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Country and industry factors in returns: evidence from emerging markets' stocks

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Abstract

This study examines the influence of country and industry factors on the cross-sectional variance and correlation structure of returns. I use new data on emerging markets' stocks obtained from the Emerging Markets Data Base. I find that emerging markets' returns are mainly driven by country factors, as it was shown previously in studies for mature markets, and that cross-market correlation is not affected by the industrial composition of the indices. These results have important implications in regard to international portfolio diversification: cross-market diversification seems to be a better bet than cross-industry diversification. A finer industry partition shows, however, that ignoring the industrial mix leads to an important loss of diversification benefits. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

Evidence shows that market returns tend to be relatively uncorrelated with each other (e.g. Akhogan, 1995). Furthermore, and in spite of an increasing globalisation of the economies and liberalisation of capital markets in recent years, there is only

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weak evidence supporting increasing cross-market co-variation in returns (e.g. Longuin and Solnik, 1995).

Previous literature has looked at why cross-country correlation of returns is low. The discussion of this issue is not settled. Some studies claim that the low correlation of returns between countries results from the diverse industrial structures in each country that are mirrored by different industrial composition of their stock market indices. As industries are imperfectly correlated, equity markets with different industry composition will also be imperfectly correlated. Roll (1992) claims that industrial factors play a determinant role but Heston and Rouwenhorst (1994) show that the influence of pure industry factors is very small. A strong national market force seems to dominate industry and other stock-specific influences.

Contrary to what happens with the mature markets, little is known about the main factors that drive the structure of returns for emerging markets.[1] A lot of studies show that the correlation of returns between emerging markets and mature markets is low, and that portfolio diversification into emerging markets would have provided increased returns and lower risks (e.g. Errunza and Pabmanabhan, 1988; Harvey, 1993). Yet the literature has not examined whether those results are driven by different industrial compositions of the market indices, or by differential economic and technological development, or by the existence of formal or informal barriers to foreign investors.

In this paper, I re-evaluate the importance of industry and country specific effects in explaining the structure of returns for the case of emerging markets' stocks. I look at different industry classifications and whether these results are the same when I use regions instead of countries.

This study is important because it provides new evidence based on extensive emerging markets' data and it has central implications for international asset management. With a sample of 364 weekly series for between 629 stocks in January 1990 and 1702 stocks in December 1996, from 26 markets, I show that country effects are the most important factors driving the behaviour of emerging markets' stock returns as shown previously for mature markets. Cross-market correlation does not seem to be affected by the industrial composition of the indices. These results suggest that cross-market diversification seems to be a better bet than cross-industry diversification. A finer industry partition shows, however, that ignoring the industrial mix will lead to an important loss of diversification benefits.

The outline of the paper is as follows. Section 2 discusses the alternative explanations that have been suggested to account for the low correlation of returns. Section 3 describes the data and briefly defines the empirical methodology. Section 4 presents the main findings and discusses the implications of the results. Section 5 concludes.

[1] Exceptions are Divecha et al. (1992), Claessens et al. (1998), Fama and French (1998) and Rouwenhorst (1999).