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Family firm human resource practices: Investigating the effects of professionalization and bifurcation bias on performance

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ABSTRACT

Although human resource (HR) professionalization can increase family firm performance through the reduction of moral hazard and adverse selection agency problems, it may introduce a unique agency problem into the family firm: the perception of organizational injustice. As such, our research suggests that the success of HR professionalization is contingent upon how family and nonfamily employees are treated within the firm. Specifically, when bifurcation bias—the asymmetric treatment of family and nonfamily employees—exists, the financial benefits of HR professionalization diminish due to a perceived inequity of treatment within the family firm. Primary survey data collected from CEOs of 123 family firms support the positive relationship between HR professionalization and financial performance. Results further demonstrate that bifurcated monitoring of family and nonfamily employees restricts the professionalization-performance relationship, while equal monitoring strengthens the relationship. The findings illuminate HR professionalization and bifurcation bias as unique sources of heterogeneity in family firms.

1. Introduction

Within the family firm literature, professionalization represents an increasingly intriguing phenomenon for scholarly inquiry (Stewart & Hitt, 2012). As organizations increase in size, new employees and managers are needed to support and grow the organization. For family firms, this often means the addition and integration of nonfamily employees (Klein & Bell, 2007; Stewart & Hitt, 2012). In essence, opening the firm to nonfamily employees implies an intentional, structural move toward professionalizing the organization by hiring managers from beyond the bounds of family membership (Dyer, 1989). This practice represents the traditional conceptualization of family firm professionalization, formally defined as "hiring full-time, nonfamily employees, particularly with the delegation of managerial authority" (Stewart & Hitt, 2012: 59). Recent scholarship, however, concludes that this definition of professionalization is oversimplified, has yielded inconsistent empirical results, and fails to fully identify other viable means of professionalization (Dekker, Lybaert, Steijvers, & Depaire, 2015; Dekker, Lybaert, Steijvers, Depaire, & Mercken, 2012; Gimeno & Parada, 2014). For example, while family firms may professionalize by hiring nonfamily managers, such firms may also professionalize by incorporating formalized human resource (HR) practices into the firm (Dekker et al., 2012; Dekker et al., 2015; Stewart & Hitt, 2012).

The rationale for HR professionalization is rooted in agency theory, which theorizes that managers will pursue self-interested goals, rather than the owner's goals, if their behavior is not monitored (Jensen & Meckling, 1976). Within family firms, however, owners and managers are often part of the same family. This role overlap implies the goals of these individuals are assumed to be inherently aligned; therefore, monitoring family manager behavior is often deemed unnecessary (Chrisman, Chua, & Litz, 2004; Fama & Jensen, 1983; Jensen & Meckling, 1976). A notable extension of agency theory, however, recognizes that family businesses are not immune to agency problems (see Madison, Holt, Kellermanns, & Ranft, 2016 for a review). Specifically, Chrisman, Chua, Kellermanns, and Chang (2007) demonstrate that family firm performance increases when family managers are monitored, suggesting that family managers' behaviors within the family firm may also be a product of self-interest despite being part of the family.

The study by Chrisman et al. (2007) emphasizes the family firm benefits of monitoring family managers. An implicit assumption based

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on agency theory is that nonfamily managers also require monitoring due to a perceived goal misalignment. Thus, we integratively suggest the existing findings might actually imply that family firm performance is enhanced when *both* family and nonfamily are monitored simultaneously. The finding by Chrisman et al. (2007), in our interpretation, perhaps reveals the importance of equal monitoring treatment—or the absence of bifurcation bias—between family and nonfamily employees. Bifurcation bias is the asymmetric treatment of family and nonfamily employees within a family firm that often manifests through the firm's formalized HR practices (Verbeke & Kano, 2012). We argue that when family firms monitor both family and nonfamily employees to the same extent, a strategic choice is made to treat employees equally regardless of family status. This strategic choice signifies an absence of bifurcation bias, and in turn, might address the organizational justice agency problems stemming from the employment, integration, and treatment of both family and nonfamily in the family firm (e.g., Baldridge & Schulze, 1999).

Our study integrates these research topics by investigating professionalization, with a particular focus on the adoption of formalized HR practices and the presence of bifurcation bias in the monitoring activities of the family firm. We build on the findings of Chrisman et al. (2007), Dekker et al. (2015), and Gimeno and Parada (2014) by offering additional insight into the effects of HR professionalization on family firm performance, noting that family firms have heterogeneous approaches for professionalizing and monitoring. Specifically, our research is guided by the question, 'Is HR professionalization always beneficial for the family firm?' Once a family firm embarks on HR professionalization, firm performance increases are expected (Chrisman et al., 2007; Dekker et al., 2015). While we concur that the presence of these professionalization activities is beneficial for firm performance, we further suggest that how monitoring practices are implemented, in either an equal or bifurcated manner, alters the positive effects of HR professionalization on performance. Additionally, we extend recent conceptual research addressing the nature of bifurcation bias within the family firm context. Daspit, Madison, Barnett, and Long (2017) adopt a family science perspective to theorize about the family-related characteristics that lead to the emergence of bifurcation bias in the family firm. Rather than offering additional theorizing about how and why bifurcation bias emerges, our research instead empirically investigates the existence of bifurcation bias and its related impact on family firm performance. Together, these research endeavors provide a more comprehensive account of bifurcation bias in the family firm.

Our research intends to make several contributions. First, we validate and extend the research of Dekker et al. (2012, 2015). Specifically, we expand the narrow definition of professionalization in extant literature by extending their HR dimension of professionalization to highlight it at a source of heterogeneity that helps explain variance in family firm performance. Considering that family firms are uniquely vulnerable to the issues, challenges, and costs of professionalization, focused research identifying and assessing the different dimensions of professionalization provides valuable insights and contributions to the family firm literature (Debicki, Matherne, Kellermanns, & Chrisman, 2009). Second, this approach contributes to the HR management literature by moving beyond the traditional focus of examining the influence of HR practices on individual-level outcomes (e.g., Alfes, Truss, Soane, & Gatenby, 2013; Herrbach, Mignonac, Vandenberghe, & Negrini, 2009) to a strategic focus of how such firm-level practices affect firm-level outcomes (e.g., Akhtar, Ding, & Ge, 2008; Schmelter, Mauer, Börsch, & Brettel, 2010; Tsao, Chen, Lin, & Hyde, 2009). Additionally, investigations of HR practices, and especially their impact on firm performance, are a neglected area in the family firm literature (Astrachan & Kolenko, 1994; Carlson, Upton, & Seaman, 2006), and this research helps fill that void. Third, our research considers both family and nonfamily members of the firm, rather than the traditional focus on the family. Although many scholars suggest the fault line between family and nonfamily exists, the present study broadens the scope of current professionalization research to address both types of employees rather than generalizing the family member effects to the entire employee population. In doing so, we provide insight into the debate on whether organizational practices should be equal or different across groups of employees within the firm (Krausert, 2014) by examining the extent to which bifurcation bias in monitoring impacts organizational justice perceptions, thereby altering the performance benefits associated with professionalization. To our knowledge, this is the first empirical investigation of bifurcation bias, which not only validates its existence, but offers further insight into the heterogeneity across family firms.

2. Theoretical framework and hypotheses development

2.1. HR professionalization and family firm performance

Researchers note that family firms may experience performance benefits from professionalizing, or establishing business practices that make the family firm look and function more like a nonfamily firm (Stewart & Hitt, 2012). Across family and nonfamily contexts, organizations choose to implement a variety of formalized policies and procedures to align goals of individuals with those of the organization. In both cases, professionalization is often a product of the firm's growth and size (de Kok, Uhlaner, & Thurik, 2006) but also depends on the extent to which agency costs and opportunism are realized given goal divergence within the firm.

Extant family firm research often equates professionalization with the hiring of nonfamily managers (Dekker et al., 2015; Klein & Bell, 2007; Stewart & Hitt, 2012). However, recent scholarship introduces a multidimensional perspective that includes the addition of more formalized systems, such as financial control systems, governance systems, and human resource control systems to broaden the previous conceptualization of professionalization as the hiring of nonfamily managers in family firms (Dekker et al., 2012, 2015; Gimeno & Parada, 2014). Essentially, extant research suggests that family firms vary in their level of professionalization, and by considering and integrating other dimensions of professionalization, further insight is gained into understanding the heterogeneity across family firms. As such, we focus specifically on HR professionalization given that HR practices are often neglected in family firm literature and the potential benefit that adopting such practices is likely to have on family firm performance (Dekker et al., 2015). To be comprehensive in our approach, we utilize the traditional definition of family firm professionalization (i.e., the hiring of nonfamily managers) and also consider compensation incentive systems and performance appraisal systems. This approach allows for a robust conceptualization of HR professionalization[1] through the domains of selection, compensation, and performance evaluation.

In the selection domain, the hiring of nonfamily managers is an HR practice that alleviates the adverse selection agency problem, which refers to the agent's lack of skill or ability in the employment relationship (Eisenhardt, 1989; Fama, 1980). Family firms are particularly vulnerable to adverse selection due to the inherent desire to hire family members regardless of whether they are the most qualified or skilled for the position (Karra, Tracey, & Phillips, 2006; Schulze, Lubatkin, & Dino, 2003; Schulze, Lubatkin, Dino, & Buchholtz, 2001); however, by instead opening the applicant pool to nonfamily, the

[1] Compensation incentive systems and performance appraisal systems are derived from Dekker et al.'s (2015) professionalization dimension of human resource control systems. Three items of Dekker et al.'s (2015) human resource control systems professionalization dimension were not included: formal recruitment systems, formal training systems, and formal scheduled staff meetings. We equate formal recruitment systems with the presence of nonfamily managers. Formal training systems and formal meetings may not be widely utilized professionalization activities in family firms because they can be less effective than informal methods due to the idiosyncratic nature of family firms (Stewart & Hitt, 2012).

family firm is attempting to hire the most qualified applicant (Kidwell, Kellermanns, & Eddleston, 2012). This practice reduces adverse selection agency problems because it is assumed that the nonfamily hire has the ability and skill to competently behave in the employment relationship. Thus, agency costs are minimized, and the performance of the firm is enhanced from these reduced costs. Furthermore, research suggests that family firms hire nonfamily managers to increase the diversity of perspectives, experience, and talent within the firm (Dawson, 2011; Filatotchev, Lien, & Piesse, 2005). The family firm benefits from having the diverse perspectives of nonfamily managers combined with the critical insights of family members (Eddleston, Kellermanns, & Zellweger, 2012). Nonfamily managers help family firms cope with their competitive environment, increase strategic decision making quality, and thus increase the performance of the family firm (Dawson, 2011; Filatotchev et al., 2005; Stewart & Hitt, 2012). Additionally, nonfamily members may act as additional agents of oversight by reducing resource expropriation by family members (Daspit & Long, 2014). Thus, family firms that professionalize their selection practices to include hiring nonfamily managers are likely to enhance firm performance by reducing adverse selection agency problems, increasing knowledge diversity, and decreasing resource expropriation.

In the compensation domain, an incentive plan is an HR practice that may alleviate the moral hazard agency problem. Moral hazard refers to the agent's lack of effort, such as free-riding or shirking, in the employment relationship (Ross, 1973). Compensation incentive plans, in which pay is provided as an incentive for high performance outcomes, are used to align the manager's interest with the goals of the principal (Fama, 1980). Compensation incentives motivate managers to curb their opportunistic behavior because doing so is in their best interest and, in turn, the best interest of the principal (Becker & Huselid, 1992; Jensen & Meckling, 1976). By using compensation incentive plans to reward desired performance, the family firm is likely to achieve a stronger alignment of agent and principal goals, thus leading to higher levels of firm performance (Chrisman et al., 2004). Further, compensation incentive plans may reduce adverse selection agency problems given that the implementation of such plans can attract higher-quality employees (Chrisman, Devaraj, & Patel, 2017).

In the performance evaluation domain, appraisal systems also help reduce moral hazard agency problems. The presence of a performance appraisal system minimizes free-riding and ensures the principal's goals are met (Anderson & Reeb, 2004; Chrisman et al., 2007; Fama, 1980). Evaluating performance serves the intended purpose of controlling agent behavior because when managers know they are being monitored, they will work toward the principal's interest; whereas, without monitoring, agent managers may behave in a self-interested manner (Wright & Kroll, 2002). Furthermore, performance appraisal systems provide a mutually agreed upon set of expectations between principal and agent that outlines the objectives and outcomes associated with individual performance within the firm. Thus, performance appraisal systems are likely to enhance the performance of the family firm.

Taken together, HR professionalization activities in selection, compensation, and performance evaluation can alleviate adverse selection and moral hazard agency problems within family firms. A firm's adoption of these practices enhances the likelihood its human resources are contributing to the firm's goals and objectives (Baird & Meshoulam, 1988). Such benefits are also evidenced in empirical research, which demonstrates that family firms utilizing more professional HR practices experience higher performance (Tsao et al., 2009). Furthermore, with professionalized practices, family firms have better access to financial resources (Stewart & Hitt, 2012) and are viewed as more attractive to private equity firms (Dawson, 2011), thereby enabling the firm to potentially increase future performance. In sum, the more family firms professionalize in the HR domains of selection, compensation, and performance evaluation, the more firm performance is likely to improve.

Hypothesis 1. HR professionalization is positively associated with family firm performance.

2.2. *Influence of bifurcation bias*

In the traditional agency relationship context, agency problems are assumed to be consistent across individuals within the firm. Family firms, however, provide a context where unique agency problems can arise due to the employment of both family and nonfamily, such as those related to perceptions of organizational justice (Baldridge & Schulze, 1999). Organizational justice refers to "people's perceptions of fairness in organizations along with their associated behavioral, cognitive, and emotional reactions" (Greenberg, 2011: 271) and is based on individual perceptions of fairness and social comparisons among individuals and groups within the firm (Adams, 1965; Greenberg, 1990; Greenberg, 2011). According to equity theory, people perceive (in)justice when they compare themselves to relevant others on both inputs and outcomes (Adams, 1965). In organizational terms, inputs refer to contributions, such as quality or quantity of work, effort, or past experience; outcomes refer to pay, benefits, or status, for example (Greenberg, 2011). Individuals compare their own input-outcome ratio to the input-outcome ratio of relevant others. Perceived equality of input-outcome ratios results in perceptions of fairness; whereas, perceived inequality of input-outcome ratios results in perceptions of unfairness, which can trigger feelings of guilt (e.g., overpayment based on relative contributions) and anger (e.g., underpayment based on relative contributions; Adams, 1965; Greenberg, 1990). Equity theory further suggests that ratio inequality causes individuals to make behavioral changes (e.g., altering the level of inputs) or cognitive changes (e.g., convincing oneself that they are more/less qualified) to attain ratio equality.

Organizational justice perceptions are particularly salient in family firms because of the overlap of the family and business system and the employment of nonfamily (Barnett & Kellermanns, 2006; Van der Heyden, Blondel, & Carlock, 2005). Human resource management practices applied equally across family and nonfamily employees are likely to control justice-related agency problems by managing the organization based on equity and contribution to the firm rather than on family membership. Alternatively, bifurcated practices within the family firm (i.e., those that are applied differently for family and nonfamily employees) would fail to alleviate these problems, causing behavioral or cognitive changes in employees that could be detrimental to the organization's success. Based on the tenets of organizational justice and equity theory, the application of consistent HR practices regardless of family membership uniquely controls for the opportunistic behavior of agents while also minimizing the potential for resentment of employees who perceive inequitable treatment within the firm when HR practices are not consistent across groups.

Therefore, we argue that bifurcation bias, manifested in how the family firm differentially monitors family and nonfamily employees, restricts the performance benefits gained from HR professionalization. Research demonstrates that monitoring activities are beneficial for family firms (Chrisman et al., 2007); however, our argument is that the derived benefit likely depends on whether the monitoring activities are bifurcated or equal across family and nonfamily employees. Bifurcated monitoring perpetuates the reputation family firms have for favoritism and bias (Barnett & Kellermanns, 2006; Lee, 2006; Lubatkin, Schulze, Ling, & Dino, 2005) and increases perceptions of organization *injustice* for nonfamily and family employees alike.

Nonfamily employees are part of the firm, but are not part of the family, and may thereby resent family members due to the perceived bias resulting from favoritism to kin (Anderson & Reeb, 2004; Schulze et al., 2001). Further, nonfamily employees are often treated as 'second-class citizens' in the family firm (Chrisman et al., 2017; Dyer, 2006). This resentment and bifurcated treatment engenders feelings of organizational injustice. When nonfamily employees perceive injustice, they may leave the family firm or may decrease their effort in an attempt to equalize their input-output ratio (Adams, 1965; Baldridge & Schulze, 1999). Either of these actions have the potential to negatively impact the performance and success of the family firm. Conversely, when nonfamily employees perceive equal treatment within a context where biased behavior may be expected, they are likely to respond favorably and increase their effort (Ehrhart, 2004; Fassina, Jones, & Uggerslev, 2008; Moorman, 1991), thereby positively impacting the performance of the family firm.

Family employees are part of the family firm and part of the family, but may also perceive organizational injustice when family firm decisions are based on family status (Baldridge & Schulze, 1999). In the field studies of Van der Heyden et al. (2005), family employees expressed their desire for family firm decisions to be based on performance and contribution rather than on their status within the family. Specifically with regard to performance monitoring, family employees desire honest and fair feedback because it is crucial for their personal and professional development. As stated by one informant in their field study, "As long as one is then judged fairly against non-family members, one is not taking unfair advantage of a birthright, but rather building on it to perform better in a way that is transparent and open to all" (Van der Heyden et al., 2005: 16). Unequal or bifurcated treatment will cause conflict within the family firm, ultimately to the detriment of family firm performance (Van der Heyden et al., 2005). To elaborate, family employees may feel bound to the family firm and may not be able to leave (Baldridge & Schulze, 1999); therefore, their perceptions of organizational injustice may cause them to "resort to 'emotional' resignations…thereby endangering the very business they are so attached to or dependent on" (Van der Heyden et al., 2005: 19).

These arguments suggest that justice perceptions of both family and nonfamily employees in the family firm are simultaneously enhanced when HR decisions are applied equally, based on consistent rules rather than personal preferences (Barnett & Kellermanns, 2006; Tyler & Blader, 2000). Organizational justice perceptions stemming from the equal application of HR practices results in increased commitment to and identification with the firm (Barnett & Kellermanns, 2006) and increased performance from family and nonfamily employees alike (Daspit et al., 2017). Further, it makes the family firm more attractive to next-generation family members and qualified nonfamily members (Van der Heyden et al., 2005), thereby helping to reduce adverse impact agency problems. Therefore, we hypothesize that monitoring activities instituted equally across family and nonfamily employees will enhance the positive relationship between HR professionalization and family firm performance, whereas bifurcated monitoring will be detrimental to the relationship:

Hypothesis 2. Equal monitoring of family and nonfamily employees strengthens the relationship between HR professionalization and family firm performance, whereas bifurcated monitoring weakens the relationship.

3. Method

3.1. Sample and procedures

Primary data were collected from CEOs of private family firms via mail surveys as part of a larger study. In line with prior survey research, our initial mailing list was obtained by soliciting contact information of known family firms from undergraduate management students at a large public university in the U.S. (Marshall et al., 2006), searching media for family firm contact information, and attending family business community forums (Madison & Kellermanns, 2013). In line with extant literature, we defined family firms as those with family ownership and at least two family members working in the firm (Kellermanns & Eddleston, 2006). Our research model is at the firm level of analysis; therefore, our respondents were the family firm CEOs because they are deemed a reliable key informant and "…particularly in the case of small organizations, the views of the respondent may, in fact, reflect those of the firm" (Lyon, Lumpkin, & Dess, 2000: 1058). As such, we were able to analyze the CEOs' responses at the organizational level.

This approach resulted in a sampling frame of 2024 firms. After initial and follow-up mailings, we received completed surveys from the CEOs of 167 distinct family firms. Our overall response rate is 8.25%, which is in line with prior empirical research (e.g., Schulze et al. (2003) had 10.3%; Zellweger, Kellermanns, Chrisman, and Chua (2012) had 8.2%). However, it was necessary to remove 44 firms from our sample because they did not have nonfamily employees or managers and had neither a compensation incentive nor performance appraisal system in place. This was a necessary constraint because bifurcation bias would theoretically not exist in these firms. In other words, if the family firm did not employ nonfamily in any capacity nor had any human resource practices in place, it would be impossible to have bifurcated treatment in the firm. This constraint aligns with the purpose of our investigation to highlight HR professionalization and bifurcation bias as unique sources of family firm heterogeneity. Accordingly, our final sample is 123 family firms.

Because our data were cross-sectional and collected via surveys, we performed tests to alleviate concerns about common method bias, non-response bias, and sample bias. First, to address common method bias concerns, we performed a Harman's single-factor statistical test as suggested by Podsakoff and Organ (1986), which is frequently used in family firm survey research (e.g., Eddleston & Kellermanns, 2007). This test entails entering all the items of the model's variables in a factor analysis to determine the number of factors that emerge and the amount of variance explained. Six factors emerged from our analysis, accounting for 75.04% of the variance, with the first factor explaining 29.19%. Because no dominant factor emerged, we conclude that common method bias does not appear to be an issue in this study.

Second, because of our low response rate, we checked for potential non-response bias. Research shows that late respondents are more similar to nonrespondents than to early respondents (Kanuk & Berenson, 1975). As such, we split the data into two groups using the average of 25.06 days to respond as a dividing point. We conducted an independent samples *t*-test to compare the means of our study's variables between these two groups of respondents, and we found no significant differences. Therefore, we conclude that non-response bias does not appear to be an issue in this study.

Third, because of our low sample size, we wanted to ensure our sample was representative of the population of family firms. Therefore, we compared characteristics of our sample to those of two other samples: (1) a sample of 673 U.S. family firms from the 1997 National Family Business Survey (Winter, Danes, Koh, Fredericks, & Paul, 2004) and (2) a sample of 1464 U.S. family firms from Schulze et al. (2003). Respectively, these studies represent a national database and a large-scale empirical study grounded in agency theory. Similar to our approach, both of these empirical studies sampled family firms in the U.S. Additionally, none of the authors of these empirical studies overlaps, thereby assuming the samples do not largely overlap. Each of these studies captured different variables, so complete comparisons could not be made. However, Table 1 presents a comparison table of key CEO and firm characteristics across the family firm samples. Because of the similarities in sample characteristics, we conclude that sample bias does not appear to be an issue in this study.

3.2. Measures

3.2.1. Dependent variable

Family firm financial performance was captured by asking the CEO the return on equity, return on total assets, and profit margin relative to the competition on a seven-point scale. Responses on the three items

Table 1
Representativeness across samples.

	1997 Database	Agency	Current study
	Winter et al. (2004)	Schulze et al. (2003)	
CEO characteristics			
Age	45.80	54.00	55.49
Gender (ratio male)	0.71		0.80
Firm characteristics			
Age		48.98	36.23
Number of family employees		3.43	3.54
Industry			
Retail	0.21		0.29
Services	0.41		0.28
Other	0.38		0.43

were averaged, with higher scores indicating higher levels of firm performance (α = 0.95; Eddleston & Kellermanns, 2007). Within the existing literature, subjective performance measures are commonly used indicators of performance. While objective measures are often unavailable and tend to lower the survey response rate (Kellermanns, Eddleston, Barnett, & Pearson, 2008), they correlate highly with subjective data and support the validity of subjective measures of performance (Ling & Kellermanns, 2010; Venkatraman & Ramanujam, 1986).

3.2.2. Independent variable

Recent research suggests professionalization in family firms is not necessarily dichotomous but rather that various levels of professionalization exist (Dekker et al., 2012; Stewart & Hitt, 2012); therefore, we used a composite score to assess the level of HR professionalization within the family firms in our sample. Following the approach of Dekker et al. (2012, 2015), we asked the family firm CEO about the presence or absence of three different HR professionalization features related to the domains of selection, compensation, and evaluation: if the firm employed nonfamily managers (Gedajlovic, Lubatkin, & Schulze, 2004; Stewart & Hitt, 2012), if the firm had a compensation incentive plan (Chrisman et al., 2007), and if the firm had a performance appraisal system (Stewart & Hitt, 2012).

Responses to these questions were used to create an overall composite score for HR professionalization within the family firm. This approach was necessary because family firms may choose to professionalize in a variety of ways, and an absence of one characteristic does not necessarily mean an absence of HR professionalization. Additionally, instead of viewing these forms of HR professionalization independently, the integration and holistic simultaneous assessment is likely more indicative of the firm's overall level of professionalization. For example, a firm with a high ratio of nonfamily managers may be perceived as highly professionalized based on the traditional operationalization in the literature; however, without an appraisal system, it is impossible to assess the extent to which these managers are evaluated in an objective manner. Without the performance appraisal component, family firms could simply be hiring nonfamily managers to attract investors or appear to be more professionalized without adjusting practices within the firm.

Our composite score was calculated by creating and summing three z-scores: (1) the presence of nonfamily managers, (2) the presence of a compensation incentive plan, and (3) the presence of a performance appraisal system; a higher score indicates a higher level of HR professionalization. This composite score helps to ensure that our HR professionalization measure captures the three HR domains noted in our conceptual development: selection, compensation, and evaluation. This scoring approach parallels recent strategic management research that uses composite measures to assess effects on firm performance (e.g., Connelly, Tihanyi, Ketchen, Carnes, & Ferrier, 2017).

3.2.3. Moderator variable

As there are no existing measures of bifurcation bias, we operationalized our measure based on how bifurcation bias is conceptualized. Using a series of steps, we assessed whether equal versus bifurcated treatment of family and nonfamily employees existed. First, we asked CEOs the level of monitoring used to obtain information on the activities and performance of *family* employees. We used four items of a previously accepted five-item monitoring scale (Chrisman et al., 2007). Scale items appear in the Appendix A (α = 0.81) and include monitoring activities that assess short-term output, progress toward long-term goals, and assessing activities and performance with input from other managers and subordinates. One item of the original scale, the level of personal observation, was excluded from our study because of the likelihood of higher levels of personal observation between the family firm CEO and a family employee due to the inherent nature of the family system. Responses were made on a seven-point scale, and the four items were averaged to obtain the level of monitoring, with larger values indicating higher levels of monitoring (Chrisman et al., 2007).

Second, we asked CEOs the same four monitoring questions to obtain information on the activities and performance of *nonfamily* employees. In other words, we asked the same four monitoring questions twice on our survey, once to ascertain the level of monitoring of family employees and once to ascertain the level of monitoring of nonfamily employees. This resulted in two monitoring variables per family firm.

Third, we compared the two monitoring variables to determine if monitoring treatment between family employees and nonfamily employees was equal or bifurcated. This comparison allowed us to create a dummy variable for bifurcation bias within each family firm. More specifically, if the variable for the level of family employee monitoring (e.g., mean of 5.25) was the same as the variable for the level of nonfamily employee monitoring (e.g., mean of 5.25), we coded bifurcation bias as 0 to indicate the absence of bias in monitoring activities (equal monitoring). If the variables for the level of monitoring were different between family (e.g., mean of 5.00) and nonfamily employees (e.g., mean of 5.25), bifurcation bias was coded 1 to indicate bias in monitoring activities. Our sample includes 48 family firms (39%) with equal monitoring of family and nonfamily employees, and 75 family firms (61%) with bifurcated monitoring.

3.2.4. Control variables

We controlled for firm-level characteristics that are associated with family firm performance: industry, age, and size (Chrisman et al., 2004; Schulze et al., 2001; Schulze et al., 2003). We categorized the firm's industry as retail (e.g., restaurants, furniture stores, auto stores), services (e.g., legal, financial, medical), or other industries (e.g., agriculture, transportation, construction). Firm age was measured by years of business existence, and size was measured by the number of employees.

4. Results

4.1. Tests of hypotheses

Descriptive statistics and bivariate correlations are provided in Table 2. On average, the family firms in our sample have been in business for 36 years and represent a variety of industries, including retail (29%) and services (28%). Our sample is predominantly comprised of small to medium-sized family firms, with 89 employees on average. Therefore, we are assessing professionalization and bifurcation bias where it is likely to be the most salient. Some of the variables in our study are correlated; however, after centering, the highest variance inflation factor statistic estimated in conjunction with each model was 2.67, therefore indicating that multicollinearity is not a major concern in this study (Hair, Anderson, Tatham, & Black, 1998).

Table 3 provides results using OLS hierarchical regression with family firm financial performance as the dependent variable. Model 1

Table 2
Descriptive statistics and bivariate correlations.

		Mean	SD	1	2	3	4	5	6
1	Firm performance	4.91	1.26						
2	Firm age	36.23	30.98	− 0.15†					
3	Firm size	89.25	208.46	0.11	0.14				
4	Retail industry	0.29	0.46	− 0.02	0.10	0.22**			
5	Services industry	0.28	0.45	0.06	− 0.15†	− 0.07	− 0.40***		
6	HR professionalization	1.05	1.64	0.22**	0.17†	0.26**	0.04	− 0.05	
7	Bifurcated monitoring	0.61	0.49	− 0.01	0.09	0.16†	0.04	− 0.14	0.08

Notes: n = 123.
*** $p \leq 0.001$.
** $p \leq 0.01$.
† $p \leq 0.10$.

contains the control variables and shows that firm age is marginally significant ($B = -0.01$, $p \leq 0.10$), indicating that younger family firms have higher levels of firm performance. Model 2 includes the addition of the independent variable, HR professionalization ($B = 0.18$, $p \leq 0.01$), and demonstrates support for Hypothesis 1 that HR professionalization is positively related to family firm performance.

Models 3a and 3b incorporate bifurcation bias in monitoring as a moderator in the relationship between HR professionalization and family firm performance ($B = -0.29$, $p \leq 0.05$) and demonstrate support for Hypothesis 2; the interaction plot is provided in Fig. 1 for ease of interpretation. Bifurcated monitoring of family and nonfamily employees negatively impacts the relationship between HR professionalization and family firm performance, while equal monitoring positively impacts the relationship. With equal monitoring of family and nonfamily employees, the slope of the line indicates that as family firms increase their level of HR professionalization, firm performance levels are enhanced ($t = 4.95$, $p \leq 0.001$). However, only the interaction slope displaying equal monitoring is significant. With bifurcated monitoring of family and nonfamily employees, the slope of the line is not significant ($t = 0.14$, n.s.), thereby indicating that the financial benefits of HR professionalization are not realized when bifurcation bias exists. We discuss the implications of these findings in more detail below.

4.2. Robustness, endogeneity, and post hoc tests

Several additional tests were conducted to further analyze the findings. Although data were obtained from 167 family firms, 44 family firms were removed from the sample given the absence of nonfamily employees or because the firm had not started the professionalization process. However, to determine if removing these additional firms affected the findings, we examined the main effect between HR professionalization and family firm financial performance with the full sample. OLS regression with the same control, independent, and dependent variables produced similar results. Firm age ($B = -0.01$, $p \leq 0.05$) and HR professionalization ($B = 0.12$, $p \leq 0.01$) remained significant, thereby validating the main effect findings from the original analysis.

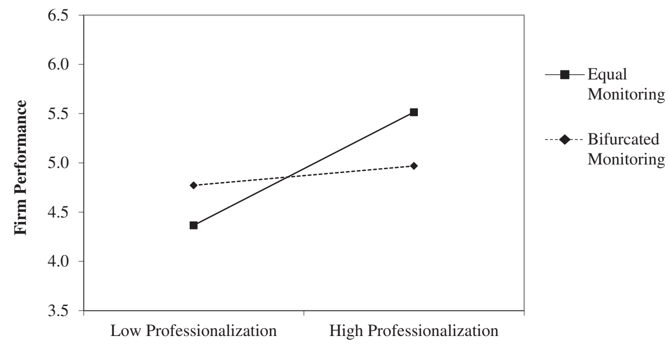

Fig. 1. Bifurcation bias and the HR professionalization-performance relationship.

Due to the potential for endogeneity between HR professionalization

Table 3
OLS regression results for family firm performance.

	Model 1	Model 2	Model 3a	Model 3b
	Controls	Main effect	Moderation effects	
Controls				
Firm age	− 0.01† (0.00)	− 0.01* (0.00)	− 0.01* (0.00)	− 0.01* (0.00)
Firm size	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Retail industry	− 0.05 (0.28)	− 0.03 (0.27)	− 0.03 (0.27)	− 0.06 (0.27)
Services industry	0.10 (0.28)	0.12 (0.27)	0.11 (0.27)	0.15 (0.27)
Main effect				
HR professionalization		0.18** (0.07)	0.18** (0.07)	0.35** (0.11)
Moderator				
Bifurcated monitoring			− 0.05 (0.23)	0.24 (0.26)
HR professionalization × bifurcated monitoring				− 0.29* (0.14)
Constant	4.89***	4.88***	4.91***	4.94***
Adj. R^2	0.01	0.05	0.05	0.07
R^2	0.05	0.09	0.09	0.12
ΔR^2		0.04**	0.00	0.03*
F statistic	1.28	2.38*	1.97†	2.34*

Notes: Unstandardized regression coefficients shown (standard errors in parentheses) n = 123.
*** $p \leq 0.001$.
** $p \leq 0.01$.
* $p \leq 0.05$.
† $p \leq 0.10$.

and performance, we conducted the Wu–Hausman F test and the Durbin–Wu–Hausman test after the calculation of a two-stage least square regression (Baum, Schaffer, & Stillman, 2002; Hamilton & Nickerson, 2003). Non-significance of the aforementioned tests, which was the case in our analysis using two instrumental variables, indicated that the estimates were unbiased and that reverse causality is not a problem in our study (Davidson & Mackinnon, 1983). Specifically, we utilized the number of generations working in the firm and number of generations owning the firm, as higher values in these variables due to more complex governance issues would likely trigger higher levels of HR professionalization (Dekker et al., 2015).

Furthermore, one year after the initial survey, we mailed a follow-up survey to the family firms in our sample to assess their current level of financial performance. We received completed surveys from 56 of the 123 firms. We used the same three financial performance items on the follow-up survey (M = 4.57, SD = 1.29, $\alpha = 0.92$) that we used on the initial survey. Our measure of HR professionalization (which was obtained one year earlier), was highly correlated with this newly obtained measure of financial performance ($r = 0.29$, $p \leq 0.05$). Additionally, OLS regression results indicate that HR professionalization is a marginally significant predictor ($B = 0.21$, $p \leq 0.10$) of this one-year lagged measure of financial performance, which is notable given the low sample size in this post hoc test. We were not able to test our moderation hypothesis using the one-year lagged measure of performance due to power issues stemming from the sample size. We conducted a power analysis using G*Power 3.1 software (Faul, Erdfelder, Buchner, & Lang, 2009). With a sample size of 56 and six predictor variables (i.e., four controls, one independent variable, and one moderator), the power analysis generated a result of 0.49, which is not an acceptable level to detect significant relationships (Cohen, 1988). Regardless, results of the aforementioned tests demonstrate the robustness of our initial main effects results and further alleviate concerns of endogeneity.

We also conducted post hoc tests of bifurcation bias in our sample of 123 family firms. Results support our hypothesis that the financial benefits of HR professionalization are diminished with bifurcated monitoring of family and nonfamily employees and enhanced with equal monitoring. Our organizational justice arguments were based on bifurcated versus equal treatment rather than based on the direction of the bias (i.e., biased toward family employees versus nonfamily employees). As a post hoc test, we sought to determine if the direction of the bias had a differential impact on the relationship between HR professionalization and family firm performance. Our sample included 67 family firms with high levels of HR professionalization based on a mean split.[2] Of those, the financial performance of the firms that monitored family to a greater extent (M = 4.92, n = 18) was not significantly different than the financial performance of the firms that monitored nonfamily to a greater extent (M = 4.94, n = 21). With consideration for equal monitoring, the financial performance of the firms that equally monitored family and nonfamily at a high level (M = 5.42, n = 18) was not significantly different than the financial performance of the firms that equally monitored family and nonfamily at a low level (M = 5.47, n = 10). Taken together, these post hoc results reveal that equal treatment, regardless of the level of treatment, is more beneficial than bifurcated treatment, regardless of the direction of the bias.

5. Discussion

Our study investigates performance differences of family firms due to HR professionalization and whether or not bifurcation bias exists. HR professionalization can yield numerous benefits for any organization. From an agency perspective, HR professionalization minimizes the adverse selection and moral hazard agency problems within family firms, thereby allowing for increased firm performance. Indeed, our results demonstrate that by adopting professional HR practices, family firms are able to reap significant increases to their bottom line. This finding validates and extends the work of Dekker et al. (2015), urging scholars to consider means of professionalization beyond the presence of nonfamily managers in the family firm. We focus specifically on HR professionalization, and extend their research by exploring bifurcation bias as a contingency in the relationship between HR professionalization and firm performance, which offers additional depth and insight into the heterogeneous nature of family firms.

By introducing bifurcation bias as a contingency, our research finds that HR professionalization may benefit the family firm, yet family firms risk missing potential financial gains from professionalization if family and nonfamily are treated differently. For firms with high levels of HR professionalization, we find that firm performance outcomes are higher when monitoring levels are equal between family and nonfamily employees. This finding offers additional insight into the findings of Chrisman et al. (2007) who demonstrate that monitoring family managers increases firm performance. The implicit agency theory assumption in their research is that nonfamily managers are also monitored. Therefore, when family firms monitor both family members and nonfamily members, the beneficial effect of HR professionalization is fully realized. When family members are not monitored, bifurcation bias is present. In other words, we suggest that the absence of bifurcation bias (i.e., presence of equal treatment) is another possible explanation for the noted positive effects on firm performance in the study by Chrisman et al. (2007).

This work also extends the insights of Patel and Cooper (2014) who find that structural power equality, defined as a balance in compensation distribution, status, and representation in the TMT, enhances firm performance. While Patel and Cooper (2014) examine structural power equality within the TMT, we find that as family firms professionalize, financial performance will be higher with equal employee monitoring when compared to bifurcated monitoring. Collectively, these studies highlight the performance benefits of treating family and nonfamily equally at all levels within the firm.

5.1. Implications and contributions

Our investigation contributes to the literature on family firm professionalization. Prior literature suggests that professionalization is beneficial for family firms and highlights the benefits in the limited context of larger firms' post-initial public offerings (e.g., Lien & Li, 2014). In our study, we extend current insights to investigate the nuanced effects of HR professionalization in predominantly small and medium-sized family firms. Further, studies largely operationalize professionalization as the presence of nonfamily managers in the firm or top management team (e.g., Lien & Li, 2014). By incorporating HR practices in selection, compensation, and evaluation, we expand on such measures and validate recent research

Our research also contributes to the family firm literature by operationalizing and testing firm-level bifurcation bias. To date, research regarding bifurcation bias has been conceptual in nature. We extend this literature by empirically demonstrating that bifurcation bias exists in organizational reality and can negatively impact family firms. We also extend the nomological base by relying on agency theory and organizational justice arguments to develop the proposed moderating effects of bifurcation bias, which extends theoretical rationale beyond the transaction cost economics perspective employed by Verbeke and Kano (2012). Additionally, we consider both family and nonfamily employees of the family firm. Indeed, family firm research often neglects considerations of nonfamily employees (Madison & Kellermanns, 2013). For example, research has been conducted to assess the family

[2] We performed the same analyses using different splits of the data. The results using the top 33% and the bottom 33% of family firms in our sample provide the same conclusion as the analysis based on the mean split.

firm implications of family employees being offered advantageous positions and not being monitored (Schulze et al., 2001). The result of this bifurcated treatment often leads to shirking and free-riding of family members, which are both actions that have negative consequences for the organization (Chua, Chrisman, & Bergiel, 2009; Dyer, 2006). While the insights derived from this research address the direct effects by assessing the behavior of family employees, it does not capture the potentially indirect effects that bifurcated treatment has on nonfamily employees. For example, nonfamily employees may view bifurcated treatment as unfair and pursue individual interests rather than the organization's interests due to the perceived inequality within the organization (Anderson & Reeb, 2004). While opportunism of family and nonfamily members may be manifested in different ways, the negative consequences associated with opportunistic behaviors, regardless of family status, tend to have negative implications for firm performance. As such, family firms must manage the delicate process of HR professionalization without ostracizing members by distinguishing between family and nonfamily employees.

Further, this study offers additional insight into the heterogeneous nature of family firms. Although the study of heterogeneity among family firms is beginning to gain more attention, understanding the precise drivers of differences within this organizational form remains nascent. Initial conceptualizations suggest that goals, governance, and resources are potential causes of heterogeneity among family firms (Chrisman, Sharma, Steier, & Chua, 2013; Chua, Chrisman, Steier, & Rau, 2012). While this conceptualization begins to acknowledge broad factors that create heterogeneity in family firms, our study offers further insight by addressing more nuanced factors related to heterogeneity. Specifically, family firms professionalize at various rates across several domains, and practices may be applied differently to family and nonfamily employees. Our findings provide further evidence supporting the positive effects of HR professionalization and offer a first step in addressing research that considers how treatment of family and nonfamily employees is a source of variation across family firms that alters the financial benefits of professionalization.

5.2. Implications for practice

Our study also offers practical value for family firms and their advisors. While practitioners may understand the financial benefits associated with professionalizing the family firm, our results emphasize the importance of how the family firm treats nonfamily employees once they are working in the family firm. Specifically, when employee performance is monitored, consideration should be made to monitor both family and nonfamily employees to the same extent. As the family firm professionalizes, equal monitoring of family and nonfamily employees is important to the bottom line.

5.3. Limitations and future research

Although several contributions derive from this research, the study is not without limitations. We investigated HR professionalization and bifurcation bias as unique sources of heterogeneity across family firms. By limiting our investigation to these sources, our research overlooks other important drivers of heterogeneity. For example, family firms may professionalize through other means, including the implementation of financial controls and governance controls (Dekker et al., 2015). These means of professionalization certainly drive heterogeneity and contribute to variance in family firm performance. Further, recent scholarship examines the willingness and ability paradox in family firms, suggesting that while family firms have superior ability, they may not be willing to implement or invest in the strategic decisions necessary for superior performance (e.g., Chrisman, Chua, De Massis, Frattini, & Wright, 2015; De Massis, Kotlar, Chua, & Chrisman, 2014). In our study, this implies family firms are able to adopt HR professionalization practices and implement them free from bias; however, they may not be willing to do so given the potentially negative effects to the family's socioemotional wealth (Gómez-Mejía, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007). We encourage more research investigating the drivers of family firm heterogeneity so that we can continue to gain insight into the unique characteristics that have allowed them to be the oldest and most prevalant form of business in the world (Astrachan, 2010; Debicki et al., 2009).

We collected primary survey data from the CEOs of private family firms. Although we defined family firms as those with family ownership and at least two family members working in the firm (Kellermanns & Eddleston, 2006), we acknowledge the limitation that we do not have data on the percentage of family ownership. Further, our data were captured from a single informant; however, we took steps to ensure that common method bias did not affect the findings. We collected a lagged measure of financial performance one year after the initial survey collection from nearly half the family firms in our sample. Analysis of this data confirms our main effect findings between professionalization and family firm performance, thereby helping to alleviate causality concerns. However, we did not have enough data to validate our moderation findings. As such, future studies can improve on our research design. For example, data from multiple respondents may be collected at various intervals to offer additional longitudinal insights into the dynamic, causal nature of the noted relationships and how the phenomena manifest across levels of analysis.

We focused on the firm level of analysis in the current study to understand the broad implications of bifurcated and equal treatment on professionalized family firms. We recognize, however, that our supporting arguments suggest that bifurcation bias is likely to influence the organizational justice perceptions of both family and nonfamily employees. Thus, empirically investigating the effects of bifurcation bias in multi-level models or across different levels of analysis is needed. This would require data from multiple informants in the family firm, and preferably from both family and nonfamily employees, to ascertain their actual perceptions of the work environment. Future research may empirically investigate how bifurcated treatment directly affects perceptions of justice (Barnett & Kellermanns, 2006), emotional ownership (Björnberg & Nicholson, 2012), and other individual-, group-, and firm-level outcomes (see Pearson, Bergiel, & Barnett, 2014).

We introduced a measure of bifurcation bias that can be used in future research. We operationalized bifurcation bias by comparing the level of monitoring between family and nonfamily employees. While this measure provides insight, future studies may benefit from examining other means through which bifurcation bias manifests. For example, future studies can examine the presence of bias in HR activities such as recruiting, training, and succession and their specific outcomes for individual, group, and organizational performance. Additionally, a more nuanced investigation of bifurcation bias, specifically considering the direction of the bias (i.e., family versus nonfamily employees), is worthy of investigation. Our post hoc test reveals that family firms with bifurcated practices favoring nonfamily employees exist. Thus, investigating this counter-intuitive bias may prove interesting in order to understand why and how these biases manifest. For example, Daspit et al. (2017) utilize a family science perspective (i.e., the circumplex model by Olson, 2000) to theorize that the direction of bias may be a result of the level of cohesion and flexibility within the owning family's structure. Empirically investigating these insights will allow for a more comprehensive understanding of the heterogeneity across family systems and the resulting impact on the family firm system (Jaskiewicz & Dyer, 2017).

We acknowledge the boundary conditions of our findings and caution against generalizing the results beyond small and medium-sized family firms. While larger firms are not immune from bifurcation bias, it is likely that after notable growth and professionalization, family firms of a larger size will employ more standardized work and evaluation systems that mitigate bifurcation bias. Although we examine the effects of bifurcation bias at a single point in time, it is also noteworthy to consider how bias manifests during transitional periods of the firm. For example, during succession, family members may receive foremost consideration for the top leadership role, while asymmetric consideration is given to nonfamily members. Prior literature notes the effects of nonfamily managers' perceptions of justice during periods of intra-family succession (Barnett, Long, & Marler, 2012), and we suggest that such contextual considerations should be acknowledged in future examinations of bifurcation bias.

6. Conclusion

Our study extends and supports the growing literature that suggests professionalization is vital to the success of family firms; however, family firms must be aware of the factors that restrict the beneficial returns of professionalization. In this study, we examine how equal monitoring of family and nonfamily employees enhances the performance effects of HR professionalization in family firms. In particular, HR professionalization is beneficial to family firm performance, and when family and nonfamily are monitored equally, the benefits are further enhanced. These findings offer insight for family firm scholars and provide practical takeaways for family firms interested in achieving higher levels of firm performance.

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Appendix A. Study variables

Firm performance[1] (α = 0.95)
How would you rate your firm's performance as compared to your competitors?
1. Return on equity
2. Return on total assets
3. Profit margin on sales

HR professionalization[2]
Indicate yes or no to the following questions:
1. Does this family firm have top managers who are not family?
2. Does this family firm have a compensation incentive plan?
3. Does this family firm have a performance appraisal system?

Monitoring[3] (α = 0.81)
How often do you use the following methods to obtain information on the activities and performance of [(1) family and (2) nonfamily] employees?
1. Regular assessment of short-term output
2. Progress toward long-term goals
3. Input from other managers
4. Input from subordinates

[1] Measure adapted from Eddleston and Kellermanns (2007).
[2] Index calculated by summing the z-scores from these three questions.
[3] Measure adapted from Chrisman et al. (2007) and used to calculate bifurcation bias.

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