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Repatriation taxes and outbound M&As☆

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ABSTRACT

Repatriation taxes reduce the competitiveness of multinational firms from tax credit countries when bidding for targets in low tax countries. This comparative disadvantage with respect to bidders from exemption countries violates ownership neutrality, which results in production inefficiencies due to second-best ownership structures. This paper empirically estimates the magnitude of these effects. The abolishment of repatriation taxes in Japan and in the U.K. in 2009 has increased the number of acquisitions abroad by Japanese and British firms by 16.1% and 1.6%, respectively. A similar policy switch in the U.S. is simulated to increase the number of U.S. cross-border acquisition by 11.0%. The yearly gain in efficiency is estimated to be 108.9 million dollar due to the Japanese reform and 3.9 million dollar due to the U.K. reform. Simulating such a reform for the U.S. results in a yearly efficiency gain of 537.0 million dollar.

> "*No one is satisfied with the U.S. corporate tax system. Some (...) say, the main problem is that the United States has a higher corporate tax rate than any other major country and, unlike other countries, imposes severe taxes on income earned outside its borders. This, they argue, unfairly burdens companies engaged in international competition and discourages the repatriation of profits earned abroad.*".
>
> (Lawrence Summers in the Washington Post July 7th, 2013)

1. Introduction

This paper analyzes a particular aspect in which tax systems may distort the international competition between firms: the effect of repatriation taxes on international mergers and acquisitions. When profits from foreign subsidiaries are repatriated by a United States (U.S.) corporate parent, the U.S. taxes the grossed up dividend at the domestic corporation tax rate of 35 % (plus state taxes), while crediting the foreign taxes already paid on the repatriated profits (foreign dividend tax credit system).[1] In contrast, all other major developed countries generally exempt dividends received by the parent from foreign subsidiaries from taxation (dividend exemption system).

Repatriation taxes to be paid on a target's profits following international mergers and acquisitions reduce the discounted future cash flows to the investor, which results in a lower valuation of the

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[1] The earnings that underlie the dividend are included in the taxable income of the U.S. recipient corporation and tax credit is granted for the corresponding corporate income taxes paid by the foreign subsidiary and for withholding taxes on dividends.

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target. Ceteris paribus, due to repatriation taxes, the bid price of U.S. investors is relatively lower than that of an identical investor from an exemption country. Investors from the U.S. should thus less frequently succeed in acquiring targets. To recur to the introductory quote: the U.S. corporate tax system may 'unfairly burden companies engaged in international competition' for corporate control. In this paper, we empirically investigate whether a foreign tax credit system indeed impedes foreign acquisitions and we quantify the implied loss in efficiency.

This is a particularly relevant issue given the important role that cross-border mergers and acquisitions play for foreign direct investment (FDI) especially between developed economies. In 2011, their value increased by 53 % to $ 526 billion and the implied loss in efficiency due to distortions in the market for corporate control may therefore be correspondingly huge.

In 2009, Japan, New Zealand and the United Kingdom (U.K.) switched from a tax credit system to an exemption system. This is the first time that major capital exporting economies fundamentally changed their international taxation regimes — an event, which allows us to directly identify the regimes' effect on international mergers and acquisitions. In contrast, previous empirical identification strategies had to rely on indirect changes in double taxation due to variations of withholding taxes or corporate tax rates in either the capital exporting or capital importing country. With such an indirect approach, it is possible that the observed effect of double taxation is actually an artifact which should instead be attributed to the underlying changes themselves — for example, the fact that a tax treaty has been concluded or that the corporate income tax rate has changed.

We consider a large sample of cross-border mergers and acquisitions in the period from 2004 to 2013. For every target firm, we analyze the origin of the eventual acquirer by estimating conditional logit models, nested logit models, and simulated maximum likelihood models. The treatment group in the sample is represented by the acquirer countries, which switch from a foreign tax credit regime to an exemption regime, while the strength of the treatment is moderated by the tax rate differentials between acquirer and target countries.

We find that repatriation taxes reduce the competitiveness of investors from tax credit countries in the international market for corporate control. The size of this effect is conditional on the acquirer's tax rate relative to the the rest of the world: the larger the home country's corporate income tax rate, the larger the repatriation taxes due. Accordingly, the effect of the reform is more pronounced for Japan than for the U.K. because the Japanese tax rate of 40.69% is higher in 2009 than the British tax rate of 28%. We estimate the abolishment of the tax credit system in Japan to have increased the number of international mergers and acquisitions with a Japanese acquirer by 16.1%. The estimated effect for New Zealand is only 1.8% and for the U.K. it is 1.6%. We finally simulate a switch in the U.S. from a credit to an exemption regime, which implies an increase in the number of international mergers and acquisitions with U.S. acquirers by 11.0%.

The empirical results are relevant for the ongoing discussion on the U.S. corporate tax system as well as for the scientific discussion on the design of international tax systems. The seminal paper by Musgrave (1969) argues that a foreign tax credit system is optimal from a global perspective because it establishes production efficiency by means of capital export neutrality. On the other hand, Desai and Hines (2003) and Becker and Fuest (2010) develop the counterargument that ownership neutrality may be more relevant for efficiency in a world in which FDI takes place mainly by means of mergers and acquisitions and not by means of greenfield investment. In this case, repatriation taxes distort production efficiency as they distort ownership structures in favor of parent firms, which are not subject to these kind of taxes. Ownership advantages (e.g. expected synergies) are therefore not optimally exploited.

Based on these arguments, Griffith et al., (2010) recommend the abolishment of foreign tax credits in the U.K. in favor of exempting dividends to improve the competitiveness of U.K.-based multinational companies in the international market for corporate control. The controversial discussion of the two systems of double taxation relief with respect to neutrality properties would be rather moot if the two systems –as they are actually put in practice –resulted in identical empirical patterns. However, our results confirm that ownership structures are indeed distorted by asymmetries in international taxation, as a policy switch from credit to exemption does increase the amount of acquisitions abroad. With respect to distortions of ownership neutrality, we estimate the yearly gain in efficiency in the form of additional synergies raised to be in the order of 108.9 million dollar for the Japanese tax reform and 3.9 million dollar for the tax reform in the U.K. A simulation of a policy change to an exemption system in the U.S. implies gains of 537.0 million dollar.

Several papers deal with the empirical effects of international taxation on FDI in general (see e.g. Slemrod (1990), Swenson (1994), Hines (1996), Gropp and Kostial (2000), Bénassy-Quéré et al. (2005) and Hajkova et al. (2006)). However, the empirical literature on the effect of international taxation on mergers and acquisitions is scarce. Di Giovanni (2005), Herger et al. (2011) and Arulampalam et al., (2012) consider the effect of host country corporate taxation. Huizinga and Voget (2009) additionally include withholding taxes in their analysis, while Barrios et al. (2012) consider the establishment of new foreign subsidiaries. In contrast to the previous literature, we directly identify the effect of a systematic change in international taxation. Furthermore, instead of analyzing the choice of location for investment, we focus on the location of the investor, as our ultimate interest is in the loss of efficiency due to violations of ownership neutrality.

In a recent paper, Hanlon et al. (2015) show a positive association between locked-out cash due to repatriation tax costs and the likelihood of acquisitions abroad for a sample of large U.S. multinationals. Although there is no comparison to the rate of acquisitions by non-U.S. multinationals, this could be taken as evidence against an impeding effect of repatriation taxes on acquisitions. However, a dynamic model of the nucleus theory of corporations (Hartman, 1985; Sinn, 1991) also explains this finding, since it would predict that firms subject to repatriation taxes initially underinvest abroad before they mature by accumulating retained earnings at which stage they may overinvest —especially when foreign earnings were subject to positive shocks and when expecting a repeal (or temporary reduction) of repatriation taxes at some point in the future[2].

In the following, Section 2 describes the tax treatment of foreign source dividends within multinational firms, and it presents the empirical framework for estimating the effect of this international tax on the location of the investor in deals. Section 3 describes the data and the control variables. Section 4 presents the empirical results and Section 5 concludes.

2. International taxation and the valuation of firms

In line with the recommendations of the OECD model tax treaty, cross-border dividend repatriations from foreign subsidiaries to their corporate parent within the OECD are generally governed by one of two methods of double taxation relief: either the dividends are exempted from further taxation at the level of the corporate parent (exemption system) or the repatriated dividends are subject to the corporate income tax in the parent's country while receiving

[2] See also page 13 for more details.