Risk, Direct Investment
and International Diversification

By

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I. Introduction

This paper offers a survey and synthesis of recent literature on risk and direct investment. In addition, some empirical tests are reported, based on a new view of the reasons for international diversification. In particular, attention is focused upon the international version of the capital asset pricing model (CAPM) developed by Solnik in his attempt to estimate the benefits of international financial diversification. Several criticisms of Solnik-type models are presented and the problems in using this model to explain direct foreign investment (rather than financial investment) are explored. In a world of imperfect capital markets direct investment frequently replaces portfolio investment and raises questions as to the usefulness of exclusively financial models.

The special role of the multinational corporation as an indirect vehicle for international diversification is outlined in Section II. Theoretical and empirical problems facing the researcher in this area are isolated, with these problems serving to reinforce the criticism of the standard use of the international asset pricing model. An alternative approach is suggested, one which models the foreign operations of multinational firms as they engage in direct investment. This new approach is explained and some relevant empirical tests are then reported in Section III. The tests show that international goods and factor markets (representing direct investment) are less correlated than international financial markets (representing portfolio, i.e., purely financial investment). In turn, these

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results lead to the implication that an individual risk averter should purchase the shares of multinational firms, as the latter serve as indirect vehicles for desirable international diversification, which can best be achieved through the foreign operations of such firms in the goods and factor markets of the world.

II. Some Theoretical Issues

There is a growing literature on the international aspects of risk but to date there has been relatively little work undertaken on direct investment, as opposed to financial investment. The pioneering papers on international diversification by Grubel\(^1\) and Levy and Sarnat\(^2\) gave indications that there were international gains to be made over and above those possible in national markets alone. Their papers used portfolio theory models of financial assets. The CAPM as developed by Sharpe and Lintner\(^3\) has been applied in an international context in papers by Solnik, MacDonald, Lessard and Adler and Horesh\(^4\). Agmon and Hughes \(\textit{et al.}\)\(^5\) use a market model to conduct tests of international diversification. None of the authors have focussed on the special characteristics of direct investment, but instead have confined their attention to financial investment.


