



Asset growth anomaly in Europe: Do profits and losses matter?



Georgios A. Papanastasopoulos

University of Piraeus, Department of Business Administration, Greece

HIGHLIGHTS

- The asset growth anomaly in Europe is more pronounced across loss firms.
- The asset growth anomaly in Europe is less severe across profit firms.
- The asset growth anomaly in Europe is more likely to be due to mispricing.

ARTICLE INFO

Article history:

Received 5 April 2017

Received in revised form

20 April 2017

Accepted 24 April 2017

Available online 28 April 2017

Keywords:

Asset growth

Stock returns

Profits

Losses

Europe

ABSTRACT

This paper investigates whether the well-documented asset growth effect on stock returns exists across both profit and loss firms in European capital markets. We find that the asset growth anomaly is more pronounced across loss firms and is significantly dampened by the inclusion of profit firms in the sample. The raw and abnormal returns earned from a hedge strategy on balance sheet growth for loss firms are almost two times higher than the respective returns for profit firms. Our evidence casts doubt on a risk-based explanation, thereby lending credence to the suggestion that the asset-growth effect is attributable to mispricing.

© 2017 Elsevier B.V. All rights reserved.

1. Introduction

Several determinants of the cross-section of returns have received the volume of attention in empirical research in finance and accounting. Cooper et al. (2008) provide the starkest findings from this line of research. They find that the growth rate in a firm's total assets is the most economically and statistically significant predictor in the cross-section of US stock returns, dominating beta, book-to-market, size, momentum and lagged returns. Specifically, firms that invest more or grow their total assets subsequently experience lower risk-adjusted returns. This negative relation between balance sheet growth and future returns is often referred to as the investment or asset growth anomaly. The presence of the asset growth anomaly has been investigated internationally, as well. Titman et al. (2013) and Watanabe et al. (2013) show that the negative effect of asset growth on stock returns generalizes outside of the US, and notably is stronger in countries with more developed financial markets.

Although extensive evidence exists on the robustness of the asset growth anomaly, consensus has not yet to be reached on

what causes the anomaly. Two prominent explanations have been proposed; one assumes some form of irrationality and the other is potentially consistent with rationality. Based on the irrational explanation, investors with limited attention fail to fully incorporate balance sheet information into stock prices in a timely fashion, which causes significant security mispricing (Cooper et al., 2008). Consistent with a mispricing-based explanation, Lipson et al. (2011) show that the asset growth anomaly is stronger when barriers to arbitrage are more severe.

Based on the rational explanation, the asset growth anomaly arises as executives optimally adjust their investment expenditures in response to discount rate changes. When the cost of capital falls (rises), more (fewer) investment projects become profitable, leading to asset expanding (shrinking) assets, and future returns decrease (increase) on average because the lower (higher) cost of capital means lower (higher) expected returns going forward (Li and Zhang, 2010). Supporting a risk-based explanation, in line with q-theory of investment, Grobys (2016) shows that the asset growth anomaly is strongly associated with macroeconomic conditions.

This paper furthers our understanding of the asset growth anomaly in an international setting by examining whether the anomaly extends across both profit and loss firms. Our motivation to investigate the asset growth anomaly conditional on the sign of earnings and particularly losses, follows from two strands of

E-mail address: papanast@unipi.gr.

Table 1

Summary statistics on asset growth. Table 1 provides summary statistics on asset growth across the whole sample and subsamples of profit and loss firms. Panel A reports univariate statistics (mean, standard deviation, 25th percentile, median, 75th percentile) on asset growth. Panel B reports pairwise correlations of asset growth with future raw and abnormal returns. ***, ** and * Denote statistical significance of pairwise correlations at 1%, 5%, and 10% level, respectively, two-tailed. ***, **, and * Denote statistical significance at 1%, 5%, and 10% level, respectively, two-tailed.

Panel A: Univariate statistics on asset growth					
	Mean	St. Dev.	25th Percentile	Median	75th Percentile
All firms (72,180 obs.)	1.091	1.161	−0.053	0.079	0.245
Profit firms (54,419 obs.)	0.479	0.165	−0.016	0.105	0.259
Loss firms (17,761 obs.)	2.975	2.328	−0.174	−0.031	0.164

Panel B: Pairwise correlations of asset growth with stock returns				
	Pearson correlations		Spearman correlations	
	RET_{t+1}	$ARET_{t+1}$	RET_{t+1}	$ARET_{t+1}$
All firms (72,180 obs.)	−0.023**	−0.019**	−0.099***	−0.081***
Profit firms (54,419 obs.)	−0.013*	−0.011*	−0.095***	−0.092***
Loss firms (17,761 obs.)	−0.055***	−0.052***	−0.145***	−0.095***

Notes:

Asset growth (AGR_t) is equal to the annual percentage change in total assets ($WO2999$).

RET_{t+1} is the one-year ahead raw return and equals to the compounded 12-month buy-hold return inclusive of dividends (using the return index provided by Datastream item RI).

$ARET_{t+1}$ is the one-year ahead abnormal return and is calculated for any individual stock by subtracting the equal-weighted return of a benchmark portfolio matched by size ($W08001$) and book-to-market ratio ($W03501/W08001$) from the one-year ahead raw return of the stock.

“W” denotes that the relevant data item comes from Worldscope.

the literature. First, losses are more transitory and less informative than profits about firms' future prospects (Hayn, 1995; Collins et al., 1999). In this line, traditional valuation models, such as the discounted residual earnings model, may be unable to yield reliable estimates of firm value for loss firms. At the same time, the greater difficulties market participants face in predicting and valuing losses, could create considerable price uncertainty for loss firms. Second, the profit versus loss binary classification of firms represents a significant, simple and powerful heuristic (see Pinnuck and Shekhar, 2013), which may be used as a reference point for naïve investors to simplify problems of choice and of processing of vast amounts of available information.

The unique characteristics of loss firms, as well as the possibility of using losses as a heuristic (either due to bounded rationality and/or to reduce the transaction costs of processing information) can give rise to systematic errors that affect market prices in the reaction to financial information. In the context of the asset growth effect on stock returns, under a mispricing storyline, one should expect asymmetry between profits and loss firms. Investors are more likely to misunderstand asset growth of loss firms and therefore, the asset growth anomaly is predicted to be more pronounced for loss firms relative to profit firms.¹

Given the ongoing debate among academics about the origins of the asset growth anomaly, as well as practical implications for the investment community (e.g., Grobys, 2014), we examine the international asset growth anomaly separately for profit and loss firms. In doing so, we focus on a sample of developed European equity markets that mirrors the well-known European stock market benchmark from Morgan Stanley Capital International (MSCI). Like in the United States, we find that firms with low growth rate in total assets significantly outperform firms with high growth rate in total assets. The average hedge raw return from buying/selling low/high asset growth firms is equal to 7.89% per annum. The respective hedge return from loss firms is rising to 16.42%, while from profit firms it is declining to 5.20%. A very similar return behavior we find when we adjust returns for size and book to market ratio.

The remainder of this paper is organized as follows. In the next section, the data is described. Section 3 presents the empirical framework and findings and the last section draws conclusions.

2. Data

We study the asset growth anomaly in an integrated European stock market sample that consists of firms from the following 16 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. The final sample includes 72,180 annual firm–year observations, covering all firms listed on the major stock exchange in each country (except financial firms) with sufficient data to compute asset growth rate, raw and abnormal returns from Worldscope and Datastream files over 25 years from 1989 to 2013.

3. Empirical findings

Table 1 reports descriptive statistics. The empirical distributions of asset growth rate are similar to those reported in prior research both for US and international equity markets. The mean and median value of asset growth across all stocks is equal to 1.091 and 0.079, respectively. The standard deviation of balance sheet growth for all stocks is 1.161. The annual raw and abnormal returns are significantly negative correlated with growth rate in total assets. To separate profit from loss firms, we rely on the sign of total accounting earnings. Accordingly, profit (loss) firms are those that report positive (negative) income at financial year-end. The sample consists of about 75% of profit firms and about 25% of loss firms. The reported statistics about asset growth for loss firms are much higher than the respective counterparts for profit firms.

Prior to exploring variation in the asset growth anomaly across profit and loss firms, we follow Titman et al. (2013), Watanabe et al. (2013) and consider quintile trading portfolios by taking into account all European firms included in the sample. In each year, we sort firms into quintile buckets based on their asset growth rates and calculate equally-weighted average raw and abnormal returns. Additionally, we report, the average annual return difference between the bottom and top asset-growth buckets, which constitutes the hedge return on a trading strategy

¹ Consistent with this prediction, loss firms are harder to arbitrage (Baker and Wurgler, 2007), and thus, the corrections of asset growth misvaluation is delayed.

Download English Version:

<https://daneshyari.com/en/article/5057840>

Download Persian Version:

<https://daneshyari.com/article/5057840>

[Daneshyari.com](https://daneshyari.com)