*The IMF and Economic Development*, by James Raymond Vreeland. Cambridge: Cambridge University Press, 2003. Cloth and paper.

Is the International Monetary Fund a force for economic reform—painful in the short-run, but ultimately contributing to economic growth by eliminating inefficient practices? Or, to the contrary, is the Fund simply a tool of class conflict that redistributes income from the poor to the rich? Are IMF programs, perhaps, even counterproductive, leading to slower rates of economic development?

James Vreeland has written a very important contribution to this debate, which is likely to spur a new generation of studies of the effects of IMF programs. It is not likely to leave anyone indifferent; this is a book that will be loved or hated. However, this is not an ideological tract. Vreeland writes dispassionately, and, in the best tradition of social science, he uses the most rigorous methods of analysis available. He carefully discusses the limitations of his data and the assumptions behind his models, and he presents a wide range of robustness checks. Vreeland finds that IMF programs reduce economic growth in the short run, without producing any compensating long-term benefits. Further, IMF programs lower wages, redistributing income to the owners of capital. Vreeland concludes that governments enter into such programs not to promote growth, but to redistribute income.

These explosive findings are possible because Vreeland uses a different statistical method than previous studies, which had found no strong effect of IMF programs on growth, either positive or negative. He rightly argues that these previous studies, which relied on before-and-after comparisons of countries under programs or cross-sectional comparisons of countries that did and did not enter programs, were unreliable because they failed to control for selection effects. Countries do not enter IMF programs randomly, so we have to control for the reasons for the programs in order to get an accurate estimate of their effects. Otherwise, we might conclude that doctors cause illness, because we observe that people who visit doctors are often ill. Even controlling for observable factors that indicate prior conditions does not solve the problem, however; for example, if we control for whether patients are sick, we may overestimate the beneficial effects of visiting doctors because highly motivated people are more likely to take the trouble. Vreeland argues that this is what has happened in previous studies of the IMF: controlling for the fact that countries with balance-of-payments troubles are more likely to turn to the Fund for assistance, it appears that the Fund has a negligible effect on growth. However, there are unobserved factors that make countries that are likely to turn to the Fund also more likely to grow, and failing to control for selection effects attributes these beneficial attributes to IMF programs. Controlling for these selection effects, Vreeland finds that IMF programs harm countries' economic growth.

The IMF and Economic Development is an impressive piece of scholarship, and a fine example of the difficult art of multi-method social science. Vreeland starts his analysis with exploratory case studies, which he selects because they are outliers for the traditional explanation for how countries are selected into IMF agreements: that countries turn to the Fund when their reserves are low. Thus, he studies the cases of Tanzania and Nigeria, which resisted IMF programs in spite of having low levels of reserves and great need for assistance, and the case of Uruguay, which accepted an agreement in the late 1980s in spite of having no pressing need for foreign exchange.

The first cases illustrate how "sovereignty costs"—the loss of prestige associated with being the first government to turn to the IMF—and election timing may prevent IMF agreements; the latter illustrates how the desire to tie the opposition's hands (overcome veto players) may lead governments to sign agreements even if they do not need them. Vreeland then develops a straightforward formal model that embodies these insights, showing that both sorts of cases can exist if countries' leaders have different ideal levels of economic reform. This sets the stage for a sophisticated multi-stage estimation in which Vreeland uses selection models to test his hypotheses about sovereignty costs, election timing and veto players; uses the estimated probabilities as controls for selection effects; and estimates the effects of IMF programs on economic development and the distribution of income. Along the way, he makes a convincing case for several political determinants of IMF programs, which demonstrates that selection is not random and underlines the importance of controlling for selection effects.

Must we then conclude, with Vreeland, that IMF programs reduce growth, and that IMF conditionality should either be scrapped or drastically reoriented? Perhaps, but there are several reasons why one might reasonably doubt this key finding, so it is safe to predict that this will be the opening salvo of a renewed debate rather than the last shot.

First, Vreeland's own analysis points to qualifications of the conclusions due to missing data. The most theoretically persuasive determinants of selection into IMF programs, and the ones with the most statistical support—the absolute size of the balance of payments deficit, the budget deficit, reserves, the number of veto players—had to be dropped in the stripped down model that Vreeland finally used to control for selection effects. This means that the selection model is misspecified, which raises questions about any inferences that we draw when we use it as a control. Vreeland's robustness checks address this issue, but future research will surely focus on building more complete data sets that will allow a wider range of variables to be used to explain selection.

Second, there is the question of how the selection model is identified. Vreeland specifies a statistical model in which the country decides whether to approach the IMF and the IMF chooses whether to grant a program, and this is a significant improvement over naïve selection models that do not specify the process by which selection takes place. However, since Vreeland does not observe whether the government or the IMF or both chose not to initiate programs that did not occur, he has to rely upon identifying conditions (variables present in one equation but not in the other) to determine the effects of shared variables on putative decisions by each actor. This is a very clever model to get around a serious data limitation, but it comes at a significant cost. If the logic behind the identifying conditions is compelling, we may believe the results, but otherwise we should not. For example, Vreeland attributes effects of the size of the balance of payments to the IMF, on the theory that the Fund cares about disruptions of the international payments system. But what if countries behave differently if they are large actors? Since the selection effects are important, future research will have to focus on pinning down the mechanism of selection. An essential step is to gather data on which countries approach the Fund for agreements, which would allow us to cut the Gordian knot that tangles up the decisions of the government and the Fund.

Third, this research project explicitly assumes—as does most of the literature on IMF program effects—that IMF programs have a single, invariant effect over time and space

Finally, there is some question about what we learn if we find that IMF programs have such-and-such effects. Does that mean that these are the effects when IMF programs are implemented correctly, or does this mean that these are the effects when IMF programs are negotiated and the conditions are not implemented? Vreeland's conclusions presuppose that if IMF programs have negative effects upon growth, this must be because the IMF gives countries bad advice. An alternative interpretation— equally extreme—would be that countries do not implement IMF conditions, so having a program is simply a measure of unobserved conditions that lead a country to turn to the fund, such as the true state of central bank reserves (frequently falsified in reports to the Fund), and the maturity structure of the national debt. The point is that we really have to disentangle the issue of whether conditions are implemented from the question of the effects of

These lingering questions should detract nothing from the value of Vreeland's contribution.