Can the information content of share repurchases improve the accuracy of equity premium predictions?

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ARTICLE INFO

ABSTRACT

We adjust the dividend–price ratio for share repurchases and investigate whether predictive power can be improved when constructing forecasts of the UK and French equity premia. Regulations in the two largest European stock markets allow us to employ actual repurchase data in our predictive regressions. Hence, we are able to overcome problems associated with markets characterised by less stringent disclosure requirements, where investors might have to rely on proxies for measuring repurchase activity. We find that predictability does not improve either in a statistical or in an economically significant sense once actual share repurchases are considered. Furthermore, we employ a proxy measure of repurchases which can be easily constructed in international markets and demonstrate that its predictive content is not in line with that of the actual repurchase data.

1. Introduction

A number of studies in the return predictability literature have documented the poor out-of-sample performance of the dividend–price ratio and other variables when used to predict stock returns in the US context (see Bossaerts and Hillion, 1999; Goyal and Welch, 2003, 2008). A very recent and small body of work posits the view that the weak out-of-sample performance of the dividend–price ratio in the US may be due to the fact that dividends alone are not representative of the true cash flow to shareholders (see Boudoukh et al., 2007; Robertson and Wright, 2006). This work links the loss of the dividend–price ratio's predictive power to the fact that firms substitute share repurchases for dividend payments. For instance, Boudoukh et al. (2007, p. 880) argue that "repurchases should be taken into account when relating yields to expected returns". Hence, they construct the total payout ratio, a measure that adjusts the dividend–price ratio for share repurchase activity and demonstrate that it outperforms the dividend–price ratio in terms of predictive ability.

Furthermore, recent work suggests that share repurchases have also become an increasingly popular and important way of providing cash payouts to shareholders in countries other than the US (Haw et al., 2011; von Eije and Megginson, 2008). However, regulations governing share repurchases are not uniform across countries (Kim et al., 2004). For example, the actual

number of repurchased shares and the price paid are not always disclosed (Gonzalez and Gonzalez, 2004; Haw et al., 2011). Therefore, lack of disclosure requirements in some markets could result in researchers and investors having to rely on monthly or quarterly proxies to measure share repurchase activity (Chung et al., 2007; Stephens and Weisbach, 1998). Nevertheless, these proxies tend to produce inaccurate estimates of actual repurchase data (Banyi et al., 2008).

The linkage between share repurchases and return predictability suggested in the recent US literature combined with the growing importance of share repurchases as a payout method outside the US market raises two important questions: Can share repurchases add useful information in predictive regressions with the equity premium outside a US setting? Furthermore, to what extend can the imprecise calculation of share repurchases lead to a spurious relationship between the total payout ratio and the equity premium due to lack of disclosure requirements in some countries? Our study seeks to answer these questions and offers important new evidence within an international stock return predictability setting.

The contribution of this paper is threefold. First, we examine whether actual share repurchases via the total payout ratio variable can enhance the ability of the dividend–price ratio to predict the equity premium in the UK and French stock markets. These two markets are the largest in terms of capitalisation and the ones with the highest repurchase activity in Europe (von Eije and Megginson, 2008). For both countries, our sample covers all listed companies (active and delisted) reported in DataStream and spans the period 1990:01–2010:06. To our knowledge, this is the first study to investigate the predictive content of share repurchases within a cross-country framework. Such framework allows us to extend the existing evidence which is limited and focused only on the US market.

Second, we investigate whether the imprecise calculation of share repurchases can affect inferences in terms of predictability. Firms in the UK and France are required to disclose the number of repurchased shares and the price paid not long after the transaction is completed. Our dataset is particularly advantageous within this context as it allows us to employ actual repurchase data and to overcome any measurement problems associated with share repurchases. Therefore, we are able to evaluate the predictive content of share repurchases with more accuracy. We additionally construct a proxy measure of the total payout ratio which involves readily available data from DataStream and can be easily constructed in international markets where there is lack of disclosure requirements. This enables us to assess whether the predictive content of proxy repurchase data is in line with that of the actual repurchase data.

Third, we move beyond a purely statistical context and evaluate the economic significance of return predictability. This is particularly important as out-of-sample statistical significance does not necessarily translate into economic gains for investors (Leitch and Tanner, 1991). In a mean-variance framework, we compare the out-of-sample performance of a dynamic portfolio strategy that uses the historical moving average of the equity premium (benchmark strategy) relative to a dynamic portfolio strategy that uses either the dividend–price ratio, the total payout ratio or the proxy of the total payout ratio.

Our key findings can be summarized as follows. First, by employing a battery of in-sample and out-of-sample tests of predictive accuracy, including the Goyal and Welch (2003) graphical method, we show that the total payout ratio is a useful predictor of the UK and French equity premia. However, it fails to outperform the dividend–price ratio in both markets. This new finding in the return predictability literature implies that the predictive performance of the total payout ratio may be driven by the information conveyed by the dividends rather than the actual share repurchase activity.

Second, we demonstrate that the predictive content of the proxy repurchase data is not in line with that of the actual repurchase data. In particular, the proxy measure of the total payout ratio is found to be the weakest predictive variable in the UK market, but the strongest in the French market. This lack of association in the predictive performance between the total payout ratio and its proxy counterpart suggests that inferences in predictability may be misleading if they are based on proxy measures of repurchase activity, which are inherently associated with measurement errors. Therefore, our paper posits the view that actual data should be used when available as they carry a more relevant economic content.

Finally, the results based on economic value are in line with the corresponding results derived from the statistical analysis. This gives further support to the view that first, repurchase activity does not enhance the predictive content of the dividend–price ratio in the two largest European stock markets and second, measuring repurchase activity with an error is likely to result in a predictive performance which is not in line with that of the underlying actual data.

Although return predictability is predominantly assessed in the US market, an emerging body of work suggests that the UK stock returns contain an element of predictability at an index level. Therefore, our findings are in line with the general consensus that the UK stock returns are predictable to some degree by dividend–price ratios. More specifically, Pesaran and Timmermann (2000) apply an extended version of the recursive modelling strategy developed in Pesaran and Timmermann (1995) and show that dividend–price ratios are useful predictors of the UK FTSE All-Share index returns between 1965 and 1993. Using quarterly data during the 1975–2001 period and adopting a non-linear approach, McMillan (2003) also reports a significant relationship between the dividend–price ratio and FTSE All-Share returns. More recently, Kellard et al. (2010) demonstrate that dividend–price ratios and dividend yields possess more in and out-of-sample predictive power in the UK market compared to the US market during the 1975–2009 period. In line with previous findings, Giot and Petitjean (2011) also uncover a good predictive performance of the dividend–price ratio in the UK market between 1950 and 2005.

On the other hand, significantly fewer studies explore stock return predictability in the French market. Bossaerts and Hillion (1999) employ data for 14 industrialized countries and their findings suggest the poor predictive performance of the dividend–price ratio between 1971 and 1995 in France. Using monthly data between 1975 and 2001, Ang and Bekaert (2007) find that the dividend yield predicts returns at short horizons when employed together with the short rate. Moreover, Hjalmarsson (2010) concludes that there is no consistent evidence that the dividend yield predicts returns in OECD countries including France. Finally, McMillan (2009) shows that a trading rule based on the dividend–price ratio could lead to higher returns for investors compared