Determinants of Corporate Organizational Structure

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Abstract
Though most academic studies and media reports focus on parent firms, many parent firms operate through networks of subsidiaries that are not easily visible. To date, virtually no research examines the basic structures that firms create to operate their businesses. In this study, we use confidential Internal Revenue Service (IRS) data to describe and examine determinants of both the size and complexity of the domestic subsidiary networks ("organizational structures") for U.S. public and private C corporations. We find that, even after including firm fixed effects, a wide array of firm characteristics are associated with firms' organizational structure choices, including attributes related to financing, taxes, and business complexity. We also evaluate whether a change in the accounting rules for certain subsidiaries alters organizational structures, but we fail to find evidence of an effect. Our study provides initial insight into firms' fundamental decisions regarding their organizational structure.

I. INTRODUCTION

Firms structure and conduct their business activities using various subsidiaries. We refer to the nature and extent of a firm's use of subsidiaries as the firm's "organizational structure." Most financial statements, however, are prepared at the consolidated (i.e., parent) level under U.S. Generally Accepted Accounting Principles (GAAP). Public firms disclose subsidiary information in Exhibit 21 of Form 10-K but may strategically withhold disclosure, including mandatory disclosures (e.g., Frost and Pownall 1994; Gramlich and Whiteaker-Poe 2013; Ayers, Schwab, and Utke 2015; Dyreng, Hoopes, Langetieg, and Wilde 2020), making it difficult to determine firms' organizational structure from publicly available information. Further, Exhibit 21 disclosures only apply to publicly traded firms and exclude information on the hierarchical nature of parent-subsidiary relationships. As a result, little is known about firms' underlying organizational structures. In this paper, we use proprietary Internal Revenue Service (IRS) U.S. tax return data to describe the determinants of domestic partnership and corporate subsidiary use in domestic C corporations' organizational structures.

We study the domestic organizational structures of public and private parent-level U.S. C corporations, which we refer to as "firms." Although C corporations are not the most common business entity, they tend to include the largest and most significant entities. For example, nearly all publicly traded entities are C corporations. Firms can have three types of subsidiaries. First, a firm can have a consolidated C corporation subsidiary. This is a separate legal entity that is more than 80 percent owned and controlled by the firm that the firm elects to consolidate for tax purposes. Though legally distinct, these subsidiaries roll up into the firm with little independent reporting; often, these subsidiaries are largely invisible and inseparable from the firm, existing only on paper. Second, a firm can have an unconsolidated C corporation subsidiary. These are

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separate legal entities with some level of independent reporting (e.g., they must file their own tax return) and, often, operate independently from the firm. Third, a firm can have a partnership, or pass-through, subsidiary (Feng, Gramlich, and Gupta 2009; Agrawal, Chen, and Mills 2021). These are also separate legal entities with some level of independent reporting (e.g., they must file their own tax return), but may or may not operate independently.[1] Notably, pass-through businesses (encompassing partnerships and S corporations) are the most common type of business entity and currently contain the majority of U.S. economic activity (Greenberg 2017).[2] However, the extent to which these entities exist within corporate structures is currently unknown.

Firms form organizational structures for several reasons. First, firms may use structures for liability protection, attempting to contain debt or legal liabilities to a specific subsidiary rather than the whole firm. Examples of firms unsuccessfully attempting to transfer liability to subsidiaries appear in lawsuits against 3M and Johnson & Johnson.[3] Second, structures may exist to generate accounting or tax benefits (e.g., Feng et al. 2009; Agarwal et al. 2021). Finally, firms may operate in complex structures due to inherent complexity in business operations or intentions to maintain flexibility for the possible separation/divestiture of divisions in the future. Businesses with disparate or distinct operations (e.g., General Motors, 3M) may prefer having structures that reflect these separate operations. Relatedly, organizational structures may exist to facilitate collaboration (e.g., joint ventures) across firms. Consistent with these reasons, we group determinants of organizational structure into proxies for financing (debt and equity), tax incentives, and business

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[1] Tax law permits, but does not require, consolidation when a C corporation owns 80 percent or more of another C corporation, but prohibits consolidation of partnerships. GAAP requires consolidation when a firm owns more than 50 percent, or otherwise controls, another entity regardless of the entity's status as a C corporation or partnership. Because we use IRS data, we generally refer to tax-based consolidation rules.
[2] C corporations are legally prohibited from owning S corporations, so they cannot exist in the structures we study.
[3] See https://www.reuters.com/legal/us-judge-penalizes-3m-bars-it-shifting-liability-earplug-litigation-2022-12-22/ and https://finance.yahoo.com/news/the-texas-two-step-is-back-as-jj-tries-to-shed-talc-lawsuits-for-a-third-time-150018521.html.

complexity.

Our study is important because it sheds light on an unexplored, fundamental business decision: organizational structure. Whereas prior literature focuses on parent-level organizational form, which refers to the parent firm's legal entity type (e.g., Gordon and MacKie-Mason 1994; Ayers, Cloyd, and Robinson 1996; Hodder, McAnally, and Weaver 2003), little research examines firms' underlying organizational structures due to a lack of data availability.[4] The papers most related to our study include Lewellen and Robinson (2013), who examine foreign ownership structures of 1,354 large U.S. multinational firms using BEA data, Feng et al. (2009), who examine public firms' use of certain pass-through entities known as special purpose entities or vehicles (SPEs or SPVs), and Agarwal et al. (2021), who examine whether pass-through subsidiaries facilitate public firms' tax avoidance. In contrast to Lewellen and Robinson (2013), we focus on U.S. firms' *domestic* organizational structure and, thus, *within-country* variation in entities, whereas Lewellen and Robinson (2013) examine the links between multinational firms' subsidiaries in different countries. Their study of multinational subsidiaries provides an important complement to our study of only domestic subsidiaries, but their country-level focus masks substantial detail in within-country organizational structure. In contrast to Feng et al. (2009), we examine both C corporate and pass-through subsidiaries, public and private firms, and use data that, unlike the Exhibit 21 data that Feng et al. (2009) use, is not subject to selective reporting, exists for private firms, and provides information on subsidiary hierarchical structure. Different from Agarwal et al. (2021), we explore the determinants of *both* public and private firms' full organizational structures, including corporate subsidiaries and hierarchical structures, and do not examine the effects of organizational structure on tax avoidance.

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[4] We focus on the legal organizational structure; we do not have data on managerial configuration, hierarchy, or interactions (e.g., of the types discussed in Harris and Raviv 2002; see Ewens and Giroud 2025).

To examine the determinants of corporate organizational structure, we obtain IRS tax return information from 2007 to 2018 that includes information on ownership links between firms and their subsidiaries (described in more detail later). For any U.S. C corporation with less than 50 percent foreign ownership and more than $10 million in assets in any one year in our sample, we trace the ownership of that entity to the highest C corporate owner (i.e., firm with no other significant owners) for all years in the sample. We require each firm to have at least one subsidiary, eliminating fundamental differences between firms with organizational structures versus purely stand-alone firms. In total, our sample includes 136,834 firm-years, of which 108,969 (27,865) are private (public) firm-years. These firm-years capture 22,218 firms, of which 18,290 (3,928) are private (public). The average firm-year has about 8 subsidiaries, with public firms having more subsidiaries than private firms. In sum, our sample firm-years include 1,318,528 subsidiary-years, of which 289,803 are partnerships (2.11 per firm-year, before winsorizing), 18,795 are unconsolidated C corporations (0.14 per firm-year, before winsorizing), and 1,009,930 are consolidated C corporations (7.38 per firm-year, before winsorizing). The average firm-year structures these entities into 2.22 hierarchical levels (where the parent firm sits alone at the top level, i.e. level 1), where each lower level can include multiple subsidiaries.

Before turning to regression analyses, we conduct several descriptive analyses. First, we examine descriptive statistics after splitting firms into eight asset size groupings based on the IRS's designated size buckets. Surprisingly, we find that subsidiary use is fairly similar across all groups with less than $100 million in assets but increases sharply after that. That said, the maximum number of subsidiaries (over 125) is similar across all asset size groups, suggesting that at least some firms of all sizes heavily use subsidiaries. Second, we examine descriptive statistics after splitting firms into 20 NAICS industry groupings frequently used in summary statistics from

government agencies. We find that agricultural and wholesale trade industries have relatively low subsidiary usage (about 4 and 5 subsidiaries on average) whereas "other" industries have higher usage (about 22 subsidiaries), though there are relatively few observations in the "other" group. Most industries average between 6 and 10 subsidiaries per firm-year. To provide a descriptive account of both the number of subsidiaries and the hierarchical structure in which these subsidiaries are organized, we also present a hypothetical organizational structure, for one industry, based on the average number of subsidiaries in each level of the organizational structure.

We then turn to regression analyses to explore determinants of the magnitude of subsidiary usage in organizational structures, as well as the complexity of subsidiary usage. We conduct both cross-sectional (with industry fixed effects) and within-firm (i.e., firm fixed effects) regression analyses. Cross-sectional tests provide information regarding overall variation in choices across firms, whereas within-firm analyses examine how firms' organizational structures change as firms change. We measure the magnitude of subsidiary usage as the number of either total, or each of the three separate types of, subsidiaries. We measure the complexity of subsidiary usage as the number of levels in the organizational structure (i.e., hierarchical structure) or the percentage of partnerships to total subsidiaries. Partnerships generally have more complicated and flexible legal, tax, and accounting rules than C corporations. Further, for firms with partnership subsidiaries, we measure complexity using the number of links among partnerships and the number of "asymmetric" links among partnerships – where loss allocations are disproportionate to profit and ownership allocations – which may indicate particularly complex arrangements (Agarwal et al. 2021; Love 2024).

Examining the magnitude of subsidiary usage, in the cross-section we find that the number of subsidiaries is generally negatively related to most financing (i.e., debt and equity issuance)

measures, negatively related to tax rates, positively related to attributes suggesting tax planning ability, and positively related to business complexity measures (e.g., size). Each category of determinants jointly explains cross-sectional variation. Within-firm, we find that the number of subsidiaries is positively related to leverage amounts and equity issuance, but still negatively related to tax rates, positively related to tax planning ability and positively related to most business complexity measures. However, our categories jointly have less explanatory power within-firm when the number of unconsolidated corporate and partnership subsidiaries are dependent variables, suggesting that decisions around unconsolidated subsidiaries may be sticky or relate to one-off business opportunities that are difficult to model.

Turning to our analysis of the complexity of subsidiaries, in the cross-section we find that the complexity results are largely similar to the magnitude of subsidiary usage results. Within firm, we find somewhat weaker evidence that firm attributes are associated with changes in subsidiary complexity; business complexity seems to be the primary driver, with some (little) evidence that taxes (financing) play a role. In general, these results are consistent with financing, tax, and business complexity being important drivers of organizational structures. However, although the business complexity results are generally consistent across analyses – firms with greater business complexity use more, and more complex, subsidiary structures – the results for taxes and liabilities are more mixed.

We also conduct several tests exploring cross-sectional variation in firm attributes. First, we conduct a cross-sectional test examining variation in determinants of organizational structure for public versus private firms. Surprisingly, we find little evidence that public firms' organizational structure choices are more sensitive to firm attributes than private firms' choices, with a few exceptions (e.g., public firms' organizational structure choices are more sensitive to

their leverage, size, and use of intangibles). We next conduct a cross section on firms with foreign operations (multinational companies or MNCs). We again find few differences in MNCs' sensitivity to firm attributes in making domestic organizational structure choices. However, like public firms, MNCs are also more sensitive to leverage, size, and use of intangibles when choosing structure.[5] A cross-section on size also indicates relatively few differences in determinants of structures for larger versus smaller firms. That said, larger firms are generally more sensitive than smaller firms to debt issuance and net operating losses in their organizational structure choices.

When we estimate our regression separately for each of eight asset size ranges based on the IRS's size groupings, we find that business complexity variables jointly explain the magnitude of organizational structure across all size groupings, whereas results are more mixed for financing and tax variables. Further, we find little evidence that any of these variables jointly explain organizational structure complexity in any size grouping. We also conduct separate regression analyses for each NAICS industry grouping and find wide variation across industries in the importance of each determinant for firms' organizational structure, though again, business complexity most often jointly explains organizational structures. In sum, these results suggest that organizational structure choices are relatively linear in some firm attributes, with additional variation across industries and firm size.

In additional analysis, we examine whether an accounting rule change affected organizational structures. SFAS 160 (now ASC 810), effective for fiscal years beginning after December 15, 2008, standardized the accounting for certain unconsolidated subsidiaries in a way that could lower the effective tax rate (ETR) that firms report on their financial statements. Prior work finds that tax rules affect firms' financial reporting, and vice versa (e.g., Blouin, Gleason,

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[5] The correlation between public firms and multinational firms is 0.375. Thus, these variables are not capturing the same set of firms or the same construct.

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Mills and Sikes 2010; Towery 2017). However, we fail to find evidence that firms use more subsidiaries after SFAS 160 in response to the ability to report lower ETRs from these subsidiaries.

Our study makes several contributions. First, we provide important descriptive evidence on a fundamentally important, but previously unexplored, business decision, laying a foundation for future research and understanding of firm behavior (Gow, Larcker, and Reiss 2016) regarding the extent to which corporate and pass-through subsidiaries are used by firms. Second, we answer calls for research on organizational structure (Hanlon and Heitzman 2010, p. 156; Dyreng et al. 2015) and provide the IRS with a new tool in modeling complex organizational structures. A model of organizational structure choice may help the IRS identify corporate entities undertaking "abnormal" changes in internal structure and enhance existing audit selection models for corporate taxpayers. To the extent that these organizational structures facilitate tax avoidance, our study also provides insight into the "black box" of tax avoidance structures, answering calls by Dyreng and Maydew (2018) and Wilde and Wilson (2018) for research in this area.

II. PRIOR LITERATURE

Our study focuses on the organizational structure of a firm, as might appear on the firm's "organizational chart" or "org chart." Appendix B presents an example of an org chart for KKR & Co Inc. obtained from their 2024 Form 10-K. Prior work focuses on firms' internal communication networks (e.g., Jacobs and Watts 2021), managerial hierarchy or centralized vs. decentralized decision making in coordinating company-wide vs. divisional activities (e.g., Radner 1993; Bolton and Dewatripont 1994; Garicano 2000; Rajan and Zingales 2001; Harris and Raviv 2002; Gumpert, Steimer, and Antoni 2022; Ewens and Giroud 2025), choices to operate across multiple industries (e.g., Bai 2021), or choices to vertically integrate supply chains (e.g., Hansman, Hjort, León-Ciliotta, and Teachout 2020). However, very little research examines legal organizational

structures.[6] The few studies that examine organizational structures often focus on foreign structures used for financing (e.g., Coppola, Maggiori, Neiman, and Schreger 2021; Murphy 2023) or tax planning purposes (e.g., Hines and Rice 1994; Dyreng and Lindsey 2009; Atwood and Lewellen 2019).[7] Further, these studies often focus only on the *existence* of a foreign subsidiary rather than a firm's complete organizational structure. Another set of studies examine internal capital markets and earnings management for firms operating as groups of firms versus stand-alone firms (e.g., Bonacchi, Marra, and Zarowin 2019; Luo, Zhang, and Zhang 2025), but these studies generally do not examine underlying organizational structure.

A limited set of studies examine topics more closely related to organizational structure. First, Hess et al. (2024) examine organizational structure of partnerships rather than corporations. Klemens (2024) similarly studies network links between partnerships and corporations. Both papers focus on the overall network structure or "spiderweb" of links between entities in IRS data. Though important and related in concept to our study, we examine organizational structure of firms where the parent firm is a C corporation, focusing on the attributes of the parent firm that are associated with its specific organizational structure. Feng et al. (2009) and Demeré, Donohoe, and Lisowsky (2020) use Exhibit 21 data to examine the determinants and financial reporting or tax avoidance consequences of one specific type of subsidiary: a pass-through SPV.[8] More broadly, Agarwal et al. (2021) use IRS data to examine the association between pass-through usage and tax

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[6] Organizational structure is sometimes used in prior work to describe either firms' operating as a conglomerate versus standalone firm (better described as an operating structure) or as the firms hierarchical management structure (better described in those terms). We focus on legal organizational structure. Organizational structure also differs from organizational form (Utke 2019; Utke and Mason 2025), which refers to the legal entity choice for a single entity.

[7] Dyreng, Lindsey, and Thornock (2013) examine the use of Delaware subsidiaries for domestic tax planning. Lewellen and Lindsey (2024) examine the choice between foreign and Delaware subsidiaries for tax planning. Both studies use Exhibit 21 data and examine only public firms.

[8] As noted earlier, Exhibit 21 data faces limitations. Feng et al. (2009) note that roughly 25 percent of firms confirming the existence of SPEs through their 10-K disclosures do not list any in Exhibit 21, and several high-profile special purpose entity users, identified through media reports or transactions, do not list any SPEs in Exhibit 21.

avoidance for public firms.[9] A separate set of studies use unique data in the banking industry to describe and examine associations between organizational structure complexity and risk in banks (e.g., Gong, Huizinga, and Laeven 2018; Flood, Kenett, Lumsdaine, and Simon 2020).

More directly focusing on organizational structure, Lewellen and Robinson (2013) use confidential Bureau of Economic Analysis (BEA) data to examine foreign structures for 1,354 U.S. multinational firms.[10] They find that most firms create simple structures (parent directly owns subsidiary in each country), but some create complex structures (subsidiary in one country owns subsidiaries in other countries), with complexity varying even within the set of complex firms. Over time, the proportion of complex firms decreases but the complexity of complex firms increases. They find that tax and non-tax factors affect structuring decisions. Non-tax factors include political risks, economic and cultural links, and economic development in various foreign countries. Because we examine U.S. subsidiaries, these non-tax, cross-country determinants are not relevant in our setting. Dyreng, Lindsey, Markle, and Shackelford (2015) use Bureau van Dijk data to study locations of foreign holding companies. Like Lewellen and Robinson (2013), they find that taxes play a role in use of foreign holding companies, as does country-level risk. Finally, using the unique Taiwanese setting where public firms disclose their full organizational structure, Hsu, Liu, and Nathan (2019) find that organizational complexity is associated with worse information environments used to support tax avoidance. However, Hsu et al. (2019) includes only 2,514 firm-years over 14 years (about 180 firms per year) and does not include private firms.

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[9] In addressing their main question regarding tax avoidance, Agarwal et al. (2021) conduct a limited analysis of the determinants of pass-through use by public firms. We expand this study significantly by examining determinants of the use of a variety of subsidiaries, as well as hierarchical structures, for both public and private firms.

[10] Unlike our data, the BEA "allows firms to consolidate entities in the same country into single BEA reporting units, so [BEA studies] do not observe within-country structures accurately." (Lewellen and Robinson 2013, 2).

III. DATA AND RESEARCH DESIGN

3.1 Data and Creating Organizational Structures

We begin our sample with all firm-year observations from the IRS's Form 1120 (i.e., U.S. C corporation) tax return database for returns filed between 2007 and 2018 by firms with less than 50 percent foreign ownership and more than $10 million in assets. If a firm has more than $10 million in assets in any year in our sample, we obtain data for the firm for all available years so that our sample includes some observations with less than $10 million in assets.

We then merge our data by EIN with the IRS's pass-through entities database, which links tax return information of corporations, subsidiaries, partnerships, individuals, and other tax entities using Schedule K-1s filed by pass-through entities to create organizational structures.[11] We observe the EINs of both corporate and partnership entities themselves, as well as the EINs (or SSNs) of corporate and individual owners. For purposes of generating organizational structures, we use a 50 percent or greater direct or indirect ownership threshold.

Each corporate EIN in our Form 1120 sample represents the parent of a consolidated group. We construct the organizational structures underlying these parent entities using data from the pass-through entities database for the years 2006 to 2018.[12] The organizational structure includes the parent corporation at the top of the structure (i.e., level 1) and subsidiary entities are added iteratively to the structure by ownership tier (e.g., level 2 are subsidiaries directly owned by the parent corporation, level 3 includes subsidiaries owned by at least one entity in level 2, etc.). A partnership or pass-through entity is included in a corporation's organizational structure if it is

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[11] Schedule K-1 is a form provided by a pass-through entity to each owner of the pass-through entity. The K-1 reports the owner's share of pass-through items (e.g., ownership percentage, income, etc.).

[12] Because our regression variables are measured in year *t*-1, we collect data starting in 2006 and our regression sample includes observations from 2007 onwards.

collectively owned (at least 50 percent) by all entities in the structure, including the parent corporation and its subsidiaries.

We then expand the organizational structure using information from Form 851 and Schedule G of Form 1120. Form 851 reports the consolidated corporate subsidiaries owned by the parent corporation. Schedule G allows us to identify owners, whether corporations, subsidiaries, or partnerships, *above* a Form 1120 filer. We then replace the structure of the Form 1120 parent corporation with that of its owners until we reach a final top-level C corporation owner and update the levels of the subsidiary entities to reflect their positions within the revised structure.

Table 1 describes the sample selection procedures. Our sample begins with 262,834 parent firm-year observations for Form 1120 corporate filers that meet our sample requirements (i.e., less than 50 percent foreign ownership, at least $10 million in total assets, and at least one subsidiary entity in the organizational structure). We obtain Form 1120 line items used to construct our regression variables from the Form 1120 tax return database. After omitting observations missing required data and singleton observations, our final sample includes 136,824 parent firm-years.

3.2 Measures of Organizational Structure

For each parent corporation in our sample, we construct several measures to represent the magnitude and complexity of its organizational structure based on the entities, and connections between entities, within each structure. To capture the magnitude or extent of the organizational structure, we measure: (1) total number of subsidiary entities (N_Sub), (2) total number of corporate subsidiary entities (N_C_Sub), (3) total number of unconsolidated corporate subsidiary entities ($N\_Unconsol\_C\_Sub$), and (4) total number of pass-through subsidiary entities (N_PS_Sub).

To measure the complexity of the organizational structure, we first identify the "depth" of the hierarchical structure based on the maximum ownership level (*N_Level*). The parent corporation is designated as level 1 in the organizational structure. Thus, a corporation with *N_Level* equal to 5 refers to a structure with four "levels" of subsidiary tiers under the parent corporation. Second, we define *PS_Ratio* (*C_Ratio*) as the proportion of pass-through (corporate) subsidiaries to total subsidiary entities in the structure. Third, *PS_Links* is the total number of partnership linkages in the organizational structure, which captures the number of Schedule K-1s issued by pass-through entities to owners within a structure in a year. Finally, we create the measure *PS_Asymm_Links* to capture the number of partnership linkages where the loss allocation percentage is higher than the profit allocation percentage or ownership percentage.

3.3 Descriptive Statistics

Table 2 presents descriptive statistics for our full sample of 136,834 firm-years (Panel A), as well as statistics for public versus private firm-years (Panel B). We winsorize all continuous variables at the 1 percent and 99 percent level to limit the influence of outliers in our regressions. The first several variables report the number of subsidiaries in raw numbers and logged. The raw (logged) total number of subsidiaries, *N_Sub* (*Log(N_Sub)*), average 7.99 (1.58) per firm-year, split between 6.59 (1.45) C corporate subsidiaries, *N_C_Sub* (*Log(N_C_Sub)*), and 1.11 (0.34) partnership subsidiaries, *N_PS_Sub* (*Log(N_PS_Sub)*). Of the C corporate subsidiaries, only about 0.09 are unconsolidated C corporations, *N_Unconsol_C_Sub*.[13] The average number of total levels (*N_Level*) in a corporate structure is 2.22 levels, and *N_Level* equals 2.00 at the 75th percentile. Thus, a large portion of the organizational structures in our sample consist of one parent corporation (level one) with a single layer of subsidiaries underneath (level two), noting that we

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[13] The total numbers of subsidiaries calculated from the descriptive statistics will not tie to those reported in the introduction because the descriptive statistics are winsorized.

require firms have at least two levels to be included in our sample. In terms of complexity, partnerships (C corporation) subsidiaries make up about 12 percent (88 percent) of subsidiaries, *PS_Ratio* (*C_Ratio*). Among firms with partnership subsidiaries, 6.48 (1.35) links (log links) exist, on average, between the partnerships and the firms' other entities, *PS_Links* (*Log(PS_Links)*).

Figure 1, Panel A (B) reports the average and median (maximum) number of total subsidiaries by firm size, grouped into eight asset size buckets based on the IRS's size groupings. Panels C and E (D and F) report the same statistics for only corporate or partnership subsidiaries. Across all panels, the maximum number of subsidiaries is similar across asset size groupings, whereas the average and median number remain relatively consistent until size reaches around $100 million, after which subsidiary use increases sharply. Figure 2, Panel A reports the average total, corporate, and partnership subsidiaries based on NAICS industry groupings (see Appendix C for industry groupings by NAICS code). Panel B (C) similarly reports the median (maximum) of these values by industry. Average, median, and maximum values are relatively consistent across industries with just a few industries showing relatively large (e.g., "other") or small (e.g., agriculture) values.

Figure 3 presents a hypothetical organizational structure for one industry (professional services), based on the average number of subsidiaries in each level of the organizational structure. Although our main descriptive statistics aggregate to the parent firm-level, this figure presents hypothetical detail on variation in number of subsidiaries by ownership tier. In order to illustrate the tiers, we compute averages for lower tiers based only on firms with non-zero subsidiaries in each tier. As such, this example structure includes 31 subsidiaries, which is above the average of 7.99 subsidiaries per firm-year in Table 1, Panel A, but well below the maximum of 141 in Figure 1, Panel B. Importantly, this is based on averages and does not represent any actual firm's structure,

disclosure of which is prohibited. This example structure demonstrates that, especially for firms that use multiple tiers, organizational structures can get quite complex and are not necessarily purely pyramidal, with lower tiers potentially having fewer subsidiaries than higher tiers.

3.4 Research Design

We estimate the following OLS model to explore the determinants of organizational structure:

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\begin{aligned}
OS_{i,t} = \ & \beta_0 + \beta_1 Lev_{i,t-1} + \beta_2 Int\_Cov_{i,t-1} + \beta_3 Debt\_Iss_{i,t-1} + \beta_4 Stock\_Iss_{i,t-1} + \beta_5 CLTD_{i,t-1} \quad (1) \\
& + \beta_6 MTR_{i,t-1} + \beta_7 SETR_{i,t-1} + \beta_8 NOL_{i,t-1} + \beta_9 Intang_{i,t-1} + \beta_{10} Foreign_{i,t-1} \\
& + \beta_{11} Eq\_Inc_{i,t-1} + \beta_{12} Min\_Int_{i,t-1} + \beta_{13} Size_{i,t-1} + Fixed\ Effects + \varepsilon
\end{aligned}
$$

OS (organizational structure), our dependent variable of interest, is alternatively measures of organizational structure magnitude (*N_Sub*, *N_C_Sub*, *N_Unconsol_C_Sub*, and *N_PS_Sub*) and measures of organizational structure complexity (*N_Level*, *PS_Ratio*, *PS_Links*, and *PS_Asymm_Links*) as described previously. To estimate the regression, we take the natural logarithm of one plus the value of any count variables (i.e., all variables with the exception of *PS_Ratio*). We model organizational structure as a function of several broad incentives identified in prior literature (e.g., Feng et al. 2009; Agarwal et al. 2021). First, leverage (*Lev*), interest coverage (*Int_Cov*), debt issuance (*Debt_Iss*), stock issuance (*Stock_Iss*), and the current portion of long-term debt (*CLTD*) capture firms' financing activities related to debt and equity. Second, we examine firms' tax incentives to utilize certain organizational structures, including their marginal tax rates (*MTR*), state effective tax rates (*SETR*), net operating losses (*NOL*), intangible assets (*Intang*), and extent of foreign operations (*Foreign*). Third, we include variables related to firms' equity in earnings of unconsolidated subsidiaries (*Eq_Inc*), minority interest (*Min_Int*), and total assets (*Size*) to proxy for overall business complexity. We construct all regression variables

using data from various line items reported on firms' Form 1120 (e.g., Schedule L, Schedule M-3) and define variables in more detail in Appendix A.

We conduct our regression analysis both cross-sectionally, by including industry fixed effects, and within-firm, by including firm fixed effects. In each specification, we include year fixed effects and cluster standard errors by firm. Further, following Easton, Larocque, Mason, and Utke (2025), we study both the joint effects of these groups of determinants as well as the estimated coefficients on the proxies comprising each group (i.e., financing, tax incentives, and business complexity). This approach assists in interpreting results given the variety of determinants we explore. Within each group, our proxies generally have low correlations (untabulated), preventing use of principal component or factor analysis (Allee, Do, and Raymundo 2022; Hinson and Utke 2023). Instead, we conduct joint F-tests of the significance of the variables in each group, which allows us to evaluate the joint effect of each group on organizational structure.

IV. RESULTS

4.1 Full Sample Results

4.1.1 Full Sample Results for Organizational Structure Magnitude

Table 3, Panel A presents the results from estimating equation (1) related to the magnitude of firms' organizational structure within the cross-section of firms. Columns 1 to 4 report results for all subsidiaries, all corporate subsidiaries, only unconsolidated corporate subsidiaries, and only partnership subsidiaries, respectively. Results are largely similar across columns, except that we find fewer significant relations in column 3 with unconsolidated subsidiaries as the dependent variable. Across columns, each of our groups of determinants are jointly significant in explaining the magnitude of organizational structure. Higher use of financing (*Lev*, *Debt_Iss*, *Stock_Iss*) are negatively related to structure magnitude, as is better interest coverage (*Int_Cov*) while higher

current portion of debt (*CLTD*) is positively, or equivalently, lower current portion is negatively, related to structure magnitude. Higher tax rates (*MTR*, *SETR*) are generally negatively related to structure size (i.e., lower rates relate to larger structures). Along the same lines, better tax planning opportunities (*NOL*, *Intang*, *Foreign*) positively relate to structure size. Business complexity variables all have positive relations with structure size (*Eq_Inc*, *Min_Int*, *Size*). In sum, firms with less tax planning ability and more financing activity have smaller structures, except when that financing is due currently, while firms with more complexity have larger structures.

Table 3, Panel B presents the related results for our within-firm estimation of equation (1) when organizational structure size is the dependent variable. Effectively, this analysis examines how firms change their structures as their attributes change. All categories jointly explain overall subsidiary and total corporate subsidiary use (columns 1 and 2). However, financing (tax incentives and business complexity) are not jointly significant within-firm when the number of partnerships (unconsolidated corporate subsidiaries) is the dependent variable in column 4 (3). For the total subsidiaries (total corporate subsidiaries) dependent variable in column 1 (2), we find that higher leverage and stock issuance, but lower debt issuance and interest coverage, are associated with larger structures. Tax results are similar to the cross-sectional results, with higher tax firms (*MTR*) having smaller structures while firms with better tax planning opportunities (*NOL*, *Intang*) having larger structures. Across all columns, many of the business complexity measures are positively associated with organizational structure magnitude.

4.1.2 Full Sample Results for Organizational Structure Complexity

Table 4, Panel A presents the results from estimating equation (1) related to the complexity of firms' organizational structure within the cross-section of firms. Column 1 (2) reports results when the number of levels (proportion of partnerships) in a firm's structure is the dependent

variable. Column 3 (4) reports – only for firms with partnerships in their structures – results when the number of total partnership linkages (asymmetric linkages) between the firm's entities is the dependent variable. Results are often, but not always similar across columns. Of note, some determinants have opposite signs in different columns. Across columns, each of our groups of determinants are jointly significant in explaining the complexity of organizational structure. Higher use of financing (*Lev*, *Debt_Iss*, *Stock_Iss*) is usually negatively related to structure complexity, as is better interest coverage (*Int_Cov*) while higher current portion of debt (*CLTD*) is positively, or equivalently, lower current portion is negatively, related to structure complexity. These results are similar to the organizational structure magnitude results in the cross-section (Table 3, Panel A). Higher tax rates (*MTR*) are generally negatively related to structure complexity (i.e., lower rates relate to more complex structures). However, better tax planning opportunities (*NOL*, *Intang*, *Foreign*) have more mixed relations with structure complexity. Business complexity variables, when significant, have positive relations with structure complexity (*Eq_Inc*, *Min_Int*, *Size*). In sum, structure complexity results are often similar to structure magnitude results in the cross-section.

Table 4, Panel B presents the related results for our within-firm estimation of equation (1) when structure complexity is the dependent variable. Effectively, this analysis examines how firms change their structures as their attributes change. Business complexity jointly explains structure complexity across all columns. Tax incentives jointly explain all complexity measures except for total partnership links (column 3), while financing incentives only jointly explain the ratio of partnerships in the structure (column 2). Across complexity measures, tax rates (*MTR*) are negatively related to structure complexity (i.e., decreases in rates are associated with larger structures), consistent with the cross-sectional results. Interestingly, there is some evidence that

state tax rates (*SETR*) and minority interest (*Min_Int*) are positively related to the number of levels and use of partnerships in structures. Size is positively associated with complexity within-firm across all measures. Other explanatory variables often have insignificant or mixed relations across columns. In general, these results suggest that within-firm organizational complexity is relatively sticky, exhibiting limited variation with observable changes in firm attributes.

4.2 Cross-Sectional Sample Results

4.2.1 Public versus Private Firm Cross-Sectional Results

Table 5, Panel A presents the results from estimating equation (1) related to the magnitude of firms' organizational structure within-firm, after including an interaction term that identifies firms that were public (*PUBLIC*) at any point in our sample. Columns 1 to 4 report results for all subsidiaries, all corporate subsidiaries, only unconsolidated corporate subsidiaries, and only partnership subsidiaries, respectively. We focus our discussion on results where the relations for public firms differ from those for private firms. Surprisingly, we find few differences in the relations between firm characteristics and organizational structure magnitude across public versus private firms. We find that public firms are often more sensitive (i.e., more positive relation) to leverage and size, but less sensitive to stock issuance and marginal tax rates (i.e., interaction term offsets main effect).

Table 5, Panel B presents results mirroring Panel A, but uses organizational complexity as the dependent variable. Column 1 (2) reports results for the number of levels (proportion of partnerships) in a firms' structure. Column 3 (4) reports – only for firms with partnerships in their structures – the number of total partnership linkages (asymmetric linkages) between the firm's entities. As with our main results in Table 4, Panel B, we find limited evidence organizational structure complexity varies with firm attributes within-firm. In comparing results for public versus

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private firms, we only find that public firms' organizational complexity is consistently more sensitive (i.e., more positive relation) than private firms to size. In sum, results suggest that, within firm, being public may induce little variation in determining firms' organizational structure magnitude (Panel A) and complexity (Panel B).

4.2.2 Multinational versus Domestic Firm Cross-Sectional Results

Table 6, Panel A presents the results from estimating equation (1) related to the magnitude of firms' organizational structure within-firm, after including an interaction term that identifies firms that were multinational (*MNC*) at any point in our sample. Columns 1 to 4 report results for all subsidiaries, all corporate subsidiaries, only unconsolidated corporate subsidiaries, and only partnership subsidiaries, respectively. We focus our discussion on results where the relations for MNCs differ from those for domestic firms. As with the size results, we find few differences in the relations between firm characteristics and organizational structure magnitude across MNC versus domestic firms. We find that MNC firms are often more sensitive (i.e., more positive relation) than domestic firms to leverage, intangibles, and size.

Table 6, Panel B presents results mirroring Panel A, but uses organizational complexity as the dependent variable. Column 1 (2) reports results for the number of levels (proportion of partnerships) in a firms' structure. Column 3 (4) reports – only for firms with partnerships in their structures – the number of total partnership linkages (asymmetric linkages) between the firm's entities. As with our main results in Table 4, Panel B, we find limited evidence organizational structure complexity varies with firm attributes within-firm. In comparing results for MNC versus domestic firms, we only find some evidence that MNCs' organizational complexity is more sensitive (i.e., more negative relation) than domestic firms to net operating losses. Other MNC estimates are largely insignificant or mixed. In sum, results suggest that, within firm, being a MNC

may induce little variation in determining firms' organizational structure magnitude (Panel A) and complexity (Panel B).

4.2.3 Large versus Small Firm Cross-Sectional Results

Table 7, Panel A presents the results from estimating equation (1) related to the magnitude of firms' organizational structure within-firm, after including an interaction term that identifies firms that were above the median size (i.e., "large," *ABOVE_MEDIAN*) at any point in our sample. Columns 1 to 4 report results for all subsidiaries, all corporate subsidiaries, only unconsolidated corporate subsidiaries, and only partnership subsidiaries, respectively. We focus our discussion on results where the relations for large firms differ from those for small firms. In contrast to the results of our other cross-sections, large firms' organizational structure magnitude is more sensitive to several firm attributes than small firms. Specifically, large firms are more sensitive to interest coverage, debt issuance, net operating losses, and intangibles.

Table 7, Panel B presents results mirroring Panel A, but uses organizational complexity as the dependent variable. Column 1 (2) reports results for the number of levels (proportion of partnerships) in a firms' structure. Column 3 (4) reports – only for firms with partnerships in their structures – the number of total partnership linkages (asymmetric linkages) between the firm's entities. As with our main results in Table 4, Panel B, we find limited evidence organizational structure complexity varies with firm attributes within-firm. In comparing results for large versus small firms, we find very little evidence that large firms' organizational complexity responds differently to firm attributes than small firms. In sum, results suggest that, within firm, large firms are more sensitive than small firms to changes in their attributes in determining organizational structure magnitude (Panel A) but not in determining organizational structure complexity (Panel B).

V. ADDITIONAL ANALYSES

5.1 Analyses by IRS Asset Size Groupings

In our first additional analysis, we estimate equation (1) with one of our organizational structure magnitude measures, *Log(N_Sub)*, as the dependent variable separately across eight firm asset size groupings based on the IRS's firm size groupings. We include firm fixed effects. For brevity, we report only F-tests of joint significance in Table 8, Panel A. Across all asset size groupings, business complexity jointly explains organizational structure magnitude. However, the joint significance of financing and tax incentives varies across size groupings. Turning to organizational structure complexity (*Log(N_Level)*) in Panel B, we find little evidence across size groupings that any set of determinants jointly determines structure complexity. The weaker results here than in our main test (Table 4, Panel B) could arise from the smaller samples attributable to splitting the sample across asset size groupings.

5.2 Analyses by NAICS Industry Groupings

In our next additional analysis, we estimate equation (1) with one of our organizational structure magnitude measures, *Log(N_Sub)*, as the dependent variable separately across NAICS industry groupings (detailed in Appendix C). We include firm fixed effects. For brevity, we report only F-tests of joint significance in Table 9, Panel A. Across nearly all industries, business complexity jointly explains organizational structure magnitude. However, the joint significance of financing and tax incentives varies across industries. Turning to organizational structure complexity (*Log(N_Level)*) in Panel B, we find limited evidence across industry that any set of determinants jointly determines structure complexity. The weaker results here than in our main test (Table 4, Panel B) could arise from the smaller samples attributable to splitting the sample across industry.

5.3 Effects of SFAS 160 on Organizational Structure

SFAS 160 (now ASC 810), effective for fiscal years beginning after December 15, 2008, standardized the accounting for certain unconsolidated subsidiaries in a way that could lower the effective tax rate (ETR) that firms report on their financial statements, which is generally a favorable outcome for firms. Specifically, SFAS 160 standardizes the reporting for minority interest, which represents the income allocable to non-controlling interest when a firm consolidates a subsidiary that it does not fully own into its financial statements under U.S. GAAP (SFAS 160 does not affect tax consolidations). These interests must now be labeled non-controlling interests. Prior to SFAS 160, firms could report their ETR treating minority interest as a *pre-tax* item. If the subsidiary is profitable, this means that minority interest represents income allocated away from the parent, reducing pre-tax income. Lower pre-tax income results in a higher effective tax rate. After SFAS 160, non-controlling interests must be reported *after-tax*, and therefore appear as a favorable line item in the effective tax rate reconciliation. Thus, after SFAS 160 pre-tax income will be higher and ETR lower, with a line item explaining the difference. For example, in its 2008 10-K, Verizon reported an ETR of 34.1 percent for 2008, suggesting that it pays a relatively high rate of tax (close to the statutory rate of 35 percent at the time). In its 2009 10-K, Verizon adjusted this reporting under the new rules to report *for 2008* an ETR of 20.9 percent. Thus, going forward, firms like Verizon would be expected to report lower ETRs from profitable, less-than-100 percent owned subsidiaries. An advantage of this setting is that it is purely a change in financial reporting; without changing any operational items or tax strategies, some firms can report lower ETRs.

We conduct several difference-in-differences analyses to examine whether this accounting change affected organizational structure (untabulated). Whether using a simple differences analysis, or considering a difference-in-differences analysis designating firms with minority

interest as "treated," or focusing on public firms, we fail to find evidence of an increase in subsidiary usage after SFAS 160 provided this potential ETR reporting benefit to firms. This contrasts with prior evidence of accounting (tax) changes affecting firms' tax (accounting) decisions. Several factors may drive the lack of results for SFAS 160. First, investors may not understand tax information well (e.g., Weber 2009; Chychyla, Falsetta, and Ramnath 2022), reducing firms' incentive to undertake changes to organizational structure in an effort to reap financial reporting benefits. Second, information aggregators such as Compustat already standardized measures so that pre- and post-SFAS 160 ETRs are the same. That is, the ETR reported by Compustat for 2008 differs from that reported in Verizon's 10-K because Compustat always treated minority interest as a component of after-tax rather than pre-tax income. Third, organizational structure decisions may be more difficult or costly to adjust than the items investigated in prior work.

VI. CONCLUSION

Using proprietary IRS data, we provide new insight on attributes associated with parent firms' organizational structures. We find that business complexity is consistently positively associated with larger and more complex organizational structures, both in the cross-section and within firm. Tax planning ability is often positively, while financing attributes negatively, associated with larger and more complex structures, but this result primarily holds in the cross-section rather than within firm.

In cross-sectional tests, we surprisingly find little difference in public versus private firms', as well as multinational versus domestic firms', sensitivity to firm attributes in determining organizational structure. However, we find that larger firms are more sensitive to several firm attributes than smaller firms regarding the magnitude (but not complexity) of organizational

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structure. We fail to find evidence that an accounting change related to subsidiaries is associated with organizational structure.

Our study provides initial evidence on a fundamental attribute of business operations, organizational structure, which has largely been overlooked in prior literature due to inability to obtain data. Our paper overcomes this limit and provides information that should be useful to future researchers as well as the IRS in understanding business operations and potentially unusual changes that may warrant additional scrutiny.

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Variable Definitions

Variable Name	Definition	Source
Organizational Structure Variables		
$N\_Sub_{i,t}$	Total number of corporate and partnership subsidiary entities	Pass-through entities database
$N\_C\_Sub_{i,t}$	Number of corporate subsidiaries	Pass-through entities database
$N\_Unconsol\_C\_Sub_{i,t}$	Number of unconsolidated corporate subsidiaries	Pass-through entities database
$N\_PS\_Sub_{i,t}$	Number of partnership subsidiaries	Pass-through entities database
$N\_Level_{i,t}$	Number of ownership levels where the parent corporation is level 1, the first layer of subsidiaries under the partner corporation is level 2, etc.	Pass-through entities database
$PS\_Ratio_{i,t}$	Proportion of partnership subsidiaries to total subsidiary entities	Pass-through entities database
$C\_Ratio_{i,t}$	Proportion of corporate subsidiaries to total subsidiary entities	Pass-through entities database
$PS\_Links_{i,t}$	Number of partnership linkages	Pass-through entities database
$PS\_Asymm\_Links_{i,t}$	Number of partnership linkages where the loss allocation percentage is higher than the profit allocation percentage or ownership percentage	Pass-through entities database
$Log(Variable)$	Natural logarithm of one plus $Variable$ (e.g., $Log(N\_Sub)$)	
Determinants		
Financing (Debt and Equity)		
$Lev_{i,t-1}$	Total debt divided by total assets	1120 Sch. L, (lines 16 through 21) / line 15
$Int\_Cov_{i,t-1}$	Operating income before interest divided by interest expense	1120 page 1, (lines 28+18) / line 18
$Debt\_Iss_{i,t-1}$	Net debt issuance divided by total assets	Change in 1120 Sch. L, (lines 17 + 20) / line 15
$Stock\_Iss_{i,t-1}$	Net stock issuance divided by total assets	Change in 1120 Sch. L, (lines 22 + 23 + 27) / line 15
$CLTD_{i,t-1}$	Current portion of long-term debt divided by total assets	1120, Sch. L, line 17 / line 15

Variable Name	Definition	Source
Tax Incentives		
$MTR_{i,t-1}$	Marginal tax rate	1120, page 1, line 31 / line 30
$SETR_{i,t-1}$	State effective tax rate	1120 Sch. M-3 Part III, (lines 3a + 4a) / 1120 line 28
$NOL_{i,t-1}$	Net operating loss divided by total assets	1120 Sch. K, line 12 / Sch. L, line 15
$Intang_{i,t-1}$	Intangible assets divided by total assets	1120 Sch. L, (line 13a + 13b) / line 15
$Foreign_{i,t-1}$	Ratio of foreign income to total income	1120 Sch. M-3 Part I, (line - 5a - 5b) / 4a
Business Complexity		
$Eq\_Inc_{i,t-1}$	Equity in earnings of unconsolidated subsidiaries divided by total assets	1120 Sch. M-3 Part II, line 6a / Sch. L, line 15
$Min\_Int_{i,t-1}$	Minority interest divided by total assets	1120 Sch. M-3 (Part I, lines 6a, 6b + Part II, lines 9, 11) / Sch. L, line 15
$Size_{i,t-1}$	Natural logarithm of total assets	Log(1120 Sch. L, line 15)
Other Variables		
Public	An indicator variable set equal to one if a firm is in the Compustat database at any time during the sample period.	
MNC	An indicator variable set equal to one if a firm reports foreign income at any time during the sample period.	
Above_Median	An indicator variable set equal to one if a firm reports total assets above the annual sample median during any year of the sample period.	
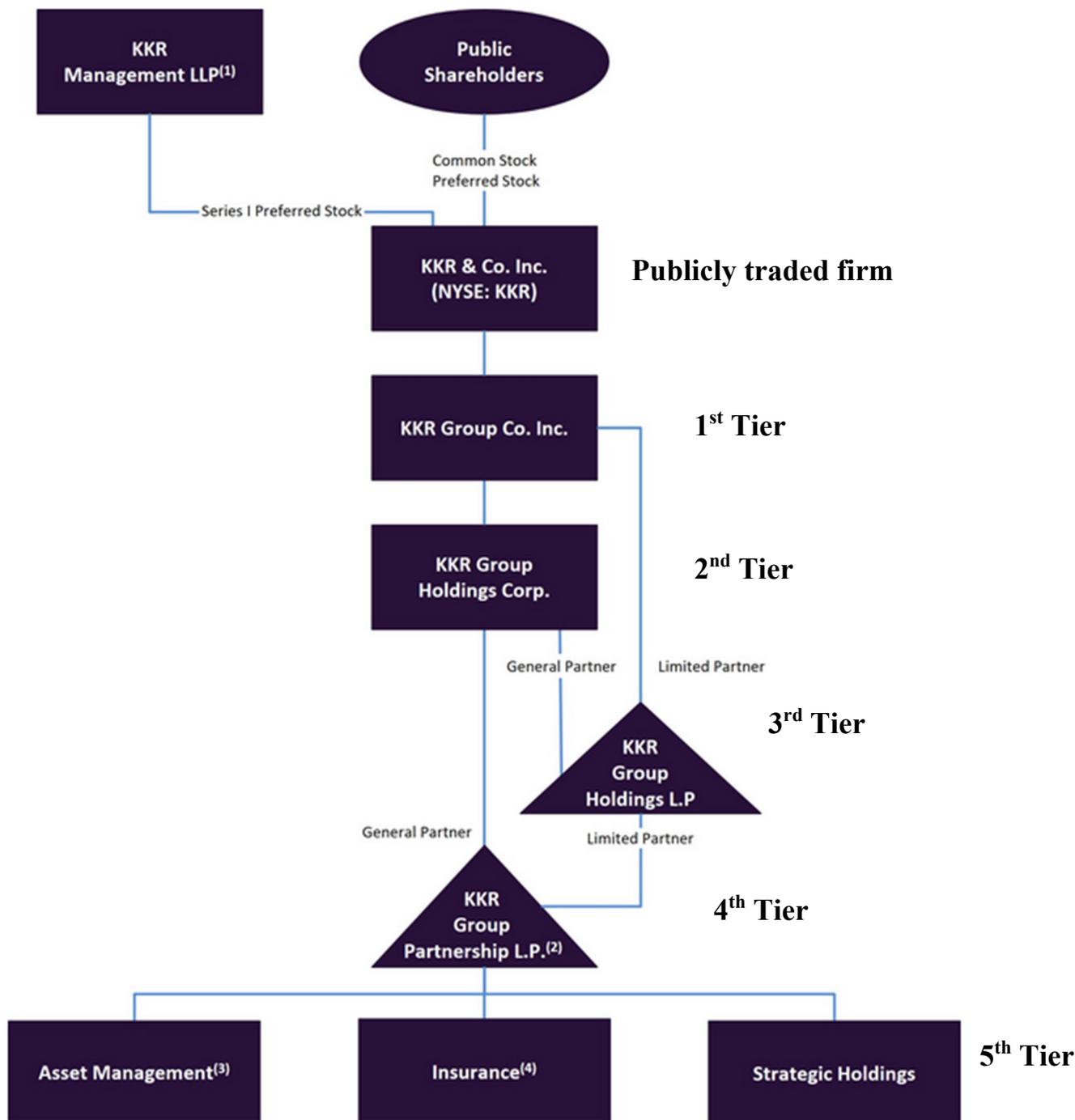
This figure presents KKR's organizational structure. The public firm (KKR) has several C corporation and partnership subsidiaries. KKR reports that this is their "simplified diagram" indicating their actual structure is much more complex. Rectangles (triangles) generally represent corporate (partnership) entities. Source: KKR & Co. Inc. 12/31/2024 Form 10-K.

APPENDIX C
NAICS Industry Groupings

Industry	NAICS Codes
Agriculture, Forestry, Fishing, and Hunting	111100-115310
Mining	211120-213110
Utilities	221100-221500
Construction	236110-238900
Manufacturing	311110-339900
Wholesale Trade	423100-425120
Retail Trade	441110-455210
Transportation and Warehousing	481000-493100
Information	512100-519200
Finance and Insurance	522110-525990
Real Estate and Rental and Leasing	531110-533110
Professional, Scientific, and Technical Services	541110-541990
Management of Companies (Holding Companies)	551111-551112
Administrative and Support and Waste Management and Remediation Services	561110-562000
Educational Services	611000
Health Care and Social Assistance	621111-624410
Arts, Entertainment, and Recreation	711100-713900
Accommodation and Food Services	721110-722515
Other Services	811110-813000
Other	999000

NAICS is reported on Form 1120, Schedule K, line 2a.

FIGURE 1
Subsidiaries by Firm Asset Size Groupings

Panel A: Average and Median Number of Total Subsidiaries by Firm Asset Size
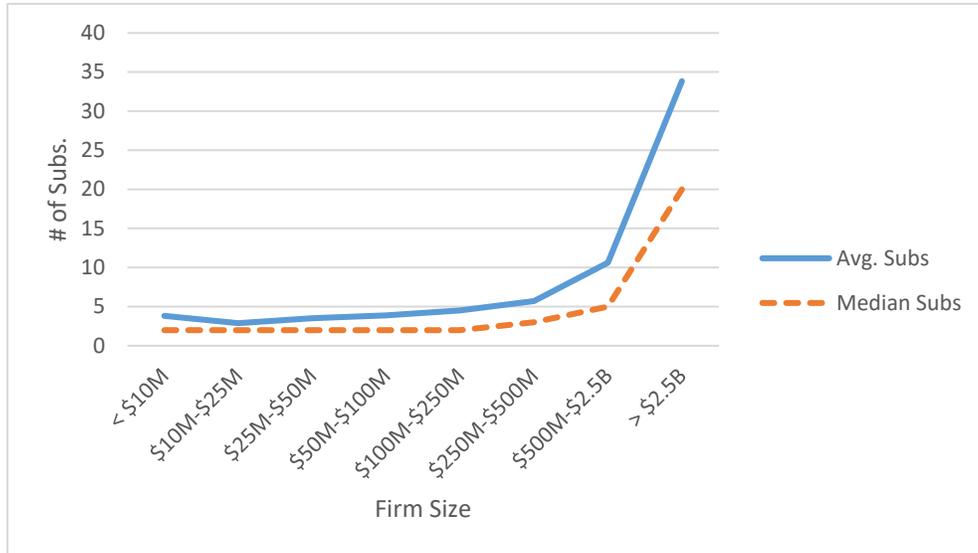
Panel B: Maximum Number of Total Subsidiaries by Firm Asset Size

Panel A (Panel B) of this figure graphs the mean and median (maximum) number of total subsidiaries (both corporate and partnership subsidiary entities) by firm size (based on total assets).

Panel C: Average and Median Number of Corporate Subsidiaries
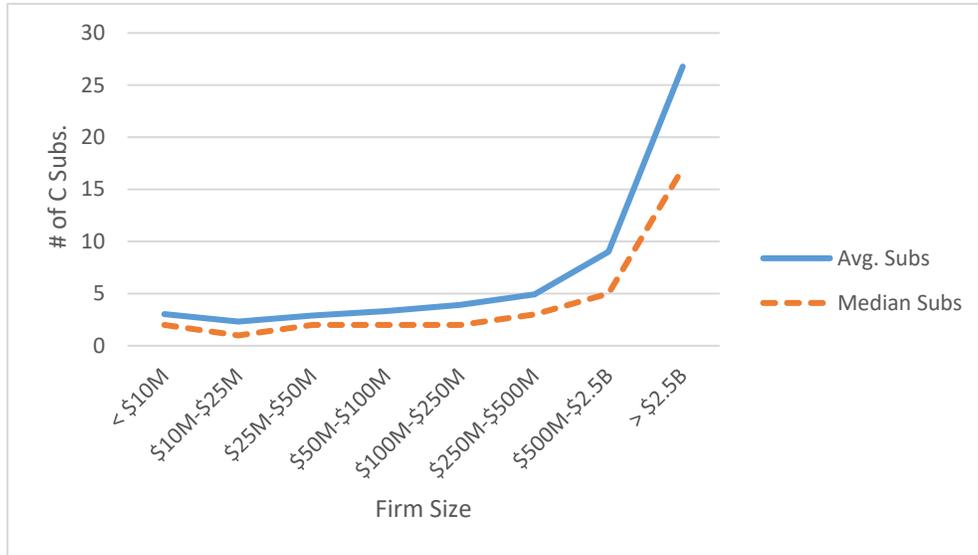
Panel D: Maximum Number of Corporate Subsidiaries

Panel C (Panel D) of this figure graphs the mean and median (maximum) number of corporate subsidiaries by firm size groupings (based on total assets).

FIGURE 1 (continued)
Subsidiaries by Firm Asset Size Groupings

Panel E: Average and Median Number of Partnership Subsidiaries
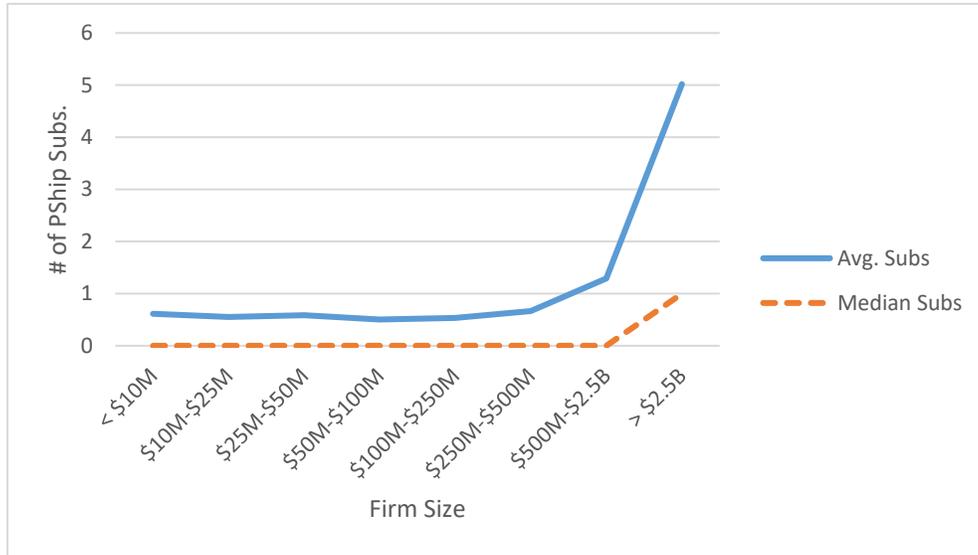
Panel F: Maximum Number of Partnership Subsidiaries
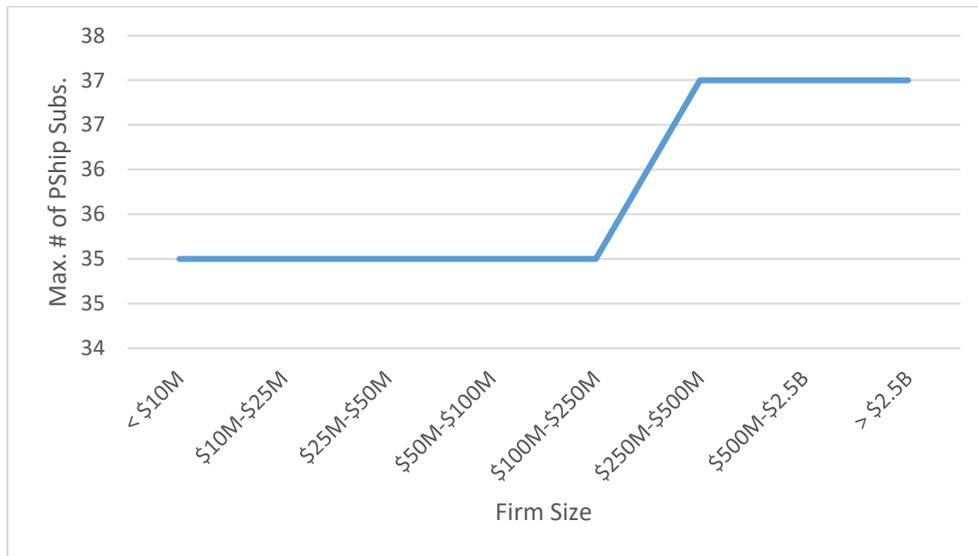
Panel E (Panel F) of this figure graphs the mean and median (maximum) number of partnership subsidiaries by firm size groupings (based on total assets).

FIGURE 2
Subsidiaries by NAICS Industry

Panel A: Average Number of Subsidiaries
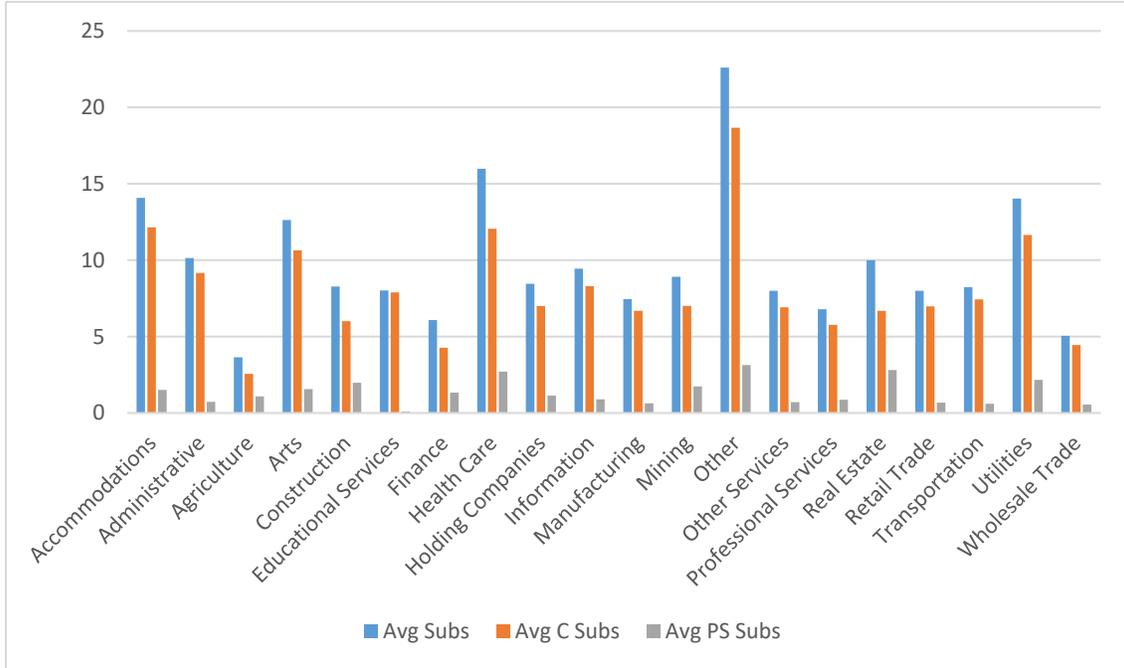
Panel B: Median Number of Subsidiaries
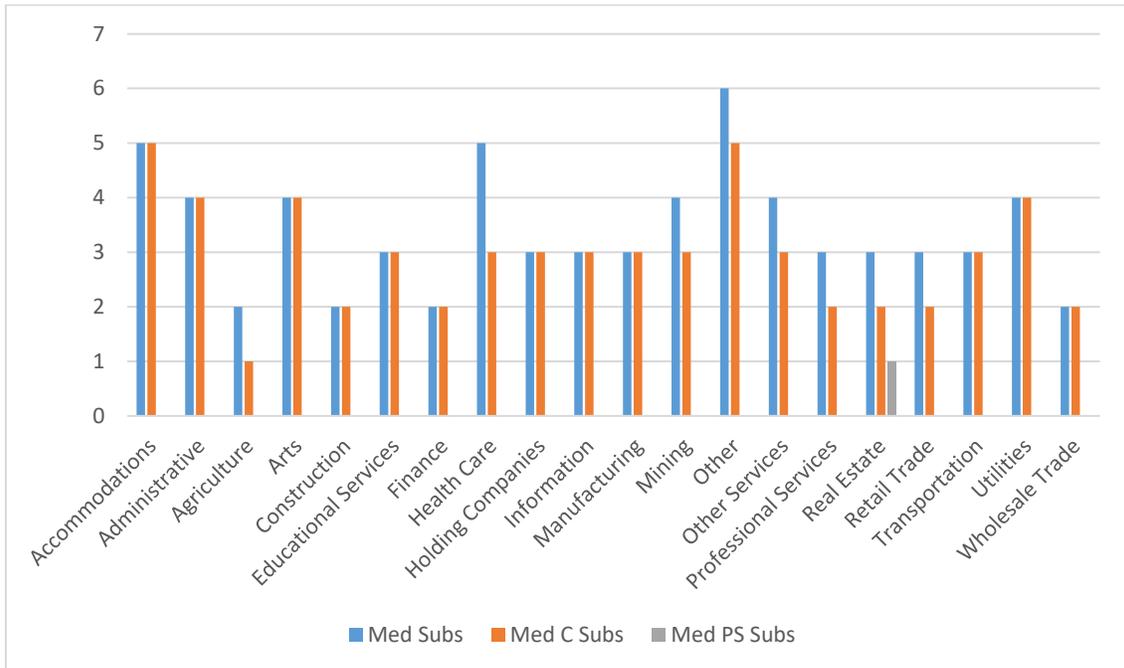
Panel A (Panel B) of this figure graphs the mean (median) number of subsidiaries by NAICS industry.

FIGURE 2 (continued)
Subsidiaries by NAICS Industry

Panel C: Maximum Number of Subsidiaries
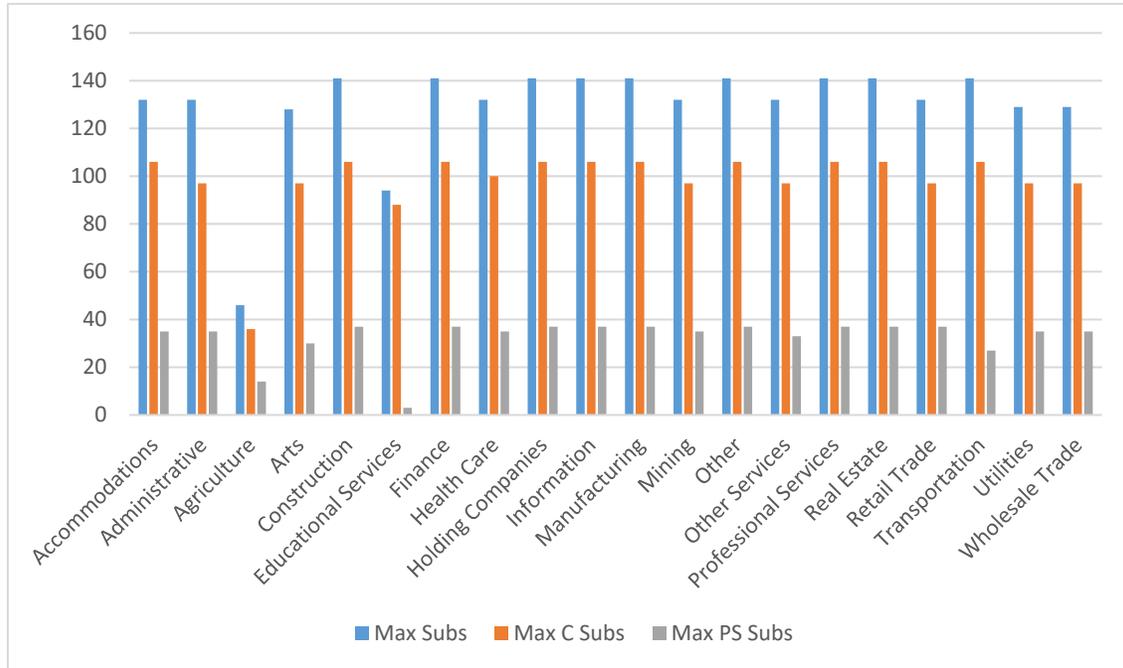
Panel C of this figure graphs the maximum number of subsidiaries by NAICS industry.

FIGURE 3

Hypothetical Organizational Structure of an Average Firm in the Professional Services Industry
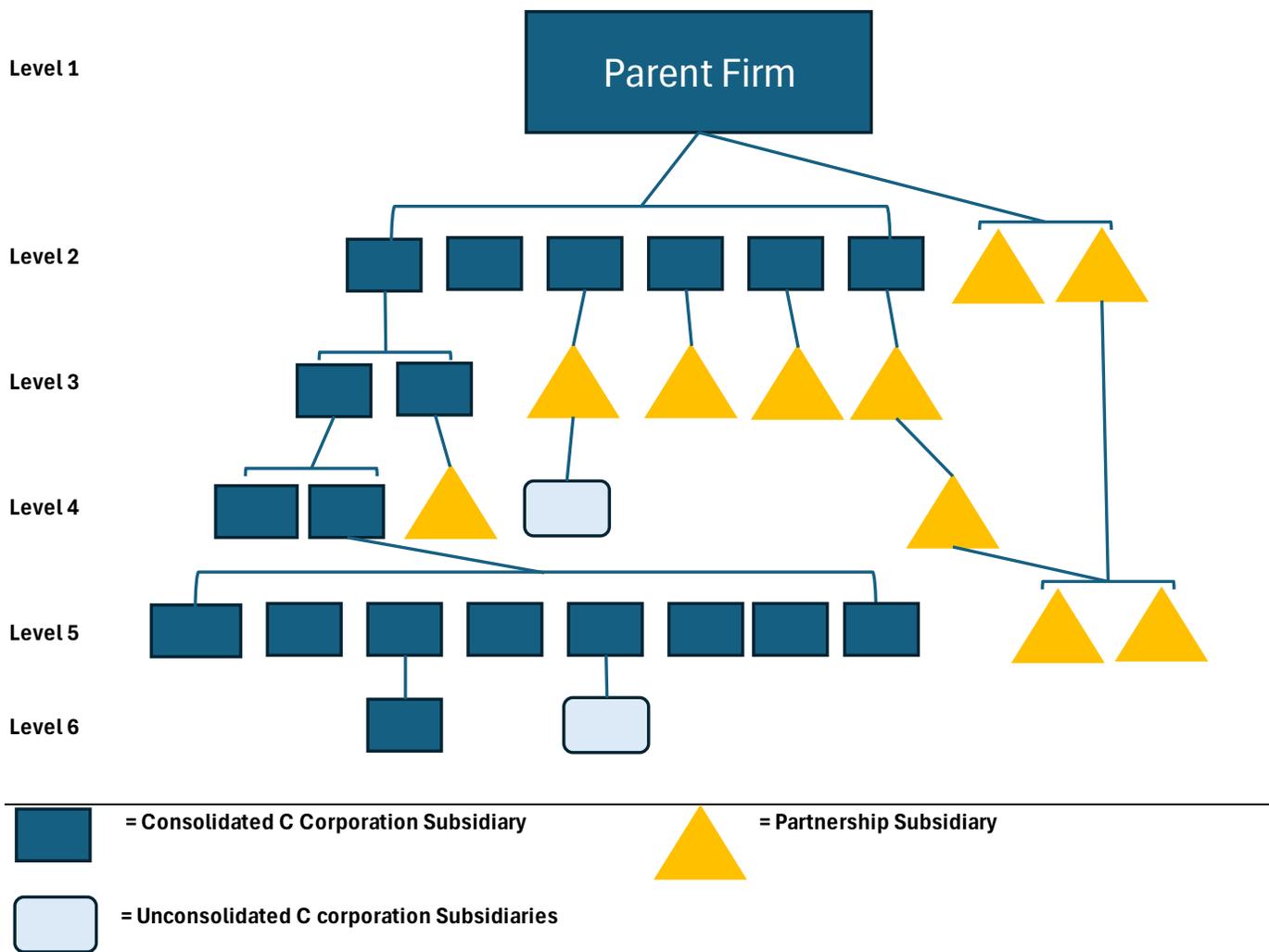
This figure presents a hypothetical organizational structure based on the average descriptive statistics in the professional services industry. Level 1 consists only of the parent. Level 2 has 6 (2) consolidated (partnership) subsidiaries. Level 3 has 2 (4) consolidated (partnership) subsidiaries. Level 4 has 2 consolidate subsidiaries, 1 unconsolidated subsidiary, and 2 partnerships. Level 5 has 8 (2) consolidated (partnership) subsidiaries. Level 6 has 1 (1) consolidated (unconsolidated) subsidiary. This does not represent a specific firm's structure.

TABLE 1
Sample Selection

	Firm-Years
Form 1120 corporate filers from 2007-2018 with less than 50% foreign ownership, assets above $10 million in any year during the sample period, and at least one subsidiary entity in the organizational structure	262,834
Less:	
Observations missing regression variables	(119,914)
Observations missing industry code	(2,363)
Singleton observations	(3,723)
Total firm-years	**136,834**
Unique firms	**22,218**
Total firm-years of public firms	27,865
Total firm-years of private firms	108,969
Unique public firms	3,928
Unique private firms	18,290

This table presents our sample selection procedures. We begin with firm-year observations of Form 1120 corporate filers in the IRS Form 1120 tax returns database over the period 2007 to 2018. We require these filers to have less than 50% foreign ownership, total assets above $10 million in any year during the sample period, and at least one subsidiary entity in its organizational structure. We identify subsidiary entities using the IRS pass-through entities database. We exclude observations with missing regression variables or industry codes, and we omit singleton observations.

TABLE 2
Descriptive Statistics

Panel A: Full Sample

Variable	N	Mean	SD	P25	Median	P75
$N\_Sub_{i,t}$	136,834	7.99	16.39	1.00	3.00	7.00
$Log(N\_Sub)_{i,t}$	136,834	1.58	0.93	0.69	1.39	2.08
$N\_C\_Sub_{i,t}$	136,834	6.59	12.71	1.00	2.00	6.00
$Log(N\_C\_Sub)_{i,t}$	136,834	1.45	0.93	0.69	1.10	1.95
$N\_Unconsol\_C\_Sub_{i,t}$	136,834	0.09	0.36	0.00	0.00	0.00
$Log(N\_Unconsol\_C\_Sub)_{i,t}$	136,834	0.06	0.21	0.00	0.00	0.00
$N\_PS\_Sub_{i,t}$	136,834	1.11	3.87	0.00	0.00	1.00
$Log(N\_PS\_Sub)_{i,t}$	136,834	0.34	0.67	0.00	0.00	0.69
$N\_Level_{i,t}$	136,834	2.22	0.53	2.00	2.00	2.00
$Log(N\_Level)_{i,t}$	136,834	1.16	0.14	1.10	1.10	1.10
$PS\_Ratio_{i,t}$	136,834	0.12	0.27	0.00	0.00	0.06
$C\_Ratio_{i,t}$	136,834	0.88	0.27	0.94	1.00	1.00
$PS\_Links_{i,t}$	35,068	6.48	17.28	1.00	2.00	4.00
$Log(PS\_Links)_{i,t}$	35,068	1.35	0.88	0.69	1.10	1.61
$PS\_Asymm\_Links_{i,t}$	35,068	2.81	8.06	0.00	1.00	2.00
$Log(PS\_Asymm\_Links)_{i,t}$	35,068	0.77	0.84	0.00	0.69	1.10
$Lev_{i,t-1}$	136,834	0.71	0.39	0.46	0.71	0.90
$Int\_Cov_{i,t-1}$	136,834	140.39	1,219.62	0.14	1.84	7.16
$Debt\_Iss_{i,t-1}$	136,834	0.00	0.11	-0.01	0.00	0.01
$Stock\_Iss_{i,t-1}$	136,834	0.02	0.11	0.00	0.00	0.01
$CLTD_{i,t-1}$	136,834	0.05	0.11	0.00	0.00	0.03
$MTR_{i,t-1}$	136,834	0.19	0.17	0.00	0.27	0.34
$SETR_{i,t-1}$	136,834	0.02	0.13	0.00	0.00	0.05
$NOL_{i,t-1}$	136,834	0.16	0.60	0.00	0.00	0.03
$Intang_{i,t-1}$	136,834	0.16	0.29	0.00	0.01	0.17
$Foreign_{i,t-1}$	136,834	0.06	0.30	0.00	0.00	0.00
$Eq\_Inc_{i,t-1}$	136,834	0.00	0.00	0.00	0.00	0.00
$Min\_Int_{i,t-1}$	136,834	0.00	0.02	0.00	0.00	0.00
$Size_{i,t-1}$	136,834	18.94	1.86	17.51	18.73	20.07

Panel A of this table provides descriptive statistics for our full sample. We winsorize all continuous variables at the 1st and 99th percentiles. We define all variables in Appendix A.

TABLE 2 (continued)
Descriptive Statistics

Panel B: Public vs. Private

Variable	Public Firms			Private Firms		
	N	Mean	Median	N	Mean	Median
$N\_Sub_{i,t}$	27,865	17.46	7.00	108,969	5.57	2.00
$Log(N\_Sub)_{i,t}$	27,865	2.23	2.08	108,969	1.41	1.10
$N\_C\_Sub_{i,t}$	27,865	14.38	6.00	108,969	4.60	2.00
$Log(N\_C\_Sub)_{i,t}$	27,865	2.12	1.95	108,969	1.27	1.10
$N\_Unconsol\_C\_Sub_{i,t}$	27,865	0.18	0.00	108,969	0.07	0.00
$Log(N\_Unconsol\_C\_Sub)_{i,t}$	27,865	0.11	0.00	108,969	0.04	0.00
$N\_PS\_Sub_{i,t}$	27,865	2.16	0.00	108,969	0.84	0.00
$Log(N\_PS\_Sub)_{i,t}$	27,865	0.53	0.00	108,969	0.29	0.00
$N\_Level_{i,t}$	27,865	2.41	2.00	108,969	2.17	2.00
$Log(N\_Level)_{i,t}$	27,865	1.21	1.10	108,969	1.15	1.10
$PS\_Ratio_{i,t}$	27,865	0.09	0.00	108,969	0.13	0.00
$C\_Ratio_{i,t}$	27,865	0.91	1.00	108,969	0.87	1.00
$PS\_Links_{i,t}$	9,349	11.40	3.00	25,719	4.69	2.00
$Log(PS\_Links)_{i,t}$	9,349	1.68	1.39	25,719	1.23	1.10
$PS\_Asymm\_Links_{i,t}$	9,349	5.08	1.00	25,719	1.99	1.00
$Log(PS\_Asymm\_Links)_{i,t}$	9,349	1.03	0.69	25,719	0.68	0.69
$Lev_{i,t-1}$	27,865	0.64	0.63	108,969	0.72	0.73
$Int\_Cov_{i,t-1}$	27,865	114.38	2.17	108,969	147.04	1.78
$Debt\_Iss_{i,t-1}$	27,865	0.01	0.00	108,969	0.00	0.00
$Stock\_Iss_{i,t-1}$	27,865	0.05	0.01	108,969	0.02	0.00
$CLTD_{i,t-1}$	27,865	0.03	0.00	108,969	0.05	0.00
$MTR_{i,t-1}$	27,865	0.18	0.22	108,969	0.19	0.28
$SETR_{i,t-1}$	27,865	0.02	0.00	108,969	0.03	0.00
$NOL_{i,t-1}$	27,865	0.24	0.00	108,969	0.14	0.00
$Intang_{i,t-1}$	27,865	0.20	0.07	108,969	0.15	0.01
$Foreign_{i,t-1}$	27,865	0.17	0.00	108,969	0.03	0.00
$Eq\_Inc_{i,t-1}$	27,865	0.00	0.00	108,969	0.00	0.00
$Min\_Int_{i,t-1}$	27,865	0.00	0.00	108,969	0.00	0.00
$Size_{i,t-1}$	27,865	20.63	20.63	108,969	18.51	18.35

Panel B of this table provides descriptive statistics for subsamples partitioned by public and private firms. We winsorize all continuous variables at the 1st and 99th percentiles. We define all variables in Appendix A.

TABLE 3
Determinants of Organizational Structure Magnitude

Panel A: Cross-Sectional Test

Dependent Variable =	Log(N_Sub) (1)	Log(N_C_Sub) (2)	Log(N_Unconsol _C_Sub) (3)	Log(N_PS_ Sub) (4)
$Lev_{i,t-1}$	-0.161***	-0.131***	-0.019***	-0.080***
	(-11.91)	(-9.78)	(-6.79)	(-7.60)
$Int\_Cov_{i,t-1}$	-0.000***	-0.000***	0.000	-0.000***
	(-4.94)	(-4.34)	(0.17)	(-4.02)
$Debt\_Iss_{i,t-1}$	-0.089***	-0.108***	-0.008	-0.048***
	(-4.27)	(-5.17)	(-1.36)	(-2.85)
$Stock\_Iss_{i,t-1}$	-0.252***	-0.217***	0.011	-0.159***
	(-10.43)	(-9.06)	(1.48)	(-8.58)
$CLTD_{i,t-1}$	0.336***	0.300***	0.049***	0.178***
	(8.11)	(7.18)	(5.15)	(5.85)
$MTR_{i,t-1}$	-0.304***	-0.225***	-0.022***	-0.199***
	(-12.96)	(-9.65)	(-3.76)	(-10.35)
$SETR_{i,t-1}$	-0.056***	-0.064***	-0.007	0.001
	(-2.90)	(-3.31)	(-1.37)	(0.05)
$NOL_{i,t-1}$	0.078***	0.086***	0.007***	0.025***
	(10.53)	(11.89)	(4.87)	(4.90)
$Intang_{i,t-1}$	0.302***	0.389***	0.016***	-0.129***
	(17.44)	(22.81)	(4.46)	(-10.76)
$Foreign_{i,t-1}$	0.109***	0.142***	0.028***	-0.053***
	(8.85)	(11.57)	(6.64)	(-5.09)
$Eq\_Inc_{i,t-1}$	16.968***	16.601***	4.588***	13.268***
	(5.49)	(5.34)	(4.85)	(4.70)
$Min\_Int_{i,t-1}$	2.291***	0.428**	0.154***	3.575***
	(11.84)	(2.27)	(3.81)	(17.88)
$Size_{i,t-1}$	0.312***	0.304***	0.026***	0.138***
	(85.01)	(85.39)	(25.00)	(36.00)
Constant	-3.961***	-4.154***	-0.433***	-1.863***
	(-49.42)	(-50.84)	(-17.05)	(-22.37)
Joint F-Tests				
Financing	p < **0.01***	p < **0.01***	p < **0.01***	p < **0.01***
Tax Incentives	p < **0.01***	p < **0.01***	p < **0.01***	p < **0.01***
Business Complexity	p < **0.01***	p < **0.01***	p < **0.01***	p < **0.01***
Observations	136,834	136,834	136,834	136,834
Adj. R-squared	0.3990	0.3954	0.0580	0.1898
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year

TABLE 3 (continued)
Determinants of Organizational Structure Magnitude

Panel B: Within-Firm Test

Dependent Variable =	Log(N_Sub) (1)	Log(N_C_Sub) (2)	Log(N_Unconsol _C_Sub) (3)	Log(N_PS_ Sub) (4)
$Lev_{i,t-1}$	0.047***	0.051***	0.006	0.008
	(6.19)	(6.75)	(1.36)	(1.11)
$Int\_Cov_{i,t-1}$	-0.000***	-0.000***	0.000	-0.000*
	(-4.75)	(-4.42)	(0.96)	(-1.77)
$Debt\_Iss_{i,t-1}$	-0.018**	-0.024***	-0.005	0.008
	(-2.07)	(-2.81)	(-0.91)	(0.91)
$Stock\_Iss_{i,t-1}$	0.019*	0.031***	0.012*	-0.007
	(1.83)	(2.93)	(1.80)	(-0.66)
$CLTD_{i,t-1}$	0.019	0.017	0.019*	-0.002
	(1.09)	(1.01)	(1.91)	(-0.09)
$MTR_{i,t-1}$	-0.037***	-0.017**	0.003	-0.041***
	(-4.50)	(-2.27)	(0.64)	(-4.42)
$SETR_{i,t-1}$	0.001	-0.004	-0.006	0.008
	(0.08)	(-0.68)	(-1.39)	(1.01)
$NOL_{i,t-1}$	0.027***	0.029***	-0.004	0.003
	(5.02)	(5.61)	(-1.30)	(0.69)
$Intang_{i,t-1}$	0.112***	0.129***	-0.010	-0.015
	(8.13)	(9.52)	(-1.50)	(-1.11)
$Foreign_{i,t-1}$	0.002	0.005	0.004	-0.006
	(0.56)	(1.30)	(1.23)	(-1.39)
$Eq\_Inc_{i,t-1}$	2.614**	3.357***	0.378	-0.822
	(2.44)	(3.25)	(0.44)	(-0.59)
$Min\_Int_{i,t-1}$	0.202**	-0.044	0.011	0.390***
	(2.46)	(-0.60)	(0.28)	(4.16)
$Size_{i,t-1}$	0.176***	0.164***	0.005**	0.074***
	(29.19)	(28.44)	(1.99)	(13.02)
Constant	-1.801***	-1.713***	-0.049	-1.065***
	(-15.56)	(-15.48)	(-0.96)	(-9.76)
Joint F-Tests				
Financing	p < **0.01*****	p < **0.01*****	p < **0.05****	p > 0.10
Tax Incentives	p < **0.01*****	p < **0.01*****	p > 0.10	p < **0.01*****
Business Complexity	p < **0.01*****	p < **0.01*****	p > 0.10	p < **0.01*****
Observations	136,834	136,834	136,834	136,834
Adj. R-squared	0.9293	0.9391	0.4555	0.8167
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

This table presents the result of estimating equation (1) where the dependent variable is alternately *Log(N_Sub)*, *Log(N_C_Sub)*, *Log (N_Unconsol_C_Sub)*, and *Log(N_PS_Sub)*. Panel A (Panel B) presents cross-sectional (within-firm) results using industry (firm) fixed effects and year fixed effects. Financing explanatory variables include *Lev*, *Int_Cov*, *Debt_Iss*, *Stock_Iss*, and *CLTD*. Tax Incentives explanatory variables include *MTR*, *SETR*, *NOL*, *Intang*, and *Foreign*. Business complexity explanatory variables include *Eq_Inc*, *Min_Int*, and *Size*. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. We present t-statistics in parentheses. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 4
Determinants of Organizational Structure Complexity

Panel A: Cross-Sectional Test

Dependent Variable =	Log(N_ Level) (1)	PS_Ratio (2)	Log(PS_Links) (3)	Log(PS_Asymm_ Links) (4)
$Lev_{i,t-1}$	-0.014***	-0.026***	-0.060**	-0.005
	(-6.60)	(-6.12)	(-2.16)	(-0.20)
$Int\_Cov_{i,t-1}$	-0.000***	-0.000	-0.000*	-0.000
	(-3.83)	(-0.09)	(-1.69)	(-1.41)
$Debt\_Iss_{i,t-1}$	-0.017***	0.017**	-0.092**	-0.129***
	(-5.06)	(2.35)	(-2.17)	(-3.01)
$Stock\_Iss_{i,t-1}$	-0.022***	-0.038***	-0.192***	-0.140***
	(-5.77)	(-5.06)	(-3.96)	(-3.02)
$CLTD_{i,t-1}$	0.028***	0.031**	0.154*	0.137*
	(4.99)	(2.14)	(1.85)	(1.73)
$MTR_{i,t-1}$	-0.037***	-0.058***	-0.306***	-0.302***
	(-9.91)	(-7.91)	(-6.34)	(-6.55)
$SETR_{i,t-1}$	-0.002	0.005	0.034	0.029
	(-0.58)	(0.75)	(0.84)	(0.76)
$NOL_{i,t-1}$	0.008***	-0.009***	0.031*	0.031*
	(8.51)	(-3.91)	(1.75)	(1.79)
$Intang_{i,t-1}$	-0.015***	-0.088***	-0.085*	-0.219***
	(-6.46)	(-21.95)	(-1.78)	(-4.83)
$Foreign_{i,t-1}$	-0.008***	-0.025***	-0.102***	-0.117***
	(-3.65)	(-10.49)	(-4.52)	(-5.21)
$Eq\_Inc_{i,t-1}$	3.531***	0.286	7.242	-3.432
	(6.45)	(0.30)	(1.63)	(-0.77)
$Min\_Int_{i,t-1}$	0.599***	1.390***	2.038***	-0.312
	(15.70)	(15.77)	(8.63)	(-1.38)
$Size_{i,t-1}$	0.032***	-0.001	0.184***	0.137***
	(47.49)	(-1.11)	(28.17)	(21.34)
Constant	0.601***	0.353***	-2.068***	-1.719***
	(38.13)	(10.23)	(-15.52)	(-13.08)
Joint F-Tests				
Financing	p < **0.01*****	p < **0.01*****	p < **0.01*****	p < **0.01*****
Tax Incentives	p < **0.01*****	p < **0.01*****	p < **0.01*****	p < **0.01*****
Business Complexity	p < **0.01*****	p < **0.01*****	p < **0.01*****	p < **0.01*****
Observations	136,834	136,834	35,068	35,068
Adj. R-squared	0.1898	0.1111	0.2211	0.1413
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year

Panel B: Within-Firm Test

Dependent Variable =	Log(N_ Level)	PS_Ratio	Log(PS_Links)	Log(PS_Asymm_ Links)
	(1)	(2)	(3)	(4)
$Lev_{i,t-1}$	0.002	-0.003	0.025	0.032
	(0.93)	(-1.04)	(1.15)	(1.29)
$Int\_Cov_{i,t-1}$	-0.000	0.000	-0.000	-0.000*
	(-1.08)	(0.16)	(-1.08)	(-1.82)
$Debt\_Iss_{i,t-1}$	-0.000	0.006*	0.001	-0.035
	(-0.07)	(1.79)	(0.04)	(-1.13)
$Stock\_Iss_{i,t-1}$	0.002	-0.012***	0.010	0.026
	(0.93)	(-3.09)	(0.33)	(0.74)
$CLTD_{i,t-1}$	0.000	0.002	-0.031	-0.018
	(0.06)	(0.36)	(-0.49)	(-0.29)
$MTR_{i,t-1}$	-0.007***	-0.014***	-0.061**	-0.054*
	(-2.94)	(-4.83)	(-2.41)	(-1.89)
$SETR_{i,t-1}$	0.004*	0.005**	0.015	-0.002
	(1.80)	(2.16)	(0.71)	(-0.07)
$NOL_{i,t-1}$	0.000	-0.003*	-0.022	-0.040**
	(0.07)	(-1.76)	(-1.43)	(-2.28)
$Intang_{i,t-1}$	-0.006*	-0.014***	-0.008	-0.016
	(-1.89)	(-3.36)	(-0.17)	(-0.31)
$Foreign_{i,t-1}$	0.000	-0.002**	-0.007	0.012
	(0.35)	(-1.99)	(-0.69)	(0.98)
$Eq\_Inc_{i,t-1}$	0.356	-0.626	-3.461	-3.985
	(0.86)	(-1.45)	(-1.30)	(-1.27)
$Min\_Int_{i,t-1}$	0.089***	0.114***	0.201	-0.587***
	(3.95)	(3.39)	(1.62)	(-4.33)
$Size_{i,t-1}$	0.013***	0.005***	0.118***	0.088***
	(9.60)	(2.70)	(8.09)	(5.52)
Constant	0.911***	0.040	-0.966***	-0.956***
	(34.75)	(1.18)	(-3.35)	(-3.03)
Joint F-Tests				
Financing	p > 0.10	p < **0.05****	p > 0.10	p > 0.10
Tax Incentives	p < **0.05****	p < **0.01*****	p > 0.10	p < **0.10***
Business Complexity	p < **0.01*****	p < **0.01*****	p < **0.01*****	p < **0.01*****
Observations	136,834	136,834	35,068	35,068
Adj. R-squared	0.7046	0.8742	0.8116	0.7007
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

This table presents the result of estimating equation (1) where the dependent variable is alternately *Log(N_Level)*, *PS_Ratio*, *Log (PS_Links)*, and *Log(PS_Asymm_Links)*. Panel A (Panel B) presents cross-sectional (within-firm) results using industry (firm) fixed effects and year fixed effects. Financing explanatory variables include *Lev*, *Int_Cov*, *Debt_Iss*, *Stock_Iss*, and *CLTD*. Tax Incentives explanatory variables include *MTR*, *SETR*, *NOL*, *Intang*, and *Foreign*. Business complexity explanatory variables include *Eq_Inc*, *Min_Int*, and *Size*. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. We present t-statistics in parentheses. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 5
Determinants of Organizational Structure of Public vs. Private Firms

Panel A: Organizational Structure Magnitude

Dependent Variable =	Log(N_Sub)	Log(N_C_Sub)	Log(N_Unconsol _C_Sub)	Log(N_PS_ Sub)
	(1)	(2)	(3)	(4)
$Lev_{i,t-1}$	0.033***	0.040***	0.007	-0.003
	(4.13)	(4.84)	(1.54)	(-0.38)
$Public*Lev_{i,t-1}$	0.050***	0.038**	-0.004	0.043**
	(2.59)	(2.02)	(-0.32)	(2.31)
$Int\_Cov_{i,t-1}$	-0.000***	-0.000***	0.000	-0.000***
	(-4.97)	(-4.17)	(0.33)	(-2.64)
$Public*Int\_Cov_{i,t-1}$	0.000	0.000	0.000	0.000
	(0.72)	(0.27)	(0.99)	(1.49)
$Debt\_Iss_{i,t-1}$	-0.012	-0.017**	-0.007	0.005
	(-1.30)	(-2.01)	(-1.40)	(0.52)
$Public*Debt\_Iss_{i,t-1}$	-0.021	-0.021	0.012	0.015
	(-0.91)	(-0.93)	(0.77)	(0.59)
$Stock\_Iss_{i,t-1}$	0.041***	0.053***	0.019***	-0.004
	(3.42)	(4.30)	(2.62)	(-0.33)
$Public*Stock\_Iss_{i,t-1}$	-0.054**	-0.057**	-0.019	-0.005
	(-2.39)	(-2.53)	(-1.29)	(-0.24)
$CLTD_{i,t-1}$	0.022	0.012	0.018**	0.007
	(1.32)	(0.71)	(2.10)	(0.43)
$Public*CLTD_{i,t-1}$	-0.022	0.024	0.003	-0.049
	(-0.37)	(0.42)	(0.08)	(-0.71)
$MTR_{i,t-1}$	-0.052***	-0.032***	0.004	-0.045***
	(-6.15)	(-4.08)	(0.83)	(-4.76)
$Public*MTR_{i,t-1}$	0.052**	0.049**	-0.001	0.013
	(2.56)	(2.54)	(-0.11)	(0.52)
$SETR_{i,t-1}$	0.002	-0.002	-0.006	0.007
	(0.28)	(-0.30)	(-1.53)	(0.88)
$Public*SETR_{i,t-1}$	-0.003	-0.007	0.004	0.006
	(-0.16)	(-0.38)	(0.36)	(0.25)
$NOL_{i,t-1}$	0.023***	0.027***	-0.005	-0.002
	(3.61)	(4.29)	(-1.41)	(-0.37)
$Public*NOL_{i,t-1}$	0.012	0.007	0.004	0.018*
	(1.08)	(0.64)	(0.70)	(1.74)
$Intang_{i,t-1}$	0.092***	0.104***	-0.016**	0.001
	(6.43)	(7.23)	(-2.34)	(0.10)
$Public*Intang_{i,t-1}$	0.059*	0.079**	0.017	-0.065**
	(1.67)	(2.33)	(0.93)	(-2.01)
$Foreign_{i,t-1}$	0.001	0.004	0.003	-0.006
	(0.20)	(0.82)	(0.86)	(-1.10)
$Public*Foreign_{i,t-1}$	-0.000	-0.000	0.001	-0.001
	(-0.06)	(-0.03)	(0.18)	(-0.12)
$Eq\_Inc_{i,t-1}$	2.186*	3.087***	0.526	-1.407
	(1.87)	(2.70)	(0.58)	(-0.95)
$Public*Eq\_Inc_{i,t-1}$	1.586	0.840	-0.765	2.485
	(0.57)	(0.32)	(-0.33)	(0.65)
$Min\_Int_{i,t-1}$	0.237***	-0.058	-0.014	0.411***
	(2.76)	(-0.75)	(-0.37)	(4.48)
$Public*Min\_Int_{i,t-1}$	-0.238	0.142	0.188	-0.166
	(-0.89)	(0.59)	(1.16)	(-0.42)

TABLE 5, PANEL A (continued)
Determinants of Organizational Structure of Public vs. Private Firms

Size_{i,t-1}	0.150***	0.141***	-0.002	0.059***
	(23.29)	(22.89)	(-0.83)	(9.51)
Public*Size_{i,t-1}	0.080***	0.071***	0.023***	0.050***
	(6.03)	(5.62)	(3.69)	(3.83)
Constant	-1.677***	-1.600***	-0.011	-0.995***
	(-14.98)	(-14.95)	(-0.22)	(-9.39)
Observations	136,834	136,834	136,834	136,834
Adj. R-squared	0.9295	0.9393	0.4559	0.8168
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

$Size_{i,t-1}$

$Public*Size_{i,t-1}$

Panel B: Organizational Structure Complexity

Dependent Variable =	Log(N_Level)	PS_Ratio	Log(PS_Links)	Log(PS_Asymm_Links)
	(1)	(2)	(3)	(4)
$Lev_{i,t-1}$	0.000	-0.005*	0.012	0.006
	(0.15)	(-1.72)	(0.52)	(0.22)
$Public*Lev_{i,t-1}$	0.005	0.011*	0.055	0.104
	(1.10)	(1.96)	(1.02)	(1.63)
$Int\_Cov_{i,t-1}$	-0.000*	-0.000	-0.000	-0.000**
	(-1.96)	(-0.61)	(-1.38)	(-2.12)
$Public*Int\_Cov_{i,t-1}$	0.000*	0.000*	0.000	0.000
	(1.73)	(1.69)	(0.75)	(0.66)
$Debt\_Iss_{i,t-1}$	0.001	0.006	-0.028	-0.046
	(0.47)	(1.60)	(-1.13)	(-1.52)
$Public*Debt\_Iss_{i,t-1}$	-0.005	-0.000	0.096	0.038
	(-0.79)	(-0.07)	(1.42)	(0.49)
$Stock\_Iss_{i,t-1}$	0.001	-0.015***	0.044	0.048
	(0.21)	(-2.95)	(1.29)	(1.21)
$Public*Stock\_Iss_{i,t-1}$	0.005	0.010	-0.090	-0.054
	(0.93)	(1.32)	(-1.46)	(-0.73)
$CLTD_{i,t-1}$	0.003	0.005	0.020	0.039
	(0.64)	(0.74)	(0.45)	(0.69)
$Public*CLTD_{i,t-1}$	-0.014	-0.016	-0.206	-0.246
	(-0.83)	(-1.00)	(-0.88)	(-1.19)
$MTR_{i,t-1}$	-0.006***	-0.013***	-0.031	-0.053*
	(-2.61)	(-3.89)	(-1.22)	(-1.68)
$Public*MTR_{i,t-1}$	-0.002	-0.002	-0.091	-0.011
	(-0.39)	(-0.29)	(-1.50)	(-0.17)
$SETR_{i,t-1}$	0.004*	0.006**	0.008	-0.021
	(1.82)	(2.15)	(0.33)	(-0.75)
$Public*SETR_{i,t-1}$	-0.001	-0.002	0.028	0.074
	(-0.12)	(-0.29)	(0.50)	(1.22)
$NOL_{i,t-1}$	-0.000	-0.004*	-0.025	-0.034*
	(-0.12)	(-1.86)	(-1.53)	(-1.78)
$Public*NOL_{i,t-1}$	0.001	0.004	0.003	-0.038
	(0.52)	(1.26)	(0.07)	(-0.90)
$Intang_{i,t-1}$	-0.004	-0.010*	0.013	-0.009
	(-1.22)	(-1.91)	(0.28)	(-0.15)
$Public*Intang_{i,t-1}$	-0.007	-0.017*	-0.072	-0.036
	(-0.91)	(-1.93)	(-0.67)	(-0.31)
$Foreign_{i,t-1}$	0.000	-0.002	0.004	0.005
	(0.08)	(-1.50)	(0.36)	(0.30)
$Public*Foreign_{i,t-1}$	0.000	0.001	-0.020	0.008
	(0.13)	(0.33)	(-1.06)	(0.35)
$Eq\_Inc_{i,t-1}$	0.171	-0.811	-5.106	-7.589**
	(0.39)	(-1.58)	(-1.63)	(-2.13)
$Public*Eq\_Inc_{i,t-1}$	0.776	0.814	5.222	11.385
	(0.68)	(0.89)	(0.88)	(1.62)
$Min\_Int_{i,t-1}$	0.082***	0.129***	0.220*	-0.462***
	(3.60)	(3.65)	(1.74)	(-3.42)
$Public*Min\_Int_{i,t-1}$	0.056	-0.126	-0.312	-1.082**
	(0.63)	(-1.16)	(-0.66)	(-1.98)

Determinants of Organizational Structure of Public vs. Private Firms

$Size_{i,t-1}$	0.010***	0.002	0.098***	0.069***
	(6.90)	(0.96)	(6.21)	(4.04)
$Public*Size_{i,t-1}$	0.010***	0.009**	0.062*	0.063*
	(3.04)	(2.44)	(1.88)	(1.78)
$Constant$	0.924***	0.051	-0.957***	-0.960***
	(36.37)	(1.50)	(-3.30)	(-3.06)
Observations	136,834	136,834	35,068	35,068
Adj. R-squared	0.7047	0.8743	0.8118	0.7011
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

This table presents the result of estimating equation (1) after including an interaction term that identifies firms that were public (*PUBLIC*) at any point in our sample. In Panel A, the dependent variable is alternately *Log(N_Sub)*, *Log(N_C_Sub)*, *Log (N_Unconsol_C_Sub)*, and *Log(N_PS_Sub)*. In Panel B, the dependent variable is alternately *Log(N_Level)*, *PS_Ratio*, *Log (PS_Links)*, and *Log(PS_Asymm_Links)*. All regressions include firm fixed effects and year fixed effects. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. We present t-statistics in parentheses. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 6
Determinants Organizational Structure of MNC vs. Domestic Firms

Panel A: Organizational Structure Magnitude

Dependent Variable =	Log(N_Sub) (1)	Log(N_C_Sub) (2)	Log(N_Unconsol_C_Sub) (3)	Log(N_PS_ Sub) (4)
$Lev_{i,t-1}$	0.030***	0.034***	0.002	0.004
	(3.45)	(3.78)	(0.42)	(0.40)
$MNC*Lev_{i,t-1}$	0.038**	0.040**	0.009	0.011
	(2.38)	(2.51)	(0.95)	(0.71)
$Int\_Cov_{i,t-1}$	-0.000***	-0.000***	0.000	-0.000*
	(-3.77)	(-3.38)	(0.18)	(-1.71)
$MNC*Int\_Cov_{i,t-1}$	-0.000	-0.000	0.000	0.000
	(-0.02)	(-0.29)	(0.95)	(0.73)
$Debt\_Iss_{i,t-1}$	-0.020**	-0.022**	-0.014***	-0.004
	(-2.03)	(-2.39)	(-2.69)	(-0.35)
$MNC*Debt\_Iss_{i,t-1}$	0.009	-0.001	0.027**	0.033
	(0.48)	(-0.03)	(2.14)	(1.64)
$Stock\_Iss_{i,t-1}$	0.028**	0.043***	0.009	-0.004
	(2.04)	(3.03)	(1.14)	(-0.27)
$MNC*Stock\_Iss_{i,t-1}$	-0.015	-0.020	0.006	-0.006
	(-0.71)	(-0.98)	(0.46)	(-0.28)
$CLTD_{i,t-1}$	-0.000	-0.007	0.019**	-0.003
	(-0.02)	(-0.40)	(2.12)	(-0.17)
$MNC*CLTD_{i,t-1}$	0.072*	0.090**	0.003	0.006
	(1.75)	(2.21)	(0.12)	(0.13)
$MTR_{i,t-1}$	-0.044***	-0.018**	0.003	-0.053***
	(-4.77)	(-2.22)	(0.76)	(-4.92)
$MNC*MTR_{i,t-1}$	0.022	0.004	0.000	0.032
	(1.20)	(0.25)	(0.04)	(1.57)
$SETR_{i,t-1}$	-0.000	-0.008	-0.002	0.015
	(-0.03)	(-1.39)	(-0.56)	(1.62)
$MNC*SETR_{i,t-1}$	0.008	0.020	-0.013	-0.022
	(0.46)	(1.25)	(-1.10)	(-1.21)
$NOL_{i,t-1}$	0.024***	0.025***	0.000	0.004
	(3.60)	(3.76)	(0.05)	(0.67)
$MNC*NOL_{i,t-1}$	0.006	0.011	-0.010*	-0.002
	(0.57)	(1.04)	(-1.75)	(-0.18)
$Intang_{i,t-1}$	0.081***	0.099***	-0.009	-0.004
	(4.72)	(6.11)	(-1.25)	(-0.24)
$MNC*Intang_{i,t-1}$	0.063**	0.061**	-0.002	-0.022
	(2.28)	(2.21)	(-0.15)	(-0.81)
$Eq\_Inc_{i,t-1}$	2.040	2.189**	-0.371	0.777
	(1.64)	(2.02)	(-0.42)	(0.52)
$MNC*Eq\_Inc_{i,t-1}$	1.739	3.588	2.404	-5.032
	(0.72)	(1.44)	(1.15)	(-1.50)
$Min\_Int_{i,t-1}$	0.159*	-0.099	-0.004	0.324***
	(1.65)	(-1.21)	(-0.10)	(3.11)
$MNC*Min\_Int_{i,t-1}$	0.205	0.248	0.056	0.287
	(1.13)	(1.33)	(0.49)	(1.23)
$Size_{i,t-1}$	0.142***	0.125***	0.001	0.074***
	(20.82)	(19.87)	(0.41)	(10.47)
$MNC*Size_{i,t-1}$	0.086***	0.099***	0.011*	-0.000
	(7.24)	(8.65)	(1.90)	(-0.03)
Constant	-1.637***	-1.524***	-0.029	-1.065***
	(-14.73)	(-14.59)	(-0.62)	(-9.65)
Observations	136,834	136,834	136,834	136,834
Adj. R-squared	0.9295	0.9394	0.4557	0.8167
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

TABLE 6 (continued)
Determinants of Organizational Structure of MNC vs. Domestic Firms

Panel B: Organizational Structure Complexity

Dependent Variable =	Log(N_ Level)	PS_Ratio	Log(PS_Links)	Log(PS_Asymm_Links)
	(1)	**(2)**	**(3)**	**(4)**
$Lev_{i,t-1}$	0.000	-0.002	0.016	0.003
	(0.04)	(-0.52)	(0.66)	(0.13)
$MNC*Lev_{i,t-1}$	0.004	-0.002	0.021	0.075
	(1.03)	(-0.40)	(0.44)	(1.35)
$Int\_Cov_{i,t-1}$	-0.000	-0.000	-0.000	-0.000
	(-1.41)	(-0.07)	(-1.23)	(-1.46)
$MNC*Int\_Cov_{i,t-1}$	0.000	0.000	0.000	-0.000
	(1.08)	(0.36)	(0.88)	(-0.22)
$Debt\_Iss_{i,t-1}$	-0.002	0.002	-0.041	-0.078**
	(-0.63)	(0.42)	(-1.53)	(-2.36)
$MNC*Debt\_Iss_{i,t-1}$	0.004	0.010	0.126**	0.132*
	(0.77)	(1.62)	(2.14)	(1.87)
$Stock\_Iss_{i,t-1}$	0.002	-0.017***	0.021	0.015
	(0.61)	(-2.67)	(0.58)	(0.36)
$MNC*Stock\_Iss_{i,t-1}$	0.000	0.010	-0.028	0.019
	(0.07)	(1.31)	(-0.49)	(0.27)
$CLTD_{i,t-1}$	-0.001	0.004	-0.019	0.011
	(-0.29)	(0.56)	(-0.39)	(0.19)
$MNC*CLTD_{i,t-1}$	0.006	-0.007	-0.031	-0.093
	(0.54)	(-0.54)	(-0.16)	(-0.53)
$MTR_{i,t-1}$	-0.007***	-0.017***	-0.052*	-0.071**
	(-2.64)	(-4.60)	(-1.78)	(-2.06)
$MNC*MTR_{i,t-1}$	0.001	0.010*	-0.028	0.033
	(0.12)	(1.79)	(-0.52)	(0.55)
$SETR_{i,t-1}$	0.006**	0.009***	0.009	-0.015
	(2.48)	(3.00)	(0.35)	(-0.54)
$MNC*SETR_{i,t-1}$	-0.007	-0.012**	0.020	0.046
	(-1.54)	(-2.24)	(0.43)	(0.80)
$NOL_{i,t-1}$	0.001	-0.001	-0.004	-0.012
	(0.65)	(-0.64)	(-0.25)	(-0.61)
$MNC*NOL_{i,t-1}$	-0.002	-0.003	-0.064*	-0.097**
	(-0.97)	(-1.05)	(-1.75)	(-2.51)
$Intang_{i,t-1}$	-0.005	-0.010*	-0.004	0.018
	(-1.19)	(-1.68)	(-0.07)	(0.28)
$MNC*Intang_{i,t-1}$	-0.002	-0.007	-0.005	-0.069
	(-0.29)	(-0.89)	(-0.05)	(-0.68)
$Eq\_Inc_{i,t-1}$	0.295	-0.075	-0.868	-2.558
	(0.62)	(-0.16)	(-0.30)	(-0.73)
$MNC*Eq\_Inc_{i,t-1}$	0.191	-1.715*	-6.820	-3.398
	(0.21)	(-1.69)	(-1.15)	(-0.50)
$Min\_Int_{i,t-1}$	0.060**	0.097**	0.218	-0.380***
	(2.43)	(2.49)	(1.57)	(-2.61)
$MNC*Min\_Int_{i,t-1}$	0.118**	0.071	-0.131	-0.987***
	(2.07)	(0.92)	(-0.42)	(-2.78)
$Size_{i,t-1}$	0.013***	0.008***	0.119***	0.100***
	(7.96)	(3.46)	(6.77)	(5.27)
$MNC*Size_{i,t-1}$	-0.001	-0.009***	-0.007	-0.034
	(-0.20)	(-2.74)	(-0.23)	(-1.08)
Constant	0.910***	0.022	-0.954***	-0.963***
	(34.54)	(0.61)	(-3.32)	(-3.10)

Observations	136,834	13,6834	35,068	35,068
Adj. R-squared	0.7046	0.8743	0.8117	0.7010
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

This table presents the result of estimating equation (1) after including an interaction term that identifies firms that are multinatinals (*MNC*) at any point in our sample. In Panel A, the dependent variable is alternately *Log(N_Sub)*, *Log(N_C_Sub)*, *Log (N_Unconsol_C_Sub)*, and *Log(N_PS_Sub)*. In Panel B, the dependent variable is alternately *Log(N_Level)*, *PS_Ratio*, *Log (PS_Links)*, and *Log(PS_Asymm_Links)*. All regressions include firm fixed effects and year fixed effects. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. We present t-statistics in parentheses. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 7
Determinants of Organizational Structure of Large vs. Small Firms

Panel A: Organizational Structure Magnitude

Dependent Variable =	Log(N_Sub)	Log(N_C_Sub)	Log(N_Unconsol_C_Sub)	Log(N_PS_Sub)
	(1)	(2)	(3)	(4)
$Lev_{i,t-1}$	0.015*	0.021***	0.007*	-0.011*
	(1.79)	(2.59)	(1.76)	(-1.92)
$Above\_Median*Lev_{i,t-1}$	0.003	0.003	-0.003	0.013
	(0.19)	(0.18)	(-0.34)	(0.91)
$Int\_Cov_{i,t-1}$	-0.000**	-0.000	0.000	-0.000*
	(-2.17)	(-1.51)	(0.17)	(-1.65)
$Above\_Median*Int\_Cov_{i,t-1}$	-0.000*	-0.000**	0.000	0.000
	(-1.82)	(-2.19)	(0.85)	(0.31)
$Debt\_Iss_{i,t-1}$	0.027***	0.020**	-0.014***	0.007
	(2.92)	(2.43)	(-2.75)	(0.71)
$Above\_Median*Debt\_Iss_{i,t-1}$	0.069***	0.061***	0.022**	0.068***
	(4.04)	(3.76)	(2.16)	(3.83)
$Stock\_Iss_{i,t-1}$	0.014	0.026**	0.013*	-0.009
	(1.15)	(2.10)	(1.76)	(-0.91)
$Above\_Median*Stock\_Iss_{i,t-1}$	0.041**	0.038*	-0.001	0.015
	(2.05)	(1.87)	(-0.10)	(0.79)
$CLTD_{i,t-1}$	0.015	0.014	0.010	0.007
	(0.90)	(0.83)	(1.21)	(0.44)
$Above\_Median*CLTD_{i,t-1}$	0.008	0.009	0.022	-0.018
	(0.21)	(0.23)	(0.99)	(-0.45)
$MTR_{i,t-1}$	-0.025***	-0.010	0.005	-0.018*
	(-2.78)	(-1.26)	(1.16)	(-1.92)
$Above\_Median*MTR_{i,t-1}$	0.014	0.019	-0.002	-0.024
	(0.95)	(1.38)	(-0.24)	(-1.42)
$SETR_{i,t-1}$	0.006	0.001	-0.000	0.008
	(0.82)	(0.14)	(-0.12)	(0.99)
$Above\_Median*SETR_{i,t-1}$	-0.008	-0.007	-0.009	0.001
	(-0.64)	(-0.64)	(-1.20)	(0.05)
$NOL_{i,t-1}$	-0.038***	-0.031***	-0.004*	-0.018***
	(-8.17)	(-6.76)	(-1.86)	(-5.09)
$Above\_Median*NOL_{i,t-1}$	-0.050***	-0.047***	-0.005	-0.040***
	(-4.08)	(-4.06)	(-0.89)	(-3.52)
$Intang_{i,t-1}$	0.024*	0.033**	-0.014**	0.000
	(1.65)	(2.23)	(-2.12)	(0.00)
$Above\_Median*Intang_{i,t-1}$	0.136***	0.154***	0.005	-0.039
	(4.98)	(5.70)	(0.41)	(-1.56)
$Foreign_{i,t-1}$	0.008	0.008	-0.003	-0.002
	(1.20)	(1.46)	(-0.89)	(-0.38)
$Above\_Median*Foreign_{i,t-1}$	-0.003	-0.000	0.009*	-0.003
	(-0.32)	(-0.04)	(1.73)	(-0.37)
$Eq\_Inc_{i,t-1}$	1.527	1.265	0.623	1.576
	(1.12)	(1.02)	(0.52)	(0.89)
$Above\_Median*Eq\_Inc_{i,t-1}$	1.576	3.227*	-0.374	-4.014
	(0.77)	(1.66)	(-0.22)	(-1.52)
$Min\_Int_{i,t-1}$	0.131	-0.060	0.043	0.185*
	(1.41)	(-0.70)	(1.37)	(1.90)
$Above\_Median*Min\_Int_{i,t-1}$	0.024	-0.101	-0.085	0.432**
	(0.13)	(-0.63)	(-0.98)	(2.10)
$Constant$	1.560***	1.415***	0.053***	0.352***
	(250.89)	(227.38)	(14.50)	(60.90)
Observations	136,834	136,834	136,834	136,834
Adj. R-squared	0.9262	0.9364	0.4555	0.8157
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

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Panel B: Organizational Structure Complexity

Dependent Variable =	Log(N_Level)	PS_Ratio	Log(PS_Links)	Log(PS_Asymm_Links)
	(1)	(2)	(3)	(4)
$Lev_{i,t-1}$	-0.000	-0.004	0.008	-0.007
	(-0.25)	(-1.46)	(0.34)	(-0.23)
$Above\_Median*Lev_{i,t-1}$	-0.000	0.002	0.004	0.043
	(-0.09)	(0.41)	(0.09)	(0.93)
$Int\_Cov_{i,t-1}$	-0.000	-0.000	-0.000	-0.000
	(-1.20)	(-0.77)	(-1.25)	(-1.09)
$Above\_Median*Int\_Cov_{i,t-1}$	0.000	0.000	0.000	-0.000
	(0.52)	(1.22)	(0.77)	(-0.60)
$Debt\_Iss_{i,t-1}$	-0.002	0.005	-0.023	-0.026
	(-0.68)	(1.12)	(-0.79)	(-0.69)
$Above\_Median*Debt\_Iss_{i,t-1}$	0.014***	0.006	0.123***	0.053
	(3.07)	(0.93)	(2.73)	(0.93)
$Stock\_Iss_{i,t-1}$	0.003	-0.016***	-0.002	0.027
	(1.17)	(-2.60)	(-0.05)	(0.58)
$Above\_Median*Stock\_Iss_{i,t-1}$	0.001	0.008	0.044	0.019
	(0.28)	(1.05)	(0.88)	(0.29)
$CLTD_{i,t-1}$	-0.000	-0.002	0.031	0.048
	(-0.09)	(-0.31)	(0.61)	(0.74)
$Above\_Median*CLTD_{i,t-1}$	0.002	0.011	-0.084	-0.106
	(0.19)	(0.85)	(-0.71)	(-0.87)
$MTR_{i,t-1}$	0.000	-0.008*	0.003	-0.002
	(0.10)	(-1.67)	(0.13)	(-0.06)
$Above\_Median*MTR_{i,t-1}$	-0.009**	-0.009	-0.080*	-0.065
	(-2.23)	(-1.61)	(-1.84)	(-1.22)
$SETR_{i,t-1}$	0.003	0.004	0.008	0.003
	(1.39)	(1.34)	(0.31)	(0.07)
$Above\_Median*SETR_{i,t-1}$	0.001	0.002	0.012	-0.006
	(0.35)	(0.35)	(0.30)	(-0.13)
$NOL_{i,t-1}$	-0.003***	-0.003**	-0.060***	-0.067***
	(-3.18)	(-2.16)	(-3.84)	(-3.70)
$Above\_Median*NOL_{i,t-1}$	-0.009***	-0.005	-0.046	-0.037
	(-3.82)	(-1.55)	(-1.44)	(-1.08)
$Intang_{i,t-1}$	-0.001	-0.006	0.033	0.123*
	(-0.62)	(-1.10)	(0.78)	(1.87)
$Above\_Median*Intang_{i,t-1}$	-0.010*	-0.016**	-0.093	-0.223**
	(-1.76)	(-1.98)	(-1.26)	(-2.36)
$Foreign_{i,t-1}$	-0.000	-0.002	0.022	0.021
	(-0.11)	(-1.14)	(1.54)	(0.83)
$Above\_Median*Foreign_{i,t-1}$	0.001	0.001	-0.029	-0.007
	(0.47)	(0.26)	(-1.59)	(-0.26)
$Eq\_Inc_{i,t-1}$	1.091**	-0.074	-0.507	-3.702
	(2.30)	(-0.11)	(-0.13)	(-0.69)
$Above\_Median*Eq\_Inc_{i,t-1}$	-1.214	-0.916	-3.878	-0.293
	(-1.60)	(-1.04)	(-0.77)	(-0.04)
$Min\_Int_{i,t-1}$	0.049**	0.059	0.139	-0.419***
	(1.98)	(1.41)	(0.95)	(-2.66)
$Above\_Median*Min\_Int_{i,t-1}$	0.085*	0.128*	-0.002	-0.496*
	(1.75)	(1.85)	(-0.01)	(-1.74)
Constant	1.162***	0.130***	1.364***	0.785***
	(791.02)	(67.36)	(84.02)	(41.54)

Observations	136,834	136,834	35,068	35,068
Adj. R-squared	0.7040	0.8742	0.8102	0.7000
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year

This table presents the result of estimating equation (1) after including an interaction term that identifies firms that are relatively large in asset size (*Above_Median*) at any point in our sample. In Panel A, the dependent variable is alternately *Log(N_Sub)*, *Log(N_C_Sub)*, *Log (N_Unconsol_C_Sub)*, and *Log(N_PS_Sub)*. In Panel B, the dependent variable is alternately *Log(N_Level)*, *PS_Ratio*, *Log (PS_Links)*, and *Log(PS_Asymm_Links)*. All regressions include firm fixed effects and year fixed effects. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. We present t-statistics in parentheses. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 8
Determinants of Organizational Structure by Firm Asset Size Grouping: Joint F-Tests

Panel A: Dependent Variable Log(N_Sub)

	N	Financing Variables	Tax Incentives Variables	Business Complexity Variables
Assets < $10M	2,937	$p < \mathbf{0.05}$**	$p > 0.10$	$p < \mathbf{0.01}$***
$10M-$25M	17,079	$p > 0.10$	$p < \mathbf{0.01}$***	$p < \mathbf{0.01}$***
$25M-$50M	16,069	$p < \mathbf{0.05}$**	$p < \mathbf{0.01}$***	$p < \mathbf{0.01}$***
$50M-$100M	17,837	$p > 0.10$	$p > 0.10$	$p < \mathbf{0.01}$***
$100M-$250M	23,523	$p < \mathbf{0.05}$**	$p < \mathbf{0.05}$**	$p < \mathbf{0.01}$***
$250M-$500M	15,802	$p < \mathbf{0.10}$*	$p < \mathbf{0.01}$***	$p < \mathbf{0.01}$***
$500M-$2.5B	22,149	$p > 0.10$	$p < \mathbf{0.05}$**	$p < \mathbf{0.01}$***
> $2.5B	12,701	$p < \mathbf{0.05}$**	$p < \mathbf{0.01}$***	$p < \mathbf{0.01}$***

Panel B: Dependent Variable Log(N_Level)

	N	Financing Variables	Tax Incentives Variables	Business Complexity Variables
Assets < $10M	2,937	$p > 0.10$	$p > 0.10$	$p > 0.10$
$10M-$25M	17,079	$p > 0.10$	$p > 0.10$	$p < \mathbf{0.05}$**
$25M-$50M	16,069	$p > 0.10$	$p > 0.10$	$p > 0.10$
$50M-$100M	17,837	$p > 0.10$	$p > 0.10$	$p > 0.10$
$100M-$250M	23,523	$p < \mathbf{0.05}$**	$p > 0.10$	$p > 0.10$
$250M-$500M	15,802	$p > 0.10$	$p > 0.10$	$p > 0.10$
$500M-$2.5B	22,149	$p > 0.10$	$p > 0.10$	$p < \mathbf{0.01}$***
> $2.5B	12,701	$p > 0.10$	$p > 0.10$	$p < \mathbf{0.05}$**

This table presents the result of estimating equation (1) by IRS firm asset size grouping. In Panel A (Panel B), the dependent variable is *Log(N_Sub)* (*Log(N_Level)*). All regressions include firm fixed effects and year fixed effects. Financing explanatory variables include *Lev*, *Int_Cov*, *Debt_Iss*, *Stock_Iss*, and *CLTD*. Tax Incentives explanatory variables include *MTR*, *SETR*, *NOL*, *Intang*, and *Foreign*. Business complexity explanatory variables include *Eq_Inc*, *Min_Int*, and *Size*. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

TABLE 9
Determinants of Organizational Structure by NAICS Industry: Joint F-Tests

Panel A: Dependent Variable Log(N_Sub)

	N	Financing Variables	Tax Incentives Variables	Business Complexity Variables
Accommodations	1,532	$p > 0.10$	$p > 0.10$	$p < 0.05**$
Administrative	1,800	$p < 0.05**$	$p > 0.10$	$p < 0.01***$
Agriculture	1,205	$p > 0.10$	$p < 0.10*$	$p < 0.01***$
Arts	875	$p > 0.10$	$p > 0.10$	$p < 0.10*$
Construction	3,742	$p < 0.05**$	$p > 0.10$	$p < 0.01***$
Educational Services	554	$p < 0.05**$	$p < 0.05**$	$p < 0.01***$
Finance	15,908	$p > 0.10$	$p < 0.01***$	$p < 0.01***$
Health Care	1,939	$p < 0.10*$	$p > 0.10$	$p < 0.10*$
Holding Companies	44,500	$p < 0.01***$	$p < 0.05**$	$p < 0.01***$
Information	5,479	$p > 0.10$	$p > 0.10$	$p < 0.01***$
Manufacturing	22,501	$p < 0.01***$	$p < 0.01***$	$p < 0.01***$
Mining	2,753	$p < 0.01***$	$p > 0.10$	$p < 0.01***$
Other	118	$p > 0.10$	$p > 0.10$	$p > 0.10$
Other Services	830	$p > 0.10$	$p > 0.10$	$p < 0.01***$
Professional Services	8,476	$p < 0.05**$	$p < 0.01***$	$p < 0.01***$
Real Estate	5,307	$p > 0.10$	$p > 0.10$	$p < 0.01***$
Retail Trade	5,582	$p < 0.10*$	$p > 0.10$	$p < 0.01***$
Transportation	2,727	$p > 0.10$	$p < 0.05**$	$p < 0.01***$
Utilities	945	$p > 0.10$	$p < 0.01***$	$p < 0.01***$
Wholesale Trade	9,242	$p < 0.01***$	$p < 0.01***$	$p < 0.01***$

Panel B: Dependent Variable Log(N_Level)

	N	Financing Variables	Tax Incentives Variables	Business Complexity Variables
Accommodations	1,532	$p < 0.10*$	$p < 0.05**$	$p > 0.10$
Administrative	1,800	$p < 0.10*$	$p > 0.10$	$p > 0.10$
Agriculture	1,205	$p > 0.10$	$p > 0.10$	$p > 0.10$
Arts	875	$p > 0.10$	$p > 0.10$	$p > 0.10$
Construction	3,742	$p > 0.10$	$p > 0.10$	$p > 0.10$
Educational Services	554	$p > 0.10$	$p > 0.10$	$p < 0.05**$
Finance	15,908	$p > 0.10$	$p > 0.10$	$p < 0.01***$
Health Care	1,939	$p > 0.10$	$p < 0.05**$	$p > 0.10$
Holding Companies	44,500	$p > 0.10$	$p < 0.01***$	$p < 0.01***$
Information	5,479	$p > 0.10$	$p < 0.01***$	$p > 0.10$
Manufacturing	22,501	$p > 0.10$	$p > 0.10$	$p < 0.05**$
Mining	2,753	$p > 0.10$	$p > 0.10$	$p < 0.10*$
Other	118	$p > 0.10$	$p < 0.05**$	$p > 0.10$
Other Services	830	$p > 0.10$	$p > 0.10$	$p > 0.10$
Professional Services	8,476	$p > 0.10$	$p > 0.10$	$p < 0.05**$
Real Estate	5,307	$p > 0.10$	$p > 0.10$	$p < 0.10*$
Retail Trade	5,582	$p > 0.10$	$p > 0.10$	$p > 0.10$
Transportation	2,727	$p > 0.10$	$p > 0.10$	$p > 0.10$
Utilities	945	$p > 0.10$	$p > 0.10$	$p > 0.10$
Wholesale Trade	9,242	$p > 0.10$	$p > 0.10$	$p < 0.01***$

This table presents the result of estimating equation (1) by NAICS industry. In Panel A (Panel B), the dependent variable is *Log(N_Sub)* (*Log(N_Level)*). All regressions include firm fixed effects and year fixed effects. Financing explanatory variables include *Lev*, *Int_Cov*, *Debt_Iss*, *Stock_Iss*, and *CLTD*. Tax Incentives explanatory variables include *MTR*, *SETR*, *NOL*, *Intang*, and *Foreign*. Business complexity explanatory variables include *Eq_Inc*, *Min_Int*, and *Size*. See Appendix A for variable definitions. We winsorize all continuous variables at the 1st and 99th percentiles and we cluster standard errors by firm. *, **, and *** represent two-tailed statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.