



Contents lists available at SciVerse ScienceDirect

## Journal of Banking & Finance

journal homepage: [www.elsevier.com/locate/jbf](http://www.elsevier.com/locate/jbf)



# Financial reporting quality, debt maturity and investment efficiency



M<sup>a</sup> Fuensanta Cutillas Gomariz, Juan Pedro Sánchez Ballesta\*

Universidad de Murcia, Facultad de Economía y Empresa, Campus de Espinardo, 30100 Murcia, Spain

## ARTICLE INFO

### Article history:

Received 26 October 2012

Accepted 6 July 2013

Available online 15 July 2013

### JEL classification:

G3

G31

### Keywords:

Investment efficiency

Overinvestment

Underinvestment

Financial reporting quality

Debt maturity

## ABSTRACT

This study, conducted with a sample of Spanish listed companies during the period 1998–2008, examines the role of financial reporting quality and debt maturity in investment efficiency. The results show that financial reporting quality mitigates the overinvestment problem. Likewise, lower debt maturity can improve investment efficiency, reducing both overinvestment and underinvestment problems. We further find that financial reporting quality and debt maturity are mechanisms with some degree of substitution in enhancing investment efficiency: firms with lower (higher) use of short-term debt, exhibit higher (lower) financial reporting quality effect on investment efficiency.

© 2013 Elsevier B.V. All rights reserved.

## 1. Introduction

A large body of literature shows that firms can reduce information asymmetries by enhancing financial reporting quality (Bushman and Smith, 2001; Healy and Palepu, 2001). One line of research (Biddle and Hilary, 2006; McNichols and Stubben, 2008; Biddle et al., 2009; Chen et al., 2011) suggests that reducing adverse selection and moral hazard and allowing managers to identify better investment opportunities, higher financial reporting quality increases investment efficiency. Several papers also propose that shorter maturities of debt can be used to mitigate information asymmetry problems (Flannery, 1986; Berger and Udell, 1998; Ortiz-Molina and Penas, 2008): from the perspective of the borrower, because firms signal that they are good firms and may obtain better price conditions in the subsequent renewals of the loans; and from the perspective of the lender, because shorter maturities enable a better control and monitoring of managers (Diamond, 1991, 1993).

Theoretical models (Myers, 1977; Childs et al., 2005) predict that the higher flexibility of shorter maturities is useful in improving investment inefficiencies, although there is limited evidence for this, especially in relation to overinvestment. Based on these premises, the main purpose of this paper is to combine these two mechanisms and analyze the effect of financial reporting quality (FRQ) and debt maturity on investment efficiency in the context

of a code law country where FRQ is lower than in Anglo-Saxon countries (Leuz et al., 2003; Bhattacharya et al., 2003) and where short-term debt is the major source of external finance. Since Chen et al. (2011) examine “boundary conditions” for the effect of FRQ on investment efficiency, and find that FRQ influences investment efficiency in private firms in emerging countries, we also expect to find this association in a sample of listed firms in Spain, where FRQ is expected to be higher. In relation to the role of debt maturity in investment efficiency, to the best of our knowledge this is the first study that empirically examines its effect on both underinvestment and overinvestment. In this sense, Spain is an interesting setting for our research because, due to the less developed capital market than in U.S. and U.K. and the higher information asymmetry, private debt is the main source of finance for Spanish firms, where banks may play a role in alleviating capital market imperfections (García-Marco and Ocaña, 1999) and the monitoring role of short-term debt is higher (Barclay and Smith, 1995). Actually, the debt maturity structure of Spanish companies presents short-term orientation. For instance, whereas in our sample the average value of short-term debt to total liabilities is greater than 60%, in U.S. companies this percentage is around 22% (Datta et al., 2005). Since these shorter maturities in Spain play, from the lender's perspective, a role as a control device of management performance, and from the borrower's side they facilitate undertaking positive net present value projects (Myers, 1977), we also expect a positive association between shorter maturities and investment efficiency.

As an extension of our research, we examine how debt maturity moderates the effect of FRQ on investment efficiency, i.e., whether

\* Corresponding author. Tel.: +34 868883807; fax: +34 868887994.

E-mail addresses: [mfuensanta.cutillas@um.es](mailto:mfuensanta.cutillas@um.es) (M.F. Cutillas Gomariz), [juanpsb@um.es](mailto:juanpsb@um.es) (J.P. Sánchez Ballesta).

the effect of FRQ on investment efficiency is increasing or decreasing with the level of debt maturity. We could expect both effects: on the one hand, the reduction of information asymmetry and more reliable accounting numbers, due to higher FRQ, could add to better monitoring due to short-term debt and, as a consequence, the effect of FRQ on investment efficiency should be higher for firms with higher FRQ and shorter maturities. On the other hand, in firms with higher FRQ, lenders will have less need for shorter maturities to monitor managers' behavior (Bharath et al., 2008; García-Teruel et al., 2010), so under this assumption we would expect the importance of FRQ to reduce information asymmetries will increase with longer maturities and will decrease with shorter maturities.

In line with previous studies, we consider different proxies for FRQ that focus on the precision of accounting information: (1) the model of discretionary revenues developed by McNichols and Stubben (2008); (2) the model of discretionary accruals suggested by Kasznik (1999); (3) the Dechow and Dichev (2002) model of accruals quality; (4) finally, we use an aggregate measure that includes the previous three proxies. Our results show that FRQ reduces overinvestment, while shorter debt maturity mitigates overinvestment and underinvestment. Our findings also demonstrate that the effect of FRQ on investment efficiency decreases with shorter maturities, suggesting a substitutive role of FRQ and shorter maturities in reducing information asymmetries and monitoring managerial behavior to limit expropriation of creditors and minority shareholders.

Our paper contributes to a growing body of literature providing empirical evidence on FRQ and debt maturity roles in improving investment efficiency in a code law country where debt maturity is an important device in controlling managerial behavior. Our findings suggest that in this context the main concern of creditors is overinvestment, because it is through overinvestment that managers expropriate creditors and minority shareholders, and that this inefficiency can be reduced with both higher FRQ and shorter maturities. With regard to underinvestment, our results suggest that the positive effect of shorter maturities on reducing this inefficiency may be more associated to internal decisions of the firm (Myers, 1977) than to monitoring by creditors. Moreover, this is the first study that analyzes the interaction effect between FRQ and debt maturity on improving investment efficiency and our findings suggest that both mechanisms may play a substitutive role in reducing overinvestment, whereas, unlike previous studies in the U.S. and emerging markets (Biddle et al., 2009; Chen et al., 2011) that find that FRQ can solve underinvestment problems, in Spain, short-term debt is the main mechanism used to control underinvestment, and FRQ is only relevant when short-term debt level is low (higher maturities).

The remainder of the paper proceeds as follows. Section 2 reviews the existing literature on investment efficiency and the role of FRQ and debt maturity in investment decisions, and develops our testable hypotheses. Section 3 describes in detail the research design, with the models, measures of variables and the sample. Section 4 shows the results and the final section presents the main conclusions of this paper.

## 2. Previous literature and hypotheses development

### 2.1. Determinants of investment efficiency

Under neo-classical theory, firms invest until the marginal benefit equals the marginal cost of this investment in order to maximize their values (Yoshikawa, 1980; Hayashi, 1982; Abel, 1983). However, in the Keynesian framework (Gordon, 1992; Crotty, 1992), where expected investment will be determined by the preference for growth or for financial security, and in the agency framework (Myers, 1977), which considers information

asymmetry problems, firms may deviate from their optimal investment levels and hence suffer from underinvestment (lower investment than expected) or overinvestment (greater investment than expected).

In perfect financial markets, all positive net present value projects (NPV) should be financed and carried out. Nevertheless, there is a significant body of literature that contradicts this assumption (for example, Hubbard, 1998; Bertrand and Mullainathan, 2003). Market imperfections, as well as information asymmetries and agency costs can lead to negative NPV projects being carried out (overinvestment) and to the rejecting of positive NPV projects (underinvestment). According to agency theory, both overinvestment and underinvestment can be explained by the existence of asymmetric information among stakeholders. Jensen and Meckling (1976), Myers (1977) and Myers and Majluf (1984) develop a framework for the role of asymmetric information in investment efficiency through information problems, such as moral hazard and adverse selection. With regard to moral hazard, discrepancy of interests between shareholders and a lack of monitoring of managers may lead to management trying to maximize its personal interests by making investments that may not be suitable for shareholders (Jensen and Meckling, 1976), with the consequence of managerial empire building and overinvestment (Hope and Thomas, 2008). Under adverse selection, better informed managers may overinvest if they sell overpriced securities and achieve excess funds. To avoid this, suppliers of capital can ration the capital or raise its cost, which will lead to the rejection of some profitable projects due to fund constraints (Stiglitz and Weiss, 1981; Lambert et al., 2007; Biddle et al., 2009) with subsequent underinvestment.

### 2.2. Investment efficiency and financial reporting quality (FRQ)

From the agency theory perspective, there are various control mechanisms to attenuate information asymmetries and information risk and to enable better supervision of managerial activity that mitigates the opportunistic behavior of managers, such as financial reporting quality and disclosure (Bushman and Smith, 2001; Healy and Palepu, 2001; Hope and Thomas, 2008). Several studies have analyzed some of these implications, such as the reduction of the cost of capital and cost of debt (Francis et al., 2004, 2005) and access to the debt market and the effect on its conditions (Bharath et al., 2008), i.e., lower cost, higher debt maturity and lower guarantees in bank financing.

Recently, a line of research has been developed on the effects of FRQ on investment efficiency. Since higher FRQ makes managers more accountable by allowing better monitoring, and it may reduce information asymmetries and, consequently, adverse selection and moral hazard, it could also diminish overinvestment and underinvestment problems. On the other hand, FRQ could also improve investment efficiency by allowing managers to make better investment decisions through a better identification of projects and more truthful accounting numbers for internal decision makers (Bushman and Smith, 2001; McNichols and Stubben, 2008). Empirically, prior literature argues and finds evidence that FRQ relieves investment-cash flow sensitivity (Biddle and Hilary, 2006) and that earnings management leads to overinvestment because it distorts the information used by managers (McNichols and Stubben, 2008). Based on this discussion, Biddle et al. (2009), for U.S. listed firms, and Chen et al. (2011), for private firms from emerging markets, examine the effect of FRQ on two inefficient scenarios, overinvestment and underinvestment, and report that higher FRQ helps underinvestment companies to make investments, and overinvestment companies to decrease their investment level. Consistent with this, García-Lara et al. (2010) find that conservatism reduces both overinvestment and underinvestment, because it reduces investment-cash flow sensitivity in overinvestment firms

دريافت فوري

متن كامل مقاله



- ✓ امكان دانلود نسخه تمام مقالات انگلیسي
- ✓ امكان دانلود نسخه ترجمه شده مقالات
- ✓ پذيرش سفارش ترجمه تخصصي
- ✓ امكان جستجو در آرشيو جامعى از صدها موضوع و هزاران مقاله
- ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
- ✓ امكان پرداخت اينترنتى با کليه کارت های عضو شتاب
- ✓ دانلود فوري مقاله پس از پرداخت آنلاين
- ✓ پشتيباني كامل خريد با بهره مندي از سيسitem هوشمند رهگيری سفارشات