Owner-Level Taxes and Business Activity

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Abstract

In some classes of models, taxes at the owner level are “neutral” and have no effect on firm activity. However, this tax neutrality is sensitive to assumptions and no longer holds in more complex models. We review recent research that incorporates greater complexity in studying the link between taxes and business activity — particularly entrepreneurship.

Dividend taxes on owners of large firms affect firm activity in models that include agency conflicts between owners and managers. Similarly, after incorporating entrepreneurs’ occupational choice into the model, taxes are no longer neutral. By forsaking lucrative alternative careers, skilled entrepreneurs tend to have high opportunity costs, which make the choice of attempting to start a business of first order importance. Moreover, in models where it is assumed that capital flows across borders without cost, taxes on domestic business owners do not alter business activity because foreign capital seamlessly compensates for tax-induced declines in investments. This theoretical notion is contradicted by the strong “home bias” observed in business ownership, in particular for small firms and startups without easy access to international capital markets.

Recent empirical work has emphasized that taxes have heterogeneous effects on mature firms, entrepreneurial startups, and owner-managed small firms. Lowering dividend taxes on firms with dispersed ownership has been shown to shift capital from mature firms into rapidly growing firms. Moreover, capital gains taxation tends to reduce the number of innovative startups and diminish venture capital activity, while high owner-level taxes encourage small business activity and non-entrepreneurial self-employment because such firms have more opportunities to avoid or evade taxes.

To obtain efficient incentives in entrepreneurial startups, contractual terms are required that *ex ante* guarantee that all providers of
critical inputs, especially equity-constrained entrepreneurs, are entitled to a share of the resulting capital value of the firm. Unless properly designed, owner-level taxes prevent such \textit{ex ante} contracting and thus lower the likelihood of eventual success.
Executive Summary

In recent years, advances in both theoretical and empirical research have painted a clearer picture of the effects of owner-level taxation on business activity. Commonly used macroeconomic models tend to find that taxes at the owner level are “neutral” and have little or no effect on firm activity. However, the conclusion that ownership taxation has no effect on firm behavior — and, as a corollary, on entrepreneurship — is derived from models based on certain (unrealistic) simplifications. Thus, the internal behavior of firms in these models is often treated as a black box, which effectively abstracts from certain features of firm activity. In general, models whose assumptions are simplified to exclude a dimension of choice or complexity cannot identify the distortionary effects of taxation on this dimension. When complex and more realistic dimensions such as entrepreneurship and corporate governance are incorporated into these models, taxes can affect business activity through these channels.

Dividend taxes on owners of large firms are no longer neutral in models that incorporate agency conflicts between owners and managers. Similarly, taxes are no longer neutral after incorporating the entrepreneur’s occupational choice into the model. Potentially innovative entrepreneurs are few and not easily replaced. They have typically left secure and high-paying jobs to start their own companies — a proposition that entails a high risk of failure. Taxes largely determine
how lucrative these choices are, which makes occupational choice a central variable in taxation models that incorporate entrepreneurship.

Taxes on domestic business owners do not affect business activity in small open economies when capital is assumed to flow without cost across countries. However, this assumption is not consistent with the strong observed “home bias” in business ownership. Due to information costs, network effects, proximity advantages, corporate governance, and other reasons, investors tend to prefer to invest in their home country. Such a persistent home bias indicates that the neutrality result for owner-level taxes in small open economies no longer holds because domestic business ownership can no longer be expected to be fully replaced by foreign ownership, in particular for those small firms and startups that do not have easy access to international capital markets.

Recent empirical research has emphasized the importance of distinguishing among various types of firms. Taxes do not have the same effect on mature firms, entrepreneurial startups, and small owner-managed firms. Although no robust link has been established empirically between the general tax rate and small business activity, studies consistently find that capital gains taxation tends to be associated with fewer innovative startups and diminished venture capital activity.

Taxes are often found to affect mature and cash-constrained firms in different or even opposite ways. Lower taxes on dividends lead to increased dividend payouts — and reduced investments — by mature firms with substantial cash flows, which in turn makes capital available to credit-constrained firms; in other words, large and mature firms are less likely to hold cash, freeing it up for investment in smaller and rapidly growing firms. Consequently, the effect of the tax cut on investments is not uniform. Mature firms may react differently to taxes than entrepreneurial startups that rely on external capital. To the extent that new and growing firms have a role as radical innovators and prime contributors to creative destruction [Schumpeter, 1934], this type of taxation hampers Schumpeterian creative destruction by favoring existing firms over new firms.

Similarly, small “mom-and-pop” businesses may differ significantly from high-tech startups in their behavioral responses to taxes. The
group of firms that are ambitiously innovative and rapidly growing is far smaller and quite different from the broader group of firms. High levels of taxation may in fact promote small business activity and non-entrepreneurial self-employment because such firms have more opportunities to avoid or evade taxes. However, the potential for rapid growth and innovation is often low in business activities motivated by tax avoidance. By contrast, high tax rates tend to reduce the ability of new innovative startups to attract capital and entrepreneurial talent from competing sectors.

When the elasticity of taxable income is used as the relevant measure, virtually all studies find that business owners are more responsive to income tax than salaried employees, at least partly due to the greater flexibility in tax planning enjoyed by owners/entrepreneurs. There is also some evidence suggesting that entrepreneurs may be more responsive to taxation in real terms — perhaps because their efforts are rewarded with a greater share of firm profit than salaried employees.

Notably, the common notion that income emanates either from capital or from labor is derived from a simplified model of reality. In certain applications, it may be reasonable to consider entrepreneurship as a separate factor of production with unique features that make distinct contributions to value added. This clarifies that owner-level taxation is unlikely to be neutral with respect to allocating and utilizing entrepreneurial talent. When examining entrepreneurship, the return on labor cannot be distinguished from the return on capital because the value created emanates from the combination of entrepreneurial talent, labor effort, human capital, and financial capital. Likewise, the contribution that the capital from outside investors makes to value creation cannot be separated from the entrepreneurial insight, knowledge, and effort supplied by the founder(s) and key employees.

Great value can be created if the concerted effort of this inseparable bundle of inputs results in the emergence of a successful firm. To obtain efficient incentives, contractual terms are required that \textit{ex ante} guarantee that all providers of inputs to the inseparable bundle will receive a share of the capital value that may be created by building the firm. Unless properly designed, owner-level taxes prevent such \textit{ex ante} contracting and lessen the likelihood of eventual success.
Startups funded by venture capital rely heavily on stock options and convertible equity to compensate owners and design contracts that harmonize incentives across agents — founders, financiers, and key employees. These types of financial instruments are believed to be well suited for addressing the complex contractual problems characterizing venture capital-funded firms and are widely used when they are taxed at a low rate. We show that there is a strong cross-country association between the de facto tax on stock options and venture capital activity.

A key lesson from this essay is that the models used in economics are necessarily simplified. Moreover, it is important for political decision makers to be conscious of these simplifications when the conclusions derived from economic models motivate or are used to justify tax policy decisions. Conclusions from overly simplified models — such as the model that concludes that dividend taxes do not influence firm behavior — may thus change when additional factors are considered.
Introduction

Most countries tax business activity at both the firm and owner levels. Unlike corporations, which pay a tax on their profits, owners of corporations pay a tax on both dividends and realized capital gains. There is an extensive literature on the effects of ownership taxation on mature corporations with dispersed ownership. Although less extensive, the research on how dividend and capital gains taxation influences business creation and entrepreneurship is steadily growing.

There is no consensus on how ownership taxation influences the behavior of large public firms. Instead, various schools of thought — or "views" — have emerged and come to quite different conclusions regarding the effects of owner-level taxation. The school of thought known as the "new view" concludes that ownership taxation is relatively unimportant to firm and investment behavior, whereas the "traditional" or "old view" concludes that such taxes have significant distortionary effects on such behavior. The differences in these conclusions depend on how business activities are modeled theoretically and on the assumptions they make regarding the firm’s sources of finance.

The conclusion that ownership taxation has no effect on firm behavior — and, as a corollary, on entrepreneurship — derives from macroeconomic models in which firms are modeled in a simplified manner or are simply absent. The internal behavior of firms is often treated as a black box, which effectively abstracts from certain features of firm
activity. However, this class of taxation models ignores three particular and important factors: entrepreneurship, corporate governance, and the imperfect mobility of capital between countries. The effect of ownership taxation on new and entrepreneurial firms is shown to be sensitive to whether entrepreneurs are incorporated into the models. The predicted effects of owner-level taxation on public firms with dispersed ownership can, for example, be reversed by considering the effects on corporate governance. Another empirically questionable assumption that can lead to the conclusion that ownership taxation is unimportant for both large companies and entrepreneurship is that foreign capital is a perfect substitute for domestic capital.

In recent years, the pendulum has swung back in the sense that theoretical and empirical research has reverted to the position that ownership taxation does affect firm activity. New models that incorporate complex dimensions (such as entrepreneurship and corporate governance) find the effect of taxes operating through these dimensions. Meanwhile, in the wake of both major changes in capital taxation in the United States and methodological advances, many new empirical studies on ownership taxation have been published.

Most of the new theoretical and empirical work focuses on how dividend taxation affects the behavior of large public firms. Dividend taxes mainly affect large established firms with dispersed ownership but also impact entrepreneurial firms. The literature on dividend taxation has some direct relevance for entrepreneurs who also pay dividend taxes, but these taxes are generally of far greater indirect relevance for entrepreneurs. The small research field of entrepreneurial taxation has largely relied on the same class of theoretical models that study dividend taxation. One important purpose of this essay is to summarize the large body of work on dividend taxation and draw parallels to the smaller related literature on entrepreneurial firm taxation.

The most important development in empirical research related to dividend taxation is the consideration of firm heterogeneity. In this context, firm heterogeneity is relevant to the extent that different types of firms react differently to taxes. Notably, reductions in dividend taxes tend to reduce investments by mature, well-financed firms and increase
investment by rapidly growing, cash-constrained firms. The importance of taking firm heterogeneity into account is at least as important in the study of taxation of entrepreneurial activity. Owner-level taxes do not appear to affect the self-employed and small “mom-and-pop” firms in the same manner in which they affect high-growth startups and other Schumpeterian entrepreneurial firms.

We divide firms into three broad categories to examine how they are influenced by taxation:

- **Established or mature large firms** tend to account for most of the value added, exports, and research and development (R&D). These companies tend to have dispersed ownership and are largely controlled by management, at least in the United Kingdom and the United States.

- **Schumpeterian entrepreneurial firms** refer to firms that introduce a new technology or innovation and have the ambition to grow. Although these firms are relatively few in number, they are believed to be disproportionately important to economic growth and job creation. There is a (partly semantic) discussion on how to define entrepreneurship that we will not focus on.\(^1\) Henceforth, the term entrepreneurship refers to Schumpeterian entrepreneurship as defined in this paragraph.

- **Small businesses** and the self-employed are here defined as companies that are not innovative and have little ambition to grow above a certain size. Small businesses or solitary self-employment (with no employees in addition to the owner) are often the optimal size in many sectors. This class of firms is particularly important for job creation in some industries and or some categories of workers, particularly the young and the foreign-born.

There are also several types of taxes:

- **Corporate tax**: The corporate tax is levied at the firm level as opposed to the owner level.

\(^1\)This is discussed in more detail in Henrekson and Sanandaji [2014a].
Introduction

- **Owner-level taxes**: The two main owner-level taxes are dividend taxes and capital gains taxes.

- **Income taxes of business owners**: In many countries, the incomes of the self-employed and sole proprietors are taxed as a type of labor income.

Our focus is on owner-level taxes, notably capital gains taxes, dividend taxes, and income taxes. We show that the importance of these taxes varies with the type of firm. In general, capital gains taxes are more important for Schumpeterian startups, dividend taxes are more important for mature firms, and income taxes are more important for small firms and sole proprietors. Notably, we are not concerned with corporate taxes, as there is relative agreement on their effects.

This essay is organized as follows. Part I (Sections 1–4) addresses the effects of owner-level taxes on mature companies. In Section 1, we survey and evaluate the research on the effects of owner-level taxes for mature, large companies. Until recently there were three schools of thought or “views” on this matter. According to the old view, taxing corporate owners reduces incentives to save and invest, whereas the new view arrives at the same conclusion with regard to the capital gains tax. According to the new view, however, dividend taxes do not affect investment behavior. The conclusions of the more recent open economy analyses are more far-reaching: Capital gains taxes (and other taxes on capital) that reduce domestic capital supply do not affect firm finance in small open economies because capital can be imported from abroad.

In Section 2, we present the new agency view, which incorporates principal–agent problems between owners and management exacerbated by owner-level taxes. This view notes that when ownership and management are separated, a conflict of interest emerges regarding the use of firm cash flow. Managerial incentives to pay low dividends to shareholders and overinvest in existing businesses are amplified by owner-level taxes, thus exacerbating the inherent principal–agent problem.

In Section 3, we discuss the empirical validity of the strong capital mobility assumption underlying the open economy view. Empirical evidence has documented a strong propensity to invest in one’s
home country, indicating that international capital is far from perfectly mobile across borders. It is thus misguided to presume that foreign capital can or will fully substitute for domestic capital. Moreover, it is more difficult for small and new firms to access international capital markets for a host of reasons that we discuss at some length.

In Section 4, we summarize the different views. We conclude that tax theorists have relied historically on relatively simple black-box models of the inside of the firm. However, more complex models of firm activity have recently produced different results than previous models. Both recent theoretical and empirical studies support the view that owner-level taxes are likely to have sizable effects on business activity.

In Part II of this essay (Sections 5–7), we address the effects of owner-level taxes on startups and entrepreneurial firms. In Section 5, we discuss the effects of such taxes on entrepreneurship. Innovative startups are increasingly dependent on venture capitalists who provide both external financing and complementary skills. Entrepreneurship is a unique activity characterized by relation-specific assets, conflicts of interest, low liquidity, weak cash flow in early stages, and high levels of uncertainty. All these features make it particularly difficult to write contracts that cover all contingencies. In such cases, owner-level taxes cause distortions by reducing the returns on the cooperative efforts of entrepreneurs and external financiers that target mutual goals. Owner-level taxes also affect the occupational choice margin, making it less lucrative to leave a salaried position to attempt to create a firm.

In Section 6, we explain and analyze the importance of stock options as an instrument to overcome agency conflicts and harmonize incentives across agents — founders, financiers, and key employees. Complex contracts, which themselves can be regarded as organizational innovations, have evolved to facilitate cooperation and reduce conflicts of interest. We show that in countries in which the taxation of stock options is low or moderate, a spectrum of option contracts is frequently used in agreements among founders, financiers, and key employees of startups, whereas such contracts are rarely used in countries in which gains on stock options are taxed at high labor income rates. In the latter countries, venture capital investments are also low.
In Section 7, we discuss the fact that virtually all national tax systems favor debt over equity financing. This factor increases the debt–equity ratio of firms and makes the economy more vulnerable, while penalizing early stage ventures relative to mature companies. In addition, it penalizes technological or human capital relative to physical capital and real estate.

In the eighth and final section, we present our main conclusions. Most importantly, our interpretation of the new empirical research is that owner-level taxes — on both dividends and capital gains — have economically significant effects on key aspects of firm activity, including innovative startup activity, allocation of investments, capital structure, and ownership structure. Our findings on the behavioral effects of such taxes are more consistent than in the earlier literature.
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