Journal of Contemporary Accounting & Economics 9 (2013) 136–150

Contents lists available at SciVerse ScienceDirect

Journal of Contemporary Accounting & Economics

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

Determinants of transfer pricing aggressiveness: Empirical evidence from Australian firms ☆

Grant Richardson [a,*], Grantley Taylor [b,1], Roman Lanis [c,2]

[a] School of Accounting and Finance, The Business School, University of Adelaide, 10 Pulteney Street, Adelaide, South Australia 5005, Australia
[b] School of Accounting, Curtin Business School, Curtin University, GPO Box U1987, Perth, Western Australia 6845, Australia
[c] School of Accounting, UTS Business School, University of Technology – Sydney, Corner of Quay Street and Ultimo Road, Haymarket, Sydney, NSW 2000, Australia

A R T I C L E I N F O

Article history:
Received 17 May 2012
Revised 10 May 2013
Accepted 3 June 2013
Available online 12 June 2013

Keywords:
Transfer pricing
Corporate tax avoidance
Australia

A B S T R A C T

This study examines the major determinants of transfer pricing aggressiveness. Based on a hand-collected sample of 183 publicly-listed Australian firms for the 2009 year, our regression results show that firm size, profitability, leverage, intangible assets, and multinationality are significantly positively associated with transfer pricing aggressiveness after controlling for industry-sector effects. Our additional regression results also indicate that firms augment their transfer pricing aggressiveness through the joint effects of intangible assets and multinationality.

1. Introduction

The purpose of this study is to examine the major determinants of transfer pricing[3] aggressiveness as a means by which firms can significantly reduce their corporate tax liabilities. Multinational firms can structure and price payments and intra-firm trade in such a way as to facilitate tax avoidance, principally by strategically setting artificial inter-company transfer prices (Grubert and Mutti, 1991; Grubert, 2003; Clausing, 2006; Usmen, 2012). The aim of Australia's transfer pricing rules is to ensure that related party international transactions are conducted on an arm's length basis so that profits are not artificially deflated (inflated) in high-tax jurisdictions (low-tax jurisdictions) (Hamilton et al., 2001). Aggressive transfer pricing activity is reflected by extensive non-arm's length transactions between related parties.

We are motivated in this study to evaluate the major determinants of transfer pricing aggressiveness because audit activity by tax authorities and economic analysis by treasury departments have collectively found that mispricing of related party transactions is a major factor contributing to a progressive erosion of corporate tax revenue.[4] Transfer pricing risks are considered high-priority in Australia by the Australian Taxation Office (ATO) which recently requested information from 150 large (i.e. greater than AUD100 million turnover) corporate groups on: restructuring, financing relating to guarantee fees and intragroup loans, services provided and received, and related party transactions (ATO, 2010). These risk reviews stem from transfer pricing audits carried out by the ATO in 2001–2006 which resulted in amended tax assessments of AUD1.33 billion, with an additional AUD1.25 billion in disallowed tax losses (ATO, 2010). The nature and outcome of review and audit activity by the

☆ The authors would like to thank the co-editor, Professor Ferdinand Gul, and an anonymous reviewer for their invaluable comments.
* Corresponding author. Tel.: +61 8 83130582; fax: +61 8 82234782.
E-mail addresses: grant.richardson@adelaide.edu.au (G. Richardson), grantley.taylor@cbs.curtin.edu.au (G. Taylor), roman.lanis@uts.edu.au (R. Lanis).
1 Tel.: +61 8 92663377; fax: +61 8 92667196.
2 Tel.: +61 2 95143081; fax: +61 2 95143669.
3 Transfer pricing is a system of laws and practices utilized by countries to ensure that goods and services are transferred amongst related parties at market-based prices so that profits are correctly attributable to different jurisdictions (Joint Committee on Taxation, 2010).
4 This is evident by a decline in effective tax rates (ETRs) and the increase in the number of firms reporting a zero or nominal corporate tax liability.

1815-5669/$ - see front matter
http://dx.doi.org/10.1016/j.jcae.2013.06.002

ATO over the past decade is indicative of the large tax risks related to transfer pricing. Transfer pricing also appears to be a major issue globally. For instance, a recent Ernst and Young (2011) survey found that tax risks associated with transfer pricing constitute one of the most critical and challenging issues facing firms internationally.[5] Transfer pricing is economically important to multinational firms with flow-on effects on earnings, dividends, return on capital and share prices (Sikka and Willmott, 2010).[6] In the Australian context, transfer pricing is economically important because Australia is an active global trader of goods and services (The Treasury, 2011).[7]

Based on a hand-collected sample of 183 publicly-listed Australian firms for the 2009 year, our regression results demonstrate that firm size, profitability, leverage, intangible assets, and multinationality are significantly positively associated with transfer pricing aggressiveness after controlling for industry-sector effects. Our additional regression results also show that firms enhance their transfer pricing aggressiveness via the joint effects of intangible assets and multinationality.

This study contributes to the literature in several important ways. First, it extends the literature on transfer pricing practices of multinational firms by providing empirical evidence of the key determinants of transfer pricing aggressiveness. Second, a measure of transfer pricing aggressiveness is constructed based on attributes regularly emphasized in the ATO's audit programs and issues scrutinized by the Australian Securities and Investment Commission (ASIC). Construction of a transfer pricing aggressiveness index provides a methodological contribution that extends beyond Australian corporate transfer pricing research because this index permits replication in other jurisdictions (e.g. Canada, New Zealand, the U.K. and the U.S.). Third, this study investigates the interaction effect between intangible assets, multinationality and tax havens to determine whether these variables are used concurrently to augment transfer pricing aggressiveness. To the best of our knowledge, these issues have not been addressed empirically in the literature. Finally, this study provides valuable information about the major determinants of transfer pricing aggressiveness to policymakers and regulators who should find our results useful in terms of developing policy and regulation.

The remainder of the paper is organized as follows. Section 2 considers the theory and develops hypotheses. Section 3 describes the research design, and Section 4 reports the empirical results. Finally, Section 5 concludes the paper.

2. Theory and hypotheses development

Several variables are argued to represent key determinants of transfer pricing aggressiveness. These are: firm size, profitability, firm leverage, intangible assets, multinationality, and tax haven utilization. The rationale and literature support for each of these variables is now discussed.

2.1. Firm size

Larger firms typically engage in more business activities and financial transactions than smaller firms, thereby providing additional opportunities to significantly avoid corporate taxes (Rego, 2003). Larger firms (as opposed to smaller firms) tend to have: substantial intercompany transactions that may have transfer pricing and/or thin capitalization implications, tax-advantaged leasing and financing arrangements, and complex flowthrough entities (including partnerships and trusts). Larger firms therefore are able to take advantage of tax arbitrage opportunities that may exist across different tax jurisdictions. Furthermore, Mills et al. (1998) and Slemrod (2001) suggested that larger firms have lower average costs of tax planning than smaller firms. Hence, larger firms can achieve economies of scale through tax planning, and have the resources and incentives to reduce the amount of corporate taxes payable (Rego, 2003).

Research by Hanlon et al. (2007) found that larger firms normally have greater tax deficiencies relative to their actual tax liability. Moreover, Bernard et al. (2006) observed that larger firms engage in greater manipulation of transfer prices. Finally, research by Benvignati (1985), Al-Eryani et al. (1990), and Conover and Nichols (2000) also found that larger firms are more likely to participate in aggressive transfer pricing arrangements. To formally test the impact of firm size on transfer pricing aggressiveness, we develop the following hypothesis:

H1. Firm size is positively associated with transfer pricing aggressiveness.

2.2. Profitability

More profitable firms are likely to engage in transactions or schemes designed to significantly avoid corporate taxes (Rego, 2003). Furthermore, research by Wilkie (1988) and Wilkie and Limberg (1993) found a positive association between pre-tax income and effective tax rates (ETRs). Rego (2003) also found that firms with greater pre-tax income avoid

[5] As indicated by Ernst and Young (2011), the anticipated review of intercompany financing (service) transactions by tax authorities increased significantly from 7% (55%) in 2007 to 42% (66%) in 2010.

[6] Eden et al. (2005) examined the impact of the U.S. transfer pricing penalty on the stock market valuation of Japanese multinational firms with U.S. subsidiaries. They found that the penalty resulted in a decline in their cumulative market value of USD56.1 billion, representing 12.6% of their 1997 market value.

[7] For example, intra-firm trade in 2009 accounted for around 50% of total Australian cross border trade in goods and services and 22% of gross domestic product (GDP) (The Treasury, 2011).