Abstract

The aim of this paper is to shed light on whether initial public offering (IPO) share pricing as a strategic decision in family firms going public is impacted by socioemotional wealth (SEW). Previous literature maintained that family firms accept higher costs in terms of IPO underpricing (UP) than nonfamily firms to preserve their SEW, yet disregarding the incomplete information that UP provides. The authors contribute to existing literature on family-firm effect on the IPO pricing by embedding the primary market pricing perspective in the UP analysis. This study documents that family firms do not excessively forgo IPO earnings to protect their SEW; rather they compromise between financial wealth (FW) and SEW safeguarding by avoiding excess UP.

Keywords: family firms, socioemotional wealth, financial wealth, initial public offering, price adjustment, underpricing

1. Introduction

Family control and ownership are widespread all over the world (Morck et al., 2005). De Massis et al. (2018) refer to the Family Firm Institute (2017) to highlight that family businesses represent two-thirds of all the existing enterprises, generate around 70–90% of annual global GDP and create 50-80% of jobs worldwide. Over 50% of enterprises are family controlled in the European Union; in Latin America, family firms constitute between 65% and 90% of enterprises; whereas, in the United States, more than 95% of businesses are family held (PricewaterhouseCoopers, 2007); the presence of family firms is also important in Arab and MENA countries (Ayman et al., 2015). Family businesses are supported by family-based network. These organizations are characterized by the search for safety and economic and financial independence and the family unit's need for accomplishment, status and prestige (Monticelli et al., 2020). As Mueller and Flickinger (2021) argue, research has documented that family firms show distinctive characteristics as opposed to their nonfamily counterparts, in terms of value (e.g., Anderson & Reeb, 2003); investment horizons (e.g., Bertrand & Schoar, 2006); management, governance, and control practices (e.g., Villalonga & Amit, 2006); and innovation strategies (e.g., Chrisman & Patel, 2012).

These differences can be explained by using the approach of behavioral theories (Araya-Castillo et al., 2021). In fact, despite both family and non-family firms need to achieve financial as well as nonfinancial benefits (Zellweger et al., 2013), in family firms these last ones depend on the family’s vision of the business developed by a dominant coalition controlled by one or a few families (Chua et al., 1999). The nonfinancial benefits that family members derive from the ownership and management of family businesses have been called socioemotional wealth (SEW) (Gómez-Mejía et al., 2007; Astrachan & Jaskiewicz, 2008; Zellweger & Astrachan, 2008; Berrone et al., 2010; Zellweger & Dehle, 2011; Berrone et al., 2012; Cruz et al., 2012). SEW is thus created - according to Gómez-Mejía et al. (2007) who first coined the expression “SEW” - by safeguarding and developing all non-financial aspects of family firms, including the family identity, family control and dynastic perpetuation.

Albeit SEW preservation is a priority for family firms even if it means a reduction in financial gains (Gómez-Mejía et al., 2007; Gómez-Mejía et al., 2010), to what extent are family businesses willing to sacrifice their financial wealth (FW) to safeguard their SEW when it comes to go public through an IPO?
Growth intention is the principal financial driver of IPOs, including family firms (Brau & Fawcett, 2006). Nevertheless, family firms face a trade-off between the need to go public to obtain an infusion of new financial capital beyond that available from the family resources and the willingness to preserve their SEW (Mazzola & Marchisio, 2002).

Previous literature documents that family enterprises forgo IPO earnings by allowing for higher IPO UP, as that helps them to protect their SEW (Leitterstorf & Rau, 2014; Kotlar et al., 2018). Nevertheless, whether such higher UP comes from a reduced offer price, from a higher market price or from both occurrences is an unsolved issue. UP by nature represents only a part of the pricing process involved in the IPO, since it accounts for the money that is left on the table when stocks are traded for the first time in the secondary market (in terms of the percentage difference between the secondary market price and the offer price) and, therefore, it only reflects the first day of trading. At the same time, UP does not provide any information on what has previously happened in the primary market. To draw the whole picture of the IPO earnings, the entire pricing process should be considered, especially including the primary market pricing dynamics (price adjustment (PA) – percentage difference between the offer price and the midpoint of the price range), which inform about how the offer price was achieved and how much money the listing firm gave up in terms of IPO earnings.

In studying primary and secondary market dynamics as a whole, this work fills the existing gap on whether family enterprises forgo IPO earnings to protect their SEW. Specifically, the authors contribute to this debated issue by documenting that when considering the interaction of being a family firm and PA on the UP, the well-known positive effect that PA exerts on UP (i.e., expected UP, see Ritter & Zhang, 2007) is reduced, suggesting that in family firms the offer price is increased more than it would be in non-family firms, thus avoiding the so called “excess UP” (Reuter, 2006; Geranio et al., 2022). Therefore, despite family firms permit a broader UP if compared to non-family firms, no excess UP is allowed, meaning that - differently from what previous literature found - family firms do not excessively forgo IPO earnings to protect their SEW.

The remainder of the paper is organized as follows. In Section 2, this work reviews the literature on the SEW preservation and IPO UP in family firms, and a few research hypotheses are discussed. In Section 3, the presentation of data and methodology is provided. Section 4 is an analysis of the main findings of this research. Section 5 offers some final conclusions.

2. Literature Review and Hypotheses

The review of the relevant literature first highlights the importance of the several dimensions of the SEW for family businesses and then explains how the need to preserve the SEW causes family firms to underprice their IPOs. Lastly, some research hypotheses are put forward.

2.1 The SEW Preservation in Family Firms

SEW represents a key characteristic that separates family firms from non-family firms (Berrone et al., 2012). Family members manage the firm in ways that enable them to generate and protect SEW, even if this means a decline in financial gains (Gómez-Mejía et al., 2007; Gómez-Mejía et al., 2010). Therefore, when SEW is put at risk, family firms take decisions that are driven by a prevalent nonfinancial logic.

A general model of SEW was developed by Gómez-Mejía et al. (2007). They define SEW as a group of several non-financial facets, including identity, the ability to exercise family influence, and the perpetuation of a family dynasty. Broadly speaking, SEW creation and safeguard imply autonomy and control, family cohesiveness, supportiveness, harmony, loyalty, pride, family name recognition, respect, status, goodwill in the community (Zellweger et al., 2013), the need to transfer the family business to future generations and sustain the family’s image and reputation (Naldi et al., 2013). According to the FIBER scale conceived by Berrone et al. (2012), SEW priorities are family control and influence (F), family members’ identification with the firm (I), binding social ties (B), emotional attachment (E), and renewal of family bonds to the firm through dynastic succession (R).

The concentration of ownership and management in the hands of few family members translates into family control and influence (F) over firm goals, strategies, and behaviors (Chrisman & Patel, 2012), which in turn allows family members to preserve the SEW of family firms (Pukall & Calabro, 2014; Randolph et al., 2019; Swah et al., 2020). As the primary aim of family members is to maintain control and influence over the business to safeguard the firm’s SEW endowment (Gómez-Mejía et al., 2007; Randolph et al., 2019), they will prefer strategies where control and influence are improved and supported (Gómez-Mejía et al., 2010).

Family members’ identification with the firm (I) is represented by the linking of the family with the business, forming a unique family and firm identity (Berrone et al., 2012; Dyer & Whetten, 2006); the social identification
between this unique identity and the social group of family members leads family members to avoid practices that can damage the firm’s image and favor those that protect its reputation (Alayo et al., 2023; Dyer, 2021; Cabrera-Suárez et al., 2014; Deephouse & Jaskiewicz, 2013).

Binding social ties (B) refers to the interaction between the family firm and non-family stakeholders such as employees, suppliers, customers, financiers, communities, and social networks. Internal and external social ties help family firms perpetuate the business across generations and maintain a strong desire for acceptance in their communities (Ng et al., 2019). This is the reason why family firms are deemed to pollute less, are more socially responsible, and have greater concern for their reputations than non-family firms (Ng et al., 2019; Campopiano et al., 2014; Berrone et al., 2010).

Emotional attachment (E) concerns the role of emotions in the family business setting, resulting from dynamic daily situations and becoming the context in which the needs for belonging, affect, and intimacy are fulfilled (Berrone et al., 2012; Morgan & Gomez-Mejia, 2014). These emotions develop gradually over time and can be positive, such as warmth, affection, compassion, and happiness, or negative, such as anger, anxiety, loneliness, sadness, and depression (Berrone et al., 2012; Firfiray & Gomez-Mejia, 2021). Emotional ties in family firms can positively influence business processes, behavior, group dynamics, and performance, but also can strengthen worries about a firm’s future, thus generating more responsible behaviors (Ng et al., 2019).

Lastly, renewal of family bonds through dynastic succession (R) means the desire to hand over the family business down to future generations (Firfiray & Gomez-Mejia, 2021), making it feasible the perpetuation of the family dynasty and continuation of family values (Zellweger et al., 2012), so that the firm’s knowledge and the family’s shared values, beliefs, and norms can be transferred across generations (De Massis et al., 2016). Therefore, as family members obtain satisfaction from being able to pass a sustainable business on to the next generations (Razzak et al., 2019), the family continuity (control over time) of the business is a priority of family firms.

2.2 IPO UP in Family Firms

Traditional theories of UP mostly ascribe money left on the table by listing firms to the asymmetric information hypothesis (Lowry & Shu, 2002; Ljungqvist, 2007), signaling effects (Demers & Lewellen, 2003), agency costs (Michaely & Womack, 1999; Loughran & Ritter, 2002; Liu & Ritter, 2011) and litigation risk (Tiniç, 1988; Hughes & Thakor, 1992; Hensler, 1995).

Asymmetric information is expected to affect UP in that when information asymmetry regarding an IPO is reduced, the offer price gets closer to the true value of the company; this allows for a reduction of the cost of capital for the listing firm because more money is raised and a lower UP is produced (Rock, 1986; Beattie & Ritter, 1986; Diamond & Verrecchia, 1991; Welker, 1995; Schrand & Verrecchia, 2005).

Authors supporting agency theories of UP maintain that underwriters are motivated by monetary incentives to underprice the stock more than is necessary to the advantage of the institutional investors involved (Michaely & Womack, 1999; Loughran & Ritter, 2002; Liu & Ritter, 2011). In other words, owners of IPO firms underprice their firms when they go public, aiming to attract large block-holders who might work as an internal monitoring agent of their firms to minimize agency problems between managers and shareholders (Jamaani & Alidaroos, 2019).

Firms may also choose to lower the offer price to benefit from the effect of the signaling theory (Demers & Lewellen, 2003); although firms can use a wide range of other ‘good signals’, apart from expected UP - i.e., the choice of good underwriters (Booth & Chua, 1986) or the presence of venture capitalists (Meggison & Weiss, 1991; Lee & Wühl, 2004) – UP is a strong signaling tool as it communicates the future firm’s value (Keasey & McGuinness, 2008). Only higher quality firms can be expected to recover the cost of this signal through subsequent offerings of seasoned equities (Denning et al., 1992).

Other authors maintain that UP might also be explained by the issuer’s decision to fix the offer price at a lower level, for fear of incurring litigation risks (Tiniç, 1988; Hughes & Thakor, 1992; Hensler, 1995).

This study contends that some of the above mentioned theories can also apply to the specific family firm’s context. This work also maintains that there are several reasons which can justify the choice of family enterprises to sell at a greater discount relative to their nonfamily counterparts when they decide to undertake an IPO, because this allows family enterprises to preserve their SEW. Specifically, when the authors look at SEW factors, information asymmetry is one of the most important determinants of IPO UP (Baron, 1982; Rock, 1986; Welch, 1992; Ljungqvist, 2007; Katti & Phani, 2016). The underwriters are better informed than issuers and induce IPO UP to minimize their distribution effort and increase the probability that the operation is successful. At the same
time, owing to the concern related to information symmetry, the issuing family firm is prepared to get lower proceeds from the IPO to reduce the probability of its failure. This allows a family firm to protect its reputation, create or reinforce the social ties with non-family shareholders and increase the possibility of perpetuating the business by leaving good taste in investors’ mouth, so that future issues will also be favored. Thus, the probability of an IPO failure persuades family firms to substantially underprice to preserve their SEW.

Secondly, according to Logue (1973) and Ibbotson (1975) firms going public underprice to reduce the litigation risk. Specifically, companies decide to sell their shares at a discount to diminish the likelihood of a lawsuit (Ljungqvist, 2007). Lawsuit avoidance prevents family firms from both bearing the economic consequences of the litigation procedures, such as legal fees and diversion of management time, and the damage to their reputation (Ljungqvist, 2007). However, Ritter and Welch (2002) assert that leaving money on the table by means of a larger UP appears to be a cost-ineffective way of avoiding lawsuits. Nonetheless, when IPOs are more likely to be sued, UP is more significant (Lowry & Shu, 2002). In this respect, this study contends that family firms perceive a higher risk of being sued after an IPO, because of their strong orientation to the safeguard of reputation and image, as main components of their SEW. Hence, they tend to issue shares at a considerable discount when they go public, to implement a prudent strategy against lawsuits.

Lastly, another important reason for the UP in family businesses is represented by the need for increasing ownership dispersion (Booth & Chua, 1996; Leitterstorf & Rau, 2014), preventing the presence of outside block holders, that would undermine family control retention (Yu & Zheng, 2012), and hence allowing the continuation of the family dynasty. Without a solid family control and influence, subsequent generations will not be able to exercise power over the business and this would imply a loss of SEW, that family companies manage to avoid through significant IPO UP. UP has also the merit, from the family’s point of view, of increasing the shares’ subscription, making the IPO more appealing for potential investors, and lowering potential family damage from IPO failure. The theoretical insights of this theory (Kotlar et al., 2018) predict that the focus on emotional-related goals will be more pronounced when the family’s share retention is high. This will make the level of acceptable IPO UP even greater (Carbone et al., 2022).

2.3 Hypotheses

The above-mentioned previous literature studied the extent to which being a family firm impacts on the level of UP, disregarding the effect on primary market price. Nevertheless, no clear and reliable conclusion can be drawn without considering the whole IPO pricing process. We analyze these issues by testing three hypotheses.

The first hypothesis is:

H1. Being a family firm is positively and significantly related to UP.

This first hypothesis basically traces the research question of previous papers in the literature, yet preventing any reliable conclusion on whether companies sacrifice IPO earnings for their SEW. As mentioned above, UP represents only part of the picture (as it measures the distance between the secondary market price and the primary market offer price); in the absence of further information, it is impossible to assess whether its magnitude is ascribable to primary market or secondary market dynamics, or to both.

Controlling for PA is therefore necessary to complete the picture. More specifically, the authors expect that the next hypothesis will find support:

H2. The family-firm effect on the UP loses its power when controlling for PA, meaning that part of the family-firm effect is embedded in an increase or decrease of the offer price.

Indeed, the authors assume that being a family firm could have a role in the relationship between the UP and the PA, rather than on the primary and secondary market pricing themselves. In other words, the authors do not expect being a family firm to affect the primary market pricing (i.e., the PA) or the secondary market pricing (i.e., the UP net of the PA) directly, but rather the way they are combined. Consequently, the last hypothesis can be stated in these terms:

H3. The interaction between PA and being a family-firms has a negative effect on the UP, meaning that for family firms PA is increased more than it would be in non-family firms and therefore no excess UP is allowed (negative effect on UP).

3. Data and Methodology

3.1 Data

The authors searched the Bureau van Dijk Amadeus database for all the IPOs occurred in OECD countries between 1995 and 2021. The authors found 7,260 firms involved in IPOs and then identified among the 7,260
IPOs those ascribable to family firms and those not. To identify family firms, the fractional equity owned by family members that generates control over the business was taken, in line with prior studies (Anderson & Reeb, 2003, Anderson et al., 2003; Barth et al., 2005; Amore et al., 2011; Croci et al., 2011; Diaz-Diaz et al., 2016).

Specifically, family-controlled firms are those enterprises for which one or more named individuals or families own together between 25 and 100 per cent of equity. The threshold of 25 per cent was chosen to identify a family firm following previous literature, according to which the ownership of 25 per cent of a listed company allows its actual control, thanks to a more dispersed ownership as opposed to privately held firms where the presence of large block holders is more likely (Amore et al., 2011). The Eikcon Thomson Reuters database was examined to integrate the above-mentioned data with information regarding the IPO prices, firms’ characteristics and other determinants of IPO pricing suggested by the literature on the topic (see table 1 for a complete list of the variables). By merging the two databases the authors ended up with 7,241 matching IPO observations and then performed data cleaning procedures. Outliers were dropped from the series. After cleaning the data and considering that pricing data are available for 394 family firms and 1,183 non-family firms, the authors ended up with 1,582 firms.

Prior research on family business IPOs has extensively used family ownership and management as proxies of SEW, due to the difficulty of directly measuring SEW (e.g., Chrisman & Patel, 2012; Zellweger et al., 2012; Gómez-Mejía et al., 2015) and based on the assumption that family control is an essential component of SEW (Zellweger et al., 2012). Despite more accurate measures of SEW have been proposed by Berrone et al. (2012) and more recently by Debicki, et al. (2016), such measures are hardly applicable retrospectively at the time of IPO (Kotlar et al., 2018). Therefore, we used family control to distinguish between family and nonfamily firms (d_ff) and thus as a proxy for SEW.

Table 1 provides a description of the core variables that are employed in the methodology.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpricing</td>
<td>UP</td>
<td>Percentage difference between the price at the end of the first day of trading and the IPO offer price, net of the market return</td>
</tr>
<tr>
<td>Price Adjustment</td>
<td>PA</td>
<td>Percentage difference between the final offer price and the midpoint of the initial filing price range</td>
</tr>
<tr>
<td>Dummy for family firms</td>
<td>d_ff</td>
<td>Dummy with value 1 for family firms and 0 otherwise</td>
</tr>
</tbody>
</table>

### Control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>TA</td>
<td>Size of the firms as measured by the value of total assets as reported in the last balance sheet before the IPO (in million S)</td>
</tr>
<tr>
<td>Debt/equity ratio</td>
<td>DE</td>
<td>Leverage of the firm as measured by the percentage value of debt/equity as reported in the last balance sheet before the IPO</td>
</tr>
<tr>
<td>Lock up agreement</td>
<td>Lockup</td>
<td>Dummy variable equal to 1 when the VC has a lockup obligation, and zero otherwise</td>
</tr>
<tr>
<td>VC backed</td>
<td>VCbacked</td>
<td>Dummy variable equal to 1 when the IPO is backed by a VC and zero otherwise</td>
</tr>
<tr>
<td>Age of firm</td>
<td>Age</td>
<td>Age of the firms</td>
</tr>
</tbody>
</table>

### 3.2 Methodology

Past literature mainly used UP to measure the amount of money that family firms going public leave on the table to preserve their SEW (Kotlar et al., 2018; Letetterstorf & Rau, 2014). Nonetheless, UP is not fully suitable to describe the whole IPO performance, as it only measures the secondary market dynamics (i.e., the difference between the price at the end of the first day of trading and the IPO offer price); in fact, by its nature the UP does not provide any information on what has previously happened in the primary market and therefore allows no conclusion regarding if and how listing firms give up IPO earnings to protect their SEW.

To analyze the extent to which a family firm really forgoes IPO earnings to protect its SEW, the primary market pricing must be considered, as well. In particular, the PA (i.e., percentage difference between the final offer price and the midpoint of the initial filing price range) reveals how much the final offer price is increased or decreased within the initial range, providing an idea of the success of the IPO (Ritter & Zhang, 2007). This suggests that a larger UP itself is not necessarily a sign of less earnings for the family firm, as PA, as well, might have been...
raised leading to increased IPO earnings. Only when considering the UP and PA at the same time conclusions can be drawn regarding whether listing firms give up IPO earnings, which is the main contribution of this research.

Therefore, as a first step the authors run model [1] to verify H1, in line with previous literature, as follows:

\[ UP = \alpha + \beta_d ff + \delta controls + \varepsilon \]  

(1)

Where:
- UP is the underpricing;
- \( d_{ff} \) is a dummy variable for family firms;
- \( \delta \text{controls} \) is a vector of control variables described in table 1.

Consistent with the literature on UP (Hanley, 1993; Ritter & Zhang, 2007) and in line with hypothesis 2 (H2), the PA measure is added to the set of explanatory variables employed in [1], as follows in equation 2:

\[ UP = \alpha + \beta_d ff + \gamma PA + \delta controls + \varepsilon \]  

(2)

To test H3, this paper then introduces in the following equation 3 an interaction term \( \chi_{ff^*PA} \) which should reveal to what extent the UP partially adjusts to the PA (partial adjustment, see Benveniste & Spindt, 1989; Bradley & Jordan, 2002; Hanley, 1993) when family firms are going public:

\[ UP = \alpha + \beta_d ff + \gamma PA + \chi_{ff^*PA} + \delta controls + \varepsilon \]  

(3)

A negative and significant coefficient for the interaction term is foreseen, meaning that for family firms PA is increased more than it would be in non-family firms and therefore no excess UP (Reuter, 2006; Geranio et al., 2022) is allowed.

4. Results and Discussion

4.1 Descriptive Statistics

Table 2 illustrates some descriptive statistics for the sample. Data show that both UP and PA are positive on average, with UP being larger that PA. Both values are in line with prior literature (Leittertstof & Rau, 2014). Firms have on average €163.97 of total assets and a debt ratio of 27.59% meaning that they are adequately capitalized. The whole sample is made up of young firms on average as the mean age is 12 years.

Table 3 reports the descriptive statistics for the sample of family and non-family firm involved in IPOs. Overall, the average level of UP in family firm IPOs is 39.42%, above the mean level for non-family firms IPOs (32.39%).

Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Obs</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpricing (%)</td>
<td>1577</td>
<td>0.07</td>
<td>0.13</td>
</tr>
<tr>
<td>Price adjustment (%)</td>
<td>827</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>Firm size (Total asset, €m)</td>
<td>2275</td>
<td>163.97</td>
<td>449.87</td>
</tr>
<tr>
<td>Firm leverage (Debt/equity, %)</td>
<td>2283</td>
<td>27.59</td>
<td>88.57</td>
</tr>
<tr>
<td>Firm age (years)</td>
<td>4464</td>
<td>12.60</td>
<td>21.06</td>
</tr>
</tbody>
</table>

Table 3. T-tests for family vs non-family firms

<table>
<thead>
<tr>
<th></th>
<th>Family firm IPOs (394)</th>
<th>Non-family firm IPOs (1,183)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>mean</td>
</tr>
<tr>
<td>Underpricing (%)</td>
<td>39.42</td>
<td>32.39</td>
</tr>
<tr>
<td>Price adjustment (%)</td>
<td>11.52</td>
<td>9.86</td>
</tr>
<tr>
<td>Firm size (Total asset, €m)</td>
<td>265.23</td>
<td>369.73</td>
</tr>
<tr>
<td>Debt/equity (%)</td>
<td>28.89</td>
<td>30.72</td>
</tr>
<tr>
<td>Firm age (years)</td>
<td>13.32</td>
<td>12.37</td>
</tr>
</tbody>
</table>

*, **, and *** indicate significance at the 10, 5 and 1% levels of the t-test for the difference, respectively, in means.

The difference is statistically significant at the 5% level. Such data, showing a huge amount of money that was left on the table from 1995 to 2021 on average, are aligned to those reported in Jay Ritter’s website* and reflect
periods of incredibly high UP (64.4% on average during the Internet bubble in 1999-2000 and 40.2% in 2020 and years around) averaged with periods with less money left on the table (the market crash in 2007 and following years).

Despite not statistically significant, family-firm IPOs show a higher average PA than non-family firm IPOs: this strengthens the hypothesis 3 that family firms do not leave more money on the table to preserve SEW, as previously maintained by literature on the topic, and suggests that further investigation is needed on this issue. Some statistically significant differences stand out in terms of size (total assets) and leverage (debt/equity ratio); family firms are on average less indebted and smaller than non-family firms. The negative effect of family ownership on debt financing of public businesses depends on control risk motivations and fear of bankruptcy costs (Mishra & McConaughy, 1999), whereas the fact that family firms tend to be smaller than non-family ones can be explained in terms of limited inclination to the entry of new equity financiers who are not family members.

Table 4 reports the correlation coefficients among all the variables used in this study. This study computed the variance inflation factors (VIFs) and found that none approached the commonly accepted threshold of 3. Thus, multicollinearity should not affect the results of this paper.

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>D_ff</th>
<th>TA</th>
<th>D/E</th>
<th>VC</th>
<th>LOCKUP</th>
<th>AGE</th>
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</thead>
<tbody>
<tr>
<td>PA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d_ff</td>
<td>0.0175</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA</td>
<td>0.1146</td>
<td>-0.2359</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>-0.0308</td>
<td>-0.0589</td>
<td>0.1822</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>VCbacked</td>
<td>0.1495</td>
<td>-0.0274</td>
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<td>-0.0303</td>
<td>1</td>
<td></td>
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<td>0.0923</td>
<td>0.0624</td>
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<tr>
<td>Age</td>
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<td>0.0980</td>
<td>-0.1187</td>
<td>-0.0521</td>
<td>-0.0288</td>
<td>-0.0960</td>
<td>1</td>
</tr>
</tbody>
</table>

4.2 Estimation Results

Table 5 shows the empirical results for the IPO UP. As expected from hypothesis 1, the family firm dummy (d_ff) is positively and significantly related to the IPO UP, in line with previous literature on the topic (model 1). At a first glance, such evidence leads to simply conclude that family firms might be willing to sacrifice some IPO financial gains to preserve their SEW. The remaining control variables show that UP negatively relates to the firm’s size (TA) as in Kotlar et al. (2018) and to the presence of venture capitalist in the IPO (VCbacked).

Notwithstanding extant literature employed UP as a unique measure to reveal money left on the table in family firm IPOs, PA effects should also be considered to correctly reveal the extent to which family firms forego IPO gains. In line with the IPO literature (Gompers & Lerner, 1999; Bradley & Jordan, 2002; Ritter & Zhang, 2007; Ince, 2014), therefore the PA is added as a control variable in the UP model (2); the results of this study show that when controlling for the PA, the family firms dummy (d_ff) loses effect, as expected in hypothesis 2. It is worth noting that, although the variance in IPO UP explained by the models in this research is rather modest (as is the case in most IPO UP studies as maintained by Certo et al., 2001), the authors increased the explained variance from a R-squared of 0.08 to 0.16 by adding the variable of PA.

Therefore, being a family firm does not seem to influence the primary market pricing (i.e., the PA^1 or the secondary market pricing (i.e., the UP net of the PA) directly, but it might rather affect the way they are combined.

Table 5 model (3) shows the findings when an interaction term (γffPA) is included. The negative result of the interaction term suggests that the UP partially adjusts to the PA (PA, see Benveniste & Spindt, 1989; Bradley & Jordan, 2002; Hanley, 1993) when family firms go public, thus confirming hypothesis 3. In other words, being a family firm reduces the positive effect that PA has on UP (i.e., for family firms UP is increased less than it would be in non-family firms and therefore less money is left on the table). Put differently, this work demonstrated that family firms do not excessively sacrifice IPO earnings to protect their SEW, as the UP analysis alone would suggest; rather they compromise between FW and SEW preservation by avoiding excess UP.
Table 5. IPO UP

<table>
<thead>
<tr>
<th>IPO UP</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>0.566</td>
<td>0.009</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(0.322)</td>
<td>(0.021)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>d_ff</td>
<td>0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction term</td>
<td></td>
<td>-1.256</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.696)</td>
<td></td>
</tr>
<tr>
<td>TA</td>
<td>-0.005</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Lockup</td>
<td>-0.002</td>
<td>0.019</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.018)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>VCbacked</td>
<td>-0.023</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.007</td>
<td>0.015</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.027)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Year fixed effects</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Industry fixed effects</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Number of obs</td>
<td>1,064</td>
<td>365</td>
<td>365</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.089</td>
<td>0.164</td>
<td>0.171</td>
</tr>
<tr>
<td>Root MSE</td>
<td>0.139</td>
<td>0.149</td>
<td>0.148</td>
</tr>
</tbody>
</table>

*, **, and *** indicate significance at the 10, 5 and 1% levels. T-statistics in brackets.

5. Conclusions

This paper contributes to the discussion on whether IPO share pricing as a strategic decision is impacted by SEW or not. It documents that in family firms the offer price is “adjusted” more than it would be in non-family firms, thus avoiding the so called “excess UP”. Specifically, family firms permit a broader UP if compared to non-family firms, but no excess UP is allowed. This, in turn, enables a reconciliation between SEW and FW in family firm IPOs.

The results of this study have practical implications in terms of strategies to be designed when family firms decide to go public. As an IPO is a unique event in a firm’s history, family owners have little opportunity to learn how to balance SEW and FW considerations from experience in the way investors or financial intermediaries do. Therefore, guidance from research may be particularly useful. This study points to important implications for IPO practice. Family firms planning IPOs need to be aware of the possibility that they can tune their UP to help them protect their SEW without the need to bear a too high economic sacrifice, and this could help obtain a broader consensus among family members of different inclination and expectations towards the family business. This issue is especially important in later-generation family enterprises, wherein the general attention to SEW weakens. In fact, when multiple generations and different family branches enter the business, some family members will become involved as simply owners and not managers and some of them will feel less attached to the firm or identified with it, so that a number of descendants might consider the firm merely as a source of financial support. In addition to this, attitude towards financialization often diverges between the first and second generations; financialization might be inhibited by first-generation entrepreneurs while second-generation successors may exhibit a higher inclination towards financialization due to emotional factors, lower attachment to the core business and a desire for personal achievements. This work tends to demonstrate that there is room for a resolution of the conflicts of interest between the different visions of family members in later-generation family firms, thanks to a compromise between the two opposite goals of the maximization of FW and SEW: the SEW-oriented family members will achieve a satisfactory level of non-financial benefits by UP, while the FW-oriented family members, by avoiding an “excess UP”, will benefit from the financial value generated by the employment of the available finance created through the IPO.

Moreover, such a conciliation could also prevent family firms from the complication to sell a smaller proportion of shares at the IPO and to sell additional shares after the IPO to minimize the costs of SEW preservation. The
findings of this work also suggest that investment banks underwriting the IPO do mediate between investors’ interests in UP and firms’ interest in the IPO proceeds, thereby honoring the agency agreement with the firm and keeping their reputation towards investors. Lastly, as nonfamily chief executive officers (CEOs) are appointed in the context of a succession process to benefit from the access of a greater pool of knowledge and resources, appropriate governance mechanisms and performance-based compensation for nonfamily CEOs should be adopted. In fact, these allow post-succession family firms to find a compromise between the achievement of considerable FW and SEW priorities.

References


Financial Economics, 86(2), 337-368. https://doi.org/10.1016/j.jfineco.2006.08.005


Notes

Note 1. The authors also run a model of PA with ff and control variables and no significant effect of ff was found, as expected.

Note 2. https://site.warrington.ufl.edu/ritter/files/IPO-Statistics.pdf. Despite data provided by Ritter are referred to the US market and not the OECD, they represent a reference point to the academy for IPO data.

Note 3. The authors also run a model of PA with ff and control variables and no significant effect of ff was found, as expected.

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