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The Economics of Exchange Rates,
by Lucio Sarno and Mark P. Taylor

Foreword, by Jeffrey Frankel

Research is supposed to proceed according to what is called the scientific method. Hypotheses are proposed, tested, and enthroned if consistent with the evidence. The accretion of knowledge is supposed to be cumulative over time, discarding what is at odds with evidence and retaining what works. The ability to answer questions about the real world is supposed to be the ultimate motivation.

Unfortunately, economics does not always work that way. Intellectual fads and the effort to demonstrate mathematical prowess sometimes dominate the research agenda. Everyone becomes more specialized, and few seek to synthesize. Some even forget that the ultimate goal is to design models consistent with the real world and that, for example, the derivation of behavior from principles of optimization should be considered only a tool to that end.

After the rational expectations revolution of the 1970s, the study of exchange rates turned nihilistic in the 1980s. It was discovered that a decade or two of experience with floating currencies had not provided enough data to verify some of the systematic patterns of movement in real or nominal exchange rates that the theories of the time had predicted. Statistical tests failed to reject the hypothesis that the nominal exchange rate followed a random walk, or that the real exchange rate followed a random walk. This meant, embarrassingly, we had nothing to say that would help predict changes in such variables. But these demonstrations of the state of our ignorance were misleadingly labeled as evidence in favor of theories, versions of the random walk "theory." More elaborate models were then designed, based on optimizing behavior, so as to have no testable implications, and thereby to correspond superficially to the empirical findings of no statistical significance. Never mind that the random walk proposition was in fact a proclamation of lack of knowledge rather than a proclamation of knowledge. Never mind that there was in any case excellent reason to believe that the failures to reject were due to low power -- insufficient data -- rather than the truth of the null hypothesis. (Never mind that the hypothesis of a random walk in the nominal exchange rate was inconsistent with the hypothesis of a random walk in the real exchange rates, given sustained inflation differentials. One can write about them in separate papers.)

The state of affairs improved a lot in the 1990s. Big data sets, based on long time series or panel studies, now allowed higher levels of statistical confidence, including rejections of random walks at long horizons. Geography reappeared in international economics, after a strangely long absence. The old question of exchange rate regimes was reinvigorated with theories of dynamically inconsistent monetary policy, credibility, and target zone dynamics. New areas of research focused on specific real world

questions, such as the study of Pricing to Market in exports, of monetary unions, of speculative attacks, and of microstructure in the foreign exchange market. The New Open Economy Macroeconomics managed to accomplish the coveted derivations from micro-foundations of optimization in dynamic general equilibrium *without* at the same time sacrificing the realism of imperfect integration, imperfect competition or imperfect adjustment, and without sacrificing the ability to address important questions regarding the effects of monetary policy.

What, then, is the current state of knowledge regarding exchange rate economics? Who can synthesize it all and present it clearly? For years, Mark Taylor has been pursuing the research of international money and finance the way science is supposed to be done. The work is patient and careful. The accumulation of understanding is cumulative. Old theories are discarded when shown to be inconsistent with the evidence, and retained if supported by the evidence. New theories are incorporated when they too pass the hurdles. Occam's razor is wielded. It all has to fit together. Above all, the enterprise is empirical, in the best sense of the word: the motivation is to explain the world. More recently, Lucio Sarno has been seen as a promising new researcher in the field.

Sarno and Taylor's book is a tour de force. The exposition is comprehensive, covering contributions from all corners of the field, and covering the range from the seminal models of the 1970s to the latest discoveries on the theoretical and econometric frontiers of the 2000s. There is no excess verbiage or mathematics. Everything is there to serve a purpose. This is the current state of knowledge.

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