

Citibank, the Swiss Bank Corporation and four English clearing banks.

Taylor suggests that bankers have much in common with sewage works: sewers link communities through the collection and disposal of their wastes. Banks link these same communities through their wealth! "Customers take their bankers and garbage collectors for granted and only notice them when the service fouls up".

Finally he supplies us with a

thought for the day. He writes: "Neither banking nor plumbing is necessary for life. The world for most of its history — like the majority of its population today — did without either."

If anyone works in a bank, puts their money in a bank or, indeed, manages a bank, they should read this book.

JULIA BASTIAN

little progress.

All of this sounds bad enough as a critique of PhD education, but worse is implied by the fact that most teaching of undergraduate economics is done by these same narrow PhD students, not by tenured faculty. (It costs the universities so much less to employ these near-PhDs as instructors: this is the evident rationale for the existence of 90 doctoral programmes in economics in the U.S.)

The authors, some of whom are professors of economics, and all of whom take the study of economics seriously, do not want to be too hard on academe. They offer suggestions for course improvement ranging from the simple:

Principles of Economics could be taught with three or four graphs. If it were, it would probably teach more ideas to students than our current approach accomplishes.

to the wholesale reworking of the structure and content of economics curricula; and a list of criteria for employing teachers of undergraduate economics.

Economists are not the only social scientists (or indeed, the only scientists) who find themselves "letting their sense of reality succumb to their theories." A whole hierarchy become interested no longer in staying open minded but, on the contrary, in eliminating rival viewpoints. The latter is probably the main reason the authors, in spite of their willingness to make constructive suggestions, seem quite despairing about achieving the needed radical reform in the teaching of economics.

Even the most optimistic contributor must be counted as not very hopeful (Colander), for he includes this aside: "Given the right configuration of the stars (and a blue moon), reform is possible."

MARY RAWSON

GRAPHIC MISREPRESENTATION

Educating Economists

David Colander and Reuven Brenner

University of Michigan Press, Ann Arbor

ACCORDING to the fourteen economists who contributed to this volume, the teaching of economics at North American universities is in a sad state. It had been steadily, even rapidly, deteriorating even as the numbers of those entering post-graduate study (PhD candidates) expanded.

PhD studies become, perforce, more narrow, more specialized, more theoretical. In graduate economics they have become overwhelmingly mathematical as well.

Inevitably, it is from this more 'educated' crop of economists that universities choose to hire when filling posts in departments of economics. Among the results are students increasingly turned off economics as a study, and economics majors who graduate in a mental fog. It has come to the point where the academic professionals are talking only to one another. A million a year ill-taught students are added to those affecting the countries' economic policies, and the universities are graduating students who are no use

to employers. One professor is so disgusted with the state of PhD programmes in economics that he advises his best undergrads to "obtain their graduate degrees in business schools rather than the leading economics departments."

The authors' most severe criticisms of the typical grad programme in economics include:

- i) Students are not given even a superficial knowledge of facts.
- ii) Too many 'models' are mere speculations or unfounded opinions.
- iii) Obscure vocabularies initiate and perpetuate confusion.
- iv) A frequently repeated idea passes for evidence. "The result is not only that 'truth' is not taught, but worse: ...a lie is being taught — exactly, logically, and with great precision and solemnity."
- v) Lack of reliability in aggregate measures, be it GNP, consumer price index, or others, is very much glossed over.
- vi) Incentives to academics to publish far exceed incentives to read. The result is only linguistic confusion and