

Corporate Taxation and Agency Problems

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Research Proposal - EPRN

1 Motivation

The effects of corporate taxation and of capital income taxation on corporate investment have been extensively discussed within the neoclassical model of firm behavior.¹ The neoclassical framework, however, treats the firm as a “black box”, operating so as to maximize the firm value. It thereby disregards tensions between executives’ and shareholders’ interests which are central to the modern corporate governance literature. This literature rests on the premise that interests of shareholders and the management are misaligned and analyzes the role of incentive pay and the corporate capital structure in limiting the divergence of interests; see Tirole (2006).

It is the aim of this project to bridge the gap between these two strands of literature by analyzing the effects of corporate taxes and their optimal choice in an agency model of corporate behavior. Two issues are of interest in this context.

1. First, a long-standing issue in public finance relates to the choice of the corporate tax base. That is, the question is whether the “normal” return on investment should be taxed at the same rate as above-normal returns. Two tax systems which center around this issue are a Cash-flow tax and an Allowance for corporate equity (ACE). The two systems effectively exempt the normal return from taxation either by allowing an immediate expensing of investment (Cash-flow tax) or by allowing firms to deduct the cost of finance from the tax base (ACE). Central to the agency model used in the project, managers and shareholders have diverging objectives due to different perceptions on the desirability of investment projects. Specifically, a manager has the opportunity to invest either in productive investment which yields a pecuniary return; capitalizing in the firm value, or in unproductive investment (pet-projects) which lead to a non-pecuniary return for the manager. The two different investment types cannot be distinguished by the shareholders and the government. So, neither an incentive contract between the shareholders and the manager nor the tax system can perfectly control the manager’s incentive and, thereby, induce him to invest resources so as to maximize the firm value. As a consequence of the manager’s taste for perk investment, managers pay too little dividends compared to a situation where no agency problem between shareholders and managers exists (see also Chetty and Saez, 2007).

2. The second issue relates to the policy question of how transfer pricing in an multinational enterprise (MNE) is used to avoid taxes and, importantly, how the tax avoidance strategy is

¹See, for instance, Auerbach (1979), Sinn (1991) and, for a review of the literature, Auerbach (2002) and Auerbach et al. (2008).

affected by corporate agency problems. The existing literature predominantly analyzes transfer pricing incentives by MNEs as a strategy to save on taxes (Haufler and Schjelderup, 2000). Transfer prices, however, may also serve different purposes in MNEs. They may equally be used as a tool to address corporate agency problems within MNEs. To the extent that both goals (saving taxes and ameliorating corporate agency problems) are non-congruent, the choice of transfer prices and the welfare implications thereof may be different to those in existing literature. The model which will be used in the project includes two divisions of a MNE which are located in different countries; see, e.g., Holmstrom and Tirole (1991). Division managers and the owner of the MNE have non-aligned interests. In particular, managers can exert effort which is costly to managers and whose return primarily accrues to the owner. Incentive contracts are used to align interests. Simultaneously, the owners may decide to leave the choice of transfer prices to division managers. This provides incentives to managers since they now partly internalize the benefit of their effort decisions. At the same time, however, the headquarter loses power to manipulate transfer prices in order to save on taxes. Analyzing the optimal organizational structure of the MNE and its implications for welfare is one prime issue of this project.

The project is policy relevant in two directions: The first part contributes to the on-going policy discussion of whether the normal return on investment should be exempted from taxation. One way of exempting the normal return from taxation is to augment the existing deductibility of the cost of debt finance by a similar provision for equity finance. A corporate tax system which also grants an allowance for corporate equity is the so called ACE tax. The ACE tax has been implemented in various countries and various proposals have been voiced to introduce it in Finland, the UK and, also in Denmark; see, for instance, Bond (2000), Griffith et al. (2008), and Devereux and De Mooij (2009). Such a tax is argued to be desirable since it eliminates the distortion in the capital structure choice, allows for undistorted investment behavior and, of particular importance for small open economies such as Denmark, it makes domestic investment less tax sensitive. High corporate taxes can be in place without triggering a significant outflow of capital. These findings have been derived in the absence of intra-firm agency problems. Their policy relevance ought to be assessed in a more complex and, arguably, more reasonable view of firm behavior. The project will shed light on the question of how the ACE tax affects corporate agency problems and, thereby, of whether such an ACE system is still desirable for a country to adopt.

The second part speaks to the policy issue of the tax treatment of MNEs and the choice

of a consolidated corporate tax base at the level of the European Union; see, e.g., European Commission (2008) on the current state of the policy discussion. Multinational firms use prices for intra-firm trade as well as intra-firm borrowing to shift profits to low-tax countries. These policies erode corporate tax revenues particularly in high tax countries. The policy response to such profit shifting is to reduce the amount of tax-motivated intra-firm borrowing by limiting the tax deductibility of intra-firm interest payments. Such policies (so called thin capitalization rules) have been introduced, for instance, in Denmark, Germany, France, and Italy. Also, regulation of prices which are used for intra-firm trade should limit profit shifting. Ideally, the regulation should imply that multinational firms set prices for intra-firm trade at the same level as is used for trade with unrelated firms (arm's length pricing). All these policies lack a coherent analysis. They have been derived in models which abstract from agency problems. Thereby, the policy proposals do not take into account that transfer prices as well as intra-firm debt policy can be used to alleviate agency problems. Hence, the policy measures (as implemented currently) may not necessarily enhance welfare. This project assesses the frequently proposed types of transfer price regulation and thin capitalization rules with respect to their impact on agency problems within MNE. Also, it will analyze whether a consolidated tax base for MNEs (as proposed by the EU Commission), which effectively limits the use of transfer prices to address agency problems, is a preferred policy option for the EU and its member states.

Besides deriving normative results, the project also generates positive results which can be tested empirically by using data on multinational firms. Such data is available in, for instance, the AMADEUS database. The empirical strategy would be to use information on corporate governance, such as corporate transparency, access to external capital and limited liability, and to relate them to the economic outcomes of the model. The empirical part (in particular related to the second project) allows to validate the economic mechanisms which underlie the normative policy results of the project.

2 Budget

The proposed budget for the project includes a teaching buy-out of 3 months and travel cost. The travel budget is included because I will co-operate with Guttorm Schjelderup and Hans Jarle Kind (both at Norwegian School of Economics, Bergen, Norway) on parts of the project.

- Teaching buy-out (3 months): $3 \times 57.350,- = 172.050,-$ DKK
- Travel cost: 15.000,- DKK

Copenhagen, 18 May 2010

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