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Rationalizing the value premium in emerging markets

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ABSTRACT

We reconfirm the presence of value premium in emerging markets. Using the Brazil–Turkey–India–China (BTIC) grouping during a period of substantial economic growth and stock market development, we attribute the premium to the investment patterns of glamour firms. We conjecture based on empirical evidence that glamour firms hoard cash, which delays undertaking of growth options, especially in poor economic conditions. Whilst this helps to mitigate business risk, it lowers market valuations and drives down expected returns. Our evidence supports arguments that the value premium is explained by economic fundamentals rather than a risk factor that is common to all firms.

1. Introduction

> "*Growth stocks, which derive market values more from growth options, must therefore be riskier than value stocks, which derive market values more from assets in place. Yet, historically, growth stocks earn lower average returns than value stocks.*"
>
> (Lu Zhang, 2005, p. 67)

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Fama and French's (1992) finding that a single factor encapsulating risk (beta) does not adequately explain cross-sectional differences in stock returns, has motivated an important strand of research on asset pricing, reigniting the debate on the fundamental relationship between risk and return, and challenging the widely-accepted capital asset pricing model (CAPM). Subsequently, numerous theoretical and empirical studies examine the cross-sectional variation in stock returns with many finding patterns unexplained by the CAPM and commonly known as anomalies.

This paper examines one of the most pronounced anomalies, the value premium puzzle. Portfolios formed on the basis of high book-to-market (BE/ME), cash flow-to-price (C/P) and earnings-to-price (E/P) are reported to earn significantly higher risk-adjusted returns than portfolios with contrasting characteristics. However, the previous literature fails to achieve a consensus on the source of the value premium (Chou et al., 2011). The objectives of this paper are to confirm the presence of value premium in a new market, to provide a new rationalization based on economic fundamentals, and to reconcile the diverging perspectives which are apparent in the literature. The value premium reflects a tendency for 'glamour firms' to hoard cash and delay implementation of growth strategies, particularly in times of economic uncertainty (Titman, 1985; McDonald and Siegel, 1986; Ingersoll and Ross, 1992). Since growth (glamour) stocks derive their market value from embedded growth in the form of real options (Zhang, 2005), we argue that cash hoarding limits their exposure to risk but exerts a significant detrimental impact on their stock returns.

The theoretical basis for our analysis derives from Fama and French (1995) and Daniel and Titman (1997). Fama and French (1995) develop a three-factor model, in which the factor that captures distress risk, known as HML, is lower for growth (glamour) firms than for value firms. The debate centres on whether lower distress risk accounts for the discrepancy in average returns between value firms and growth firms (Fama and French, 1995) against claims that distress risk does not contribute to the value premium (Dichev, 1998; Griffin and Lemmon, 2002). We contend that both the cash-drag factors and firm characteristics, as highlighted by Daniel and Titman (1997), are of relevance.

In comparison with value firms, growth firms face a wider array of strategic options, carrying various levels of risk. These firms may limit their exposure to risk by abstaining from investing resources in risky strategies, especially in poor economic environments. Accordingly, growth firms hoard cash when economic conditions are tough, and realize lower returns. By contrast, value firms are prominent in mature and/or declining markets and face a more limited range of options. Such firms face financial risk, as well as business risk, owing to a tendency to use existing assets as collateral in order to leverage earnings. They have less flexibility in managing their risk, because past sunk-cost investment in assets is irreversible (Zhang, 2005). Our approach in rationalizing the value premium is consistent with the neoclassical framework, in which low-risk assets yield lower returns and vice versa.

Our research draws on two recent studies that contrast the approach of Fama and French (1995) with Daniel and Titman (1997). In a similar vein to Daniel and Titman (1997), Chen et al. (2011) propose a three-factor model incorporating factors with greater explanatory power for cross-sectional returns than the Fama and French model. We aim to extend these findings, by obtaining results that are not sample-specific (a limitation of Chou et al., 2011), and by adopting a real options framework in cases where the Net Present Value investment perspective (Chen et al., 2011) is inapplicable.[1] This paper is among the few that try to reconcile differences not only between the neoclassical asset-pricing

[1] Ingersoll and Ross (1992, p. 2) explain this as follows:

> "*If in making the investment today we lose the opportunity to take on the same project in the future, then the project competes with itself delayed in time. In deciding to take an investment by looking at only its NPV, the standard textbook solution tacitly assumes that doing so will in no way affect other investment opportunities. Since a project generally competes with itself when delayed, the textbook assumption is generally false. Notice, too, that the usual intuition concerning the "time value of money" can be quite misleading in such situations. While it is true NPV postponing the project delays the receipt of its positive NPV, it is not true that we are better off taking the project now rather than delaying it since delaying postpones the investment commitment as well.*
>
> *Of course, with a flat, non-stochastic yield curve we would indeed be better off taking the project now, and this sort of paradox could not occur. But that brings up the even more interesting phenomenon that is central focus of this article, the effect of interest-rate uncertainty on the timing of investment*".