

EVIDENCE OF ACCRUALS ANOMALY AROUND THE GLOBE

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ABSTRACT: This paper reviews the empirical research on accruals anomaly around the globe. Accruals anomaly is defined as the negative relation between accruals and future stock returns. Starting with Sloan (1996) many papers have documented and confirmed the existence of accruals anomaly in US capital market. Though, recent papers started to examine the existence of accruals anomaly outside the US. Overall, empirical results suggest that accruals anomaly is a global phenomenon present in developed countries with large companies and where an accruals accounting system exists. The approach adopted is a survey of the literature of accruals anomaly conducted on other samples than US companies. This review splits the discussion in three key topics: (1) empirical evidence from single country studies, (2) empirical evidence from comparative countries studies and (3) empirical evidence from US studies. This comparative discussion highlights the important challenges generated by the accruals anomaly in a global capital market. As a policy implication, investors from all over the globe should enhance their understanding of accruals information as accruals anomaly is a pervasive anomaly encountered in many capital markets.

Keywords: accruals, accruals anomaly, global capital market, accrual accounting

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Introduction

In this paper I review the literature on the negative relation between accruals and future stock returns, also called accruals anomaly. The approach adopted is a survey of the literature of accruals anomaly conducted on other samples than US companies. The present study aims to complement the current research by providing a detailed and comparative analysis of the papers that confirm the existence of accruals anomaly worldwide and to comment the main results from these studies.

Starting with Sloan (1996) many papers have documented and confirmed the existence of accruals anomaly in US capital market. Though, recent papers started to examine the existence of accruals anomaly outside the US. The present evidence proves that indeed exist accruals anomaly in other countries than US. Sloan's (1996) main argument for the occurrence of accruals anomaly relies on investors' fixation on earnings. This hypothesis has been documented and confirmed by many researchers (Xie, 2001; Collins and Hribar, 2000). Further, many authors have tried to confirm this hypothesis on other capital markets (Pincus et al., 2007; LaFond, 2005). The interest in accruals anomaly internationally arose because the returns may vary from a country to other due to different accruals measures and different accounting systems.

In addition, Dechow et al. (2011) draw attention that when performing this kind of research, researchers must be aware that: accruals anomaly is stronger in common law countries than in civil law countries or similar accounting and legal system to US. But, given the results provided by

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LaFond (2005) and Leippold and Lohre (2010) which find evidence in both civil and common law countries, I cast doubt regarding the existence of accruals anomaly only in common law countries. Also, must be considered that the number of observations in US and UK is higher than in other countries. This could lead to low test power for small markets(Dechow et al. 2011).Further, is expected that accruals anomaly will be stronger in countries with stronger reactions to earnings news and less persistent accruals towards cash flows (Dechow et al. 2011).

Nevertheless, Richardson et al. (2010) consider that accruals anomaly has started to diminish in the last years. This may occur because investors have started to pay attention to the information content of accruals and understand the different persistence of accruals and cash flows. Moreover, Leippold and Lohre (2010), who confirmed accruals anomaly in 10 out of 26 countries, consider that the existence of accruals anomaly in only few markets occurs to some reasons. Thus, they motivate that accruals anomaly has small chances to be met in countries where earnings are not so relevant to stock prices. Also, an intensive use of accruals accounting seems to be confirmed especially for US capital market. Moreover, the authors do not understand the role of speculating differences between earnings components if exists a uniform investors` earnings fixation across countries. In addition, convincing arguments are provided by LaFond (2005) and Xu and Lacina (2009) that wherever exists an accruals accounting system there may occur the accruals anomaly.

This review splits the discussion in three key topics: (1) empirical evidence from single country studies, (2) empirical evidence from comparative countries studies and (3) empirical evidence from US studies. In the last section I present my conclusions.

Evidence of accruals anomaly in single country studies

There are several papers that examine the existence of accruals anomaly in distinct countries than US. These studies employ their analyses on one or two countries. The results of these papers confirm the existence of accruals anomaly outside the US. Clinch et al. (2012) argue that studies related to one country are more representative for the broader market because the aggregate studies refer to large companies.

Table 1 presents the most important studies that confirm the existence of accruals anomaly in other countries than US. This table is a synthesis of the papers that study accruals anomaly in different countries and several observations that distinguish these studies.

Table no. 1

Evidence of accruals anomaly in single country studies

Study	Country	Accrual anomaly	Observations
Clinch et al. (2012)	Australia	YES	<i>Include small firms</i>
Goncharov et al. (2013)	Australia Spain	YES	<i>Comparative abnormal returns between Australia and Spain from the insiders perspective</i>
Chan et al. (2006)	United Kingdom	YES	<i>The second market after US</i>
Kaserer and Klingler (2008)	Germany	YES	<i>Firms which present their financial statements under IFRS or US-GAAP</i>
Kho and Kim (2007)	Korea	YES	<i>Related to mispricing of accruals and not related with any risk factor</i>
Koerniadi and Tourani-Rad	New Zealand	NO	<i>Still evidence of cash flow anomaly</i>

(2007)			
Li et al. (2011)	China	YES	<i>Evidence is revealed only after eliminating firms that take “big-bath”, due to delisting regulation</i>
Mehdi (2011)	Tunisia	YES	<i>Mispricing in firms with low institutional ownership</i>

Source: provided by author

The countries examined are from all over the globe. The majority of them are developed countries and have common features with US capital market. Overall, results show that accruals anomaly exists around the world. There is no surprise to find evidence of accruals anomaly in UK, in Chan et al. (2006) paper as UK market is the second-largest capital market after US and it has similar accounting standards with this. Other study that finds evidence in Europe is Kaserer and Klinger (2008). They confirm the existence of accruals anomaly in Germany but for firms which present their financial statements under IFRS or US-GAAP, and less in firms which follow German GAAP. The evidence of accruals anomaly in Germany is controverted as Germany is a code law country, if is taken in consideration Pincus et al. (2007) conclusion that accruals anomaly occurs only in common law countries.

Clinch et al. (2012) investigate whether accrual anomaly exists in Australia, a well-developed capital market as US. But compared with US it has a lot of small firms and is more resource oriented. Evidence suggests the existence of accruals anomaly in Australia, but with weaker results than Sloan (1996) paper. Nevertheless, when small firms are eliminated from the sample, the results are stronger. Goncharov et al. (2013) also find evidence for Australia. They compare insider trading returns and conditioned comparability of accruals in Spain and Australia and notice that in Australia abnormal returns are higher. The difference between Australia and Spain may occur due to cultural differences and to the code law-based accounting system in Spain and common law-based accounting system in Australia. Accounting accruals in Australia contain more opacity to general public. Spanish accruals, contrary to Australian results, are not associated with greater insider returns or income predictability. It can be noticed that Spain, United Kingdom and Germany are the only countries from Europe that have been studied. This is not surprising given that these countries are developed countries.

The presence of accruals anomaly has also been confirmed in Korea (Kho and Kim, 2007) and China (Li et al. 2011). While in Korea, results have been robust to several accruals measures, in China, the accruals anomaly has been found only after eliminating earnings distortions induced by the delisting regulation. Li et al. (2011) observe that many Chinese firms are taking a big-bath in order to avoid China delisting regulation, by recognizing large income-decreasing abnormal accruals in the loss years. Accruals anomaly is caused by the earnings management related to market pressures induced by delisting regulation. Mehdi et al. (2011) find evidence in Tunisia in particular in firms with low institutional ownership. The results of Li et al. (2011) and Mehdi et al. (2011) are interesting as the countries examined are emerging countries. Authors prove that accruals anomaly not only exist outside the US but exists beyond the developed markets. These results contrast Pincus et al. (2007) who allege that accrual anomaly is idiosyncratic to US capital markets.

The only country studied where it could not be find evidence of accruals anomaly is New Zealand. Koerniadi and Tourani-Rad (2007) find insignificant evidence for accrual anomaly, although they find evidence for the cash flow anomaly. Results are confusing as New Zealand is an ambient where accruals anomaly is likely to occur due to the accounting structures and the common law legal system.

The main conclusion that can be dropped from this evidence is that accruals anomaly is a phenomenon that occurs in other countries than US, in particular in developed countries. Even if exists evidence about its occurrence in two emergent markets it cannot be generalized to other emergent countries because there are few studies that have demonstrated this. Further research is needed in this area. Accruals anomaly not only appears in large companies but is related to small companies too (Clinch et al. 2012). A special case is offered by the Chinese capital market, where this anomaly is discovered only after eliminating big-bath firms. This case may occur in other countries where earnings management is developed too.

Evidence of accruals anomaly in comparative countries studies

There are several papers that test for accruals anomaly in aggregate countries (Leippold and Lohre, 2010; Pincus et al. 2007; LaFond, 2005). The studies of Leippold and Lohre (2010) and Pincus et al. (2007) are similar because both divide countries by their legal system and conduct the analysis on developed countries. Leippold and Lohre (2010) examine the accruals anomaly in 26 developed markets between 1994-2008 period. Countries are classified by their legal system. Tests are employed one country at a time, ignoring the multitude of test. But, they test simultaneously several hypotheses. Evidence reveals anomalous returns in some countries, but they consider that some of these findings may be spurious because of data snooping biases that arise when test simultaneously several hypothesis. Abnormal returns are identified for ten countries after adjusting for common risk factors. Pincus et al. (2007) employ an analysis to verify the existence of accruals anomaly internationally. The sample is formed by 20 developed countries, classified by their legal system (common law and code law countries) for the period 1994-2003. The accruals anomaly is confirmed in four countries: Australia, Canada, UK and US. The authors consider that accruals anomaly occurs predominantly in common law countries and is driven by earnings management. This is justified by a broader set of insider stakeholders exposed in code law countries which understand information better from the earnings` components.

LaFond (2005) finds evidence about accruals anomaly in 15 developed countries from 17. He concludes that accruals anomaly is a phenomenon met wherever is applied accrual accounting. Contrary to Pincus et al. (2007), LaFond (2005) states that accruals anomaly is not depended to the legal system of the country, investor protection or accruals intensity. In addition, he finds no dominant factor that could explain the existence of accrual anomaly around the world. However, these factors have distinct manifestations across countries. The component analysis of accruals emphasizes that accruals mispricing is largest for working capital accruals.

I have synthetized these studies in Table For a better comparison I have classified all the countries from these studies after the common and civil law systems and after the existence of accruals anomaly in these countries.

Table no. 2

Evidence of accruals anomaly in comparative countries studies

Countries	Legal system	Pincus et al. (2007)	Leippold and Lohre (2010)	LaFond (2005)
Australia		√	√	√
Canada	Common law countries	√	X	√
Hong Kong		X	√	√
Singapore		X	X	√
UK		√	√	√
US		√	√	√
India		X	X	-
Ireland		-	X	-
Malaysia		X	X	-

New Zealand		-	X	-
Thailand		X	X	-
Belgium	Code law	-	X	√
Denmark	countries	X	√	-
France		X	√	√
Germany		X	√	√
Indonesia		X	-	-
Italy		X	√	√
Japan		X	√	√
Netherlands		X	X	√
Spain		X	X	√
Sweden		X	X	√
Switzerland		X	√	√
Taiwan		X	-	-
Greece		-	X	X
Norway		-	X	X
South Korea		-	X	-

Note: X- no evidence of accruals anomaly; √ - accruals anomaly is confirmed; “-“ the country is not included in the study.

Source: adapted by author

I have analysed the countries where exists evidence of accruals anomaly and where does not, classified by their legal system in order to establish some common patterns. The first aspect noticed is that Pincus et al. (2007) find evidence of accruals anomaly only in common law countries. Next, all studies discover the existence of accruals anomaly in Australia, US and UK. These are common law countries. These results are also corroborated by the single country studies like Clinch et al. (2012) (Australia), Sloan (1996) (US) and Chan et al. (2006) (UK). Pincus et al. (2007) and LaFond (2005) find also accruals anomaly in Canada while Leippold and Lohre (2010) do not. Accruals anomaly existence is also indicated in Hong-Kong in Leippold and Lohre (2010) and LaFond (2005) studies. Pincus et al. (2007) couldn't provide results in this view. LaFond (2005) finds evidence of accruals anomaly in all common law countries studies (Australia, Canada, Hong Kong, Singapore, US and UK). However, the other studies cannot confirm the accruals anomaly in common law countries like: India, Malaysia, Singapore and Thailand.

Further, the discussion is moved to the code law countries. Even if Pincus et al. (2007) do not provide any evidence about accruals anomaly in these countries, the other related papers do. Both Leippold and Lohre (2010) and LaFond (2005) show that accruals anomaly is present in France, Germany, Italy, Japan and Switzerland. These particular countries were studied by Pincus et al. (2007) but with contradictory results. Kaserer and Klingler (2008) also confirm accruals anomaly in Germany in their single country study. The other code law countries where the accruals anomaly is confirmed by LaFond (2005) are: Spain, Netherlands, Sweden and Belgium. These results are in contrast with the studies of Pincus et al. (2007) and Leippold and Lohre (2010). Leippold and Lohre (2010) confirm the accruals anomaly in Denmark in contrast with LaFond (2005) result. The other civil law countries investigated for accruals anomaly but with no conclusive results are: Greece, Indonesia, Norway and Taiwan. In general, in these studies are examined countries considered in the single country studies, except for China and Tunisia.

A different approach for testing accruals anomaly across multiple countries is considered by Fan and Yu (2013). They document whether abnormal returns are positively correlated with idiosyncratic risk. The study is driven on 43 equity markets between 1989 and 2009 period. Countries are both developed and emerging. The results reveal that abnormal returns are less influenced by idiosyncratic risk in developed countries than in emerging countries. Research design employs a zero-cost trading strategy and a Fama-French factor model to provide evidence about the

abnormal returns produced by accruals anomaly across countries. Significant variations were observed over the countries.

Goncharov and Jacob (2013) offer another interesting example for the use of accruals in a different purpose, namely the corporate taxation. The sample is formed by the OECD countries, between 1997-2009 period. Accruals are considered to be an important element in the definition of corporate taxable income. They motivate the use of accruals in tax purposes on the “trade-off between the lower volatility of accrual-based corporate tax revenues and the higher procyclicality of tax collection in accrual regimes”. In order to show the effects of accrual versus cash elements for the distribution of corporate tax revenues, is constructed an accrual index based on the norms of tax codes which “proxies for the extent to which corporate taxable income deviates from cash accounting”. Results capture differences in accruals perception between countries. Hence, high accruals countries have tax revenue less volatile, easier to predict and become more procyclical.

Overall, all the papers that search for the evidence of accruals anomaly outside US confirm that accruals anomaly do exist around the globe no matter the legal system or similarities with US capital market. Accruals anomaly is met especially in developed countries with large companies and where an accruals accounting system exists.

Evidence of accruals anomaly in US

The first study (Sloan, 1996) that documented accruals anomaly has been performed in US. Further, the researchers (Xie, 2001; Collins and Hribar, 2000; Bradshaw et al. 2001) have seek to confirm or extend the accruals anomaly on the same US. Given the previous evidence, it was considered by many researchers in the literature that accruals anomaly is common only to US capital market, as this is the biggest capital market and developed country too, with large companies. But the current evidences have proved that accruals anomaly can extend to other capital markets more or less developed.

Xie (2001) confirms Sloan`s results and improve them by introducing a measure of earnings management which takes in consideration abnormal accruals. Chen and Cheng (2002) also obtain similar results, showing that future abnormal returns are negatively associated with abnormal accruals. Recently, the research has started to be oriented on the existence of this relationship in other capital markets as it could not be accepted the idea that accruals anomaly is common only to US capital market.

Conclusions

This article provides a critical review on the existence of accruals anomaly worldwide which is an important stream in the literature of accruals anomaly. The empirical research has confirmed that accruals anomaly is a pervasive anomaly that exists around the globe no matter the legal system or similarities with US capital market. Accruals anomaly is met especially in developed countries with large companies and where an accruals accounting system exists. Accruals anomaly not only appears in large companies but is related to small companies too (Clinch et al. 2012). A special case is offered by the Chinese capital market, where this anomaly is discovered only after eliminating big-bath firms. This review is divided in three important categories in order to emphasize the importance of the research accomplished either on a single country either on many countries at a time.

Through this survey, I want to shed light on the various critics made to accruals anomaly that is an anomaly specific to US capital market. The recent empirical evidence states clearly that accruals anomaly may occur in different capital markets where investors fixate on earnings.

My discussion highlights the important challenges generated by accruals anomaly in a global capital market. As a policy implication, investors from all over the globe should enhance their understanding of accruals information as accruals anomaly is a global anomaly.

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