chapters focus predominantly on the cross-section of growth rate differentials, first in the context of long-term regional data sets for U.S. states, Japanese prefectures and European regions, and then in a large cross-section of countries' average growth rates during the period from 1965 to 1985.

The authors interpret their empirical finding of 'conditional convergence' as confirming not only the Solow and Ramsey growth models with exogenous technical progress, but also as confirming two-sector models of endogenous growth, where convergence is attributed to initial imbalances in economies' endowments with physical and human capital, and as confirming open economy models with endogenous technological change and diffusion across countries. At this point, even the most gullible reader may begin to wonder what he has ultimately learned about economic growth from all the models and the wealth of data presented in this book if none of the reported empirical work effectively helps to discriminate between the different models. Other readers may even question whether 'conditional convergence' has been established, given the authors' choice of an empirical methodology which has actually been shown to be flawed precisely as a test of the convergence hypothesis (see Quah 1993b).

One problem with the authors' interpretation of their empirical results is that the many observations in their cross-sections of regions or countries are from interdependent, and not just open, economies so that these observations can hardly be considered as statistically independent from each other. As a consequence, the reported degrees of freedom in the various regressions are almost certainly overstated. An alternative view of growth might postulate a unique historical process, which is interdependent across economies via an ongoing process of specialization (in the wake of changing comparative advantages or path-dependent technological accumulation). But the empirical research of Barro and Sala-i-Martin essentially explores the stylized implications of just one generic model, namely the neoclassical model and some of its recent extensions, without seriously formulating an alternative hypothesis. In particular, the implications of multiple equilibria and path dependence, which are essential features in many recent models of endogenous growth in interdependent economies, are ignored in Barro and Sala-i-Martin's empirical work.

Nevertheless, the book's empirical part deserves some praise – namely for taking up the old growth accounting practice of describing the available data sets on economic growth in a detailed fashion, and for even reproducing large parts of these data sets in tables so that students can immediately begin to use them in their own work.

References

Durlauf, S.N. (1993). Nonergodic Economic Growth. *Review of Economic Studies* 60(2): 349–366.

Quah, D. (1993a). Empirical Cross-Section Dynamics in Economic Growth. *European Economic Review* 37(2/3): 426–434.

— (1993b). Galton's Fallacy and Tests of the Convergence Hypothesis. *Scandinavian Journal of Economics* 95(4): 427–443.

Scott, M.F. (1989). *A New View of Economic Growth*. Oxford: Clarendon Press.

Michael Stolpe