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The Effect of Succession Taxes on Family Firm Investment: Evidence from a Natural Experiment

Margarita Tsoutsoura[1]

University of Chicago
Booth School of Business

ABSTRACT

This paper exploits a tax reform to study the effect of succession taxes on firm succession and investment decisions. In 2002 the Greek government abolished its high tax on intra-family transfers of businesses. This change in tax policy is used to identify the effect on investment. The results of the study show that in the presence of high succession taxes firms undergoing an intra-family transfer of ownership experience a more than 40% drop in investment around succession. These investment effects are much stronger for family firms owned by entrepreneurs with relatively low income from other sources. This suggests that the observed effect of the succession tax on investment is driven by financial constraints.

[1] Chicago Booth, 5807 South Woodlawn Ave., Chicago, IL 60637; Email: tsoutsoura@chicagobooth.edu.

I. Introduction

This paper uses a tax reform in Greece in 2002 as a natural experiment to study the effect of succession taxes on entrepreneurs' succession decisions, investment decisions, and financial policies. Understanding the effects of succession taxes on entrepreneurial firms is important, as more than 40% of family-owned businesses in the US and Europe are expected to change hands in the next decade.[2] Across Europe 70-80% of firms are family businesses, and they contribute more than 40% of GDP, while they employ more than 42% of the workforce.

Family firm successions have been the subject of heated debates. On the one hand, the view that inherited family firms underperform has led some to conclude that succession taxes are too lenient and provide incentives to keep poorly managed firms within the family. On the other hand, it has been argued that taxing successions adversely affects productive entrepreneurs' incentives to exert effort and creates liquidity problems for taxed firms. Succession taxes might even force entrepreneurs to sell their firms in order to pay the tax.

One aspect of the debate that has not been explored empirically is the effect of succession taxes on entrepreneurial firms' investment. This paper aims to fill this gap. To this end, the paper exploits a tax reform in Greece in 2002 that reduced succession tax rates for transfers of limited liability companies to family members from 20% to less than 2.4%. The tax rate remained unchanged at 20% for unrelated transfers.

To address the impact of succession taxes on investment, I construct a unique database that contains information on all transfers of limited liability firms in Greece for the years 1999 to 2005. Although limited liability firms are private, they are required to publish their transfers as well as their financial statements in the official government newspaper. I supplement these data by matching them with hand-collected data on the gender of the first-born child of the entrepreneur and data on entrepreneurs' personal income from other sources.

For my analysis, I exploit the tax reform and I compare firms that undergo family succession with firms that are transferred to unrelated entrepreneurs both before and after the policy change. The analysis reveals a highly negative effect of transfer taxes on post-succession investment for firms that are transferred within the family. In the presence of high succession

[2] Depending on the country, succession taxes are levied in the form of inheritance, estate, gift or inter vivos transfer taxes.

taxes, investment drops from 17.6% of property, plant and equipment (PPE) the three years before succession to 9.7% of PPE the two years after. This represents a drop of more than 40% relative to the pre-transition investment level. For those firms, successions are also associated with slow total asset growth and a depletion of cash reserves.

In addition, I investigate the mechanism through which taxes affect investment. I use data on the entrepreneur's personal income from sources other than the company to classify firms according to their access to low-cost financial sources outside the firm. I find that these investment effects are much stronger for family firms owned by entrepreneurs with relatively low income from other sources (i.e., entrepreneurs without an alternative to costly external finance). The above findings are consistent with the view that entrepreneurs who transfer their firm within the family are draining the internal financial resources of the firm to avoid the costly external financing of the tax liability.

II. Event: Legal Reform

The reform of taxation for business transfers is an issue under continuing debate both in the US and Europe. In many industrialized countries, tax law preferentially treats within-family transferred firms. In 1994 the European Commission issued a recommendation to its country members to support the transfer of small and medium-size companies from one generation to the next. According to EU recommendations, "The Commission requests the Member States to ensure that family law, succession law and the payment of financial compensation cannot jeopardize the survival of business and to reduce taxation on assets in the event of transfer by succession or by gift," and "… inheritance taxes extract liquidity and assets from businesses …".

In 2002 policy makers in Greece introduced in Law N.3091 to facilitate the inter-generational transfer of family firms. Before Law N.3091 took effect in 2003, the tax rate for a business transfer of a limited liability company was 20%, regardless of whether the firm was transferred to family members or third parties.[3] After January 1, 2003 the tax rate dropped to 1.2% for transfers to first degree relatives (sibling, spouse, parent or offspring) and to 2.4% for

[3] The tax is applied both in inter vivos transfers and transfers upon death.

transfers to second degree relatives (grandchild, nephew or niece). Nevertheless the tax rate remained 20% for business transfers to unrelated third parties (Figure 1).

III. Data Sources

For the empirical analysis I construct a unique dataset of all business transfers of limited liability companies in Greece from 1999 to 2005. I obtain the information from various sources, as explained below.

1. Financial information was provided by ICAP, the leading company for business information in Greece. Although all limited liability companies in Greece are privately held, they are required to publish their financial statements either in the official government newspaper or in financial newspapers. ICAP gathers the financial data from these sources. Furthermore, ICAP verifies the data by directly contacting the companies and acquiring additional information on their quarterly reports and cash flows. ICAP has the most extensive database on both public and private companies in Greece and is the local provider of the Amadeus database for Greek company data. I obtain information for the period 1995 to 2007. I include all limited liability firms except from utilities and financial firms.

2. I collected the succession data by hand from the disclosure statements of companies in the government newspaper for the years 1999 to 2005. The law requires all LLCs to report their transfers. A transfer is a change of ownership of the firm. For privately held firms ownership and control are usually not separated, and therefore in a transfer not only the ownership but also the management is transferred from one generation to the next. Overall, I observe 694 successions in the years 1999 to 2005. The official records contain the name, date of birth, address and identification number of the departing entrepreneur as well as the name and address of the successor and their family relationships if any. This allows one to identify whether the departing entrepreneur is related by blood or marriage to his successor. Successions are classified into two categories: family, when the transfer of the company is towards relatives of either the first (sibling, spouse, parent or offspring) or second degree (grandchild, nephew or niece), or unrelated. The disclosure statements of the companies in the government newspaper were also used to identify the gender of the first-born child of the entrepreneur. In general, that is easy to do because the Greek language uses different endings for female and male names. Whenever the gender could not be identified from the filings of the companies I did so using information from company websites, or contacted the companies directly.

3. The data on the other sources of income of the departing entrepreneur are provided by the Ministry of Economy and Finance.

IV. Results

A. Unconditional Evidence

Figure 2 shows graphically the main results of the paper. Figure 3 shows the time series evolution of average investment around transitions for family successions and unrelated successions. Panel A refers to successions that took place before the reform. Time is measured in years relative to the year of transition. Figure 3 shows that when they face high succession taxes, firms that are transferred within the family experience a sharp decline in investment in the year of succession, relative to firms that were transferred outside the family. The decline in investment for firms with family successions is more than 40% of the pre-transition level and persists for the two years after succession with only a slight recovery. Panel B plots the average investment around succession for family successions and unrelated successions that occur after the reform. In contrast to Panel A, Panel B shows that when succession taxes for within-family transfers were effectively eliminated, the average investment of both, family and unrelated succession firms, follows similar patterns.

Figure 3 plots the time series evolution of cash holdings for the two groups of firms. Cash holdings are defined as the ratio of cash relative to total assets. Panel A suggests that under the high succession tax, the tax liability drains the cash reserves of firms that undergo family successions. There is a sharp decline in cash holdings for family successions in the year of the transition. Firms slowly replenish their cash reserves in the years following transition. For unrelated successions the cash holdings move smoothly around succession. In the post-reform period (Panel B) the cash reserves of both groups of firms move similarly over time.

This preliminary evidence indicates that in the presence of high taxes (pre-reform period), firms that undergo family succession experience a large drop in their post-succession investment and cash holdings. These results were also confirmed in the formal empirical analysis which can be found in the academic paper.

B. Investigating the financial constraints channel: Entrepreneur's Other Income Sources

The previous analysis shows that transfer taxes have a large impact on the firms' internal financial resources and their investment decisions. This section further analyzes the financial channel through which taxes affected investment.

My unique dataset, and the nature of family firms, for which the business assets and the personal assets of the entrepreneur are closely connected, allow me to use the entrepreneur's personal income from sources other than the company to classify firms according to their access to low-cost financial sources outside the firm. The income from other sources ("Other income" henceforth) is defined as the total income of the departing entrepreneur the year prior to succession minus his income from the company.

For each time period, I divide firms into two groups based on the pre-succession income of the entrepreneur from sources other than the firm. I designate the top 50% firms as "High Other Income" firms and the bottom 50% as the "Low Other Income" group. Although most small and medium-sized firms face financing constraints, the effect of the tax on investment should be mitigated for firms whose entrepreneurs can use sources other than external finance to pay their tax liabilities.

I find that the high transfer tax has a greater impact on investment in firms in which the departing entrepreneur has low income from other sources. The analysis supports the view that the existence of internal financial constraints drives the investments results.

V. Conclusion

This paper uses a tax reform as a natural experiment to study the effect of succession taxes on entrepreneurs' succession decisions, investment decisions, and financial policies. The paper uses unique microdata of privately held firms in Greece that combine firm-level financial data with entrepreneurs' family characteristics and personal income.

I find a strong negative effect of succession taxes on firm investment around successions. Under high transfer taxes, successions are also associated with slow total asset growth and depletion of cash reserves, consistent with the draining of internal financial resources to avoid costly external financing of the tax liability. This is further supported by the finding that these investment effects are much stronger for firms owned by entrepreneurs with relatively low income from other sources (i.e., entrepreneurs without another alternative to costly external finance).

This paper makes three main contributions: First, it shows that succession taxes are an important influence on the succession decisions of family firms, and on family firms' growth and investment around transitions. The effects are particularly severe for firms in which the departing entrepreneur has limited "other sources" of income that he could use for fulfilling his tax liability. Previous cross-country studies failed to find a significant effect of the succession tax on investment around succession. I focus on a tax reform within a country to overcome the limitations of cross-country studies

Second, the paper highlights internal financial constraints as another important factor in the decision of the entrepreneur to transfer his company within the family. Under high succession taxes, many financially constrained entrepreneurs may be "forced" to sell off their company even in cases that it would be more efficient to have a family succession.

Third, this study offers a unique opportunity to analyze the investment behavior of private firms, which are the most understudied group of firms in the economy. Although they comprise more than 80% of all firms, there are limited data on US privately held firms, leading researchers of private firms to rely on international data, like those analyzed in this study.

Finally, although the paper does not make explicit policy recommendations, it contributes to the policy debate on succession taxes both in Europe and the US. High succession taxes may hinder investment and firm growth and this may also affect employment and firm survival.

Figure 1. Tax reform – Tax Rate by Succession Type

Successions are classified into two categories: *family*, when the transfer of the firm is towards relatives of the first or second degree, *unrelated* otherwise.

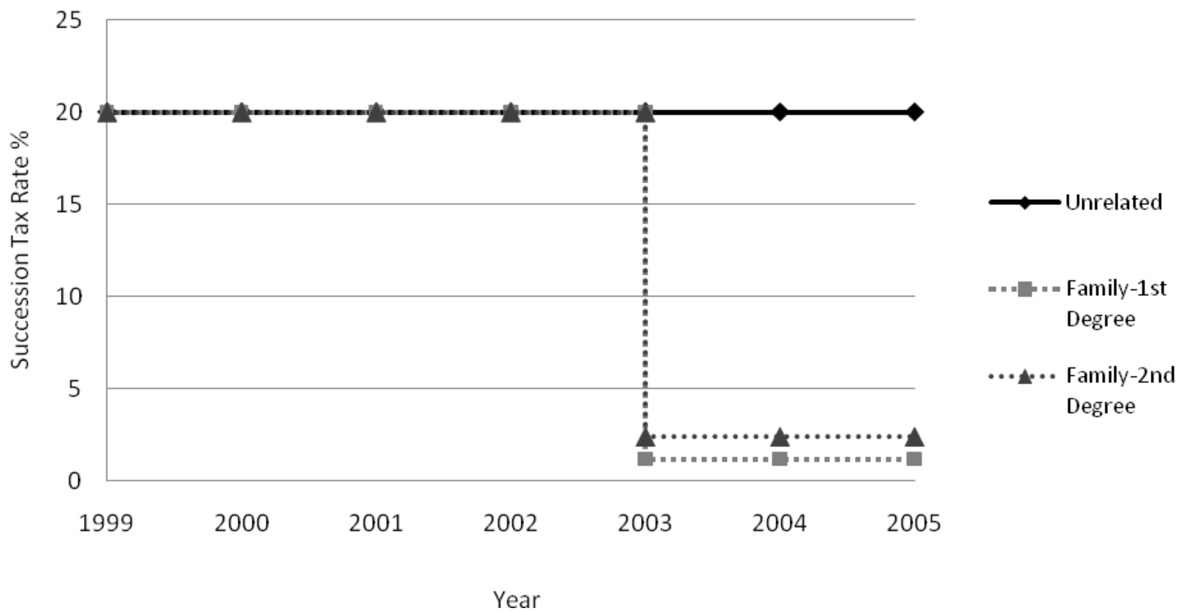
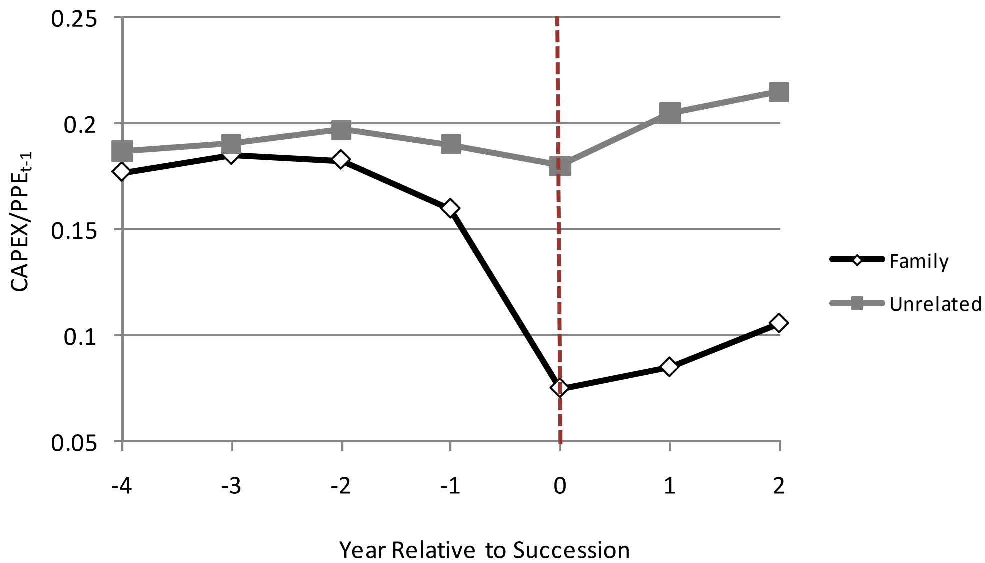


Figure 2. Investment (CAPEX/PPE$_{t-1}$) for Alternate Succession Decisions

Successions are classified into two categories: *family*, when the transfer of the firm is towards relatives of the first or second degree, *unrelated* otherwise. Time is measured in years relative to the year of transition.

PANEL A: Before the Tax Reform (High Tax for Both Family and Unrelated Successions)



PANEL B: After the Tax Reform (Low Tax for Family Successions)

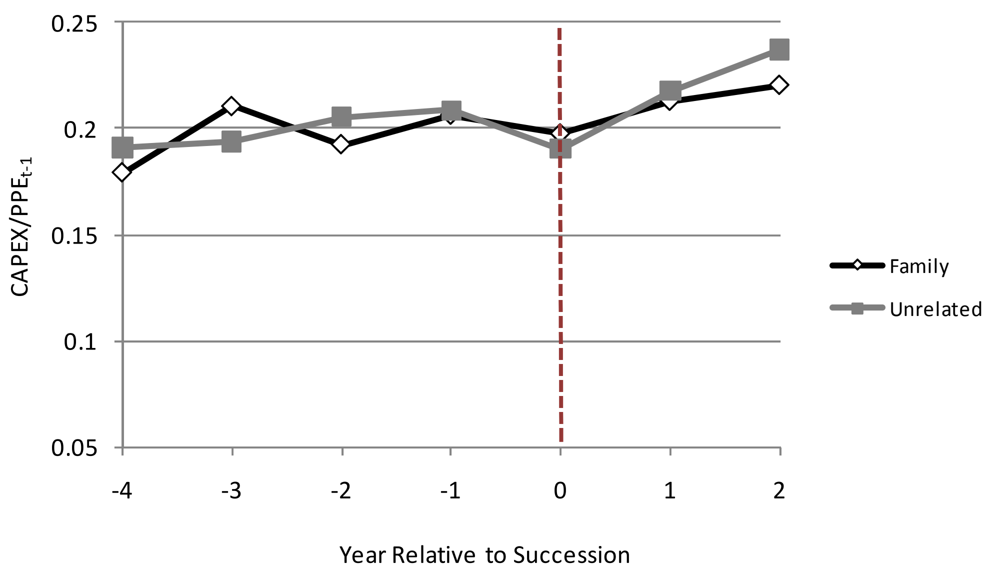
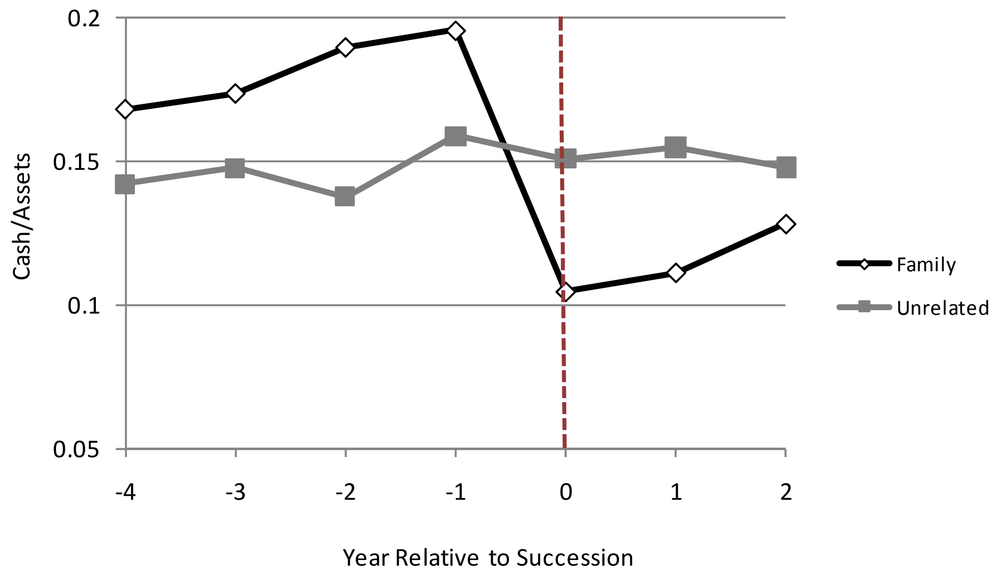


Figure 3. Cash Holdings (Cash/Assets) for Alternate Succession Decisions

Successions are classified into two categories: *family*, when the transfer of the firm is towards relatives of the first or second degree, *unrelated* otherwise. Time is measured in years relative to the year of transition.

PANEL A: Before the Tax Reform (High Tax for Both Family and Unrelated Successions)



PANEL B: After the Tax Reform (Low Tax for Family Successions)