Accounting, Organizations and Society 39 (2014) 149–169

Contents lists available at ScienceDirect

Accounting, Organizations and Society

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

Do Chinese government subsidies affect firm value?

Edward Lee [a], Martin Walker [b,*], Cheng Zeng [c]

[a] Manchester Accounting and Finance Group, Manchester Business School, Crawford House, Oxford Road, Manchester M13 9PL, United Kingdom
[b] Manchester Accounting and Finance Group, Manchester Business School, Room 6.21, Harold Hankins Building, Booth Street West, Manchester M13 9QH, United Kingdom
[c] School of Economics, Finance, and Management, University of Bristol, Social Sciences Complex, 8 Woodland Road, Clifton BS8 1TN, United Kingdom

ABSTRACT

Consistent with the prevailing socio-political ideology of China, the Chinese government offers financial assistance to firms, including many listed companies. Government subsidies are provided for several reasons including support for investment, support to enable firms to pursue social objectives, and support to prop up ailing firms in order to protect jobs.

We examine the value relevance of government subsidies for Chinese listed companies and structure our study around three questions. First, whether the subsidies received by Chinese listed companies are value relevant consistent with their time-series properties. Second, whether the value relevance of subsidies depends on the purpose for which they are used. Third, whether the value relevance of subsidies depends on the channel through which they are granted.

We motivate these research questions through interviews of accountants, managers, academics, government officials and financial analysts. Through large sample analyses, we confirm that subsidies are positively related to firm value, but less so for distressed firms and subsidies granted through non-tax channels. Our study contributes to improved understanding of Chinese-style capitalism.

Introduction

China is playing an increasingly important role in the global economy, and is expected to surpass the US to become the world's largest economic power (Hawksworth & Tiwari, 2011). An interesting feature of Chinese listed firms, that distinguishes them from their Western peers, is the pervasiveness of their access to financial subsidies from the government. Despite over three decades of transformation from a centrally planned to a market-oriented economy (Ezzamel, Xiao, & Pan, 2007), the Chinese government (both central and local levels) maintains a high degree of influence on listed firms through such practices (Allen, Qian, & Qian, 2005). In recent years, however, there is increased international concern that state subsidies are giving Chinese firms an unfair advantage over foreign competitors (Capital Trade Incorporated, 2008). These reasons call for a better understanding of the effects of Chinese state subsidies.

The main purpose of this paper is to examine the link between firm value and Chinese government subsidies. Since state subsidies capture the government's "visible hand", a study of the value relevance of subsidies for Chinese listed firms provides an opportunity to examine the direct role of government in the economy. Although several studies have investigated the value relevance of accounting numbers in China (e.g. Bao & Chow, 1999; Chen, Chen, & Su, 2001; Sami & Zhou, 2004), there has been little systematic examination of how subsidies are reflected in the market value of Chinese listed companies.

* Corresponding author. Tel.: +44 0161 275 4008; fax: +44 0161 275 4023.

E-mail address: martin.walker@mbs.ac.uk (M. Walker).

http://dx.doi.org/10.1016/j.aos.2014.02.002
0361-3682/

Moreover, most existing studies on the value relevance of accounting information in China fail to model the underlying information dynamics, which prevents them from considering whether the accounting numbers are rationally valued. Thus, we explore this issue by using large scale statistical data to estimate accounting based models of firm value based on the ideas in Ohlson (1995, 1999).

However, before undertaking this statistical analysis we first engaged in a number of interviews of people actively involved in the granting and receiving of subsidies (e.g. government officials and entrepreneurs) as well as people with expertise on this issue (e.g. accountants, academics, and financial analysts). The interviews were used to gain a better understanding of why the market value of subsidies might vary across different contexts. Based on the result of the interviews, we structure our econometric analyses of the valuation consequence of state subsidies around the following three questions.

First, we investigate whether the subsidies received by Chinese listed companies are value relevant and, if so, is the value relevance of subsidies consistent with their time-series properties? Following the approach of Barth, Hand, and Landsman (1999) and Landsman, Miller, and Yeh (2007), which extend the Ohlson (1999) model, we find that subsidies are value relevant on average, consistent with the results of our analyses of their information dynamics. This is also consistent with subsidies being viewed as beneficial from the perspective of outside equity investors.

Second, we investigate whether subsidies are equally value relevant across all firm contexts. In particular, does the value relevance of subsidies differ if they are used to boost firms' competitiveness or to bailout firms in trouble? We partition the sample into financially healthy and distressed firms and our analyses indicate that subsidies are value relevant for the former group, but not the latter group. This is consistent with subsidies not adding value to the firm if they are likely to be used to assist earnings management or impede natural selection against weak firms.

Third, we consider if the value relevance of subsidies depends on the channel through which they are granted. We classify subsidies into those based on tax rebates and those provided by non-tax approaches such as direct cash payments, loan guarantees, and debt forgiveness. Our analyses reveal that the valuation consequence of subsidies differs considerably between the two different channels. In particular, we find that the value relevance of tax based subsidies is substantially greater than that of non-tax based subsidies, which is consistent with the former being granted on a more persistent and transparent basis.

Our findings have implications for academics, policy makers, and firms. From an academic point of view, we show that it is possible to use accounting based valuation models to demonstrate the valuation consequence of state subsidies. This research methodology also enables us to show that value relevance varies in predictable ways according to the purpose and channel of the subsidies. For policy makers, our evidence implies that subsidies are an essential input to the valuation decisions of investors in Chinese listed firms and policies that ensure their clear disclosure should be promoted. As such, our study also offers policy implications for Chinese capital market regulators, who are keen to enhance transparency and information efficiency.[1] For the firms, our study suggests that the Chinese capital market recognizes that state subsidies provide net benefits to corporate value. Thus we have identified a valuation driver specific to the context of China, which firms should consider as part of their effort to maximize their shareholders' wealth.

The remainder of the paper is organized as follows: 'Literature review and institutional background' briefly reviews the economic literature on the role of subsidies in the development of the economy and introduces the institutional environment in China. 'Interviews and hypotheses development' presents the findings of our interviews, and develops our main research hypotheses. 'Modeling the value relevance of government subsidies' describes the research design and sample selection process. 'Empirical results' presents the econometric evidence and the last section concludes.

Literature review and institutional background

Related economic literature

Subsidies are economic intervention tools used by governments around the world to offset market imperfections, to exploit economies of scale, and to pursue social policy objectives (Schwartz & Clements, 1999). For instance, a government may offer subsidies to firms to influence research and development (R&D) (González, Jaumandreu, & Pazo, 2005; Gorg & Strobl, 2007; Irwin & Klenow, 1996), export competitiveness (Desai & Hines, 2008; Ishikawa & Spencer, 1999; Shivakumar, 1993), production efficiency (Azzimonti, de Francisco, & Krusell, 2008; Bagwell & Staiger, 1989, 2006), wages and employment (De Mel, McKenzie, & Woodruff, 2010; Phelps, 1994; Snower, 1994), and environmentally friendly practices (Conrad, 1993; Conrad & Wang, 1993; Kohn, 1997). However, existing empirical research on the economic effects of state subsidies yields a mixed picture. On the one hand, some studies suggest that subsidies can stimulate R&D activities (Almus & Czarnitzki, 2003; Davidson & Segerstrom, 1998; González et al., 2005), improve firm profitability (Desai & Hines, 2008; Girma, Gong, Gorg, & Yu, 2009), enhance competitiveness (Bagwell & Staiger, 1989; Brander & Spencer, 1985), and reduce the capital constraints of firms (Claro, 2006; Li, 2002). On the other hand, some studies suggest that subsidies result in overproduction or efficiency losses (Larsen & Shah, 1992; Lopez & Galinato, 2007; To, 1994), and invite international disputes (e.g. Neary, 1994). In recent years, the increased outcry of the US government against Chinese state subsidies to firms (Capital Trade Incorporated, 2008) suggests that subsidies may distort competitiveness and disadvantage US firms against their Chinese counterparts.

[1] These issues were mentioned, for instance, in the Chinese Capital Markets Development Report issued by the China Security Regulatory Committee (CSRC) in 2007 to discuss the future of China's stock market development: http://www.csrc.gov.cn/pub/csrc_en/Informations/publication/200911/P020091103520222505841.pdf (in Chinese).