Accrual anomaly and corporate financing activities☆

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ABSTRACT

We examine the mispricing versus rational explanation of the accrual anomaly for U.K. listed firms by focusing on the interaction between accruals and equity financing activities. Portfolio-level analyses and firm-level regressions indicate that the negative relation of accruals with future profitability and stock returns occurs only when firms with low accruals that repurchase equity and firms with high accruals that issue equity are considered. In contrary, this negative relation is dampened by the inclusion of firms with low (high) accruals that issue (repurchase) equity. Our evidence suggests that investors misprice accruals in U.K. and casts doubt on the rational explanation.

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1. Introduction

It is well established that firms with low accruals are rewarded with higher average returns than firms with high accruals, giving rise to the so-called accrual anomaly around the world (see Richardson et al. 2010). However, there is an ongoing debate in the literature on whether the anomaly reflects systematic mispricing or rational risk premia. According to the mispricing explanation, introduced by Sloan (1996), accruals have low persistence, but naïve investors fixate on earnings and implicitly assign a higher weight than warranted to accruals in pricing stocks. According to the rational explanation, introduced by Khan (2008), low accrual firms are marginal in sense that they have a higher exposure to distress risk.

In this paper, we examine the impact of interactions of accruals and equity financing activities on stock returns. We are motivated by a desire to seek whether the accrual effect on stock returns really reflects mispricing or it derives in part or fully from rational risk premia. Loughran and Ritter (1995) argue that managers of overvalued (undervalued) firms exploit misvaluation by issuing (repurchasing) equity. Thus, by conditioning to the valuation signals contained in the firm's equity financing activities could help to identify ex ante accruals mispricing.

Building upon this insight, Bali et al. (2010) show that the well documented U.S. contrarian profits are restricted to value firms that repurchase equity (i.e., value repurchasers) and growth firms that issue equity (i.e., growth issuers). Value firms that issue equity (i.e., value issuers) and growth firms that repurchase equity (i.e., growth repurchasers) do not exhibit significant return differences. Based on these findings, Bali et al. (2010) conclude that the value-growth anomaly is attributable to mispricing. In this respect, our work extends that of Bali et al. (2010) by assessing whether equity financing activities can be also informative about the underlying culprit of the well-known accrual anomaly.

Table 1
Performance of portfolios on. *TACC*.

Parameter	1 Low accruals	2	3	4	5 High accruals	Spread (1–5) LA-HA
ΔROA_{t+1}	0.045	−0.011	−0.015	−0.024	−0.029	0.074
	5.847	3.521	4.845	9.336	6.15	9.562
$ARET_{t+1}$	0.024	0.017	0.017	−0.025	−0.075	0.099
	1.365	1.442	1.427	1.819	5.391	4.904

Notes:

Total accruals (*TACC*) are equal to the change in net operating assets. Net operating assets are equal to the difference between non cash assets ($WO2999 − W02001$) and non–debt liabilities ($W02999 − W03426 − W03255 − W03995$).

ΔROA_{t+1}: is the change between future profitability (ROA_{t+1}) and current profitability (ROA_t). Profitability is equal to net income (W01551) scaled by average total assets (WO2999).

$ARET_{t+1}$ 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 annual return of the stock. The annual return equals to the compounded 12-month buy-hold return inclusive of dividends (using the return index provided by Datastream item RI).

"W" denotes that the relevant data item comes from Worldscope.

We focus on the origins of the accrual anomaly outside U.S., and specifically we conduct our work in the U.K. stock market. U.K. listed firms constitutes an interesting and challenging test setting for our research question, since the existing literature provides clear evidence supporting the occurrence of the accrual anomaly (see Doukakis and Papanastasopoulos, 2014), while we are not aware of any study to date that attempts to distinguish between a mispricing explanation and a rational explanation behind the occurrence of the anomaly. In this way, we also attempt to investigate whether the dependency of an asset pricing regularity on the valuation signals contained in equity financing activities, documented by Bali et al. (2010), is sample-specific or can be generalized worldwide.

As mentioned above, at the center of a mispricing interpretation of the accrual anomaly is the lower persistence of accruals. Firms with high accruals have lower profitability in the future relative to firms with low accruals. Put another way, accruals have a negative impact on future profitability. In contrary, a rational-based explanation does not put forward the lower persistence of accruals.

It is worth noting here, that Ritter (2003) shows that earnings performance is associated with a rising trend up to the share issue, but it declines after the share issue. Put another way, issuers have lower future profitability relative to repurchasers. Thus, firms with high accruals that issue equity are expected to have lower future profitability than firms with low accruals that repurchase equity. A similar prediction cannot be developed for firms with high accruals that repurchase equity relative to firms with low accruals that issue equity.

If the accrual anomaly is due to mispricing from naïve investors who fixate on earnings and fail to understand the lower persistence of accruals, then low (high) future returns of high (low) accrual firms should be more pronounced to those that issue (repurchase) equity for which we expect lower (higher) future profitability. In contrary, if the accrual anomaly is due to risk, then we should not expect significant return differences between firms with high and low accruals depending on issue/repurchase decisions.

Further, if both accruals and equity financing activities are noisy indicators of mispricing and the degree that they are unrelated, combining them may produce a superior indicator of mispricing. When the signals of these indicators agree (do not agree), there is a high conditional probability that each signal is due to mispricing (noise). As a result, we expect the effects of both indicators on stock returns to be stronger (weaker) when their signals are more likely to be due to mispricing (noise). In contrary, if the accrual anomaly is due to risk, we should not expect significant return differences between firms with high and low accruals depending on their equity financing activities, since holding the risk due to one of these indicators constant, the other indicator should still have an effect on stock returns.

The remainder of this paper is organized as follows. The next section describes our data, methods and presents our empirical results, and Section 3 concludes.

2. Data and empirical findings

The sample consists of 22,973 annual firm-year observations, covering all firms listed on the London Stock Exchange (except financial firms) with sufficient data to compute financial statement variables (accruals, profitability, net external financing) and abnormal returns on Worldscope and Datastream files over the period 1989–2013. Details on the measurement of all variables are provided in the notes below Table 1.

The empirical methodology adopted in this paper is consistent with the prior literature on stock market anomalies. Stocks are sorted into portfolios annually by the variable of interest (accruals). Profitability changes and abnormal returns to accrual portfolios and a long-short spread portfolio (i.e., hedge portfolio) are examined for evidence of a negative impact of accruals on future earnings and stock price performance. We then investigate profitability changes and abnormal returns on bivariate portfolios sorted on accruals and net equity financing. Following the argumentation in Bali et al. (2010), under a mispricing-based explanation, profitability changes and abnormal returns should be stronger and more significant in the