

## **“Repurchases, Issuances, and Stock Returns” (Job Market Paper)**

Does the size of a firm’s repurchases and issuances reveal information on its future stock returns? For firms in the CRSP and Compustat databases over 1975-2013, most quarterly changes in shares outstanding are less than 1%, but the mean share repurchase (issuance) is 3.5% (4.8%). To quantify the relationship between the size of changes in shares outstanding and stock returns, I sort firm-quarter observations with a repurchase or issuance into 5-percentile bins by the size of the repurchase or issuance. I then regress 2-year stock returns less the CRSP equal-weight portfolio return on these bins and firm controls. I find a large – over 8 percentage points – difference in predicted 2-year excess returns between firms with small changes in shares outstanding versus firms with large changes. Firms making repurchases (issuances) of less than 8.6% (1.4%) of shares outstanding outperform the equal-weight portfolio by 6.4% (3.9%). These observations represent 90% of repurchases and 70% of issuances. Firms making larger repurchases (issuances) underperform by 2.3% (5.1%). When controlling for time fixed effects with Fama-Macbeth (1973) regressions, the effects of large repurchases become insignificant but the other findings are robust. I find no statistically-significant changes in the coefficients after 2003. These results suggest earlier studies which do not control for this non-linear relationship may overestimate the returns of firms with large share repurchases and underestimate the returns of firms with small share issuances.

## **“Delegated Investment Management and Boom-Bust Cycles”**

Minsky’s financial instability hypothesis, which argues extended periods of stable financial markets fuels investment in risky assets and market crashes, has been cited to explain the 2007 financial crisis (e.g. McCulley 2009). I build a model of delegated investment management to formalize this aspect of Minsky’s theory. In this model, investment managers can invest in a conventional asset, or they can invest in a tail-risk asset which generates no returns if a negative aggregate shock is realized but otherwise generates higher average returns. Investment managers differ in their ability to distinguish between high- and low-return conventional assets. Each saver is uniquely matched with an investment manager and can’t observe the manager’s ability or investment decision. In equilibrium, savers fire managers who generate low returns to match with a new manager. Low-ability managers invest in the tail-risk asset because it reduces their risk of being fired, even when the price of the tail-risk asset is above its expected return. Numerical simulations generate patterns qualitatively similar to Minsky’s hypothesis. Investments in the tail-risk asset and its price grow during periods of stability where the negative shock doesn’t occur, and decline sharply when the negative shock is realized.

## **“Aggregate Share Repurchases and Stock Returns”**

The value of quarterly share repurchases among S&P 500 firms increased threefold from 2010 to 2015. Some financial market commentators (e.g. Hanauer 2015) raised concerns that high share repurchases fueled the rise in stock prices over this period and stock returns may fall sharply if repurchases slow. In contrast, academic work by Ikenberry et al. 1995 and Peyer & Vermaelen 2009 finds a positive effect of individual firms’ share repurchases on future stock returns, but don’t consider the effect of aggregate share repurchases. To examine the effect of aggregate share repurchases, I use monthly data on all publicly-traded U.S. companies in the CRSP and Compustat databases from 1975-2015 to construct a monthly time series of aggregate net share repurchases as a percent of total market capitalization. I estimate the effect of aggregate share repurchases on firms’ 2-year stock returns while controlling for firm characteristics and business cycle conditions. I find evidence that periods of higher aggregate share repurchases correlate with lower average stock returns on an equal-weight basis. My findings provide empirical support for financial commentators’ concerns about future stock returns during times with high levels of share repurchases.