Corporate policies of private firms with concentrated ownership

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Abstract

In a sample of 1.5 million firm-year observations from 28 European countries from 2001 to 2015, we examine the impact of different ownership structures on corporate policies of private companies. We examine investment, capital structure, and payout decisions, and document the first large-scale results of corporate behavior when ownership structures deviate from full ownership, and when firms have different types of single owners. In addition to the previously documented transitory effect of ownership, we identify an additional, permanent, effect of ownership on corporate decisions. Our results reveal that the impact of the permanent component is on average several times larger than the transitory effect.

Keywords:
private firms; panel data; Europe; concentrated ownership; corporate policies

JEL Classification: G30, G32, G35, D22

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1. Introduction

Even today, understanding the effect of corporate ownership on firm decisions is as important a topic as it was almost 100 years ago when Berle and Means (1932) published their seminal book "The Modern Corporation and Private Property". The authors, observing the ownership structure in the largest US public companies, claim that dispersed ownership in large corporation gives rise to the management control hypothesis, where outside shareholders have little incentive to monitor management behavior.

The ownership concentration of large US publicly traded corporations has increased substantially over the last decades, due to the rise of institutional ownership. The commonly-held belief has been that institutional investors tend to be passive (Bebchuk et al, 2017), which would again lead to similar predictions under the management control hypothesis of Berle and Means (1932). On the contrary, recent research suggests that large institutions, including index funds, take an active role in exercising 'voice' through proxy voting and behind-the-scenes engagement with management (Appel, Gormley, and Keim 2016; McCahery, Sautner, and Starks 2016). Their effectiveness increases with governance experience obtained from multiple blockholdings (Kang, Luo, and Na 2017), because they have a strong financial incentive to engage in corporate governance (Lewellen and Lewellen, 2017). Even internationally, the importance of institutional investors is growing quickly (Khorana, Servaes, and Tufano, 2005), and research suggests that institutional investors promote good corporate governance practices around the world (Aggarwal, Erel, Ferreira, and Matos 2011) and foster long-term investment and innovation output (Bena, Ferreira, Matos, Pires 2017).

In sharp contrast to the case of public firms, understanding of the effect of concentrated ownership on private firms remains sparse. Thomsen and Pedersen (2000) examine the impact of the ownership structure of private firms on company economic performance in 435 of the largest European companies, and conclude that the identity of large owners matters for corporate strategy. It is surprising, however, that no study systematically studies the effect of concentrated ownership on corporate policies in private companies, given the broad interest in understanding the impact that concentrated ownership has on companies. This has also been noted in Boyd and Solarino (2016, page 16), who state that "the unevenness of topics studied is most easily addressed if scholars develop new studies that concurrently address multiple owner types and outcomes". The goal of this study is to address this void.

In this paper, we examine corporate policies of private companies which have different majority ownership concentrations and owner types. The sample covers about 1.5 million firm-year observations from 28 European countries from 2001 to 2015.

Corporate policies reflect the owner's objectives with respect to risk taking, investment horizons, and the treatment of minority shareholders if present. In lieu of these objectives, we examine investment policies, capital structure decisions, and total payout decisions by different ownership structures. First, we examine different constellations of majority and minority ownership, such as majority ownership with and without a blocking minority vote, and ownership structures without a majority owner. The baseline category is almost full ownership in the Jensen and Meckling (1976) sense.

It is important to note that there are two ownership concentration effects over time. An ownership concentration dummy variable in the corporate policy regression models captures the "transitory" effects of ownership; i.e. this means it captures the effect of the change in the ownership in the sample. However, as is typical for private firms, many firms undergo no change in ownership structures during the sample. Thus, we capture the "permanent" effect of ownership concentration, i.e., the effect of ownership in firms with no change of ownership structure, by saving the estimated firm fixed effect and regressing it on the ownership concentration category. Prior studies (such as Thomsen and Pedersen, 2000) examine only the so-called transitory effect.

Our analysis reveals that, in comparison to fully-owned firms (Jensen and Meckling, 1976), the transitory effect shows that there are only slight deviations of corporate policies when ownership concentration changes. The permanent effect is however substantially larger in all corporate policy decisions, often more than double.

As for the individual corporate policies, the aggregated effect (transitory and permanent) shows that domestic firms always invest more than their foreign counterpart. Domestic firms employ considerably less debt in their capital structure than their foreign counterpart. Additionally, we can see that foreign owned firms extract more capital from companies than their domestic counterparts.

We also examine six different ownership categories of full ownership and examine them from the agency theory perspective. The six different majority ownership categories are individuals or families, corporations, two types of institutional investors (grey and independent), nameless (hidden) and private equity firms. The results show that when comparing different types of almost

full ownership, individual owners invest more capital than other full owners, they employ more debt, and their total payouts are the least amongst all types of owners.

We expand our analysis and conduct a nearest neighbor matching, once again between different ownership constellations and ownership types, in order to supplement our fixed effect regression analysis.

This paper is organized as follows. Section 2 describes the data. Section 3 shows the results and Section 4 concludes.

2. Data

2.1. Sample Construction

This study examines 28 countries from Western, Central and Eastern Europe from 2001 to 2015. We construct our dataset from the Amadeus database, which is owned and maintained by Moody's Bureau van Dijk (BvD) and contains comprehensive financial and ownership information on private companies across Europe. We create our dataset from special historical queries and seven bi-annual versions of Amadeus. This is an important step to minimize sample construction biases, because BvD eliminates firm data after ten years, or for firms which are inactive, merge, or change identification. Following prior literature, we use unconsolidated financial statements to avoid double counting subsidiaries or operations abroad. We delete firm observations from the financial services and insurance industries (NACE codes 64–66), because of their extensive oversight by government regulatory authorities and fundamental differences in financial data presentation.

We construct the following firm characteristic variables. *Gross Investment* is calculated as fixed assets (FIAS) minus lagged fixed assets plus depreciation (DEPRE), and then scaled by total assets. Firm size, denoted as *Size*, is the natural logarithm of total assets (TOAS) in million USD. *Cash* is calculated as cash and other marketable securities (CASH) divided by total assets (TOAS). *Profitability* is EBITDA scaled by total assets (TOAS). *Sales Growth* is sales (TURN) minus lagged sales scaled by lagged sales. *Tangibility* is tangible fixed assets (TFAS) scaled by total assets. *Leverage* is calculated as long-term debt (LTDB) + current liabilities (CULI), scaled by total assets (TOAS). Total Payouts are calculated as the annual change in retained earnings

adjusted for net income ($-\Delta$osfd + pl).[1] Country-level variables are downloaded from the Global Financial Development Database (GFDD). We employ *Private Credit*/*GDP* defined as private credit scaled by GDP, where private credit is the deposit by money banks and other financial institutions; *Market Cap*/*GDP* is the ratio of the value of listed shares on the national stock exchange divided by GDP; and *GDP Growth* is the annual percentage nominal growth rate of GDP denominated in the local currency.

Our sample consists of 1.4 million firm-year observations, spanning from 2001 to 2015. Table 1 shows the summary statistics of the sample.

2.2. Ownership Classification

For our main analysis, we categorize firms according to their ownership concentration. The base comprises firms with concentrated ownership of at least 96%. The remaining 4% could be used as motivational tools for employees. The other categories are a) firms which have majority ownership but no minorities - these ownership structures enable easier expropriation of the remaining, dispersed, shareholders- b) firms who have a majority owner, but that owner is monitored, i.e. there is a blocking or legal minority present which has a veto vote, c) firms which do not have a majority owner, but only minorities present- if the minorities act united, then they could resemble majority owned firms, but if they do not then they are fighting groups of minority interests, and d) firms with unknown ownership concentration, which could be purposefully hidden.

The almost full majority ownership types are the follows. The first type are individual/ family owners and categorized in Amadeus with the classification I ("Named individuals or families"). The second type are corporate owners and denoted with the letter C in Amadeus ("Trade& Industry organization"). As for institutional ownership, we split this group into two categories following Ferreira and Matos 2008 Brickley, Lease, and Smith (1988), Almazan, Hartzell, and Starks (2005), and Chen, Harford, and Li (2007). Independent institutions tend not to side with corporate management, while grey institutions may. Independent institutions are labeled with category E ("Mutual/Pension fund/Nominee / Trust") and with category J ("Foundations") in Amadeus. Grey institutions are labeled with the letter B ("Bank"). The next group are active investors defined as private equity firms, labeled as P ("Private Equity firms") in

[1] This calculation is for example used in Drobetz, Janzen, and Meier (2018).

Amadeus, and venture capitalists, labeled as V ("Venture Capital"). We also examine corporate decisions for firms which have an owner, but the owner is nameless, i.e. hidden. This category in is labeled as D in Amadeus ("Nameless private stockholders"). We also utilize the other catch-all category "Other Named" which doesn't follow any of the other definitions, and we have an unknown category for which Amadeus makes no provision.

3. Methodology

3.1. Regression Analysis

3.1.1. Investments

In analyzing the effect of ownership concentration of private firms we follow the work of Erel, Jang and Weisbach (2015).[2] We augment their model with a dummy variable which captures the behavior of different types of ownership concentration. The estimated model is as follows:

$$\begin{aligned} &Gross\ Investment_{it} \\ &= \alpha_0 + \beta X_{it} + \sum_{k=1}^{K} \gamma_k Ownership\ Concentration_{it} + \delta Macro_{ct} + \tau_t + f_i + \varepsilon_{it}, \end{aligned} \tag{1}$$

for all i = 1,…, N (firm index); t = 2001,…, 2013 (time index); k = 1,…, K (ownership concentration). Standard errors (ε_{it}) are robust to arbitrary heteroskedasticity.

Vector X_{it} contains firm-specific control variables of firm size, profitability, cash holdings, leverage, and sales growth for firm *i* at time *t*. These variables are selected based on prior literature because they are informative about investments; they capture financial constraints (Fazzari, Hubbard, and Petersen, 1988), and investment opportunities and profitability (Bond et al., 2004). A widely employed common proxy for financial constraint is size (Hadlock and Pierce, 2010), but recent literature also argues in favor of cash holdings (Erel, Jang, and Weisbach, 2015). We employ ROA as a proxy for cash flow (Blanchard, Rhee, and Summers, 1993; Asker, Farre-Mensa, & Ljungqvist 2015; Erel, Jang, and Weisbach, 2015). The variable sales growth is a proxy for the firm's growth opportunities (Lehn and Poulsen, 1989; Shin and Stulz, 1998; Bloom, Bond, and van Reenen, 2007; Michaely and Roberts, 2012). Lastly, leverage may be related not only to firm

[2] Erel, Jang, and Weisbach (2015) analyse European private firms and their investment behaviour around their acquisition. They also employ the same database, Amadeus, to examine more than 5,000 acquisitions from 2001 to 2008 in Europe.

fundamentals (Campello and Graham, 2013),but also to opportunities (Erel, Jang, and Weisbach, 2015).

Macro captures the macroeconomic state. Specifically, it stands for the variables total private credit to GDP, stock market capitalization to GDP, and nominal GDP growth, which capture the availability in external financing. We also capture year fixed effects (τ_t) to control for changes in general macroeconomic conditions and firm fixed effects (f_i).

3.1.2. Leverage

Using cross-sectional regressions, we study the determinants of debt ratios following Rajan and Zingales (1995), Hovakimian et al. (2001), and Fama and French (2002). We estimate the following models:

$$Leverage_{it} = \alpha_0 + \beta X_{it} + \sum_{k=1}^{K} \gamma_k Ownership\ Concentration_{it} + \tau_t + f_i + \varepsilon_{it}, \quad (2)$$

for all i = 1,…, N (firm index); t = 2001,…, 2013 (time index); k = 1,…, K (ownership concentration). Standard errors (ε_{it}) are robust to arbitrary heteroskedasticity.

Again, vector X_{it} contains firm-specific control variables of firm size leverage composition, tangibility, age, investment and sales growth for firm *i* at time *t*. These variables are selected based on prior literature and we vary the inclusion of the variables also in line with prior literature. Four factors are major determinants of leverage, following Rajan and Zingales (1995), and these are size, asset tangibility, growth, and profitability, but Hovakimian et al. (2001) excludes profitability because it passively forces the firm's leverage away from its target level. Following Faulkender and Petersen (2006), we also include the composition of the firm's debt, i.e. we control for the amount of short-term debt to proxy for contracting problems. Further, as firms age they have establish a longer market presence and access to capital becomes easier (Berger and Udell, 1995; Petersen and Rajan, 2002). We also capture year fixed effects (τ_t) to control for changes in general macroeconomic conditions and firm fixed effects (f_i).

3.1.3. Payout

As the last corporate decision, we examine payouts. The estimated model is as follows:

$$Total\ Payout_{it} = \alpha_0 + \beta X_{it} + \sum_{k=1}^{K} \gamma_k Ownership\ Concentration_{it} + \tau_t + f_i + \varepsilon_{it}, \quad (3)$$

for all i = 1,…, N (firm index); t = 2001,…, 2013 (time index); k = 1,…, K (ownership concentration). Standard errors (ε_{it}) are robust to arbitrary heteroskedasticity.

Vector X_{it} contains the firm-specific control variables firm size, profitability, cash holdings, shareholders equity, leverage, investment, tangibility, age and sales growth for firm *i* at time *t*, to build on prior literature (see Brockman and Unlu, 2009). We also capture year fixed effects (τ_t) to control for changes in general macroeconomic conditions and firm fixed effects (f_i).

3.1.4. Permanent vs. Transitory Effect

It is important to note that there are two ownership concentration effects over time. The ownership concentration dummy variable in the regressions captures the "transitory" effects of ownership; i.e. this means that for a particular firm there is a change in the ownership concentration in the sample. However, as is typical for private firms, many firms undergo no change in ownership structures during the sample period and thus our variables of interest do not capture the effect of ownership at all. Thus, we capture the "permanent" effect of ownership concentration, i.e., the effect of ownership in firms with no change of ownership structure, by saving the estimated firm fixed effect ($\hat{\alpha}_i$) and regressing it on ownership concentration categories. The estimated model is then:

$$\hat{f}_i = \sum_{k=1}^{K} \gamma_k Ownership\ Concentration_{it} + \sum_{c=1}^{C} \eta_c I(country = C) + \tau_t \quad (4)$$

for all i = 1,…, N (firm index); t = 1,…, T (time index); k = 1,…, K (ownership categories); and c = 1,…, C (country dummies). Standard errors (ε_{it}) are robust to arbitrary heteroscedasticity. We include a control for country and time specifics using relevant dummies; time fixed effects control unbalanced panel and for business cycles, while country fixed effects capture the legal and financial environment (see for example Francis et al., 2013).

In sum, the panel fixed-effects specifications capture the effect of transitory (or changes in) ownership concentrations, while the firm fixed effects estimations capture the permanent effect of unchanged ownership.

3.2. Matching Analysis

We perform a nearest neighbor matching analysis with bias corrections for continuous variables and robust standard errors, from Abadie & Imbens (2006, 2011) , to support a casual interpretation of our results. The idea is to compare corporate investment, leverage, and payout decisions of similar firms with different types of majority owners by estimating the treatment effect on the treated (ATET).[3] We use firms with individual/family majority ownership as our control sample, and we then vary the treated group by either corporate majority owned, independent or grey institution owned, or active-investor owned firms. Also, we look at firms that have unknown majority owners. In terms of the key corporate decisions, we examine the differences in three corporate decisions, these being corporate gross investments, leverage, and total payouts. We explain the matching procedure in an example where we examine the difference in corporate gross investment between the treated firms, who are majority owned by corporations, and the control group, who are firms with an individual/family majority owner as follows:

Formally, let $D = 1$ if the firm is owned either by a corporation and $D = 0$ if the firm has an individual/firm majority ownership. Similarly, Y_1 is the gross investment ratio of a firm owned by a corporation and Y_0 is the gross investment ratio for a firm owned by an individual/family. Then an observed firm investment is equal to

$$Y = DY_1 + (1 - D)\, Y_0 \tag{4}$$

The difference in the gross investment could be attributed to the treatment effect when the firm is simultaneously owned with a majority by a corporation and an individual/family defined as

$$\Delta Y = Y_1 - \ Y_0 \tag{5}$$

Certainly, this cannot be true as a firm can have only one single majority owner. Thus, we only observe a firm either with a corporate majority owner or with an individual/family majority owner. To approximate the similarity, we use the exact matching on industry (NACE alphabetical letter level) and yea,r combined with a nonparametric nearest neighbor matching procedure that accounts for a set of firm-specific characteristics.

For the corporate gross investment decision, we match on size, tangibility, sales growth, and leverage. For the leverage decision, we match on size, tangibility, and sales growth. For the payout decision, we match on size, tangibility, sales growth, gross investment and leverage. Online Appendix contains the balancing tests.

[3] See Wamser (2014) among others for a finance application.

4. Results

4.1. Regression Analysis: Transitory vs. Permanent Effect

4.1.1. Investment Decision

In Table 2 we show the regression results for the investment decision, equation 1. The control variables have the expected signs and significance levels. Investments grow with the size of the firm at a decreasing speed. Firms with a larger proportion of fixed assets invest more. More profitable firms with more growth opportunities invest more, while a higher debt ratio indicates less investment.

Our model distinguishes different effects of ownership concentrations on the firm. In column 1(3) we show the transitory effect. Again, the transitory effect captures the ownership effect when a firm switched the ownership concentration in the sample. In column 2(4) we show the permanent effect of ownership concentration. The permanent effect captures the effect of ownership concentration on investments for firms whose ownership structure doesn't change in the sample.

The first important observation to make is that the permanent effects are several times larger than the transitory effect. Previous studies do not account for the permanent effect, which is the dominant force (Thomsen and Pedersen. 2000).

In Panel A column 1, the model base category is almost full 100% ownership (Jensen and Meckling, 1976) and the transitory effect shows that there are slight deviations when ownership concentration changes for a firm within the sample. In column 2, we see the permanent effect. In comparison to fully-owned firms, firms with less concentrated ownership invest substantially more. A firm where the dominant owner has the majority of votes and no minorities present, invests about 0.015 more (transitory + permanent effect). Firms where the majority owner is monitored invest about 0.012 more. If only minority owners are present, then the firm invests about 0.007 more. Interestingly, firms with unknown ownership concentration invest about 0.015, i.e. they behave like firms with an unmonitored majority owner.

In columns 3 and 4, we show the same results, but we now distinguish whether the firm is domestic or foreign; the base category for the model is almost 100% foreign ownership. Again, the coefficients on the permanent effect are several times larger. Taking columns 3 and 4 together, the aggregated effect (transitory and permanent) shows that domestic firms always invest more than their foreign counterpart. Fully owned domestic firms invest more than foreign owned firms,

with a coefficient of 0.032. Domestic majority owner firms, monitored or non-monitored, have coefficients which are at least twice as large.

In Panel B, we distinguish the almost full ownership by type. The model base category is individual owners. Looking at the combined impact of the transitory and permanent ownership concentration, then all types invest less than the individual full owner.

4.1.2. Leverage Decision

In Table 3 we provide the results for the leverage equation 2. The table setup mimics the investment decision from Tables 3. Again, column 1(3) and column 2(4) show the transitory and permanent effect of ownership concentration on corporate leverage. The base line category is full ownership. Combining the transitory (1) and permanent (2) effects, all considered ownership considerations employ less debt in their capital structure. Unknown and minority-controlled firms employ the least amount of debt. Majority controlled firms employ also less. Again, the permanent effect dominates.

In column 3 and 4 we separate the ownership concentration by domicile. Combining the two effect, the results show a clear pattern that domestic firms employ considerably less debt in their capital structure than their foreign counterpart.

In Panel B we compare the impact different of different almost full owners on corporate leverage. The base category are individual owners. Again, the permanent effect dominates.

The results show that all other types of owners employ less debt in their capital structure.

4.1.3. Payout Decision

In Table 4 we provide the results for the payout equation 3. The control variables have the expected signs and significance levels. Firms that are older, have more cash, leverage, and are more profitable payout more. Firms reduce their payouts when they invest and have increasing growth opportunities.

In Panel A, column 1(3) shows the transitory effect of ownership concentration and column 2(4) the permanent. In column 1 and 2, the baseline category are firms with almost full ownership. The results show that when firms move away from the full ownership, they payout less. This is true for all categories. Firms with and without monitored ownership, and firms with only minorities pay less. Full ownership means that the owner bears all the costs and keeps all the profits. This

changes for majority owners who do not have full ownership. They share the costs of investments, but they are in control of the proceeds. Again, the permanent effect dominates the transitory effect.

In column 3 and 4, we analyze the payout decision for different ownership concentrations by domicile. The baseline category are foreign owners with almost full ownership. By combining the two effects, we can see that foreign owned firms extract more capital from companies than their domestic counterparts.

In Panel B we explore different types of almost full owners. The baseline category is almost full individual ownership. All other types extract more payouts from the company. Active owners of firms extract the most.

4.2. Matching

In Table 5, we examine the situation where the control group is an individual who holds either 96% ownership of the firm or more. We label this group as *"Full Individual Ownership"*. The remaining 4% could be used as motivational tools for employees.

When comparing firms who have some majority ownership but no minorities, to the individually owned firm, then the majority owner seems to invest more by about 6%, and leverages the company similarly but restricts payouts by about 140%. This is consistent with the expropriation idea when there is dispersed minority ownership.

When looking at firms who have a majority owner, but that owner is monitored, i.e. there is a blocking or legal minority present, then having a minority with a veto vote matters substantially. The company invests less than the individual owner and less than if there was no majority ownership. More importantly, the blocking minority forces the company to pay out substantially more than if no blocking minority existed; compare -102% to -142% and the difference significant at the 0.001%. However, majority owned firms with a blocking minority pay out substantially less than individual firms.

The last group of firms are those which do not have a majority owner, but only minorities present. If those minorities act united, then they resemble majority owned firms. However, if they do not act united, then they may resemble either majority owned firms with blocking minorities or a fighting group of minority interests. When examining the results, this category does not act like any of the previously examined group. They invest substantially more than individual firms, by

about 17% which could be a sign of overinvestment; they have similar levels of leverage, but they curb payouts substantially by 160%. This could be a sign of fighting factions.

Table 6 looks at the different types of owners. Panel A shows the results when the ownership is known.

When comparing corporate ownership with individual ownership, corporate owners invest about 23% less, leverage their companies about 3% more, and payout about 85% less. This is consistent with the view that firms owned by other corporations optimize capital flows between corporations so that payouts can be minimized. Transfer pricing strategies help minimize taxes and increase the allocation efficiency of capital in internal capital markets.

When comparing independent institutional ownership with individual ownership, independent institutions invest about 22% less, hold similar levels of debt, and pay out about 85% more. Independent institutions tend not to have business relationships with the firms they own. These indicate that they curb investment levels and magnify returns through slightly more leverage. Their payout decision is substantially larger than for individual firms. We speculate that this could be because independent institutional owners do not have other means of extracting wealth from the company.

When comparing grey institutional ownership with individual ownership, grey institutions invest about the same, use lightly less leverage by 7%, and pay out substantially more by about 222%. Grey institutions tend to be involved in the business activities of the corporation, which allows them to invest about the same as individual firms. They have a slightly lower appetite for risk but command substantial payouts when compared to individually-owned firms.

Lastly, private equity owners, which we label as active, behave similarly to individual owners. They invest the same, increase leverage slightly (by about 7%), signaling a higher appetite for risk, and command similar payouts.

In Panel B we show the results for firms who also have a majority owner, but that owner is hidden. When comparing the corporate decisions of that owner to an identified individual owner, nameless ownership is characterized with lower investments by a substantial amount of more than 60%, slightly leverage by almost 10%, and lower payouts by more than 150%. The reasons why ownership is hidden are various. Ownership of companies can be hidden due to undesired public and media attention, for fear of kidnapping. Or the reason could also be for expropriation.

Nevertheless, the corporate behavior of those companies is substantially different, which must be in line with their objective.

5. Conclusion

Understanding of the effect of concentrated ownership on private firms is limited. Corporate policies reflect the owner's objectives with respect to key corporate decisions such as investment policies, capital structure decisions, and total payout decisions. In this paper, we examine key corporate policies of private companies which have different types of majority ownership and different types of ownership structures and document first large-scale impacts of ownership on private firm behavior.

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Appendix I

This table contains descriptions and sources of variables used in our analyses.

Variable	Definition
Gross Investment	= (Fixed assets $(FIAS)_t$ – lagged fixed assets $(FIAS)_{t-1}$ + depreciation $(DEPRE)_t$) / Total Assets $(TOAS)_t$. Source: Amadeus
Cash	= Cash and other marketable securities (CASH)/Total Assets (TOAS). Source: Amadeus
Size	= the natural logarithm of total assets (TOAS) in million USD. Source: Amadeus
Tangibility	= the natural logarithm of total assets (TFAS) in million USD. Source: Amadeus
Profitability	= EBITDA(EBTA)/ Total Assets (TOAS). Source: Amadeus
Sales Growth	= (Sales $(TURN)_t$ – Lagged Sales $(TURN)_{t-1}$)/Lagged Sales $(TURN)_{t-1}$. Source: Amadeus
Leverage	= (Long-term debt (LTDB) + Current liabilities (CULI))/Total Assets (TOAS). Source: Amadeus
Total Payouts	= annual change in retained earnings adjusted for net income (–Δosfd + pl) Source: Amadeus
Re_Ta	= retained earnings (OSFD) / Total Assets (TOAS). Source: Amadeus
Age	= year- number of years since addition to the Amadeus database
Private Credit/GDP	= Private Credit/GDP, where private credit is the deposit by money banks and other financial institutions. Source: Global Financial Development Database, World Bank.
Market Cap/GDP	Total value of all listed shares on the national stock exchange as a percentage of GDP. Source: Global Financial Development Database, World Bank.
GDP Growth	The annual percentage nominal growth rate of GDP denominated in the local currency. Source: Global Financial Development Database, World Bank.

Table 1

Summary Statistics

This table shows the summary statistics. Panel A shows the variable summary statistics. Panel B shows the number of observations by country. Panel C shows the number of observations by year and Panel D shows the number of observations by industry. Variable definitions are provided in Appendix I.

Panel A: Summary Statistics

Variable	N	Mean	St Dev	p5	p25	p50	p75	p95
Size	1,444,439	16.352	1.713	13.457	15.347	16.363	17.369	19.159
Tangibility	1,444,439	0.370	0.256	0.028	0.151	0.332	0.554	0.852
Sales Growth	1,444,439	0.046	0.318	-0.364	-0.095	0.031	0.168	0.486
Cash	1,444,439	0.097	0.137	0.000	0.008	0.039	0.127	0.394
Cash Flow	1,434,941	0.083	0.132	-0.066	0.030	0.071	0.129	0.268
Re_Ta	1,443,299	0.249	0.291	-0.160	0.069	0.224	0.433	0.748
Age	945,885	22.260	17.227	4.000	10.000	17.000	29.000	57.000
Gross Investment	1,444,439	0.050	0.102	-0.080	0.002	0.032	0.089	0.242
Leverage	1,444,439	0.561	0.273	0.119	0.356	0.568	0.754	0.961
Payout	1,422,633	0.030	0.135	-0.096	-0.009	0.009	0.053	0.218

Panel B: Observations by Country

Country	N	Country	N
AT	23,032	HU	28,421
BE	46,722	IE	4,121
BG	43,153	IS	267
CH	2,187	IT	206,444
CZ	79,198	LV	621
DE	124,556	NL	2,639
DK	3,521	NO	28,750
EE	6,119	PL	55,807
ES	135,565	PT	37,038
FI	10,128	RO	33,826
FR	179,494	SE	36,465
GB	139,778	SI	9,564
GR	19,648	SK	25,096
HR	18,041	UA	144,238
		Total	1,444,439

Panel C: Observations by Year

Year	N
2001	23,134
2002	28,190
2003	34,069
2004	58,708
2005	78,608
2006	102,709
2007	110,620
2008	116,530
2009	121,944
2010	129,480
2011	129,411
2012	118,168
2013	130,180
2014	138,754
2015	123,934
Total	1,444,439

Panel D: Observations by Industry

Industry Letter Code	Description	N
A	Agriculture, forestry and fishing	30,794
C	Manufacturing	542644
D	Electricity, gas, steam and air conditioning supply	14,368
E	Water supply; sewerage; waste management and remediation activities	24,705
F	Civil engineering	111,338
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	245,543
H	Transporting and storage	87,065
I	Accommodation	49,050
J	Information and communication	53,592
L	Real estate activities	22,151
M	Professional, scientific and technical activities	64,577
N	Administrative and support service activities	82,691
O	Public administration and defense; compulsory social security	1,586
P	Education	18,118
Q	Human health and social work activities	67,472
R	Arts, entertainment and recreation	16,182
S	Other services activities	12,275
T	Undifferentiated goods - and services - producing activities of households for own use	47
U	Activities of extraterritorial organizations and bodies	241
	Total	1,444,439

Table 2

Transitory and Permanent Effect of Ownership Concentration on Corporate Investment

This table shows the regression results which separate the transitory and permanent effect of ownership concentration on corporate investments. Panel A shows the results for ownership concentration and Panel B by full ownership type. Variable definitions are provided in Appendix I. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively. In parentheses we provide the robust standard error.

Panel A: Corporate Investment and Ownership Concentration

	Dependent Variable = *Gross Investment*			
	Transitory Effect	*Permanent Effect*	*Transitory Effect*	*Permanent Effect*
Independent Variables	(1)	(2)	(3)	(4)
Ln(Total Assets)	0.061***		0.061***	
	(0.002)		(0.002)	
Ln(Total Assets)^2	-0.001***		-0.001***	
	(0.000)		(0.000)	
Tangibility	0.274***		0.274***	
	(0.001)		(0.001)	
Sales Growth	0.049***		0.049***	
	(0.000)		(0.000)	
Cash	0.001		0.001	
	(0.001)		(0.001)	
Profitability	0.004***		0.004***	
	(0.001)		(0.001)	
Leverage	-0.003***		-0.003***	
	(0.001)		(0.001)	
GDP Growth	0.004***		0.004***	
	(0.000)		(0.000)	
Market Cap/GDP	0.000***		0.000***	
	(0.000)		(0.000)	
Private Credit/GDP	-0.000***		-0.000***	
	(0.000)		(0.000)	
Ownership Concentration (vs Full ownership)				
Majority Without Any Monitoring	0.000	0.015***		
	(0.000)	(0.000)		
Monitored Majority Ownership	-0.001***	0.010***		
	(0.000)	(0.000)		
No Majority Ownership, Only Minorities	-0.004***	0.004***		
	(0.001)	(0.000)		
Unknown	-0.001***	0.014***		
	(0.000)	(0.000)		
*Ownership Concentration (vs Full ownership) * Domicile*				
Full Ownership - Domestic			0.006***	0.026***
			(0.001)	(0.001)
Majority Without Any Monitoring - Foreign			-0.000	0.013***
			(0.000)	(0.000)
Majority Without Any Monitoring -Domestic			0.003***	0.028***
			(0.001)	(0.001)
Monitored Majority Ownership - Foreign			-0.002***	0.009***
			(0.000)	(0.000)
Monitored Majority Ownership - Domestic			0.004***	0.023***
			(0.001)	(0.001)
Only Minorities - Foreign			-0.003***	0.004***
			(0.001)	(0.000)
Unknown			-0.001**	0.015***
			(0.000)	(0.000)
Constant	-0.770***	-0.051***	-0.768***	-0.049***
	(0.015)	(0.001)	(0.015)	(0.001)
Firm FE	Yes	Yes		
Time FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
R-squared	0.243	0.051	0.243	0.053
N	1,211,923	1,211,923	1,211,923	1,211,923

Panel B: Corporate Investment and Ownership Type

	Dependent Variable = *Gross Investment*	
	Transitory Effect	*Permanent Effect*
Independent Variables	(1)	(2)
Ln(Total Assets)	0.063***	
	(0.002)	
Ln(Total Assets)^2	-0.001***	
	(0.000)	
Tangibility	0.265***	
	(0.001)	
Sales Growth	0.047***	
	(0.000)	
Cash	-0.002	
	(0.002)	
Profitability	0.003***	
	(0.001)	
Leverage	-0.001	
	(0.001)	
GDP Growth	0.005***	
	(0.000)	
Market Cap/GDP	0.000***	
	(0.000)	
Private Credit/GDP	-0.000***	
	(0.000)	
Ownership Type		
Independent	-0.001	-0.041***
	(0.001)	(0.001)
Grey	0.001	-0.047***
	(0.005)	(0.002)
Company	-0.000	-0.043***
	(0.001)	(0.000)
Active	0.010**	-0.070***
	(0.005)	(0.003)
Other named	0.011**	-0.058***
	(0.005)	(0.003)
Nameless	0.005	-0.051***
	(0.008)	(0.003)
Unknown type	0.002*	-0.046***
	(0.001)	(0.001)
Constant	-0.780***	0.021***
	(0.023)	(0.001)
Firm FE	Yes	
Time FE	Yes	Yes
Country FE		Yes
R-squared	0.230	0.059
N	512,992	512,992

Table 3

Transitory and Permanent Effect of Ownership Concentration on Corporate Leverage

This table shows the regression results which separate the transitory and permanent effect of ownership concentration on corporate leverage. Panel A shows the results for ownership concentration and Panel B by full ownership type. Variable definitions are provided in Appendix I.*, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

Panel A: Corporate Leverage and Ownership Concentration

	Dependent Variable = *Leverage*			
	Transitory Effect	*Permanent Effect*	*Transitory Effect*	*Permanent Effect*
Independent Variables	(1)	(2)	(3)	(4)
Ln(Total Assets)	-0.031***		-0.031***	
	(0.002)		(0.002)	
Ln(Total Assets)^2	0.001***		0.001***	
	(0.000)		(0.000)	
Tangibility	-0.070***		-0.070***	
	(0.001)		(0.001)	
Sales Growth	0.022***		0.022***	
	(0.000)		(0.000)	
Short-term Debt	-0.191***		-0.191***	
	(0.001)		(0.001)	
Age	-0.004***		-0.004***	
	(0.000)		(0.000)	
Missing Age	-0.013***		-0.013***	
	(0.001)		(0.001)	
Gross Investment	-0.004***		-0.004**	
	(0.002)		(0.002)	
GDP Growth	-0.001***		-0.001***	
	(0.000)		(0.000)	
Market Cap/GDP	0.000***		0.000***	
	(0.000)		(0.000)	
Private Credit/GDP	0.000***		0.000***	
	(0.000)		(0.000)	
Ownership Concentration (vs Full ownership)				
Majority Without Any Monitoring	-0.001**	-0.010***		
	(0.001)	(0.001)		
Monitored Majority Ownership	-0.004***	-0.007***		
	(0.001)	(0.001)		
No Majority Ownership, Only Minorities	-0.008***	-0.020***		
	(0.001)	(0.001)		
Unknown	-0.003***	-0.027***		
	(0.001)	(0.001)		
*Ownership Concentration (vs Full ownership) * Domicile*				
Full Ownership - Domestic			-0.004***	-0.016***
			(0.001)	(0.002)
Majority Without Any Monitoring - Foreign			-0.000	-0.011***
			(0.001)	(0.001)
Majority Without Any Monitoring -Domestic			-0.008***	-0.012***
			(0.001)	(0.002)
Monitored Majority Ownership - Foreign			-0.004***	-0.007***
			(0.001)	(0.001)
Monitored Majority Ownership - Domestic			-0.010***	-0.013***
			(0.001)	(0.001)
Only Minorities - Foreign			-0.008***	-0.020***
			(0.001)	(0.001)
Unknown			-0.003***	-0.027***
			(0.001)	(0.001)
Constant	1.006***	-0.018**	1.005***	-0.019***
	(0.022)	(0.007)	(0.022)	(0.007)
Firm FE	Yes	Yes		
Time FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
R-squared	0.059	0.066	0.059	0.066
N	1,210,793	1,210,793	1,210,793	1,210,793

Panel B: Corporate Leverage and Ownership Type

	Dependent Variable = *Gross Investment*	
	Transitory Effect	*Permanent Effect*
Independent Variables	(1)	(2)
Ln(Total Assets)	-0.026***	
	(0.004)	
Ln(Total Assets)2	0.001***	
	(0.000)	
Tangibility	-0.046***	
	(0.002)	
Sales Growth	0.023***	
	(0.001)	
Short-term Debt	-0.191***	
	(0.002)	
Age	-0.004***	
	(0.001)	
Missing Age	-0.014***	
	(0.002)	
Gross Investment	-0.001	
	(0.003)	
GDP Growth	-0.002***	
	(0.000)	
Market Cap/GDP	-0.000***	
	(0.000)	
Private Credit/GDP	0.000***	
	(0.000)	
Ownership Type		
Independent	0.002	-0.011***
	(0.002)	(0.002)
Grey	0.022***	-0.056***
	(0.007)	(0.007)
Company	0.002	-0.013***
	(0.001)	(0.001)
Active	0.012	-0.041***
	(0.008)	(0.010)
Other named	-0.003	-0.105***
	(0.008)	(0.008)
Nameless	-0.009	-0.090***
	(0.012)	(0.009)
Unknown type	0.002	-0.041***
	(0.002)	(0.002)
Constant	0.976***	-0.034***
	(0.037)	(0.010)
Firm FE	Yes	
Time FE	Yes	Yes
Country FE		Yes
R-squared	0.055	0.080
N	512,752	512,752

Table 4

Transitory and Permanent Effect of Ownership Concentration on Corporate Payout

This table shows the regression results which separate the transitory and permanent effect of ownership concentration on total corporate payouts. Panel A shows the results for ownership concentration and Panel B by full ownership type. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively. In parentheses we provide the robust standard error.

Panel A: Total Corporate Payout and Ownership Concentration

	Dependent Variable = Total Payout			
	Transitory Effect	*Permanent Effect*	*Transitory Effect*	*Permanent Effect*
Independent Variables	(1)	(2)	(3)	(4)
Ln(Total Assets)	-0.088***		-0.087***	
	(0.003)		(0.003)	
Ln(Total Assets)^2	0.002***		0.002***	
	(0.000)		(0.000)	
Tangibility	0.025***		0.025***	
	(0.001)		(0.001)	
Sales Growth	-0.028***		-0.028***	
	(0.000)		(0.000)	
Cash	0.022***		0.022***	
	(0.002)		(0.002)	
Age	0.002***		0.002***	
	(0.000)		(0.000)	
Missing Age	0.003***		0.003***	
	(0.001)		(0.001)	
Profitability	0.100***		0.100***	
	(0.001)		(0.001)	
Gross Investment	-0.129***		-0.129***	
	(0.002)		(0.002)	
Leverage	0.057***		0.057***	
	(0.001)		(0.001)	
GDP Growth	-0.005***		-0.005***	
	(0.000)		(0.000)	
Market Cap/GDP	-0.000***		-0.000***	
	(0.000)		(0.000)	
Private Credit/GDP	0.000		0.000	
	(0.000)		(0.000)	
Ownership Concentration (vs Full ownership)				
Majority Without Any Monitoring	-0.001**	-0.022***		
	(0.001)	(0.000)		
Monitored Majority Ownership	-0.000	-0.021***		
	(0.001)	(0.000)		
No Majority Ownership, Only Minorities	0.000	-0.023***		
	(0.001)	(0.001)		
Unknown	-0.002***	-0.030***		
	(0.000)	(0.000)		
*Ownership Concentration (vs Full ownership) * Domicile*				
Full Ownership - Domestic			-0.012***	-0.028***
			(0.001)	(0.001)
Majority Without Any Monitoring - Foreign			-0.001	-0.020***
			(0.001)	(0.000)
Majority Without Any Monitoring -Domestic			-0.008***	-0.034***
			(0.001)	(0.001)
Monitored Majority Ownership - Foreign			0.000	-0.021***
			(0.001)	(0.000)
Monitored Majority Ownership - Domestic			-0.008***	-0.031***
			(0.001)	(0.001)
Only Minorities - Foreign			-0.001	-0.023***
			(0.001)	(0.001)
Unknown			-0.003***	-0.031***
			(0.001)	(0.000)
Constant	0.998***	0.024***	0.994***	0.023***
	(0.026)	(0.003)	(0.026)	(0.003)
Firm FE	Yes	Yes		
Time FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes

R-squared	0.094	0.096	0.094	0.097
N	728,870	728,870	728,870	728,870

Panel B: Total Corporate Payout and Ownership Type

	Dependent Variable = *Total Payout*	
	Transitory Effect	*Permanent Effect*
Independent Variables	(1)	(2)
Ln(Total Assets)	-0.132***	
	(0.005)	
Ln(Total Assets)2	0.003***	
	(0.000)	
Tangibility	0.025***	
	(0.002)	
Sales Growth	-0.026***	
	(0.001)	
Cash	0.021***	
	(0.003)	
Age	0.003***	
	(0.001)	
Missing Age	0.005***	
	(0.002)	
Profitability	0.074***	
	(0.001)	
Gross Investment	-0.125***	
	(0.003)	
Leverage	0.055***	
	(0.002)	
GDP Growth	-0.005***	
	(0.000)	
Market Cap/GDP	-0.000***	
	(0.000)	
Private Credit/GDP	-0.000	
	(0.000)	
Ownership Type		
Independent	-0.005***	0.056***
	(0.002)	(0.001)
Grey	0.004	0.078***
	(0.007)	(0.003)
Company	-0.004***	0.060***
	(0.001)	(0.001)
Active	-0.010	0.085***
	(0.007)	(0.005)
Other named	-0.002	0.023***
	(0.008)	(0.004)
Nameless	-0.004	0.038***
	(0.012)	(0.004)
Unknown type	-0.006***	0.039***
	(0.001)	(0.001)
Constant	1.442***	-0.032***
	(0.046)	(0.005)
Firm FE	Yes	
Time FE	Yes	Yes
Country FE		Yes
R-squared	0.077	0.102
N	320,043	320,043

Tables 5

Matching Analysis for Concentrated Ownership

This table shows matching results where the control group are firms with 96% and higher ownership. The treated groups are different types of concentrated ownership structures. The matching is performed using the nearest neighbor methodology with Abadie and Imbens (2006, 2011) bias adjustment for continuous variables. Variable definitions are provided in Appendix I. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively. In parentheses we provide the robust standard error.

	Gross Investment			Leverage			Payout		
Difference between Types of the Concentrated Ownership	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean
(Firms with *Majority Without Any Monitoring* – Firms with *Full Individual Ownership*)	147,967	0.0019*** (0.0004)	6.11		0.0050*** (0.0010)	0.83		-0.0061*** (0.0005)	-142.79
(Firms with *Monitored Majority Ownership* – Firms with *Full Individual Ownership*)	210,148	-0.0009*** (0.0003)	-2.90		0.0018** (0.0009)	0.30		-0.0044*** (0.0004)	-103.00
(Firms with *No Majority Ownership, Only Minorities* – Firms with *Full Individual Ownership*)	57,681	-0.0053*** (0.0006)	-17.06		-0.0032** (0.0016)	-0.53		-0.0069*** (0.0008)	-161.52

Tables 6

Matching Analysis for Corporate Decisions

This table shows matching results between types of ownership with respect to key corporate decisions. The matching is performed using the nearest neighbor methodology with Abadie and Imbens (2006, 2011) bias adjustments for continuous variables. Panel A shows the results for firms with known ownership types and Panel B shows the results when the majority owner is hidden. Variable definitions are provided in Appendix I. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively. In parentheses we provide the robust standard error.

Panel A: Ownership is Known

	Gross Investment			Leverage			Payout		
Difference between Types of the Majority Ownership	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean
(Firms with *Corporate Ownership* – Firms with *Individual Ownership*)	213,669	-0.0071*** (0.0004)	22.85	213,669	0.0162*** (0.0011)	2.70	215,653	-0.0036*** (0.0005)	-84.27
(Firms with *Independent Institution Ownership* – Firms with *Individual Ownership*)	73,839	-0.0069*** (0.0006)	-22.21	73,839	0.0270*** (0.0018)	4.50	74,117	0.0036*** (0.0007)	84.27
(Firms with *Grey Institution Ownership* – Firms with *Individual Ownership*)	2,513	-0.0023 (0.0038)	-7.40	2,513	-0.0463*** (0.0091)	-7.72	2,557	0.0095* (0.0052)	222.38
(Firms with *Active Ownership* – Firms with *Individual Ownership*)	1,335	-0.0016 (.0040)	-5.15	1,335	0.0439*** (0.0103)	7.32	1,352	0.0029 (0.0054)	67.89

Panel B: Ownership is Known is Hidden

	Gross Investment			Leverage			Payout		
Difference between Types of the Majority Ownership	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean	*N-Matched*	ATET	% of Mean
(Firms with *Nameless Ownership* – Firms with *Individual Ownership*)	1,475	-0.0037*** (.0035)	-11.91	1,475	-0.0374*** (0.0089)	-6.23	1,490	-0.0065* (0.0036)	-152.16

Online Appendix

Table A

Covariate Balance Summary

This table shows the Covariate Balance Summary for Table 6.

Panel A: Balance Summary for Table 6

(Firms with *Corporate Ownership* – Firms with *Individual Ownership*)

Gross Investment				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	-0.946	-0.029	0.795	1.057
Tangibility	0.089	0.007	0.831	1.010
Sales Growth	0.023	0.001	1.226	1.038
Leverage	-0.057	-0.001	0.953	1.021
Leverage				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	-0.946	-0.028	0.795	1.051
Tangibility	0.089	0.007	0.831	1.009
Sales Growth	0.023	0.001	1.226	1.041
Payout				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	-0.943	-0.052	0.795	1.085
Tangibility	0.090	0.014	0.833	1.012
Sales Growth	0.025	0.002	1.214	1.066
Gross Investment	0.110	0.007	1.192	1.049
Leverage	-0.059	-0.001	0.940	1.039

(Firms with *Independent Institution Ownership* – Firms with *Individual Ownership*)

Gross Investment				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.929	0.076	1.141	1.215
Tangibility	-0.113	0.000	1.175	1.031
Sales Growth	-0.084	-0.006	0.759	1.090
Leverage	0.113	0.013	0.917	1.059
Leverage				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.929	0.069	1.141	1.198
Tangibility	-0.113	0.002	1.175	1.021
Sales Growth	-0.084	-0.005	0.759	1.081
Payout				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.930	0.102	1.133	1.248
Tangibility	-0.113	0.001	1.172	1.033
Sales Growth	-0.086	-0.008	0.769	1.114
Gross Investment	-0.159	-0.012	0.809	1.106
Leverage	0.116	0.018	0.930	1.101

(Firms with *Grey Institution Ownership* – Firms with *Individual Ownership*)

Gross Investment				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.193	0.145	1.610	1.374
Tangibility	0.234	0.004	1.651	1.070
Sales Growth	0.031	0.001	0.960	1.227
Leverage	-0.159	0.012	1.145	1.102
Leverage				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.193	0.148	1.610	1.353
Tangibility	0.234	0.005	1.651	1.020
Sales Growth	0.031	-0.006	0.960	1.171
Payout				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.199	0.182	1.610	1.415
Tangibility	0.253	0.013	1.641	1.069
Sales Growth	0.029	0.003	0.987	1.201
Gross Investment	0.083	0.007	1.279	1.173
Leverage	-0.143	0.023	1.222	1.162

(Firms with *Active Ownership* – Firms with *Individual Ownership*)

Gross Investment				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.289	0.131	0.916	1.313
Tangibility	0.168	0.019	1.315	1.064
Sales Growth	-0.004	0.001	0.787	1.166
Leverage	0.102	0.022	0.867	1.057
Leverage				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.289	0.136	0.916	1.287
Tangibility	0.168	0.024	1.315	1.075
Sales Growth	-0.004	0.000	0.787	1.045
Payout				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	1.296	0.192	0.898	1.289
Tangibility	0.180	0.032	1.305	1.074
Sales Growth	0.007	0.001	0.820	1.120
Gross Investment	0.077	-0.002	1.253	1.110
Leverage	0.138	0.039	1.141	1.229

Panel B: Balance Summary for Table 6

(Firms with *Nameless Ownership* – Firms with *Individual Ownership*)

Gross Investment				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.449	0.016	1.655	1.073
Tangibility	0.081	0.000	0.851	1.011
Sales Growth	-0.047	-0.006	0.683	1.049
Leverage	-0.217	-0.005	0.848	1.033
Leverage				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.449	0.016	1.655	1.073
Tangibility	0.081	0.000	0.851	1.011
Sales Growth	-0.047	-0.006	0.683	1.049
Payout				
	Standardized Differences		Variance Ratio	
Matching Variable	Raw	Matched	Raw	Matched
Size	0.449	0.017	1.635	1.091
Tangibility	0.078	0.012	0.855	1.007
Sales Growth	-0.048	-0.018	0.696	1.058
Gross Investment	-0.075	-0.006	0.888	1.064
Leverage	-0.197	-0.003	0.879	1.077