

Unchain my Chain:
The Impact of Founding Couples on Family Businesses*

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A growing literature explores the importance of family businesses. In this paper, we use a unique data on the largest US restaurant chains to investigate how the familial relationship among the founders of these chains affects the propensity of the chain to be sold to external investors and to expand internationally. Our analysis indicates that compared to other forms of founders, couples (i.e., a husband and wife) who founded restaurant chains maintain their ownership for a longer time period and are less likely to sell the chain. We also provide evidence that chains that were founded by couples are less likely to expand internationally as long as the chain is owned by the founders, and are more likely to expand overseas after the chain is sold to external owners.

Key words: Family business, restaurant chains, founders, international expansion

JEL Classifications:

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1. Introduction

"I do not want to sell the company. It's part of my life. I've inherited it from my father, your grandfather. . I do not think I could live with the decision to sell"¹

Family-owned firms account for the majority of businesses in the world and their prevalence is not limited to small firms or to non-western countries (La Porta et. al, 1999). For instance, in the US, founding families own and control at least one third of large publicly-held firms (Anderson and Reeb 2003, Villalonga and Amit, 2006) whereas in France, family firms account for about 2/3 of firms traded in the French stock market (Sraer and Thesmar 2007). Given the importance of family-owned businesses, researchers have acknowledged the need to better understand whether family characteristics affect firm decisions and what are the consequences of these decisions on performance (e.g., Bertrand and Schoar 2006). Yet, probably due to data limitations, existing studies have underexplored how family ownership and the nature of this ownership affect many of the strategic decisions by these firms.

In this paper, we try to partially address this gap in the literature by studying the relationship between the nature of family ownership and two basic business decisions: founders' decision to sell their business to external investors, and the decision to expand internationally. As we are interested in the initial sell-out decision, we cannot use a sample of established firms as the starting point of the empirical analysis. Instead, we collect unique data on the founders of the largest restaurant chains in the U.S. and examine how the nature of the relationship among the founders of these chains correlates with subsequent business decisions. We are particularly interested in studying whether different familial ties among founders (siblings, couples, non-family business partners) might determine subsequent business decisions. By exploiting variation in the familial relationships among chain founders (e.g., family vs. non-family partners, and/or couples vs. individuals), we explore the impact of family ownership on the sell-out decision and on the decision to expand internationally. We believe that our approach – examining how

¹ Hill, L. and K. C. Doughty 2000 "Francisco de Narvaez at Tia: Selling the Family Business." HBS Case 9-401-017.

family ownership evolves as a function of its founders' characteristics – is novel and complements previous studies that typically focused on family firms at a later stage of their life cycle.

The impact of family ownership on the sell-out decision is theoretically ambiguous. From a classical economic perspective (Berle and Means, 1932), firms should sell for the highest bid, and ownership type (e.g., family vs. non-family) should not be a relevant factor in determining whether to sell and the timing of the sale. If, however, founders of family firms foresee the difficulties associated with transgenerational succession, then we might expect that the founders of family firms will be more active in facilitating and fostering sell-out options compared to founders of comparable non-family firms. Potentially, such tendency might be more apparent among chains that were founded by couples (i.e. husband and wife) compared to chains that were found, say, by a father and son. Furthermore, if the owners of family firms are more risk-averse (Morck and Yeung 2003) with regards to the prospects of their business then they may be more likely to sell their company earlier than non-family firms. On the other hand, if family firms carry certain non-economic benefits to the family, then we might expect that the founders of family-firms will be more reluctant to sell their business to external parties. Bertrand and Schoar (2006) propose that `legacy considerations` are the non-monetary benefits of a family that owns the business. They conjecture that legacy considerations may instill the desire to ensure family control, and that this “may lead families to ... forgo profitable expansion strategies or mergers with other firms.” To the best of our knowledge, these considerations and in particular the specific conjecture concerning the link between family ownership, sell out and expansion decisions, have not been systematically addressed in the literature.

Our study focuses on large U.S. restaurant chains. For each chain, we collected information on its foundation year; the identity of its founders; the founders' family relations (e.g. siblings, business partners, individuals); the year in which the chain began – if at all – to operate internationally and to franchise. For most of the chains in our sample, we also obtained information on the annual sales, the number of restaurants and the share of franchised outlets since 2000. Finally, we collected information on whether

the founders of the chain still **control** the chain in 2013, and if not, when did the sell-out transaction take place. Overall, our sample consists of 92 restaurant chains, with average annual sales of ... million dollars and average number of outlets is .. . These chains represent the largest US restaurant chains and are useful to study international expansion decisions. Our findings indicate that restaurant chains that were founded by married couples are approximately 30% less likely to be sold to external investors compared to chains founded by individuals. The differences in the likelihood of sell-out decisions are non-trivial also when we compare chains that were founded by married couples with chains with other types of partnerships among founders (e.g., business partners, siblings/brothers). For instance, Jack in the Box, a large hamburger chain was founded in 1952 by Robert Oscar Peterson. Sixteen years later, Peterson sold his control shares in the chain. Arby's, another large hamburger chain was established in 1964 by the Raffel Brothers who sold their shares in the chain 12 years after its foundation. In contrast, In-N-Out Burger, which was established in 1948 by Harry Snyder and his wife Esther is still controlled by the Snyder family. Likewise, Panda Express which was founded in 1983 by Andrew and Peggy Cherng is still controlled and managed by the founders' family. Consistent with our initial finding regarding the likelihood of a sell-out, we also find that conditional on selling the control over the chain, the pre-sell time period in which couples maintained their ownership over the chain was 12 years longer compared to the pre-sell time period of chains that were founded by individuals. With regards to international expansion decisions, we provide evidence that chains' sell-out decisions could affect overseas expansion decisions. Conditional on the chain being sold by the founder, nearly 88% of the chains expanded their operations outside of US territories. In contrast, only 40% of the chains that remained under the control of founders operate internationally. Furthermore, couple-founded chains that were sold were more likely to expand internationally after the chain was sold. Taken together, these findings suggest that couple-founded chains are less likely to internationally expand because they lack the necessary managerial and financial capital, which are needed for the international expansion.

Related literature. Existing research on family firms predominantly address two important questions pertaining to family businesses. The first strand of research examined

the impact of CEO succession on performance in family and non-family businesses. For instance, Bennedsen et. al 2007 studies the impact of CEO succession in Danish family firms, exploiting variation in the gender of a departing CEO's firstborn child. They convincingly show that family succession has a negative impact on firm performance (other studies that addressed this topic include Pérez-González 2006, Villalonga and Amit 2006, Bertrand et. al 2008, Caselli and Gennaioli 2012). Second, existing studies used publicly available cross-sectional data to compare various performance measures across family and non-family businesses. For instance, Anderson and Reeb 2003a use S&P 500 data, and Sraer and Thesmar (2007) use French data to find that publicly-held family firms perform better than non-family firms. In contrast, Morck, Strangeland and Yeung (2000) for Canada, and Cronqvist and Nilsson (2003) for Sweden find opposite results. The S&P 500 data source, like other data sources on publicly-traded firms, offers a wealth of data. However, the sample of firms available in those sources is also potentially subject to selection bias concerning the decision to go public or concerning firms' tendency to retain ownership over the chain (Demsetz and Lehn 1985). As already mentioned, we explore how the ownership structure of the family firm, at inception, affects strategic decisions. Most closely related to this paper are studies that examine how family ownership is associated with divestiture decisions. In general, these studies support the notion that family businesses divestiture decisions are also driven by non-classical economics motivations. Sharma and Manikutty (2005) lay out a theoretical framework that captures the relationship between family structure and divestment decisions. Praet (2013) provides evidence that Belgian family firms are less likely to engage in divestment decision when families have higher ownership levels. Finally, Feldman, Amit and Villalonga 2014 also show that family firms are less likely to engage in divestment decisions, and when they do divest – the value of the divesting family firm significantly increases. These studies rely on data on publicly traded firms, and have not examined whether the familial relationship among founders has an explanatory power over firms' strategic decisions.

What constitutes a family firm? Thus far, there is no consensus in the literature on the exact definition of a family firm, and different studies used different definitions, often based on the available data. Miller et. al 2007 who review the literature on family firms

propose to distinguish between businesses in which a founding family (i.e., more than one family member) or only a founding individual owns a fraction of the firm. We follow Miller et. al 2007 and consider family-founded firms as businesses in which more than one family member is the founder of the business. Within the family category, we further distinguish between firms in which a married couple founded the firm and other same family-members founders. This approach enables us to examine how the strength of the familial relationship might explain the sell-out and international expansion decisions. The remainder of this paper is as follows. In the next section we describe the data that we use. In section 3 we present the empirical analysis and the results. In section 4 we conclude.

2. Data

We use a listing entitled *Top 200 Franchise Systems*, published by the *Franchise Times* magazine in 2008 to identify restaurant chains with sales larger than 200 million dollars. The *Top 200 Franchise Systems* includes information on a chain's worldwide sales, the number of total units, U.S. units, share of franchised outlets out of total units and the current owner of the chain. We also used the 2008 QSR 50 listing published by the QSR magazine to identify relevant restaurant chains which do no franchise outlets. The QSR 50 listing provides annual information on the 50 largest U.S. restaurant chains and includes information on a chain's U.S. sales, the number of U.S units, and the share of franchised outlets out of total U.S. units. Overall, we have information on 93 chains, 11 of which were reported only at the QSR data.² For each chain we collected the following information: the chain's foundation year; the year that the chain began franchising; the year that the chain began operating internationally and the year in which the founders sold their control over the chain to external parties. We also collected information on the number of founders and the familial relationship among founders. We classify the type of founders into 4 groups: individuals (27 chains), business partners (28 chains), married couples (15 chains) and `other family` (e.g., siblings, 16 chains). Finally, we collected the following information regarding the chains' founders: age, marital

² Both the Top 200 Franchise and QSR data sources are published annually (Top 200 franchise since 1999 and QSR since 2003). Unfortunately, the panel structure of these data is not useful for our purposes because in most cases, founders' sell-out transactions took place before the new millennium (i.e., before the starting year of the panel data).

status, business experience at the time of foundation (i.e. was the newly founded chain their first business) and education. Not all the variables are available for all the chains in our sample. In the analysis, we use the background information when available for the dominant founder. The sources for the data are typically the chains' websites as well as the popular press, and myriad open sources.

Table 1 presents basic information for the top 20 restaurant chains in terms of sales. Table 2 presents descriptive statistics on the founders and on the 86 chains in our sample. Based on the table, for 30% of the founders, the restaurant chain was their first business. The mean age of founders was nearly 33 years, and more than half of them did not attend college. Seventy one chains were sold by the founders and, on average these chains remained under the ownership of the founders for 18.4 years. Figure 1 shows the sell-out years and international expansion years starting in 1961. As one can see, the sell out and international decisions are dispersed over the entire time period and not concentrated in a certain time period.

3. Estimation and Results

3.1 Sell-out Decisions

To examine the relationship between the sell-out decision and founders' type (individual, business partners, spouse and other-family partners) we estimate the following LPM specification:

$$Sell_out_{ij} = Founders_type_i + Chain_age_i + Founder_age_j + Business_exper_j + Franchised_i + \epsilon_{ij}$$

The dependent variable is an indicator variable that equals one if the control over the chain was sold to external parties, and zero if the founders' maintained their ownership over the chain. The ``Founders' type`` variable is the main variable of interest and it captures the four types of founders mentioned above. The omitted group is the individual founder. Other control variables include the age of the dominant founder and his business experience at the time of foundation. In addition, we include the age of the chain at the

sell-out year, and information on whether the chain was franchising its units at the time of sell out and for how many years.³ The results are presented in Table 3. According to our estimates, chains that were founded by couples were 33% less likely to be sold compared to chains founded by individuals (the omitted category). We also find a negative correlation between the sell-out decision and the business partners and `other family` types of founders. Yet, in most specifications the relationship between sell out and these types of founders is statistically insignificant. The number of years that the chain was engaged in franchising is positively correlated with the likelihood of a sell-out decision. Also, the business experience of the founder is negatively associated with the sell-out decision. Finally, our estimates suggest that both the age of the founder at foundation and the age of the chain at sell-out are not significantly correlated with the decision to sell.

In table 4, we present the estimation results using the number of years to sell-out (i.e., between foundation year and the sell-out year) as the dependent variable. We find that chains founded by couples remained under their ownership for 12 years more than chains founded by individuals. This estimate remains large and significant as we add control variables. In column 4, in which add information on the education of the primary founder, the estimate increases to 26 years although the number of observations in this specification is considerably smaller. Other control variables are generally statistically insignificant, though we find some evidence that younger founders and founders with more business experience are likely to retain ownership for a longer time period. In Table 5, we repeat the regression analysis for the number of years but we do not assume that the age of chains that were not sold to external parties is their age in 2013. Instead, we estimate a censored model and present the results in Table 5. The results are qualitatively similar to the non-censored model though the estimates are greater. In particular, we find that couple-founders maintain ownership over the chain for 18 years more than individual founders (specification 1). Finally, in the analysis presented in table 6, we restrict attention only to chains that were sold to external parties. For this subsample of chains, we still find that couple-founders maintain ownership for a longer time period before selling the chain. However, this relationship is not statistically significant in all

³ For chains that have not been sold, we compute their age at 2013 (age = 2013 – foundation year).

specifications. Interestingly, the estimate of the founder age is now negative and highly significant, suggesting that older founders are much more likely to sell the chain faster. In addition, chains that were engaged in franchising for more years are also more likely to retain ownership for more years. Overall, the results presented in tables 3-6 indicate that the identity of the chains' founders and particularly the familial relationship among its founders might affect the sell-out decision of the chain and the duration over which the chain is under the ownership of its founders. We now turn to analyze whether the decision to sell the chain or the timing of this decision affects the chain's decision to internationally expand.

3.2. International expansion decisions –

International markets seem like a natural growth engine for large restaurant chains. These chains often exhaust the potential growth opportunities in their home market and are concerned that opening additional restaurants will cannibalize sales from existing restaurants. While opening restaurants in foreign countries entails considerable opportunities for chains, it also poses several challenges, such as cultural and taste differences, language barriers, and the difficulties to enter a new market, attract customers and often local franchisees. Given these challenges, it is not surprising that international expansion requires sizable financial investments, expertise and long term planning. Are family businesses more or less likely to be involved in international expansion? On the one hand, family firms are typically associated with better future planning capabilities. On the other hand, family firms may lack the necessary experience to undertake such strategic decision. Furthermore, as we motivate in the introduction, chains that were founded by couples may further reluctant to expand internationally because this may weaken the family control over the chain. We empirically examine this issue by looking at the propensity of family restaurant chains, and particularly chains that were founded by couples, to expand outside U.S. territories. First, as can be seen in Table 2, about 90% of the large chains operate outside the US. However, among the chains that remained under the control of their initial founders, the propensity to expand internationally is only 40%. This suggests that the founders of the chain often find it less attractive to expand outside the US. Taken together with our findings that chains founded

by family members, and particularly couples, are less likely to be sold to external parties, this suggests that family-founded chains are less likely to expand internationally. To further illustrate this point, in Table 7 we present regression results that examine how the likelihood to expand internationally varies with the sell-out decision. In this estimation, the dependent variable equals one if the opening of the international operation occurred after the sell-out decision and zero otherwise. Thus, we are interested in examining if the sell-out decision serves as a trigger for international expansion, and how does it depend on the familial relationship among the chain's founders. Accordingly, the main control variable is the identity of the founder's familial relationship. In particular, the value of that control variable equals one if a couple founded that chain and zero otherwise. The regression results strongly suggest that chains founded by couples were more likely to expand internationally only after they were sold to external parties. In contrast, couple-founded restaurant chains that were not sold to external parties are less likely to expand internationally. Furthermore, restaurant chains that were not founded by couples often expanded internationally before the sell-or decision. Thus, the regression results in table 7 shows that familial relationships among founders, and especially family relationships among couples, could hinder the growth of the firm.

4. Concluding remarks

Existing studies on family businesses often rely on agency theory to guide the analysis and explain their findings. One view of the agency theory emphasizes that family-ownership implies closely-held, concentrated, ownership which mitigates incentive misalignment between the family and its agents. A different view stresses that concentrated ownership could have negative implications because large share-holders can use their power to exploit the business to their own benefit (e.g. Anderson and Reeb 2003b). While these arguments have merit, we contend that the main conduct and the performance of family businesses differ from the conduct and performance of non-family businesses not only due to different ownership structures. The underlying differences potentially arise because family-firms operate in a different environment and the profit-maximization objective is not the only goal that these businesses pursue. Bertrand and Schoar 2006 offer the term legacy considerations to describe these considerations while

in the management literature researchers have often used the concept of socioeconomic wealth as the distinguishing feature between family and non-family businesses (e.g. Gomez-Mejia et al. 2011).

In this paper, we contribute to the empirical literature on family-businesses by providing evidence which we believe is consistent with such legacy motivations. In particular, we empirically examine how restaurant chains that were founded by families differ from non-family founded restaurant chains with regards to two important business decisions: the sell-out and international expansion decisions. We find that restaurant chains that were founded by family-related individuals are more likely to maintain their ownership over the chain compared to “similar” “non-family” restaurant chains. Second, we show that these sell-out decisions are strongly associated with international expansion decisions, and chains whose founders remain the owner of the chain are less likely to expand internationally than chains that changed ownership. We believe that our study is important not only for understanding the role of (family) ownership but also for the trade literature, illustrating how non-economic motivation can affect and shape decisions to expand internationally. Though our study focuses on one industry, we believe that this industry could serve as an example for other industries in which businesses are often founded by families. It will be definitely worthwhile exploring how the familial relationship among business founders affects other decisions and other industries.

References

- Anderson, Ronald C., and David M. Reeb, (2003a) Founding-Family Ownership and Firm Performance: Evidence from the S&P 500, *Journal of Finance*, LVIII, 1301–1328.
- Anderson, R. C., & Reeb, D. M. (2003b). Founding-family ownership, corporate diversification, and firm leverage. *Journal of Law and Economics*, 46, 653-684.
- Bennedsen, M., K. Nielsen, F. Perez-Gonzales, and D. Wolfenzon. Inside the Family Firm: The Role of Families in Succession Decisions and Performance. *Quarterly Journal of Economics*, 122(2), 2007, 647–91.
- Bertrand, M., S. Johnson, K. Samphantharak, and A. Schoar. Mixing Family with Business: A Study of Thai Business Groups and the Families Behind Them. *Journal of Financial Economics*, 88(3), 2008, 466–98.
- Bertrand, M., Schoar, A., 2006. The role of family in family firms. *Journal of Economic Perspectives* 20, 73–96.
- Bloom, N., and J. Van Reenen. Why Do Management Practices Differ across Firms and Countries? *Journal of Economic Perspectives*, 24(1), 2010, 203–24.
- Caliendo L, Rossi-Hansberg E. 2012. The Impact of Trade on Organization and Productivity. *Q. J. Econ.* 127:1393-467
- Cronqvist, Henrik and Mattias Nilsson. 2003. Agency Costs of Controlling Minority Share- holder. *Journal of Financial and Quantitative Analysis*. 38:4, 695-719.
- Demsetz, H., Lehn, K., 1985. The structure of corporate ownership: causes and consequences. *Journal of Political Economy* 93, 1155–1177.
- Feldman, E. R., Amit, R. R., & Villalonga, B. (2016). Corporate divestitures and family control. *Strategic Management Journal*, 37(3), 429-446
- Gómez-Mejía, L. R., K. T. Haynes, M. Núñez-Nickel, K. J. L. Jacobson, J. Moyano-Fuentes. 2007. Socioemotional wealth and business risk in family-controlled firms: Evidence from Spanish olive oil mills. *Admin. Sci. Quart.* 52(1) 106–137.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & DeCastro, J. (2011). The bind that ties: Socioemotional wealth preservations in family firms. *Academy of Management Annals*, 5, 653-707.

- La Porta, R., F. Lopez-De-Silanes, and A. Shleifer. Corporate Ownership around the World. *Journal of Finance*, 54(2), 1999, 471–517.
- Miller D, Le Breton-Miller I, Lester RH, Cannella AA Jr. 2007. Are family firms really superior performers? *Journal of Corporate Finance* **13**(5): 829–858.
- Morck, R., Yeung, B. (2003). Agency problems in large family business groups. *Entrepreneurship Theory and Practice*, 27(4), 367-382
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A. (2007). Are family firms really superior performers? *Journal of Corporate Finance*, 13(5), 829-858.
- Praet, A. (2013). Family firms and the divestment decision: An agency perspective. *Journal of Family Business Strategy*, 4(1), 34-41.
- Perez-Gonzales, F. “Inherited Control and Firm Performance.” *American Economic Review*, 96(5), 2006, 1559–88.
- Sharma, P., & Manikutty, S. (2005). Strategic divestments in family firms: Role of family structure and community culture. *Entrepreneurship Theory and Practice*, 29(3), 293-311
- Villalonga, B., and R. Amit. “How Do Family Ownership, Management, and Control Affect Firm Value?” *Journal of Financial Economics*, 80(2), 2006, 385–417.

Table 1

<u>Chain</u>	<u>Sales</u>	<u>Outlets</u>
McDonald's	35,600	14,157
Subway	12,100	25,549
Starbucks	10,600	11,128
Wendy's	8,600	5,817
Burger King	8,587	7,183
Taco Bell	7,478	5,262
Dunkin' Donuts	6,264	7,306
Pizza Hut	5,666	6,209
Chick-fil-A	4,621	1,683
KFC	4,459	4,556
Panera Bread	3,861	1,652
Sonic	3,791	3,556
Domino's Pizza	3,500	4,928
Jack-in-the-Box	3,085	2,250
Arby's	2,992	3,354
Chipotle	2,731	1,410
Papa John's	2,402	3,131
Dairy Queen	2,300	4,462
Popeye's	2,253	1,679
Hardee's	1,900	1,703

Notes:

Table 2: Descriptive Statistics

Variable	N	Mean	S.d	10%	90%
No Partner	86	0.326	0.471	0	1
Partner: Spouse	85	0.165	0.373	0	1
Partner: Brother/Child	85	0.176	0.383	0	1
Partner: Business	85	0.329	0.473	0	1
# Years to Franchise	86	6.93	8	0	19
First Business of Founder	78	0.308	0.465	0	1
Age at Foundation	81	32.8	9.82	21	43
Company Age at Sell Out	86	47.4	18.7	25	73
Founder Educ.: B.A.	45	0.356	0.484	0	1
Founder Educ.: M.A.	45	0.111	0.318	0	1
Founder Educ.: Professional	45	0.0444	0.208	0	0
Sold Out	86	0.826	0.382	0	1
# Years to Sell Out	86	23.2	17.3	5	44
# Years to Sell Out Sell Out=1	71	18.4	12.4	4	38
Went International	86	0.791	0.409	0	1
# Years to Go Intl. Went Intl. =1	64	25	16.6	9	44

Table 3: The Effect of Founder's Familial Relationship on the Sell Out Decision

	(1) LPM	(2) LPM	(3) LPM	(4) LPM
Partner: Spouse	-0.321** (0.136)	-0.322** (0.129)	-0.334** (0.139)	-0.680*** (0.198)
Partner: Brother/Child	-0.164 (0.112)	-0.142 (0.110)	-0.105 (0.113)	-0.337* (0.168)
Partner: Business	-0.143* (0.082)	-0.083 (0.079)	-0.066 (0.079)	-0.093 (0.096)
# Years Franchised		0.017*** (0.004)	0.019*** (0.005)	0.019** (0.009)
First Business of Founder		-0.207** (0.092)	-0.213** (0.099)	-0.218* (0.125)
Founder's Age at Foundation			0.002 (0.004)	0.004 (0.010)
Chain's Age			-0.002 (0.002)	-0.000 (0.003)
Founder Education: B.A. or below				0.021 (0.091)
Founder Education: M.A. or above				-0.100 (0.201)
Founder Education: Professional				-0.317 (0.468)
R^2	0.086	0.265	0.298	0.551
N	85	78	74	44

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: The Effect of Founder's Familial Relationship on the Number of Years to Sell Out

	(1) LPM	(2) LPM	(3) LPM	(4) LPM
Partner: Spouse	12.214** (4.693)	13.309*** (4.745)	12.713*** (4.148)	26.006*** (4.704)
Partner: Brother/Child	5.271 (4.733)	5.130 (5.393)	2.569 (4.855)	10.167 (6.518)
Partner: Business	3.393 (4.734)	3.527 (5.054)	3.933 (3.599)	1.380 (3.390)
# Years Franchised		0.013 (0.207)	-0.354 (0.238)	-0.119 (0.300)
First Business of Founder		4.295 (4.527)	7.389* (4.082)	7.818 (4.687)
Founder's Age at Foundation			-0.260 (0.159)	-0.544* (0.304)
Chain's Age			0.599*** (0.121)	0.461*** (0.127)
Founder Education: B.A. or below				-2.703 (3.063)
Founder Education: M.A. or above				0.502 (6.307)
Founder Education: Professional				43.095** (16.161)
R^2	0.057	0.079	0.481	0.760
N	85	78	74	44

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: The Effect of Founder's Familial Relationship on the Number of Years to Sell Out - Censored Model

	(1) Tobit	(2) Tobit	(3) Tobit	(4) Tobit
Partner: Spouse	18.052*** (6.750)	19.845*** (6.997)	16.295*** (5.560)	36.137*** (8.541)
Partner: Brother/Child	6.771 (5.700)	6.665 (6.456)	3.640 (5.479)	13.320* (7.686)
Partner: Business	4.475 (5.579)	3.746 (5.819)	4.366 (3.953)	1.691 (3.530)
# Years Franchised		-0.292 (0.291)	-0.513* (0.281)	-0.241 (0.357)
First Business of Founder		6.913 (5.724)	9.360* (4.956)	9.467* (5.185)
Founder's Age at Foundation			-0.283 (0.178)	-0.564 (0.360)
Chain's Age			0.597*** (0.133)	0.419*** (0.137)
Founder Education: B.A. or below				-2.524 (3.430)
Founder Education: M.A. or above				1.445 (7.976)
Founder Education: Professional				47.004*** (17.909)
N	85	78	74	44

The table presents marginal effects obtained from estimating censored interval models (intreg Stata command)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: The Effect of Founder's Familial Relationship on Years to Sell-Out (conditional on sell-out)

	(1) LPM	(2) LPM	(3) LPM	(4) LPM
Partner: Spouse	7.519* (4.470)	7.401 (4.761)	4.977 (3.273)	22.131*** (2.779)
Partner: Brother/Child	2.102 (4.104)	1.929 (4.331)	0.431 (3.120)	1.422 (3.997)
Partner: Business	-3.148 (3.565)	-2.242 (3.634)	0.188 (2.456)	-2.689 (1.734)
# Years Franchised		0.514*** (0.171)	0.339* (0.178)	0.668*** (0.143)
First Business of Founder		-2.776 (3.122)	-0.882 (2.529)	-0.466 (2.311)
Founder's Age at Foundation			-0.277*** (0.084)	-0.351** (0.169)
Chain's Age			0.398*** (0.088)	0.222*** (0.072)
Founder Education: B.A. or below				1.191 (2.221)
Founder Education: M.A. or above				-1.045 (4.797)
Founder Education: Professional				42.857*** (2.725)
R^2	0.072	0.175	0.628	0.888
N	71	65	61	33

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: The Effect of Founders' Familial Relationship on the Decision to Go International

	(1) OLS	(2) Probit	(3) OLS	(4) Probit	(5) OLS	(6) Probit
Partner: Spouse	0.303** (0.143)	0.253** (0.103)	0.272* (0.153)	0.226** (0.105)	0.370* (0.215)	0.381*** (0.128)
First Business of Founder			-0.003 (0.104)	-0.005 (0.099)	-0.053 (0.130)	-0.087 (0.118)
Age at Foundation			0.000 (0.005)	0.000 (0.005)	-0.001 (0.010)	-0.001 (0.009)
Franchised			0.137 (0.100)	0.151 (0.121)	0.181 (0.141)	0.283* (0.170)
Founder Education: B.A. or below					-0.140 (0.112)	-0.283** (0.136)
Founder Education: M.A. or above					0.396 (0.238)	0.286** (0.121)
Founder Education: Professional					0.372 (0.481)	0.299 (0.270)
R^2	0.068		0.075		0.252	
Observations	85	85	74	74	44	44

The dependent variable takes the value 1 if the chain went international after the sell out, and 0 otherwise

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 1:

