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ژورنال بین المللی بانکداری و امور مالی
journal homepage: www.elsevier.com/locate/jbf

ژورنال بین‌المللی بانکداری و امور مالی، ۲۰۱۴ میلادی

Cash holdings, R&D, dividend ad value of the firm

رویکردی بر:

دارائی وجوه نقدی، تحقیق و توسعه $(R\&D)$، سود سهام و ارزش شرکت

مؤسسه‌ی مالی، دانشگاه هامبورگ، ۲۰۱۴۶ هامبورگ، آلمان
دپارتمان مالی، دانشگاه باسل، ۴۰۰۲ باسل، سود

چکیده

در این نوشتار قصد داریم به بررسی ارزش بازارِ ناشی از انباشت وجوه نقد شرکتی[1] و ارتباط آن با عدم تقارن اطلاعاتی متغیر با زمان و مختص به شرکت (معروف به قضیه لیمو) بپردازیم. ازاین‌رو با تجزیه‌وتحلیل یک نمونه‌ی بزرگ بین‌المللی، دو فرضیه‌ی متضاد را تست خواهیم نمود. با توجه به نظریه‌ی سلسله‌مراتب[2]، مسائل ناشی از سوء انتخاب[3](انتخاب منفی) باعث گردیده تا پروسه‌ی تأمین مالی خارجی[4] امری هزینه‌بر بوده و یک ارزش بالایی را برای بهای تمام‌شده‌ی یک دلار وجه نقد در کشورهایی با عدم تقارن اطلاعاتی بالا به همراه داشته باشد. در مقابل، نظریه‌ی جریان نقدی آزاد، پیش‌بینی نموده که انباشت مازاد وجوه نقدی که با عدم تقارن اطلاعاتی بالا همراه می‌باشد، مخاطره اخلاقی[5] را به همراه داشته و منجر به کم شدن ارزش بازار برای بهای تمام‌شده‌ی یک دلار وجه نقد می‌گردد. ما از پراکندگی سود تحلیلگران به ازای پیش‌بینی هر سهم[6] به‌عنوان مقیاس اصلی اندازه‌گیری عدم تقارن اطلاعاتی متغیر با زمان و مختص به شرکت استفاده خواهیم کرد. با توسعه‌ی رگرسیون ارزیابی مدل فاوا و فرنچ (فاما، فرنچ ۱۹۸۸، مالیات‌ها، تصمیم‌های مالی و ارزش شرکت-ژورنال مالی)، نتایج ما توانسته است ازنظریه‌ی جریان نقدی آزاد پشتیبانی کرده و نشان دهد که ارزش انباشت وجوه نقدی شرکت، در کشورهایی که با سطح بالایی از عدم تقارن اطلاعاتی روبرو هستند پایین می‌باشد.

واژگان کلیدی: انباشت وجوه نقد، ارزش نقدی، ارزش پول نقد، عدم تقارن اطلاعاتی، پیش‌بینی‌های تحلیلگران

[1] Corporate cash holdings
[2] Pecking order theory
[3] Adverse selection problems
[4] External financing
[5] Moral Hazard
[6] Analysts earning per share forecasts

Journal of Banking & Finance 34 (2014) 2168–2184

Contents lists available at ScienceDirect

Journal of Banking & Finance

journal homepage: www.elsevier.com/locate/jbf

Cash holdings, R&D, dividend and value of the firm

Wolfgang Drobetz [a,*], Matthias C. Grüninger [b], Simone Hirschvogl [c]

[a] Institute of Finance, University of Hamburg, 20146 Hamburg, Germany
[b] Department of Finance, University of Basel, 4002 Basel, Switzerland
[c] Corporate Finance, KPMG LPP (UK), EC4Y 8BB London, United Kingdom

ARTICLE INFO

Article history:
Received 8 March 2011
Accepted 2 February 2012
Available online 6 February 2014

JEL classification:
G32

Keywords:
Cash holdings
Value of cash
Information asymmetry
Analysts' forecasts

ABSTRACT

This study investigates the market value of corporate cash holdings in connection with firm-specific and time-varying information asymmetry. Analyzing a large international sample, we test two opposing hypotheses. According to the pecking order theory, adverse selection problems make external financing costly and imply a higher market value of a marginal dollar of cash in states with higher information asymmetry. In contrast, the free cash flow theory predicts that excessive cash holdings bundled with higher information asymmetry generate moral hazard problems and lead to a lower market value of a marginal dollar of cash. We use the dispersion of analysts' earnings per share forecasts as our main measure of firm-specific and time-varying information asymmetry. Extending the valuation regressions of Fama and French [Fama, E.F., French, K.R., 1998. Taxes, financing decisions, and firm value. Journal of Finance 53, 819–843], our results support the free cash flow theory and indicate that the value of corporate cash holdings is lower in states with a higher degree of information asymmetry.

1. Introduction

J.P. Morgan economists calculated that savings by corporations in rich countries increased by more than $1 trillion from 2000 to 2004.[1] Compared to the last 40 years, firms never hoarded so much cash as they did during this recent time period. A natural question is why firms accumulate such enormous amounts of liquidity. The standard textbook model suggests that cash holdings are irrelevant and cannot affect firm value. In perfect (frictionless) capital markets, external finance can always be obtained at fair terms. Looking at the corporate landscape, however, this cash irrelevancy is not supported. For example, the US software giant Microsoft presented a cash position amounting to $60.6 billion in its 2004 annual report. After growing investor pressure, in July 2004 Microsoft announced to pay a one-time dividend of $32 billion and to buy back up to $30 billion of the company's stock over the next 4 years. Upon the arrival of that news, Microsoft's stock price rose by 5.7% in the after-trading, indicating that cash should by no means be regarded as irrelevant in investors' eyes.[2]

In order to explain corporate cash holdings, it is necessary to relax the assumptions of frictionless capital markets. First, if transaction costs are incorporated into the model, the irrelevancy proposition of cash no longer holds and an optimal cash balance exists. Second, if information asymmetry is taken into account, adverse selection and moral hazard problems arise. Myers and Majluf (1984) model the adverse selection problem in financing decisions and consider the role of cash holdings in the presence of information asymmetry. Adverse selection induces managers to abstain from raising external capital because they are not willing to issue undervalued securities. A cash buffer may prevent managers from being forced to pass up positive net present value investment projects. In contrast, Jensen (1986) analyzes the moral hazard problem and emphasizes the agency costs of free cash flow. Instead of paying out the free cash flow to shareholders, managers tend to waste these funds on inefficient investments or on their own pet projects (empire building).

Corporate cash holdings and information asymmetry are strongly interrelated. This is the novel path that our study takes and how it contributes to the existing literature. Specifically, we measure the marginal value of cash holdings in the presence of firm-specific and time-varying information asymmetry. Previous studies also investigate the value consequences of corporate cash holdings, but they put their emphasis on corporate governance issues rather than on information asymmetry. These studies document that a weak corporate governance regime has detrimental effects on the value of cash (Dittmar et al., 2003; Pinkowitz et al., 2006; Dittmar and Mahrt-Smith, 2007). In this study, we analyze firm-specific and time-varying information asymmetry and its impact on the market value of cash. We test whether in states with a

* Corresponding author. Tel.: +49 40 42838 5506; fax: +49 40 42838 4627.
E-mail addresses: wolfgang.drobetz@wiso.uni-hamburg.de (W. Drobetz), matthias.grueninger@alumnibasel.ch (M.C. Grüninger), simone.hirschvogl@kpmg.co.uk (S. Hirschvogl).

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0378-4266/$ - see front matter
doi:10.1016/j.jbankfin.2010.02.002