DISCUSSION PAPER SERIES

DP15398

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FINANCIAL ECONOMICS

ISSN 0265-8003

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Discussion Paper DP15398
Published 22 October 2020
Submitted 21 October 2020

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Abstract

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JEL Classification: G32, L26

Keywords: Family control, ownership, Succession

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Acknowledgements
We are grateful for excellent and helpful comments from an anonymous referee, the editor, Hsi-Mei Chung, Royston Greenwood, Yi-Chun Lu, Danny Miller, Daniel Wolfenzon and seminar participants at the Entrepreneurship Theory and Practice conference at the University of Alberta, Beijing University, the Columbia/INSEAD conference on Family Firms 2018, the Conference on Family Firms in Lehigh University, Copenhagen Business School, Development Bank of Japan, European Finance Association meetings, Hanken School of Economics, and INSEAD Brown Bag (economics and finance). This project benefited from the financial support from Singapore Ministry of Education Academic Research Fund Tier 1 grants (R-315-000-111-112 & R315-000-086-133), the visiting scholar program of the Research Institute of Capital Formation at the Development Bank of Japan, JSPS KAKENHI Grant Numbers JP15K03563 and the Danish National Research Foundation under the Niels Bohr Professorship.

Dynastic Control without Ownership: Evidence from Post-war Japan

By

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ABSTRACT

Dynastic-controlled firms are led by founding family CEOs while the family owns an insignificant share of equity (defined as less than five percent). They represent 7.4% of listed firms in post-war Japan, include well-known firms such as Casio, Suzuki and Toyota, and are often grouped with widely-held firms in the literature. These firms differ in key performance measures from both traditional family firms and non-family firms, and evolve from the former as equity-financed growth dilutes the founding family's ownership over time. In turn, the transition from dynastic control to non-family status is driven by a diminution of strategic family resources.

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We are grateful for excellent and helpful comments from an anonymous referee, the editor, Hsi-Mei Chung, Royston Greenwood, Yi-Chun Lu, Danny Miller, Daniel Wolfenzon and seminar participants at the Entrepreneurship Theory and Practice conference at the University of Alberta, Beijing University, the Columbia/INSEAD conference on Family Firms 2018, the Conference on Family Firms in Lehigh University, Copenhagen Business School, Development Bank of Japan, European Finance Association meetings, Hanken School of Economics, and INSEAD Brown Bag (economics and finance). This project benefited from the financial support from Singapore Ministry of Education Academic Research Fund Tier 1 grants (R-315-000-111-112 & R315-000-086-133), the visiting scholar program of the Research Institute of Capital Formation at the Development Bank of Japan, JSPS KAKENHI Grant Numbers JP15K03563 and the Danish National Research Foundation under the Niels Bohr Professorship.

"Ever since he was a little boy, his mother always told him, 'One day you'll be president.'" [1]
About Toyota's President, Akio Toyoda

1. Introduction

Can business dynasties continue to exercise control over firms they have founded even when their ownership stakes become insignificant? We define dynastic-controlled[2] firms as those where a member of the founding family serves as the CEO[3] while the family owns less than 5% of equity. Despite anecdotal evidence on the presence of dynastic-controlled firms in other advanced economies including the U.S., we provide the first systematic documentation on their prevalence, persistence and performance based on the universe of public listed firms in post-war Japan.[4]

Japanese governance system is ideal for studying dynastic control for two reasons. First, unlike the U.S., Japan does not permit dual-class voting shares, so the one-share-one-vote rule applies. Second, unlike many other Asian countries, pyramidal family ownership structures are, as a rule, absent in Japan.[5] Thus, voting control and ownership go hand in hand in Japan, and a loss in ownership is strictly correlated to a loss in voting control.

This study makes four distinctive contributions to the literature on family firms. First, we show that the prevalence of dynastic-controlled firms is non-trivial – they represent 7.4% of all listed firms, and 16.3% of all firms incorporated as family firms, on

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[1] Jason Clenfield and Yuki Hagiwara, Doubting Toyota Prince Defeats Crisis to Prove Self Wrong: Cars, Bloomberg, November 21, 2013 (online).

[2] The term *dynastic-controlled* is motivated by the seminal work of Jensen and Meckling (1976) on the separation of ownership and management control.

[3] In Japan the highest-ranking executive officer is the Shacho, or President, of the company. In keeping with the literature (see Kaplan, 1994 and Crossland and Hambrick, 2007), we take the Shacho's position as the CEO, and use the terms Top Management and CEO interchangeably in the rest of the paper. For instance, Crossland and Hambrick (2007) note that "In Japan, the top executive is the shacho (president)".

[4] Where such firms have merited mention, they have been bracketed either with a broader group of traditional family firms that have control plus ownership, or, more commonly, with widely-held non-family firms. See, for instance, Masulis et al. (2011), footnote 6: "*There are a few cases where a sample firm is reported to be effectively controlled by the founding family through executive and board positions, but the family has divested its interests to below 10% of voting rights (e.g., the Banco Santander group in Spain). For consistency, these firms are categorized as widely held*." See also Section 3 and footnote 25 for a further discussion.

[5] Masulis et al (2011) document that Japan resembles the UK and the USA in the absence of pyramidal ownership structures. See also, Morck and Nakamura (1999) and Morck, Nakamura and Shivdasani (2000).

Japanese exchanges between 1955 and 2000. In IPO time, such firms represent 10.1% of all firms incorporated as family firms that survive 10 years after their IPO, and 20.7% of all those that survive 20 years after their IPO. To further illustrate the importance of dynastic-controlled firms we highlight the cases of Casio, Suzuki and Toyota Motor.

Second, we provide an extended literature review of 112 empirical papers covering 135 definitions of family firms. The literature relies on binary definitions of family firms and more than half of the definitions use ownership as the sole criterion to define a family firm – the most common minimum threshold is 20% of equity for public traded firms. The rest use a variety of definitions including management control and board presence. Three out of four definitions group dynastic control firms as widely-held non-family firms and the rest categorize them as family firms together with firms where the family has significant ownership with or without the CEO position.

Third, we compare dynastic-controlled firms to two groups of firms: first, to *traditional family firms*, where the founding family retains significant ownership (>5%) and the CEO's position, and second, to *ex-family firms* where the founding family owns less than 5% of equity and has relinquished the CEO position permanently. We find that dynastic-controlled firms are associated with superior accounting performance relative to ex-family firms, but under-perform traditional family firms.

Our final contribution is to analyse the factors that drive traditional family firms to evolve into dynastic-controlled firms, and eventually, the factors that drive dynastic-controlled firms to become ex-family firms. We find that the former is driven by growth induced need for finance, while the latter is correlated with diminution of family resources such as legacy, education and talent.

The rest of the paper is organized as follows. In the next section, we provide case studies of Casio, Suzuki and Toyota Motor to illustrate three different ways in which families retain control when their ownership is materially diluted. In Section 3, we provide a short summary of the literature review of 112 studies covering 135 family firm definitions and show how extant literature has categorized dynastic-controlled firms. The full survey is included as an Internet Appendix. Section 4 describes our data. Section 5 documents the prevalence of dynastic-controlled firms among public listed firms in post-war Japan. In section 6, we show that dynastic-controlled firms are different from both traditional family firms and non-family firms along widely-followed performance metrics. Section 7 identifies factors driving the transition from traditional family firms to dynastic-controlled firms, and eventually from dynastic-controlled firms to ex-family firms. We conclude in Section 8.

2. Case studies: Casio, Suzuki and Toyota Motor

The three well known Japanese companies, Casio, Suzuki and Toyota Motor, illustrate how the founding family maintains management control through family talent, advanced governance mechanisms and board control in situations where they have very little ownership. Figure 1 shows the evolution of family ownership and top management from 1960-2019 in these three firms. In all cases, ownership stakes of the founding families were either never significant, or reduced to insignificant levels by the end of the sampling period. Thus, according to our definition of less than 5% ownership and family CEO, all three firms are dynastic controlled today.

2.1. Casio Computer Company: Control through talented family members.

We start with Casio, the iconic calculator and electronic watch company, and show how equity financed growth has diluted founding family ownership over time. We submit that family talent nevertheless has kept the founding family in control to this day.

Casio was founded in 1946 as *Kashio Seisakujo* by a team of founders, father and four sons from the Kashio family. The Kashio men worked together to develop the world's first electronic calculator that was launched in 1957. To finance expansion, Casio went public in 1970 on the Tokyo Stock Exchange, with the family retaining 60% of shares. Three years later, Casio also listed on the Amsterdam Stock Exchange, and on the Frankfurt Stock Exchange in 1979. These listings and the equity issuances following them resulted in a steep decline in the founding family's relative equity ownership as shown in Figure 1: 19.3% in 1980, 8.1% in 1990, 5.7% in 2000 and below 5% in most years after that.[6] It is

[6] We include shares held by the unlisted Casio Brothers Limited and the Casio Science Foundation alongside the direct equity stakes held by the Kashio family.

easy to categorize Casio today as a widely-held firm, with financial institutions as its largest shareholders.

In reality, however, the Kashio family has always been running Casio. The Kashio brothers have taken turns holding the top management positions.[7] Casio's first CEO was the founding father, and was succeeded by his son, Tadao, who had a reputation as a financial wizard and served as CEO for 28 years. Tadao retired at the age of 71 in 1988, and remained as Casio's adviser until his death in 1993. The second brother, Toshio (born in 1925), was the inventor of many of Casio's hit products and served as board Chairman from 1988 until 2011, and then as honorary chairman until his death in 2012 at the age of 87. The third brother, Kazuo (born in 1929), with an expertise in sales and marketing, led Casio as its third CEO from 1988 and held the dual positions of CEO and board Chairman in 2011. The fourth brother, Yuiko (born in 1930), was the production chief and served as vice-president from 1991 until his retirement in 2014 at the age of 84.

Kazuo worked with the company well into his 80s to groom his successors who were his eldest son and three nephews. In June 2015 when Casio's profit hit an all-time high, Kazuo promoted his 49-year-old son, Kazuhiro, as Casio's CEO, while he remained as board Chairman.[8] When Kazuo died in 2018, Kazuhiro became Chairman in addition to his CEO role. A younger Kashio scion, Tadao's son, already works in the executive team and another cousin is a director in the firm. The presence of the Kashio founders and heirs in the top management of Casio has not been challenged by the continued erosion of their equity ownership, and highlights the importance of family resources in maintaining control in the hands of the founding family.

2.2. Suzuki Motor Corporation: Control through arranged marriages and adult adoptions

Ever since it went public in 1949, the founding Suzuki family has *never been* listed among the top ten shareholders of their iconic namesake company. For more than 70 years average family ownership has been less than 1%. Suzuki's largest shareholders have been

[7] Casio company website, accessed on September 10, 2020, https://www.casio.co.jp/company/history/.

[8] Changing of the Guard: Casio president set to hand reins to son, Nikkei Asian Review, May 12, 2015, accessed on January 19, 2020, https://asia.nikkei.com/Business/Companies/Casio-president-set-to-hand-reins-to-son.

banks and insurance companies that have often held their shares for decades.

Suzuki was established by Michio Suzuki in 1909. Osamu Suzuki, the current CEO and patriarch, entered the Suzuki family through an arranged marriage to the eldest daughter of Suzuki's 2nd CEO, Shunzo Suzuki. Osamu adopted the Suzuki surname, began working at Suzuki in 1958 and rose through the ranks to senior management positions. In 1978 when Chairman Shunzo passed away and Suzuki's 3rd CEO, Jitsujiro Suzuki, had health problems, Osamu was promoted as the CEO at the age of 48. Before Osamu, his two predecessor CEOs, Shunzo and Jitsujiro, were also the founder's adopted sons-in-law who took on the Suzuki name after arranged marriages.

Osamu followed the family's succession tradition by grooming his son-in-law, Hirotaka Ono, to be the next CEO but unfortunately, Ono died of cancer in 2007 at the young age of 52. In 2008, partly to cope with the financial crisis, Osamu, aged 78 at the time, assumed the positions of joint CEO/Chairman. In 2015, his 55-years old eldest son, Toshihiro Suzuki, was appointed as the CEO, while Osamu continued serving as Chairman, and has shown no signs of retiring even as he turned 90 in 2020.

The Suzuki family has always controlled their namesake company without any significant ownership stakes. This has been possible through advanced governance mechanisms focused on increasing the potential pool of talent through arranged marriages and adoption of sons-in-law.

2.3. Toyota Motor Company: Control through intra-group board ties

Toyota Motor is one of the world's largest automobile manufacturers, with a market capitalization at its peak of USD 220 billion in fiscal year 2015. The Toyota Motor case illustrates how complex ownership and management structures over a group of firms can empower the family, even when direct family ownership stakes are insignificant.

Toyota Motor is part of the Toyota Group comprising a network of companies connected to each other via cross-shareholdings and shared top executives from the extended Toyoda clan. During the last 50 years, the largest shareholders in Toyota Motor have been banks, financial investors and a handful of group firms such as Toyota Industries

Corporation and Denso Corporation. The Toyoda family's direct ownership stake in Toyota Motor has been insignificant throughout our sample period.

After the war, Toyota Motor was led by the founder's son, Kiichiro Toyoda, and was on the brink of bankruptcy in 1949. The apex firm in the Toyota group, Toyota Industries, sent its CEO, Taizo Ishida, to rescue Toyota Motor and act as the family's caretaker. Following the death of Kiichiro in 1952, Taizo continued running Toyota Motor until 1961, while grooming young Eiji Toyoda as the next successor (Bennedsen et al., 2016). Eiji was named as Toyota Motor's 5th CEO in 1967, a position he held until 1981 when he became the chairman of its board. Eiji grew Toyota Motor into a global leader in the Automotive Industry.

Toyota Motor's 6th CEO was Shoichiro Toyoda, the first son of Kiichiro and a designated heir by birth. Shoichiro served as CEO from 1982-1991, and groomed his younger brother, Tatsuro, for succession. Tatsuro was promoted to Toyota Motor's 7th CEO in 1991 where Shoichiro became chairman. Toyota Motor's next three CEOs were career employees (or *sararimen*) namely Hiroshi Okuda (1995-1999), Katsuaki Watanabe (1999-2005), and Fujio Cho (2005-2009). During this high growth decade, Toyota Motor looked as if it had transformed itself to become a non-family firm run by professional managers. However, two Toyoda seniors, Eiji and Shoichiro, retained influential board positions, and in reality, the professionalization of top management proved to be temporary[9]

Akio Toyoda, the only son of Shoichiro, was told by his mother since he was little that *"One day you'll be president."*[10] The prophecy came true in June 2009 when 49-years old Akio was named as Toyota Motor's 11th CEO. His appointment came on the heels of the company's largest recall scandal, Toyota Motor's worst crisis in decades. The company needed the Toyoda family name to signal that it was returning to its roots and would restore the values, quality and reputation upon which the business was founded. The stock price of Toyota Motor increased 3% when Akio's appointment was announced.

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[9] Family tensions and succession manoeuvring darken Toyota's top ranks, *Sentaku*, December 2016, accessed on January 18, 2018, https://www.sentaku.co.jp/articles/view/16445.

[10] See footnote 1.

Mr. Akio's equity ownership in Toyota Motor is less than 0.1% (his father owned 0.2%, as of 2008). Based solely on equity ownership, the Toyoda family's control over the firm might appear puzzling. .

Casio, Suzuki and Toyota Motor reflect three different ways in which founding families have retained management control when rapid growth diluted their ownership to insignificant levels. The Casio family has kept control through a line of very talented family managers. The Suzuki family has broadened its talent pool for succession through the use of arranged marriages and adult adoptions for three successive generations. The Toyoda family has retained control via board presence supported by cross shareholdings within the Toyota group of firms and the use of career professional CEOs during periods where family heirs were not ready to take the helm.

2.4. Non-Japanese Cases of Dynastic Controlled Firms

Do dynastic control firms exist beyond Japan? In the next section, we note that the handful of dynastic control without ownership cases in the literature are not time persistent – these firms have all except one been acquired over time. Furthermore, many of the time persistent cases are supported by control-enhancing mechanisms such as dual class shares.[11]

Nevertheless, dynastic control firms do exist outside Japan and our first case is the Taiwanese Sinon Corporation,[12] founded in 1955 by Tien-Fa Yang with support from the Horng family. Sinon grew from a single agrochemical factory into a diversified business group with more than 3000 employees, mainly in Taiwan but with subsidiaries in China, Thailand, the U.S. and Australia. Tien-Fa Yang passed away in 1989 and was succeeded by

[11] Examples include many European-listed family-controlled companies and the J. M. Smucker Company in the U.S. Smucker has been run by the eponymous family for four generations, even though their equity stake in the firm is now less than 6%. A unique aspect of their share structure is Time Phased Voting. Under this set-up, 1 share in Smucker equals 1 vote if held for less than 4 years and equals 10 votes if held for more than 4 years. A few other well-established companies such as the Ford Motor Company and the New York Times also vest control in the hands of the founding family with very little equity ownership, albeit in both cases dual voting shares empower the founding family to exercise board control of the firms.

[12] We are indebted to Hsi-Mei Chung and Yi-Chun Lu for suggesting this case, providing ownership and management data and translating press coverage around the death of Wen-bin Yang.

his son Wen-bin Yang, who listed the company on the Taiwan Stock Exchange. The company expanded and diversified over the next 30 years leading to a steady decline in the Wang family's share of ownership. The family ownership was about 6% in 1997, fell to 4.5% in 2003, 2.8% in 2010, and has stayed between 2%-3% since then. From 1989 to 2015 Wen-bin Yang held both the title of Chairman and Group Manager (CEO). In 2015 Wen-bin Yang suddenly passed away and left a succession vacuum. The press emphasized that Mr Po-Yen Horng[13] took up the chairman position temporarily until the third generation of the Yang family is ready.[14] It seems that dynastic control by the Yang family is supported by the Horng family - family friends and long-term investors.

Our second case is Banco Santander from Spain, with a market capitalization of around 75 billion euros in 2019 which makes it among the top 15 banks in the world. Santander is listed on five global stock exchanges and all shares carry equal votes. The Botín family has run Banco Santander since 1857 for four generations. As was his father, Emilio Botín was groomed to be the successor, entering the bank at the age of 24 and rising quickly through the executive ranks. At the age of 52 in 1986, Emilio replaced his father as CEO and steered Banco Santander from a small regional bank to become not only the largest bank in Spain but also in the Eurozone. Due to rapid expansion, the family ownership fell to around 2% by the time of his sudden death in 2014. Following his death, Ana Botín, his 53 years old daughter, was nominated as the Chairperson to run the banking empire. When Ana Bótin was appointed to the top position it was highlighted that she possessed strong family assets associated with the family's legacy, continuity and network. During Ana's tenure running Banco Santander, the family's ownership has declined to less than 0.15% by 2019. Currently, asset management companies and investment banks count among the bank's top 10 shareholders.

[13] Po-Yen Horng and his family own less than 4% of Sinon's equity.

[14] They are Wen-bin Yang's second daughter, Renya Yang, and two nephews, Renming and Renyou Yang. The current interim group manager is a long-term career employee, Tsu-fang Yen.

3. Categorization of dynastic-controlled firms in the family business literature[15]

In this section we describe the large variety of family firm definitions employed in the literature and show how existing studies have failed to recognize dynastic-controlled firms as a separate class. Definitions matter in generating even the most basic insight about family firms. For example, Anderson and Reeb (2003) find superior performance for family firms relative to non-family firms. However, subsequent papers contest this result: Villalonga and Amit (2006) and Miller et al (2007) show that the superior performance of family firms is driven by the presence of founder-controlled firms. If founder-controlled family firms are accorded a separate category, the remaining class of heir-managed firms' performance is significantly lower (Bennedsen et al 2007).

Extant definitions of family firms are based on multiple criteria including equity ownership, family involvement in executive management, boards, and planned or realized succession within the family. Almost all empirical papers take a binary approach, categorizing firms into family or non-family firms.[16]

Our survey includes 112 studies spanning 135 family firm definitions. We find that in approximately half the studies (49 pct of the studies and 53 pct of the definitions) ownership is the sole and sufficient basis of defining a family firm.[17] The vast majority of these studies use a minimum qualifying threshold varying from 5% of equity to more than 50%.[18] In another 14% of studies (12% of the definitions), ownership <u>and</u> top management

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[15] This section is based on a summary of our survey of 112 empirical papers on family firms (see Internet Appendix for the full survey).

[16] An alternative to the binary approach is to start with the universe of all firms and then analyse how particular family structures impact governance (see, e.g. Bennedsen et al. (2007), Bertrand and Schoar (2006)).

[17] Examples include Ang, Cole, and Lin (2000), Franks et al. (2005) and Maury (2006). A few studies do not specify exact threshold values but either requires family to be the largest shareholder, the ultimate controller or the firm self-declare as a family firm.

[18] The specific ownership threshold used is subject to data availability. For instance, in many countries, owners do not have to declare ownership below 5 pct. In such cases using ownership as a defining criterion will fail to capture firms where the founding family has, say, 3 pct of equity, but does not need to declare it. Furthermore, equity ownership is defined as the fraction of outstanding shares in the hands of the family, with only a handful of studies (e.g. Masulis et al., 2011) defining ownership based on the fraction of ultimate voting rights that may be disproportional to cash flow rights under a variety of control enhancing mechanisms such as dual class shares and pyramidal ownership structures.

jointly determine if the firm is classified as family. In these studies, family firm status is affirmed where the family owns more than the threshold equity level *and* a family member is the CEO of the company.[19] Third, about 9% of the studies (7% of the definitions) use the top executive position as the sole criterion to define a family firm.[20] Fourth, 4% of the studies (3% of the definitions) use either ownership <u>or</u> top management position independently as sufficient criteria.[21] In the remaining quarter of all studies, board membership is a determinant of family firm status.[22]

None of the studies we have surveyed has defined dynastic-controlled firms as an independent category. Based on our survey, 73% of the definitions would categorize dynastic control firms as widely-held non-family firms[23] and the rest as family firms.[24] In the following sections we provide evidence that dynastic-controlled firms are different with respect to firm value, accounting performance and other frequently used metrics from both traditional family firms and non-family firms.

Only four studies in our survey acknowledge the existence of dynastic-controlled firms, albeit as isolated cases. In these studies, the authors provide an example and then proceed to include such firms into the broader group of family firms where the family has significant ownership, or alongside widely-held firms. Furthermore, in all but one case mentioned in the literature, family control has not been time persistent: these firms were eventually sold to other companies via takeovers that ended family control.[25]

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[19] Examples include Gomez-Mejia et al. (2001) and Smith and Amoako-Adu (1999).

[20] Examples include Fahlenbrach (2009) and McConaughy et al., (1998).

[21] Examples include Mehrotra et al. (2013) and Miller et al. (2007).

[22] Nine percent of studies (7% of definitions) use board presence, ownership and CEO position as individually sufficient conditions. 18% of studies (14% of definitions) employ board presence in combination with ownership and/or top management to bestow family status. See the Internet Appendix for further details.

[23] Examples include Masulis (2011) that use a 10% ownership threshold and Claessens et al. (2000) that requires that the family has the largest share of voting rights.

[24] Examples include Anderson and Reeb (2003) and Anderson, Manzi and Reeb (2003) who use ownership of the founding family with no lower threshold level as the definition of family firms.

[25] Six cases have been proposed as examples of family firms possessing control with little ownership: the Ablon family controlling the Ogden company (Anderson and Reeb, 2003); the Cadbury and Schweppes families controlling their namesake companies, and the three GKN families controlling the GKN company (both in Franks et al, 2009); family control of Tektronik during 1994–1996 (Villalonga and Amitt, 2006); and, finally, the family control of Anheuser-Busch (the referee). Ogden was acquired by Danielson Holding Company in 2004 and is called Covanta Energy today. Franks et al. (2009) highlight the Cadbury family's control over the management of the eponymous company ever since its establishment in 1824, even when the

To summarize, our extensive survey of the literature shows that there is no single study that analyses dynastic controlled firms as a separate category and the highlighted cases have not been time persistent. In the rest of this paper we show that dynastic control is not only prevalent and time persistent, but that these firms differ in important ways from traditional family and non-family firms.

4. Data Sources

We construct a dataset of all companies that went public in the post-war period in Japan (after the stock exchanges re-opened in 1949). Ownership data are from the Development Bank of Japan database for 1981 through 2000, as are our accounting data from 1962 through 2000. The Toyo Keizai database provides information on stock prices and board composition from 1989 through 2000. We exclude a small number of the firms where financial or ownership data are missing. The final sample covers almost the entire universe of public listed firms in Japan from 1955-2000.

To identify family firms, we follow Mehrotra et al. (2013). Ownership data disclosed in annual reports include: (1) the stake of each of the top ten shareholders, (2) the combined stake of all banks and other financial sector firms, and (3) the combined stake of all other firms. Board data include detailed information on each director's education (alma mater, major and graduation year), birth date, year initially hired, year appointed to the board, year made CEO (*shacho*) or Chairman (*kaicho*), and prior work experience.

We identify each firm's founder by consulting the following sources: (1) commemorative volumes celebrating company anniversaries, (2) Toyo-keizai Shimposha

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family's beneficial ownership stake fell to negligible levels. The family's ownership were diluted first upon the private merger with J.S.Fry & Sons in 1919 (another Quaker family firm), then through an initial public offering in 1962 and finally, via a merger with Schweppes in 1969. Eventually, with little material ownership and after they were forced by aggressive financial shareholders to split up Cadbury and Schweppes, the Cadbury family lost a bitter battle for control against an unsolicited takeover by Kraft Foods (now Modelez) in 2010 (see Bennedsen and Cadbury, 2013). GKN were family controlled since 1758 but were acquired by Melrose Industries in a controversial hostile takeover in 2018. Tektronix was acquired by Danaher Corporation in 2007 in an unsolicited takeover. Anheuser-Busch was served briefly by a fourth-generation Busch family scion until the firm was acquired by Inbev in a hostile takeover in 2008. Finally, as we discussed in Footnote 3, Masulis et al. (2011) mention Banco Santander as an example of family control but categorize it as a widely held company without further discussion.

(1995), (3) Nihon Keizai Shimbun (2004) and (4) company websites. To identify relationships within the founding family, we use various Japanese language sources: (1) Tokiwa Shoin (1977) provides the family trees of 1002 business leaders, (2) a series of books published by Zaikai Kenkyusho (1979, 1981, 1982, 1983, 1985) provides the names of family members of the boards of listed firms, and (3) a set of thirty-eight Nihon Keizai Shimbun (2004) volumes provides the biographies of 243 prominent post-war business leaders.

Additional information on family relationships is obtained from the following sources: Japanese equivalents of Who's Who published by Jinjikoshinjo, the Nikkei Telecom 21 database of corporate news items published from 1975 onwards in the Nikkei group of newspapers (Nihon Keizai Shimbun, the Nikkei Business Daily, the Nikkei Financial Daily and the Nikkei Marketing Journal), company archives, Koyano (2007) and website searches. Using all this information, we annotate family trees with the names and business roles of all members of each firm's founding family. This information lets us identify each firm's founder(s) and ultimate owners, and ascertain each CEO/Chairman's relationship, if any, to the founding family by blood, marriage, or adoption.

5. The prevalence and persistence of dynastic control firms

In this section we analyse the prevalence and persistence of dynastic control firms in post-war Japan. We start with charting the number of dynastic controlled firms as a fraction of all listed firms over this period. We then analyse the share of family listed firms that over time become dynastic-controlled.

Panel A in Figure 2 describes the prevalence of dynastic-controlled firms in calendar time over our sample period. The solid black line depicts the share of dynastic controlled firms out of all public listed firms using the 5% ownership threshold. The upper grey line shows the share of dynastic-controlled firms with a 20% minimum ownership threshold.

First, using the 5% ownership threshold to define dynastic-control, we note that they represent 7.4% of all listed firms across our sample period of 1955-2000. In terms of numbers, dynastic-controlled firms represent anywhere from around 50 firms in the late 1950s, to almost 200 firms at their peak in the late 1980s. By construction, the fraction of dynastic-controlled firms is significantly higher (22% of all listed firms) when the higher threshold of 20% is used to define dynastic control. We also note that the relative abundance of dynastic-controlled firms appears to be pro-cyclical with the Nikkei Index.[26] Thus, towards the end of the so-called lost decade of the 1990s when the Nikkei was down more than 50% from its peak in 1989, we find that the share of dynastic-controlled firms is reduced to 5% of listed firms using the 5% ownership threshold and to 15% of listed firms using the 20% threshold. The share of dynastic-controlled firms was highest in the late 1980s, when it represented one out of ten listed firms using the 5% ownership threshold and a quarter of all listed firms using the 20% threshold.

As noted earlier, when family firms are defined on the basis of minimum ownership thresholds, all dynastic-controlled firms risk being classified as non-family firms. We find this mis-categorization to be non-trivial: with a 5% ownership threshold, it varies between 5 and 10 percent of all public listed firms, and with a 20% ownership threshold, it is between 15 and 25 percent of listed firms over our sample period of 1955-2000. As an illustration, Claessens et al (2000) use a 20% ownership threshold and conclude that in 1996 "*Fewer than one-tenth of Japanese companies (9.7%) are now controlled by families*".[27] When we add dynastic-controlled firms using the same 20% ownership threshold, the share of family firms in Japan increases from 9.7% to 29.7%. In general, the higher the minimum ownership threshold for defining family firms, the larger is the bias in under-counting dynastic-controlled firms and, by extension, of under-reporting the presence of family firms.

In Figure 2, Panel B, we describe the evolution of dynastic-controlled firms in IPO time. The graph shows the likelihood of a traditional family firm transitioning to dynastic controlled status as the founding family ownership is diluted over the firm's life-cycle. We

[26] To the extent equity issuances are more common when market valuations are high, transitions from traditional family firms to dynastic control firms become more likely.

[27] Prior to Claessens et al (2000), La Porta et al (1999) found a similar share of family firms using a 20% ownership threshold in a smaller sample of large and medium sized listed Japanese firms.

begin with the population of firms that are listed as family firms, identify the proportion represented by dynastic control and repeat this process each year after the IPO. The dark black line depicts the share of dynastic-controlled firms among the surviving firms using a 5% ownership threshold. The grey line depicts the share using a 20% minimum ownership threshold.

Beginning with dynastic-controlled firms based on the default 5% ownership cut-off, we find that at the end of the IPO year, fewer than one out of 40 firms are dynastic controlled. Five years later, 4.5% of the surviving firms are dynastic controlled. This fraction increases to 10% in year 10, and is more than 20% in year 20. Thirty years after their IPO, almost a quarter of the surviving firms are led by dynastic CEOs. By construction, the relative share of dynastic-controlled firms among surviving firms is higher when the 20% minimum ownership threshold is employed to define them. For example, 10 years after their IPO, 44% of all surviving firms are led by dynastic CEOs with ownership stakes below the 20% threshold. By the 12th year, the odds are higher that a surviving firm is dynastic-controlled vs. a traditional family firm.

To sum, we find that dynastic-controlled firms represent a large and persistent fraction of exchange-listed firms in post war Japan. This finding is important for two reasons. First, the literature has as a rule underestimated the share of family firms by categorizing dynastic-controlled firms as non-family firms. Second, the literature has underestimated the persistence of families in business by not realizing that many families keep control of their companies even when their ownership share becomes very small.

6. Dynastic-controlled firms: comparisons with traditional family firms and non-family firms

In this section we compare dynastic-controlled firms with the two groups the literature has grouped them with – traditional family firms and non-family firms, and show that dynastic control firms differ from both groups along widely used performance measures.

To identify our reference groups, we categorize family firms into three groups: (i) *Traditional family firms,* as described earlier (the founding family owns more than five percent of the shares and a family member is the CEO); (ii) *Dynastic-controlled firms,* as described earlier (a founding family member is the CEO but the family owns less than five percent of equity); and (iii) *Professionally-managed family firms* where the CEO is non-family but the founding family ownership exceeds five percent or where the non-family CEO is a temporary placeholder.[28] In addition, we create two groups of non-family firms: *ex-family firms*, that were family firms at the time of the IPO but the family has permanently relinquished both ownership and management; and, *never family firms* that were not listed by a family or an individual at the IPO time. We repeat all our tests below with higher minimum ownership thresholds as robustness checks.[29]

In Table 1 we describe firm characteristics and key performance measures. Our sample contains 30,879 firm years, which includes 14,709 *traditional family* firm-years, 4,606 *dynastic-controlled* firm-years, 5,600 *professionally-managed family* firm-years, and 5,235 *ex-family* firm-years spanning 1955-2000. In addition, we also have 26,273 *never family* firm-years spanning the same period. The table begins by providing the means of all the variables for each group, and follows this exercise by providing mean pairwise differences between *dynastic-controlled* firms and the three relevant comparison groups (*traditional family firms, ex-family firms and never-family firms)*.

We begin by comparing earnings performance. The mean ROA for dynastic-controlled firms is 4.2%, vs. 5.3% for traditional family firms, 3.4% for ex-family firms and 4.2% for never family firms. The difference between dynastic-controlled firms and each of the other family and ex-family firms is statistically significant at the 1% level. However, the ROA for dynastic-controlled firms and never family firms is statistically indistinguishable.

[28] We define a temporary place holder as a non-family CEO that is later replaced with a family CEO. In the Japanese context such placeholders are often appointed until the family successor is old enough, usually 50, to assume the top job. In the case of temporary place holder ownership may be less than 5%.

[29] We run all tests and tables with 10% and 20% minimum ownership thresholds. Since the results do not change qualitatively, we only present tables using the 5% threshold. Results using higher minimum ownership thresholds are available upon request.

In row 2 we observe that traditional family firms and dynastic-controlled firms have similar valuation (Tobin's Q= 1.49), followed by ex-family firms (1.46) and non-family firms (1.39). Mean Q-ratios for dynastic-controlled firms are not statistically different from traditional family firms but higher than those of ex-family and never-family firms. Thus, dynastic control without ownership fares no worse than traditional family firms, while both are valued higher than ex-family and never family firms. Dynastic control in the absence of ownership does not appear to be related to a valuation discount in the eyes of investors.

The volatility of industry sales is lower in dynastic-controlled firms than in traditional family firms and ex-family firms. However, it is higher than in never family firms. In terms of book assets, dynastic controlled firms are larger than traditional family firms. This is only natural since ownership dilution is correlated with asset growth. Dynastic control firms have the highest leverage, with the exception of never family firms, and they tend to be older than traditional family firms from whence they evolve. Foreign ownership tends to be low across all categories, but tends to increase as family ownership declines.

Next, we focus on proxies for family related variables. Traditional family firms are more likely to be *Legacy* firms compared to dynastic-controlled and ex-family firms, indicating a reluctance of legacy heirs to disengage from their firms. For the same reason, dynastic-controlled firms are more likely to be *Legacy* firms compared to ex-family firms, indicating the role played by family ties in preserving management control in the face of insignificant ownership. Likewise, dynastic-controlled firms are more likely to have a family member on the board vis-à-vis ex-family firms; they are also more likely to be graduates of Elite universities in comparison to ex-family firms. It is worth noticing that dynastic controlled firms are more likely to have elite family members on their boards than traditional family firms, consistent with the idea that stronger family assets empower families to control firms even when their ownership stakes are non-material (Bennedsen et al 2015).

Our univariate mean analysis provides support for the claim that dynastic-controlled firms are different from the two categories of firms they have been bundled with in the existing literature. Compared to traditional family firms they are larger, have weaker accounting performance but similar firm value, and even though they are less likely to have family members on the board, both family and non-family board members are more likely to come from an elite university. Compared to firms where the family has exited, they display superior performance and have a marginally higher firm value, similar size but higher leverage, more likely to be eponymous (*Legacy* firms), have more family board members with and without elite education, but fewer outside board members who are educated at elite universities. These results point to biases that can result from including dynastic-controlled firms with other traditional family firms or with widely-held non-family firms.

It is important to remark that our findings are based on correlations supported by mean comparisons.[30] We do not claim the findings are causal. It is possible that family heirs are invited to serve as CEOs in many more firms than we observe, but choose only the better performing ones. Similarly, transitions to ex-family firms may well be motivated by declining performance, and not be attributable to a loss of family control. Finally, it may be that both ownership structure and performance are determined by unobserved third factors.

7. Transition into and out of dynastic control

In this section we study the determinants of the origins and loss of dynastic control. We begin by documenting how traditional family firms evolve into dynastic-controlled firms as the founding family's ownership erodes over time. We then examine how dynastic-controlled firms eventually lose management control and evolve into widely-held non-family firms.

7.1 Transitions to and from Dynastic Control

[30] We confirm the performance and valuation results of the univariate comparison in unreported multivariate regression analysis.

Table 2 provides the transition map of how family firms move in and out of dynastic control status. In Panel A we describe the origins of dynastic control. With a threshold of 5%, 63% of dynastic-controlled firms originated as traditional family firms when the founding family's ownership level was diluted but the CEO position was retained by heirs of the founding family. A smaller fraction, 22%, originated from professionally-managed family firms.[31] Finally, about 15% were identified as dynastic controlled firms at the time of the IPO, meaning that the founding family ownership was already less than 5% at the end of the IPO year. When ownership threshold is set at 20%, the fraction originating from traditional family firms is lower (52%), and the IPO fraction is larger (46%).

Panel B describes dynastic-controlled firms' exit path. Not surprisingly, most (77%) of the transitions are to the ex-family firm group. A smaller fraction, 22%, involves transition to a professionally-managed firm – almost all of these transitions are to placeholder professional CEOs, who are succeeded by family CEOs in due time. When the higher ownership threshold of 20% is employed, 98% of dynastic controlled firms transition to ex-family status.

7.2. Determinants of transitions from traditional family firm into dynastic control

In Table 3, Panel A we explore the determinants of transitions from traditional family firms to dynastic-controlled firms. By definition, this transition is a change in ownership while (family) management is retained. As we saw in our three case studies, the dilution of ownership has much to do with the imperatives of financing growth. Thus, *a priori*, we expect finance to play an important role in these transitions.

We present three models: Model (1) focuses only on finance factors; Model (2) focuses only on family-related factors; and, Model (3) includes both finance and family factors. Model 1 shows a positive correlation between firm size and the odds of transitioning from traditional family firms to dynastic-controlled firms. This is consistent with larger firms needing more capital for their investments. Leverage is also positively correlated with these transitions, underscoring a rising need for external capital for firms

[31] These are firms where the family typically has less than 5% of ownership but has a temporary non-family CEO in place until the next family CEO is ready.

with tighter balance sheets. Finally, the equity issuance variable has a significantly positive coefficient, underscoring the role of finance in hastening the transition.

In the transition from traditional family firm to dynastic-controlled firm, management control is unchanged; hence, we conjecture that family legacy, talent and other variables related to family resources are less important. This is confirmed in Model (2) and (3) where among the family factors only the size of family ownership and the size of stable ownership are correlated with transitions to dynastic control. Firms with smaller ownership stakes are more likely to fall below the threshold ownership level. It is noteworthy that having a strong network, as measured by the stability of ownership, makes families less likely to dilute their ownership. In Model 3 we add both finance and family variables. The results are robust except we now find that firm age is negatively correlated with transition and firm size loses its significance.[32] Overall, we interpret the results in Panel A of Table 3 as affirming the importance of finance in transitioning from traditional family firms to dynastic control, largely through the dilutive effects of growth.

7.3. Determinants of exit paths from Dynastic Control to Ex-family Status

Panel B of Table 3 explores the correlates of a transition from dynastic control to ex-family status. We find in Model 4 that profitable firms are less likely to transit, indicating that strong performance makes stakeholders and boards more likely to retain family CEOs. On the other hand, we find that larger and older firms are more likely to transit. This is consistent with that the relation-specific capital of family CEOs are more important for smaller and younger firms, and less so for larger and older firms. Foreign ownership appears to expedite exit to ex-family status as well – we cannot distinguish if this is because of a selection bias where foreign investors shun firms with dynastic control, or if foreign owners actively advocate for a transition from dynastic control to widely-held status. These

[32] Turning to the control variables, we find that transitions from traditional family firm to dynastic control are more likely when the CEO is younger. This is consistent with younger CEOs being more risk taking and thus accept ownership dilution as part of a growth process. Second, for a given CEO age, tenure on the job correlates positively with a transition from traditional family firm to dynastic control – without the backing of ownership, job experience matters. Finally, while CEOs from elite universities are more likely to be retained when family ownership is being diluted, we also notice that they are more likely to generate an exit for dynastic controlled firms.

effects are both economically relevant and statistically significant at a one percent level, and also confirmed in Model (6).

Turning to family assets in Model (5), the proxy for family legacy lowers the odds of exit to ex-family status, although the coefficient is only significant in the full regression (Model 6). Put simply, eponymous firms are more likely to retain dynastic control, since family legacy may be a strong driver of business strategy and the family may derive private utility from managing a namesake company (Bennedsen et al 2015; Belenzon et al 2017).

Not surprisingly, having a family member in general and an elite educated one in particular on the board of the company retards the exit to non-family status, though only the latter coefficient is statistically significant, underscoring the role of talent in helping family heirs retain control. The Elite Education variable has been used as a proxy for talent in Perez-Gonzales (2006) and Mehrotra et al. (2013), and our results indicate that both monitoring and talent are important family resources that have the effect of preserving dynastic control. While the role of monitoring has previously been addressed, we believe that the role of family talent in preserving family control has not been documented before. Finally, we investigate whether stable ownership retards the likelihood of exit to non-family status. We hypothesize that strong family networks engender stable block holders that can preserve the status quo for a longer time. The results in Model (5) do not support such a hypothesis.[33]

It is interesting to note that Model (4) and Model (5) have very similar pseudo R-squares, indicating that family variables can explain the transitions to widely-held status just as well as finance variable can – this is noteworthy since the literature has focused on finance as a propeller of exit from family control. Hence, the literature has missed out on a set of family factors that are statistically similar in their ability to jointly explain the loss of

[33] In all regression specifications, we notice that succession concerns loom large – the presence of older CEOs (as well those with a longer service record) increases the odds of an exit. This has been noted in the literature (see Klasa, 2007) and indeed, succession is often seen as the Achilles' heel of family firm longevity (see, for e.g., Burkart, Panunzi and Shleifer, 2003). The last of the control variables is the educational attainment of the outgoing CEO. We would expect this variable to have a negative sign indicating that talented CEOs continue in their position for a longer period. Instead, we find that the coefficient on the Elite Dummy is positive, perhaps because talented CEOs have better outside opportunities and hence support a timely sale of their firm.

family ownership and control. Including both sets of variables in Model (6) yields similar results.

The results in Table 3 Panel B shed light on factors that help in preserving dynastic control in the absence of direct share ownership. Smaller, younger and legacy firms, especially those with elite board members, are more likely to retain dynastic control, while larger and older firms with higher foreign ownership less so. Overall, the transitions analysed in Table 3 paint the following picture. Equity-financed growth appears to expedite the transformation of traditional family firms to dynastic control. In turn, dynastic control is preserved with the aid of family resources.

8. Conclusion

Using the universe of public listed firms in post-war Japan, we find that founding families continue to exercise control over their companies even in the absence of material share ownership. We define such firms as dynastic-controlled, and find that they represent between 7.4% of all listed firms during 1955-2000. We document that they differ in accounting performance and valuation metrics both from traditional family firms and from widely-held firms, the two groups that the existing literature has grouped them with. Our findings indicate that family firms in Japan are more prevalent than the very low family ownership documented in extant studies would suggest, and persist long after the firm's IPO. We have highlighted two examples of dynastic-controlled firms outside Japan, but we leave it to future research to verify their prevalence in other countries.

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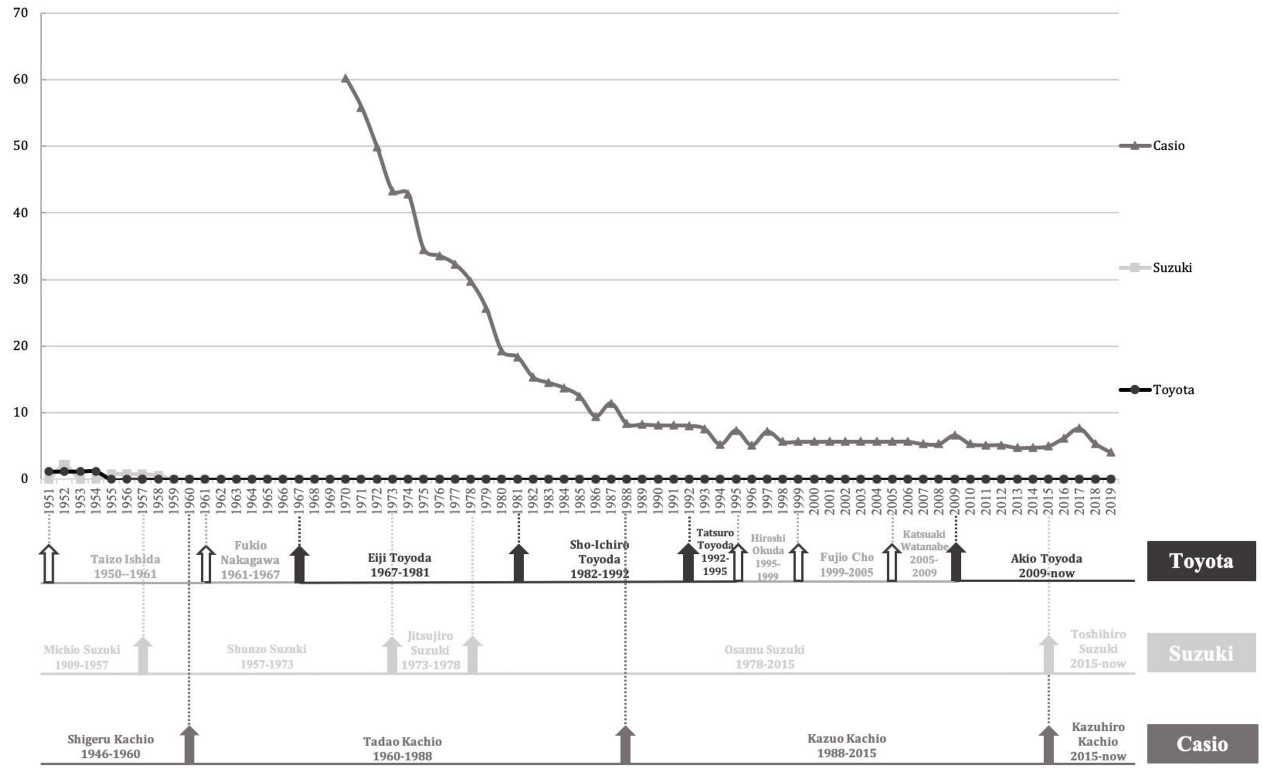
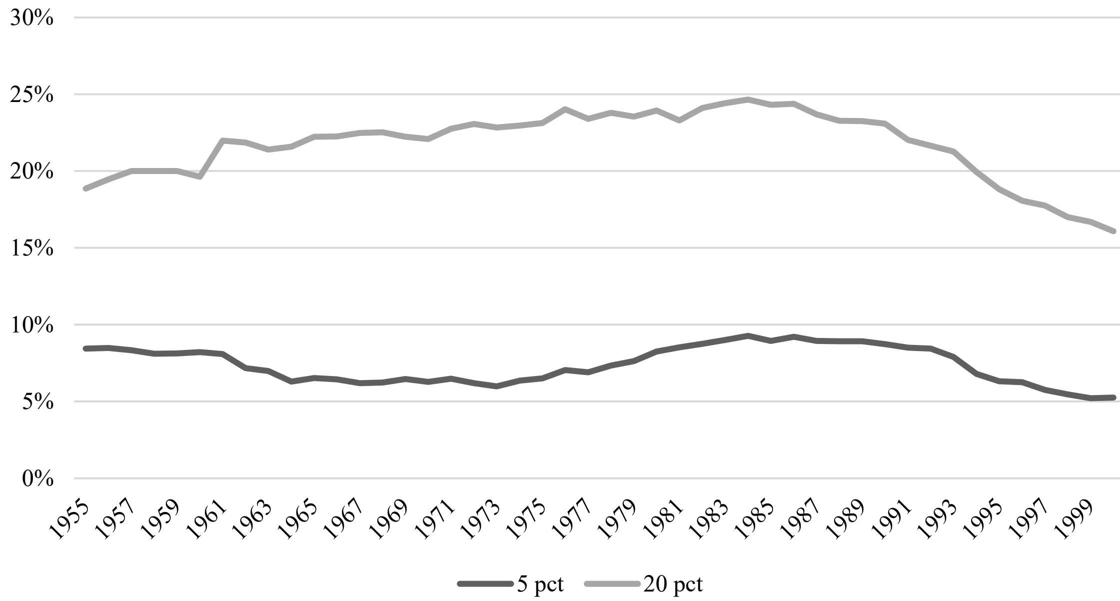
Figure 1: Family Ownership of Casio, Suzuki and Toyota Motor (1951-2019)



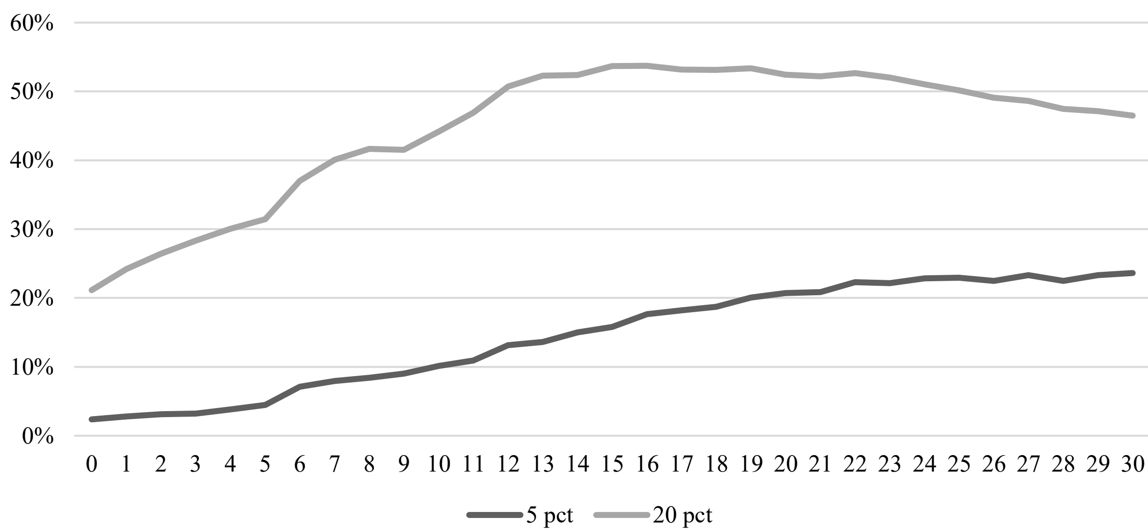
Notes: Figure 1 presents the founding family ownership evolution of Casio, Suzuki and Toyota Motor ranging from 1951 to 2019. The percentage of family shareholdings includes the ownership by the members of the founding family as well as by group companies. Vertical axis numbers are in percent. The lower half of the figure reports CEO names and term of service of each firm for different periods, with using hollow arrow representing firms being controlled by professional CEOs (outsiders).

Figure 2: Dynastic Controlled Firms in Calendar and IPO Times

Panel A: Share of dynastic-controlled firms among all listed firms from 1955-2000



Panel B: Share of dynastic-controlled firms in IPO Time



Notes: The charts depict the share of dynastic controlled firms among all firms listed on major Japanese stock exchanges (namely the Tokyo, Osaka, Nagoya and Fukuoka Stock exchanges) between 1955-2000. Panel A shows the share of dynastic control firms among all listed firms using 5% (black line) and 20% (grey line) minimum ownership thresholds in calendar time. Panel B shows the share of dynastic-controlled firms in IPO time and is scaled by the number of surviving firms till that point in time after the IPO. As in Panel A, the black and grey lines represent the share of dynastic-controlled firms defined on the basis of 5% and 20% ownership thresholds.

Table 1: Univariate Differences across Firm Types

Family firm classification	TFF(1)	DCF(2)	PFF(3)	XFF(4)	NFF(5)	DCF-TFF(6)		DCF-XFF(7)		DCF-NFF(8)	
ROA, %	5.29	4.23	4.98	3.45	4.23	-1.06	***	0.78	***	-0.003	
Tobin Q	1.49	1.49	1.56	1.46	1.39	0.003		0.04	***	0.10	***
Volatility of industry sales	20.68	20.59	20.90	20.70	20.33	-0.09	***	-0.10	***	0.26	***
Firm size	16.96	17.84	17.49	17.85	17.83	0.88	***	-0.004		0.02	
Leverage	20.46	21.30	17.81	19.71	23.59	0.84	***	1.59	***	-2.29	***
Equity issuance dummy	0.195	0.165	0.18	0.12	0.15	-0.03	***	0.04	***	0.02	***
Firm age, years	38.63	48.55	42.12	50.04	46.83	9.92	***	-1.49	***	1.72	***
Foreign ownership, %	0.67	1.14	0.84	2.14	1.56	0.47	***	-1.00	***	-0.43	***
Family ownership, %	21.27	0.00	20.80	0.00	.	-21.27	***	0		.	
Family legacy	0.35	0.29	0.34	0.24	.	-0.06	***	0.05	***	.	
Family on the board	0.32	0.25	0.37	0.13	.	-0.07	***	0.12	***	.	
ELITE family on the board	0.26	0.30	0.26	0.11	.	0.03	***	0.19	***	.	
Elite non-family on the board	0.74	0.87	0.83	0.91	.	0.13	***	-0.04	***	.	
Stable ownership, %	22.27	15.83	25.78	32.40	.	-6.43	***	-16.57	***	.	
CEO age, years	57.95	59.34	61.60	62.20	.	1.39	***	-2.86	***	.	
CEO tenure, years	16.56	14.03	5.08	4.55	.	-2.53	***	9.49	***	.	
CEO eliteness	0.15	0.22	0.31	0.39	.	0.07	***	-0.17	***	.	
Number of observations	14709	4606	5600	5235	26273	19315		9841		30879	

Notes: This table reports basic financial and management indicators for five categories of firms. ***TFF*** are traditional family firms where the founding family owns more than 5% shares and retains the CEO position. ***DCF*** are dynastic control firms where the family controls the top management position but has less than 5% of ownership. ***PFF*** are family firms where the CEO is non-family but the founding family ownership exceeds 5%, or where the non-family CEO is a temporary placeholder. ***XFF*** are ex-family firms, where the founding family ownership is less than 5% and the family has permanently left the CEO position. Lastly, ***NFF*** are non-family firms since their exchange listing. ***ROA*** equals operating income scaled by total assets, ***Tobin Q*** equals the market value of equity plus the book value of debt scaled by total assets, ***volatility of industry sales*** equals standard deviation of industry sales, ***firm size*** equals natural log of total assets, ***leverage*** equals total debt scaled by total assets, ***equity issuance dummy*** takes the value of 1 when firms experience a change of shares outstanding of more than 10% from the previous year, ***firm age*** equals the number of years since incorporation, and ***foreign ownership*** refers to the fraction of shares held by foreign investors. Family indicators are listed as follows, ***family ownership*** is the fraction of total shares owned by the founding family, ***family legacy*** takes the value of 1 when the founding family name and firm name are the same, ***family on the board*** takes the value of 1 when there is at least one family member on the board, ***ELITE family on the board*** takes the value of 1 when there is at least one ELITE family on the board, ***ELITE non family on the board*** takes the value of 1 when there is at least one ELITE non-family on the board, and ***stable ownership*** equals the percentage of shareholdings by investors who were listed among the top 10 shareholders for at least 5 consecutive years. Control variable include ***CEO age, CEO tenure*** *(number of years as CEO)* and ***CEO eliteness***, denoting if the CEO has a bachelor degree from an elite university. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 2: Transitions to and from dynastic control

Panel A: Transition to DCF		
From	5% ownership	20% ownership
TFF	0.63	0.52
PFF	0.22	0.02
IPO	0.15	0.46
Panel B: Transition from DCF		
To	5% ownership	20% ownership
TFF	0.01	0.01
PFF	0.22	0.01
XFF	0.77	0.98

Notes: Panel A describes the origins of dynastic-controlled firms. ***TFF*** are traditional family firms where the founding family owns more than 5% shares and retains the CEO position. ***DCF*** are dynastic control firms where the family control top management position but has less than 5% of ownership. ***PFF*** are family firms where the CEO is non-family but the founding family ownership exceeds 5%, or where the non-family CEO is a temporary placeholder. ***XFF*** are ex-family firms, where the family ownership less than 5% and the founding family has permanently left the CEO position. Panel B describes the transitions from ***TFF*** (dynastic-controlled firms) to ***TFF*** (traditional family firms), ***PFF*** (professionally-managed family firms), and ***XFF*** (ex-family firms). IPO means Initial Public Offering.

Table 3: Determinants of the transition to and from dynastic control

	Panel A(1-3)			Panel B(4-6)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Finance factors						
ROA	-0.025		-0.012	-0.133***		-0.130***
	(1.38)		(0.59)	(5.88)		(5.78)
Tobin Q	0.067		0.161	-0.232		-0.241
	(0.42)		(1.07)	(0.87)		(0.90)
Volatility of industry sales	0.328*		0.267	-0.108		-0.115
	(1.75)		(1.39)	(0.62)		(0.65)
Firm size	0.167***		0.009	0.339***		0.343***
	(2.86)		(0.14)	(5.09)		(4.88)
Leverage	0.021***		0.023***	0.010*		0.010
	(3.74)		(3.96)	(1.66)		(1.52)
Equity issuance dummy	0.508***		0.518***	-0.312		-0.300
	(3.29)		(3.33)	(1.25)		(1.21)
Firm age	0.001		-0.014**	0.016**		0.018***
	(0.26)		(2.46)	(3.15)		(3.53)
Foreign ownership	0.021		-0.007	0.042**		0.045***
	(1.02)		(0.27)	(2.96)		(3.22)
Family factors						
Family ownership		-0.077***	-0.086***			
		(7.50)	(7.50)			
Family legacy		-0.191	-0.072		-0.285	-0.378**
		(1.27)	(0.47)		(1.63)	(2.03)
Family on board		-0.129	-0.165		-0.284	-0.270
		(0.81)	(1.02)		(1.63)	(1.49)
ELITE family on board		0.199	0.282		-0.424**	-0.559***
		(1.14)	(1.57)		(2.45)	(3.09)
Elite non-family on board		0.210	0.209		0.553**	0.250
		(1.11)	(1.08)		(2.37)	(1.02)
Stable ownership		-0.044***	-0.043***		-0.0003	0.003
		(4.65)	(4.62)		(0.05)	(0.54)
Control factors						
CEO age	-0.017**	-0.027***	-0.023**	0.049***	0.054***	0.050***
	(2.05)	(3.02)	(2.48)	(4.64)	(5.43)	(4.67)
CEO tenure	0.016**	0.026***	0.01***	0.016***	0.009	0.017***
	(2.47)	(3.69)	(2.76)	(2.88)	(1.48)	(2.86)
CEO eliteness	-0.242	-0.442**	-0.441**	0.132	0.584***	0.455**
	(1.29)	(2.27)	(2.22)	(0.72)	(3.44)	(2.48)
Number of observations	19803	19803	19803	20411	20411	20411
Number of transitions	233	233	233	190	190	190
Pseudo R2	0.0574	0.1310	0.1465	0.1117	0.0664	0.1201

Notes: Panel A reports the coefficient estimates from a logistic regression where the dependent variable is the transition of a *traditional family firm* to a *dynastic-controlled firm*. Panel B reports the logistic regression coefficient estimates where the dependent variable is a transition of a *dynastic-controlled firm* to an *ex-family firm.* Model 1 and Model 4 display coefficient estimates for finance variables, Model 2 and Model 5 contain family variables, and Model 3 and Model 6 include both. Finance variables include ***ROA*** defined as operating income/total assets, ***Tobin's Q*** defined as (total assets + market value of equity – book value of equity)/total assets, ***volatility of industry sales*** defined as the standard deviation of sales for the firm's industry over the past 5 years, ***firm size*** defined as the natural log of total assets, ***leverage*** defined as total debt/total assets, ***equity issuance dummy*** set to 1 when firms experience a change in shares outstanding from previous year of more than 10%, ***firm age*** defined as the number of years since incorporation, and ***foreign ownership*** defined as the fraction of shares held by foreign investors among the firm's top 10 shareholders. Family variables include ***family ownership*** defined as the fraction of total shares owned by the founding family, ***family legacy*** as an indicator variable set equal to 1 when the founding family name and firm name are the same, ***family on board*** as an indicator variable set equal to 1 when there is at least one family member on the firm's board, ***ELITE*** defined as an indicator variable for graduation from the top national universities in Japan, and ***stable ownership*** as the fraction of equity held for five consecutive years by top 10 shareholders. Control variables include ***CEO age, CEO tenure (number of years as CEO)*** and CEO ***Elite*** status. *t*-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.