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FAMILY CONTROL AND FIRM GROWTH: EVIDENCE FROM CZECH REPUBLIC

This study investigates the relationship between family control and growth under market conditions of Czech Republic. Using data on various industries, 2008–2013, we find that family firms are likely to grow slower than non-family firms. We also found that younger firms grew faster than older firms and that leverage has a positive effect on growth.
Keywords: *family firms; firm growth; Czech Republic.*

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ВЗАЄМОЗВ'ЯЗОК РОДИННОГО УПРАВЛІННЯ ТА РОСТУ ФІРМИ: ЗА ДАНИМИ ЧЕСЬКОЇ РЕСПУБЛІКИ

У статті досліджено взаємозв'язок між родинним управлінням та зростанням фірми в умовах ринкової економіки на прикладі Чеської Республіки. Використовуючи дані по різним галузям за 2008–2013 рр., автор прийшов до висновку, що родинні підприємства схильні зростати повільніше, ніж решта фірм. Крім того, молодші фірми розвиваються швидше, ніж старші; а розмір фінансових зобов'язань зазвичай позитивно впливає на розвиток.
Ключові слова: *родинні фірми; зростання фірми; Чеська Республіка.*
Табл. 3. Літ. 37.

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ВЗАИМОСВЯЗЬ СЕМЕЙНОГО УПРАВЛЕНИЯ И РОСТА ФИРМЫ: ПО ДАННЫМ ЧЕШСКОЙ РЕСПУБЛИКИ

В статье исследована взаимосвязь между семейным управлением и ростом фирмы в условиях рыночной экономики на примере Чешской Республики. Используя данные по различным отраслям за 2008–2013 гг., автор пришёл к выводу, что семейные предприятия склонны расти медленней, чем остальные. Кроме того, более молодые фирмы развиваются быстрее, чем старые, а объём финансовых обязательств обычно позитивно сказывается на развитии.
Ключевые слова: *семейные фирмы; рост фирмы; Чешская Республика.*

Introduction. The recent financial crisis has highlighted the importance of stable growth. The support of private entrepreneurship belongs to the basic prerequisites of successful economic development. At the same time, in most countries around the world, family firms represent an important organizational form of business (Anderson and Reeb, 2003). Their inherent attributes, such as trust, altruism, and commitment (Lee, 2006) are supposed to have a non-negligible impact on performance. However, the findings of different authors differ as to financial performance and growth rates between family firms and their non-family counterparts. Evidence is especially missing for Eastern European countries. While by the beginning of the 1990s, the number of private and individual businesses, not to mention family firms, was very low due to the transition from centrally planned economy, nowadays, many family firms have been successfully established, their situation is becoming similar to the family firms in Western developed countries, and often, the transition from the first generation to the next one is taking place. This highlights the importance of family business as an

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emerging academic discipline in former post-socialist countries such as Czech Republic.

While family firms have often been reported to be more profitable than non-family firms, the question of how they grow is also a subject of academic attention. The aim of this article is to examine the rate of growth for family firms as compared with the non-family ones in Czech Republic. This article is organized in the following way. The second section provides the review of relevant literature. The third section describes the data and research methods. The fourth section presents the key empirical findings. The last section provides the discussion and concluding remarks.

Literature review. Growth is important for all for-profit organizations. Growth is a process function which happens over multiple time periods. Sources and measurement of business growth have been subject to considerable academic attention. The growth of firm can be represented by the change of some variables over time. The most frequently used measures of growth are probably profit, physical output in natural units, sales in monetary units or market share (Delmar, 1997). Miller and Friesen (1984) described 5 common stages of firm development: birth, growth, maturity, revival, and decline. Each of these stages can be associated with a certain development of sales. It is also noteworthy that some researchers consider that a firm's growth is in an adverse relationship with profitability, because profitability is focused on short-term results and postpones investments which belong to the sources of long-term growth (Milano, 2010). And because family firms have often reported to be more profitable than non-family firms it can be presumable that they grow slower. However, before discussing performance of family firms, it is necessary to clarify what "family firm" actually means.

1. Definition of family firm. Even if family business as an academic discipline is no more an emerging one, the definition of the term "family firm" is far from being standardized. Definitions cited in literature usually explicitly or implicitly include 3 dimensions (de Massis et al., 2012): ownership, membership in supervisory boards, or control over management. Rosenblatt et al. (1985) defined family business as "a company where the majority of ownership or control rights are possessed by one firms and in which two or more family members are involved". Leach (2007) defined family business as a company where family members possess at least 50% of ownership. Klein (2000) used a special indicator, called SFI (substantial family influence), to measure the family involvement as a sum of shares of a family in management, ownership and supervisory boards. The group of similar to the abovementioned criteria are also called "involvement" criteria (Chrisman, Chua and Zahra, 2003) since they deal with the involvement of family in different areas of control over a company.

There also exist other approaches, which include the "intention for succession", self-identification as a family business, or behavioural aspects as distinguishing factors of family firms. For instance, Chua et al. (1999) defined family business as "a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family of families". Habbershon and Williams (1999) proposed that "family firms should be distinguished by the presence of unique and synergistic resources and capabilities arising from family involvement and interactions between family members".

According to de Massis et al. (2012), the "involvement" criteria have been by far more prevalent than other criteria. We will also adopt this approach in this article.

2. Performance differences between family and non-family firms. The question whether family firms perform better than non-family firms belongs to the most attractive topics of family business as an emerging academic discipline. While a large number of past studies found superior financial performance of family firms (Allouche et al., 2008; Anderson and Reeb, 2003; Dibrell and Craig, 2006; Kachaner et al., 2012), other authors (Dyer, 2006; O'Boyle et al., 2012) found no significant difference. According to a recent meta-analysis, "there exists an economically weak, albeit statistically significant, superior performance of family firms compared to non-family firms" (Wagner et al., 2015).

In another recent study of Czech firms, a matched-pair investigation of family and non-family businesses was carried out on the sample of large and medium-sized companies (Machek and Hnilica, 2015) to find that family firms were more profitable. Since the analysis was not based on random sampling, one must be careful not to generalize such results. However, these findings are consistent with those found by other researchers outside Czech context, of the superior performance of family vs. non-family firms.

Czech family firms were also found to use less debt (external resources), most probably due to higher risk aversion of family businesses. This can be explained by a perceived risk of transfering control over the company to other people than family members in case of default, as well as a possible damage to family reputation.

The differences are often explained by a more effective management due to familial nature of business, with the following emphases:

- Reduction of agency costs, i.e. reduction of costs paid by shareholders to avoid the possibility that their agents may act in their own interest (Carney, 2005; Davis at al., 1997).
- Long-term orientation of family firms, i.e. intention of family business owners to transfer their firms to following generations, which may result in better investment policies (James, 1999; Miller and Le Breton-Miller, 2006).
- Values shared across family business stakeholders (such as managers, owners, employees, suppliers), which may generate synergistic effects (Habbershon and Williams, 1999).

According to some researchers, family businesses seem to outperform non-family firms in terms of performance, but performance decreases through generations (Nowak et al., 2006; Villalonga and Amit, 2006). In addition, non-family firms have frequently been reported to grow faster than family firms, since family owners often restrict growth in order to retain control within the family (Birley, 2000; Daily and Dollinger, 1992).

Data and methodology. As mentioned above, we consider that business growth can be measured by sales growth. Based on literature review, we want to answer the following research question: Do Czech family firms grow slower than their non-family counterparts?

To investigate the extent of family control on sales growth, we employ multivariate regression analysis. The research sample contains data on Czech family businesses from 2008 to 2013 from various industries. The data were collected from the data-

base "Albertina" which contains financial data on all Czech economic subjects with registered tax ID. The basic selection criteria were: companies with more than 30 employees having a turnover greater than 30 mln CZK (Czech crowns).

The sample of family firms was obtained using the surname-matching approach (Hnilica and Machek, 2014). The principle of matching is to select all companies for which at least one of the following conditions holds: there are at least two people of the same surname in management board, or in supervisory board, or among owners. Subsequently, we had to manually check all records to eliminate possible errors such as non-disclosed values. The final sample contains data for 934 family firms and 7224 non-family firms for the years 2008—2013. Table 1 shows the distribution of firms by industries.

Table 1. **Number and percent of family and non-family firms by industries,** *authors'*

Sector	FB	NFB	% FB
Manufacturing	459	2801	14.08
Construction	100	720	12.20
Wholesale and retail	177	1217	12.70
Transport, network industries, agriculture and mining	108	1404	7.14
Other	90	1082	7.68
Total	**934**	**7224**	**11.45**

Note: FB – family businesses, NFB – non-family businesses.

Family control is captured by a binary variable, which equals 1 for a family firm and 0 otherwise. Market conditions also vary from one year to another, as well as across industries. Hence, we introduced 4 dummy variables, each representing an industry (Table 1), and 5 dummy variables, which represent the years from 2008 to 2013. We also controlled for company size (natural logarithm of a firm's total firm assets), leverage (liabilities over total assets), and age of firms (which captures differences in firm competitiveness associated with history).

Key results. Table 2 displays the t-tests of differences in means of selected variables (sales growth, firm age, leverage, and firm size measured by natural logarithm of total assets). Significant differences were obtained for sales growth (family firms seem to grow faster) and size (family firms are larger). We are unable to draw any conclusions on firm age — family firms seem to be older that non-family firms, but the observations are not statistically significant. Also, according to the past research, family firms should use less debt (Allouche et al., 2008; Machek and Hnilica, 2015) — their average debt ratio is lower, but the mean difference is not statistically significant in our sample.

Table 2. **Tests of difference in means,** *authors'*

Description	FB (mean)	NFB (mean)	t-statistic
Sales growth	0.0211	0.0343	–1.997**
Firm age	16.629	16.279	1.499
Leverage	0.480	0.483	–0.348
Total assets (mln CZK, natural log)	11.901	11.719	4.019***

Note: FB – family businesses, NFB – non-family businesses, * – significant at the 1% level, ** – significant at the 5% level, *** – significant at the 10% level.

Table 3 displays the regression results. The family firm variable has a negative effect on sales growth (significant), which supports the idea that family firms grow slower than non-family firms. Moreover, younger firms and firm using more external resources (debt) seem to grow faster (significant). Firm size had no statistically significant effect on sales growth. The analysis also reveals that firms were growing faster in 2010 and 2011, while the growth was lower in 2008, 2009 and 2012. Besides that, transportation, network industries, agriculture and mining enjoyed higher growth than other industries.

Table 3. **Family firms and sales growth, 2008–2013,** *authors'*

Explanatory Variable	Coefficient	p-value	t-statistics
Intercept	0.0316***	< 0.001	3.469
Family firm	-0.0061**	0.0269	-2.212
Firm age	-0.0021***	< 0.001	-14.347
Total assets	0.0011	0.1039	1.626
Leverage	0.0667***	< 0.001	17.046

Note: Excluding dummy variables for industry affiliation and years, * – significant at the 1% level, ** – significant at the 5% level, *** – significant at the 10% level.

Younger firms are more likely to grow than older firms (Haltiwanger et al., 2013). It can be justified by the very simple idea that younger firms are more likely to experience the stage of growth rather than the one of maturity (Miller and Friesen, 1984).

Higher growth of firms using more debt is questionable and prior research doesn't provide a clear answer. Some authors (Avarmaa, 2011; Francis et al., 2011) found that leverage has a positive impact on the growth of local companies, or at least does not have a negative effect; other authors present a negative relationship between leverage and growth (Lang et al., 1996; Jordan et al., 1998). Chen and Zhao (2006) posit that the relation between growth and leverage is not monotonic and the previously documented negative relation was driven by a subset of firms with high market-to-book ratios. According to (Huynh and Petrunia, 2009), there exists a positive nonlinear relationship between firm growth and leverage. However, the goal of this article is not to explore the relationship between growth and debt; we leave this issue open for future research.

Literature on the relationship between firm size and growth is abundant. The famous Gilbrat's law (Gilbrat, 1931) stating that size of a firm and its growth rate are independent has been questioned and frequently shown to be not valid. Sutton (1997) makes a review of "new literature which developed in the 1980s" when multiple studies (such as Evans, 1987) found that firm growth is actually negatively related with firm size. A number of recent studies confirmed this "stylized fact". However, in our study, we didn't obtain any statistically significant relationship between firm size and sales growth. This may be due to the fact that our research sample doesn't contain small firms (with less than 30 employees), which, however, represent the largest part of the economy, and, at the same time, younger and smaller firms, especially start-ups, are supposed to grow faster.

However, the most important outcome is the fact that family firms grew slower than non-family firms. In other words, family control tends to reduce growth. As previously noted in past literature, family firms have frequently been reported to grow slower than non-family firms. This could be attributed to a greater risk aversion of family firms (Kachaner et al., 2012) since growth can be attained by risk-taking. Another possible reason is the pursuit for family firm independence. In order to prevent dilution of family control, family firms may refuse external financing of growth opportunities. In other words, family owners may restrict growth in order to retain control within family (Birley, 2000; Daily and Dollinger, 1992).

Conclusions. Family firms belong to the most important organizational forms in business world. Their unique attributes, which include trust, loyalty, and cooperation, are supposed to influence performance, including growth. According to the past research, family firms tend to grow slower than non-family firms. This article has sought to test this hypothesis in the market conditions of Czech Republic, where empirical evidence on family business is missing; the same is true for other former Eastern bloc countries.

Regression analysis using data from various industries over the period 2008–2013 led to the conclusion that family control has a negative effect on sales growth. Holding everything else constant, family firms are likely to grow slower than non-family firms. We also found that younger firms grew faster than older firms and that leverage had a positive effect on growth.

Besides these findings, it is also presumable that the proportion of family firms in Czech economy is by no means negligible. At least 11.45% of all Czech firms having more than 30 employees were family firms; and these are only those detected by the surname-matching approach. The proportion of family firms among small and micro-companies is likely to be much higher.

This study also has several policy implications. Generally, it is desirable that private companies grow and increase their impact on the economic and political environment. Yet family firms, especially in the former Eastern bloc, seem to be overlooked and underestimated by their governments. Government support may include, among others, introducing more flexible working hours, job sharing, but also reducing inheritance taxes, supporting start-ups, or providing easier access to long-term financing.

Family firms will face multiple challenges in the near future. More precisely, it seems that family firms' managers, especially in European countries, face a more intensive competition, as well as a slower economic growth. They will also have to deal with increasing internationalization and globalization.

This study also has several limitations. We focused on Czech firms having more than 30 employees. However, most companies belong to the class of small and micro-sized firms. Moreover, regression analysis reveals little about the reasons "why". Future research will have to be qualitative in nature.

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