

the World Bank is also evident among some contributors. For example, in the case of the Indonesian agriculture project, Pincus concludes that the World Bank's actions illustrate its view of "sustainability as bureaucratic persistence rather than the large-scale adoption of practices" (p. 96). This may well be true but the latter requires the former; if a project is more than a demonstration, it must address bureaucratic and funding issues. This was in fact the lesson the World Bank drew from this experience.

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Labor, Capital, and Finance: International Flows. By Assaf Razin and Efraim Sadka. Cambridge; New York and Melbourne: Cambridge University Press, 2001. Pp. xii, 181. \$55.00, cloth; \$20.00, paper. ISBN 0-521-78074-8, cloth; 0-521-78557-X, pbk.

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Discussions of "globalization" often lose sight of the fact that the world economy remains remarkably closed in a number of important respects. Flows of labor across national borders remain limited, especially relative to the dramatic nineteenth-century migration of labor from the old world to the new. Additionally, it is only recently that international capital flows have included a significant component of portfolio equity and foreign direct investment (FDI).

Are there large gains to be had from increased factor mobility? Is it possible to allow migration of unskilled labor without undermining the welfare state in a developed economy? Does FDI dominate portfolio equity and debt in terms of host country welfare? This textbook, which summarizes over a decade of research by two distinguished economists, presents a series of stylized models that are helpful in thinking about these questions.

The book is divided into three parts. The first reviews two theoretical issues that are fundamental to any analysis of the welfare implications of factor flows. In a frictionless world, the movement of factors to locations with the highest return is always potentially Pareto improving. Moreover, increased factor flows can have no welfare consequences in a world in which factor and goods flows are perfect substitutes, and goods are freely traded. The first part of the book illustrates the restrictive requirements for the

classic substitutability result, and demonstrates by example the potential for welfare reducing factor flows in a world with frictions.

The second part of the book focuses upon migration and, in particular, the impact of migration by low skilled workers on the feasibility of, and political support for, a redistributive welfare state. The analysis begins with an overlapping generations economy in which inter-temporal redistribution via social security is potentially Pareto improving. If the country is small and open (so that factor prices are fixed) the migration of low skilled workers can increase the welfare of native born citizens even when individual migrants are net recipients of welfare benefits: the native old benefit from transfers by new immigrants, who in turn derive net benefits from the contributions of their own children.

The analysis then turns to the interaction of migration and intra-temporal redistribution under a progressive labor income tax. When society votes on the size of the tax, it is shown that increased migration by non-voting, low skilled workers will shift the political equilibrium in favor of less redistribution. This provides a rationale for the concerns of many about the sustainability of the welfare state in the face of immigration. Empirical evidence in support of this result is presented from a sample of European countries.

The third part of the book analyzes capital flows, and begins with an explanation for abrupt and costly capital flow reversals in a class of models generating multiple Pareto-ranked equilibria in debt markets. Multiple equilibria are generated, first, in a standard model of bank runs in the face of a sequential service constraint, and second, in a model of debt with default. In the latter case, low interest rates prompt firms to invest and repay in most states, lowering the country risk premium and justifying the lower interest rate; if interest rates are high, low investment levels make default more likely raising the risk premium.

It is important to emphasize that in both of these models it is the interaction of an imperfection with a particular exogenously imposed form of market incompleteness that creates multiple equilibria. Indeed, it is now well known that, in the bank-run model, enriching the contract structure is sufficient to eliminate bank runs (for

example, Edward J. Green and Ping Lin, "Diamond and Dybvig's Classic Theory of Financial Intermediation: What's Missing?" *Federal Reserve Bank of Minneapolis Quarterly Review*, 24:3-13). This begs an important, and unanswered, question. If the welfare costs of bank runs are as large as is typically presumed, then there are large gains to any private agent that introduces these contracts. If so, what prevents their introduction?

The analysis then shifts to the welfare benefits of foreign direct investment and challenges the conventional wisdom that FDI dominates portfolio investment in terms of host country welfare. The friction here is asymmetric information. When the owners of a firm enjoy an information advantage over outside investors, the resulting lemons problem makes foreign portfolio investment inefficiently low. However when the economy is opened up to FDI, under the assumption that FDI buys access to the private information and is leveraged on domestic financial markets, host country welfare can decline as foreign investors float the lemons on the domestic stock market. The possibility that these costs are offset by the positive benefits of technology transfer and increased product market competition is also considered. Part 3 of the book then ends with an empirical study of capital flow reversals viewed through the lens of competing models of currency crises.

Overall, there is much of value in this concisely written volume. The authors make a number of novel and important points that merit further investigation. The style is lucid, and the use of simple partial equilibrium models should make the arguments accessible to advanced undergraduate students. Although too narrow in scope to serve as a textbook for an introductory class in international economics, this book deserves to be widely read by researchers, and can be expected to be adopted as a supplementary reference in advanced undergraduate and graduate courses.

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G Financial Economics

Asset Pricing. By John H. Cochrane. Princeton: Princeton University Press, 2001. Pp. 530. ISBN 0-691-07498-4. JEL 2001-1024

This is a textbook for advanced graduate students in finance and professionals who would estimate, test, or implement financial asset pricing models. The classical models, assuming frictionless financial markets and rational expectations, are viewed from an empiricist's perspective. The book has five parts. The first two, basic theory and empirical methods, account for almost 60 percent of the page length. Shorter sections include primers on derivatives, term structure, continuous-time models and a selective empirical survey.

Part I uses the stochastic discount factor (SDF) representation as the unifying theme. Here, $p = E(mx)$, where p is the price, x is the payoff and m is the stochastic discount factor. Asset pricing models are just statements identifying m . The consumption-based model, Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT) and state pricing are viewed through the lens of the SDF. The APT gets only ten pages, less than I think it deserves, mostly supplanted by the "good deal" bounds of Cochrane and Jesus Sa'a-Requejo, which get their own chapter 18. My wish list for the second edition includes the asymptotic principal components methodology of Gregory Connor and Robert Korajczyk. Chapter 5 explores the modern Hansen-Richard representation of mean variance efficiency and ends with the Hansen-Jagannathan bounds. Much of the intuition is developed algebraically and with regression. I don't find the graphical representations as useful, but those who think better geometrically may have a different response.

Chapter 6 describes an elegant equivalence between three paradigms of empirical asset pricing: stochastic discount factor pricing, beta pricing models, and mean variance efficiency. This brings together insights developed in various papers over the last two decades. It is difficult to do the attribution properly without disturbing the delightfully easy flow. So be careful, or your students will cite Cochrane for ideas that should be attributed to earlier authors.

A brief discussion of conditioning information in chapter 8 reveals the aptly named "Hansen-Richard critique." If the asset pricing model says a portfolio is minimum variance efficient given an unobservable "market" information set, then testing with the part of the information we can observe, we are not allowed to infer that a portfolio is inefficient on the full information set. We